Layman, Robb

From: Pilapil, Ray
Sent: Monday, March 30, 2020 8:54 AM
To: Armitage, Julie; Frost, Brad; Layman, Robb; Jones, Eric E.
Subject: FW: General III, LLC (031600SFX, 19090021) - NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES
Attachments: Scanned from a Xerox Multifunction Printer.pdf

FYI

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Monday, March 30, 2020 8:50 AM
To: John Pinion <jpinion@rka-inc.com>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Pilapil, Ray <Ray.Pilapil@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Subject: RE: General III, LLC (031600SFX, 19090021) - NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES

John,

Attached is the signed copy of the Notice of Additional Construction Permit Application Fees letter.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Bernoteit, Bob
Sent: Monday, March 30, 2020 8:46 AM
To: John Pinion <jpinion@rka-inc.com>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Pilapil, Ray <Ray.Pilapil@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Subject: General III, LLC (031600SFX, 19090021) - NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES

John,

Please see the attached Notice of Additional Construction permit Application Fees letter. We are also sending a hard copy through the US mail. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

May 11, 2020

CERTIFIED MAIL #7014 2120 0002 3290 5844
RETURN RECEIPT REQUESTED

Phone: 217-524-7071
TDD: 217-782-9143
Email: anwar.johnson@illinois.gov

General III, LLC
Attn: Jim Kallas
1909 N. Clifton Ave.
Chicago, IL 60614-4803

RE: APPROVAL OF TRADE SECRET CLAIM

031600SFX
General III
Compliance

Dear Mr. Kallas,

The Illinois Environmental Protection Agency (Illinois EPA) has reviewed your claim that the following public records in the Illinois EPA's files contain information designated as "trade secret," as provided in 35 Ill. Admin. Code Part 130 (collectively referenced in this letter as the "Claimed Documents"): (1) equipment layout drawings for the Ferrous Material Processing System and Non-Ferrous Material Processing System, submitted as supplemental information for the construction permit application on November 14, 2019; and (2) Figures A-1, A-2, B-1 and B-2, submitted with the Modeling Protocol for Metal Emission Impacts on November 19, 2019, which depict the Ferrous Material Processing System and Non-Ferrous Material Processing Facilities; and (3) Figures A-1, A-2, B-1 and B-2, submitted with the Air Dispersion Modeling Report for Assessment of Metal Emission Impacts on January 24, 2020, which depict the Ferrous Material Processing System and Non-Ferrous Material Processing Facilities.

This letter will serve as notice, pursuant to 35 Ill. Adm. Code Section 130.212, that the Illinois EPA has approved your trade secret claim with respect to the Claimed Documents. Accordingly, the Claimed Documents are exempt from disclosure as a "trade secret."

a) Reason for Approving Claim

The Illinois EPA reviewed your claim letter and statement of justification, as well as supplemental information supplied in your letter dated April 23, 2020, and approved your claim for the reasons provided in your statement of justification and supplemental information.

b) Review of Illinois EPA Determination

This determination may be reviewed by a requester who is adversely affected by this final determination pursuant to the procedures described in 35 Ill. Adm. Code 130.214 and 35 Ill. Adm. Code 105, Subparts A and B, by petitioning the Pollution Control Board to review this determination within thirty-five (35) days after service of the determination.

The Illinois EPA will continue to protect the article at issue as "trade secret" unless and until the Illinois EPA receives official notification of a final order by a reviewing body with proper jurisdiction that reverses the Illinois EPA's decision to approve your claim, and only when it is not subject to further appeal.

Please contact me if you have any questions.

Sincerely,

Anwar Johnson
Deputy Chief Legal Counsel and Division Manager,
Division of Records Management/FOIA

Layman, Robb

From: Zwick, Ann M. <azwick@freeborn.com>
Sent: Monday, June 22, 2020 3:59 PM
To: Armitage, Julie
Cc: Jones, Eric E.; Layman, Robb
Subject: [External] General III New Facility Highlights
Attachments: General III Future 06-22-20.pdf

Julie –

Attached is a summary of the highlights of the new General III facility, including a rendering to demonstrate distance and give a relative idea of the position of buildings and shredder at the South Burley location.

Please let me know if you have any questions about the attached.

Ann

ANN M. ZWICK
Attorney at Law

Freeborn
Your Future Is Our Purpose

(312) 360-6254 direct
(312) 952-1651 mobile
azwick@freeborn.com

Freeborn & Peters LLP
311 South Wacker Drive, Suite 3000
Chicago, IL 60606
www.freeborn.com

THE FUTURE: GENERAL III, LLC

a reserve management group company

providing safe, responsible + sustainable recycling solutions for our customers and the environment

RMG

RESERVE MANAGEMENT GROUP

RMG AND GENERAL III

An affiliate of Reserve Management Group (RMG), General III, LLC, is committed to investing approximately $80 million to build and operate a new state of the art metal recycling facility on RMG's southeast side Chicago property. RMG has occupied more than 175 buffered acres along the east side of the Calumet River, at South Burley Avenue and 116th Street, for approximately 20 years. The company has operated metal and electronics recycling, stevedoring, and shipping operations on Chicago's south side for more than 30 years.

Formed in 1991, RMG is a family of distinct but related businesses involved in recycling, electronic and plastic scrap processing, scrap metal processing (ferrous and non-ferrous metals), material handling, equipment sales, and property management. RMG currently operates in 10 states (Ohio, Illinois, New York, Wisconsin, Florida, Alabama, Georgia, Arizona, Texas, and Washington). More information can be found at www.reserve-group.com.

In March 2019, General III was granted a special use permit to expand RMG's existing operations by constructing and operating a new Class IVB metal recycling facility on just under 25 acres of its existing property, remote from the surrounding neighborhood. The expansion will enhance an underutilized site in a Planned Manufacturing District.

The operation will convert obsolete metal products into raw materials for use by steel mills and foundries, preventing dumping of unprocessed metals into landfills.

In the fall of 2019, RMG purchased the metal recycling operations and substantially all the assets of the Labkon family-owned General Iron Industries. An intermediate RMG affiliate, GII, LLC d/b/a General Iron, assumed control of the business. Under an agreement reached in September 2019, just prior to the sale, between the City of Chicago, General Iron Industries, Inc., and RMG, GII, LLC will cease north side operations after 2020, and RMG will commence operating the new General III facility on the southeast side in early 2021.

RMG anticipates hundreds of off- and on-site union construction jobs in building the new clean, efficient, and environmentally sensitive facility. Upon completion, more than 100 head-of-household jobs will remain in the City if Chicago, with attrition creating ongoing hiring and apprenticeship opportunities for union workers.

RMG has pledged to prioritize protecting public health and the environment, while meeting applicable environmental regulations and operating requirements. Keeping discarded autos, appliances, and demolition materials out of landfills helps make Chicago a green, sustainable city, while conserving energy and natural resources. Compliance with stricter rules and regulations being promulgated by the city will ensure that all metal recyclers are held accountable for protecting public health and the environment.

NEW FACILITY HIGHLIGHTS

- Investment of approximately $80 million in new construction, including a new Hammermill shredder system that features a European-style enclosure containing noise and dust. This will provide a much tighter, more aesthetically attractive, and complete enclosure, compared to the existing shredder.

- Re-installation of our current best-in-class filtration system for capturing metals and particulate matter (see Air Quality Measures page below), as well as the regenerative thermal oxidizer (RTO) from the current location.

- The expansive, open space (175 acres compared to fewer than 10 acres that the current shredder occupies) provides a significantly larger buffer zone between the operation and surrounding neighbors — almost four times greater distance to the nearest residential neighbors than the current site. This is a game-changing difference in contrast to the constraints currently facing the north side facility.

- The new facility will be a full-service operation, leveraging the experience of RMG and General Iron. The new design will enable the mining of an additional 1,000 tons of recyclable metals from waste annually that will be diverted from landfills. The new

location presents more efficient transportation, including rail access, using an automatic barge loading system for the seaway draft at its dock, and more efficient traffic flows into and out of the facility. Outbound trucks will be 20 miles closer to their destinations.

- A commitment to green economic and industrial practices, including installing air monitors and solar panels, and increasing the number of large water misters that are used to dampen and suppress dust. Continuing to capture, filter, and treat all storm water run-off.

- Maintaining up to nine inspectors to screen inbound recyclables for any prohibited or non-conforming materials. We believe this is the highest number of fulltime inspectors at any of the more than 300 metal shredding facilities nationwide.

- Planting and maintaining 7 trees, 77 shrubs and 167 perennials/grasses in and around the new office building in the facility.

- Removing over 150 non-native trees/invasive species and planting and maintaining 415 new trees/shrubs/perennials and grasses on a multi-acre tract along Avenue O that will be visible from George Washington High School and commercial properties facing Avenue O, and Rowan Park.

No other business in the Chicago area has the capacity or pollution control equipment to handle the massive volume of metal shredding and recycling. Replacing General Iron's north side operation with General III's new large-capacity recycling facility in the City of Chicago provides vital economic and environmental benefits, while serving a critical need. It also prevents the detrimental impact that would result from not having such a facility located in the city.

Among the key benefits of recycling obsolete metal products is keeping discarded metal out of landfills, preventing them from more quickly reaching their capacity. Recycling also provides the most efficient, economical, and environmentally friendly means of replacing the metal products that consumers enjoy and depend on daily, such as automobiles, appliances, iron for buildings, and assorted metal goods and products, while also conserving energy and natural resources.

Chicago has long nurtured a recyclable metal supply chain, ranging from thousands of individual peddlers to large businesses. These suppliers rely upon General Iron for their livelihood and success, and their dependence will continue when operations begin at the new location.

The new facility will ensure that a vibrant recyclable metal market exits in Chicago and avoid decreasing the value of recyclable metal, forcing suppliers to transport material outside the city in search of competitive prices. A reduction in value of recyclable metal would ultimately lead to less valuable discarded items being left in streets and alleys, causing major hazards and congestion. City sanitation and refuse collection and disposal costs would increase dramatically.

MEASURES TO REDUCE EMISSIONS AND PROTECT AIR QUALITY

The new facility will utilize state of the art engineering to meet or exceed industry standards for ensuring air quality. General III's metal shredder will adopt the custom-designed and constructed air pollution control system that General Iron has developed over decades. The features include:

Enclosure – The shredder will be enclosed within a new structure consisting of materials designed to reduce noise and particulate matter emissions.

Capture Hood – Exhaust from the shredder will be captured and directed through a network of ducts to the cyclone separator.

Cyclone Separator – Once collected, the shredder exhaust will be directed through a high-efficiency cyclone that will remove large particulates. Cyclone separators work by directing air flow through the cyclone in a spiral pattern which causes particulate matter to separate from the airstream through centrifugal force.

Roll-Media Filter System – After the cyclone, the shredder exhaust will be directed through a thick filtering material that creates a physical barrier and retains particulate matter, while allowing filtered air to pass through the system. Such roll-media systems allow the facility to efficiently remove particulate matter.

Regenerative Thermal Oxidizer (RTO) – After the roll-media filter system, the filtered air will be directed to the RTO, which burns volatile organic compounds (VOCs) and eliminates 99 percent of VOCs from the airstream.

Wet Scrubber – After the RTO, the airstream will be directed to a wet scrubber which neutralizes any gases that may be generated by the RTO. The scrubber emits water vapor, or steam, through its stack.

Dust control – Water trucks, street sweepers, and large misting cannons placed at strategic locations throughout the facility will be used to control dust.

In 2018 and 2019, the U.S. and Illinois EPAs' supervised shredder emissions testing revealed the following:

- **Particulate matter (PM) emissions** from the shredder is approximately *3%* of the amount allowed in General Iron's IEPA operating permit;
- **Metal emissions** are well below U.S. EPA emission limits. The company voluntarily performed air dispersion modeling of these metal emissions, which revealed that they were far below health-based standards adopted by the State of Wisconsin (Illinois has no relevant standards); and
- The **VOC** destruction efficiency of the RTO was 99 percent.

Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Tuesday, June 23, 2020 4:09 PM
To: Bernoteit, Bob; Jones, Eric E.
Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com)
Subject: [External] periodic reporting under GIII permit

Eric asked a question about information for periodic reporting for GIII permitting.

We have not discussed this yet.

Do we need to talk about this?

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:38 AM
To: Layman, Robb
Subject: FW: LEL.docx

From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, June 24, 2020 9:16 PM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Subject: [External] RE: LEL.docx

RK & Associates, Inc.

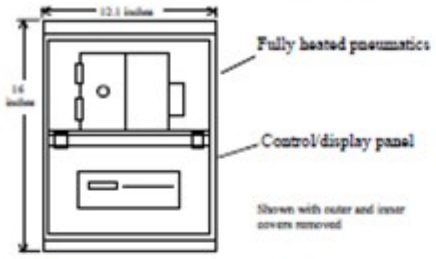
Eric,

Attached is the spec sheet for the proposed LEL monitor, I misspoke this afternoon when I said the accuracy was 1%. The reported accuracy is +/- 3% of full scale. See below

Control Instruments Corporation
25 Law Drive, Fairfield, NJ 07004-3295 USA
Telephone 973-575-9114 Fax 973-575-0013
Email: sales@controlinstruments.com
Internet: www.controlinstruments.com

Product Specifications

SNR675 PrevEx® Flammability Analyzer



Specifications

Calibration:	0 to 100% Lower Flammable Limit (LFL)
Operating Temperature	Sensor heated up to 270°C (518°F)
Accuracy	± 3% of full scale reading or 10% of applied gas whichever is greater
Repeatability	Within 1% of measurement range
Zero Stability	± 1% in 30 days
Span Stability	± 5% per year
Cell Response Time	Less than 1 second
Power Requirement	120 VAC +10% –15% 50/60 Hertz 400 Watts maximum, 230 VAC optional
Oxygen	12 to 21% oxygen in sample 0 to 21% oxygen in sample (optional)
Fuel Requirements	99.99% prepurified Hydrogen
Fuel Consumption	58 liters/day 40-45PSIG hydrogen
Compressed Air	20 PSIG, regulated, clean, dry
Air Consumption	42 SCFH, 21 liters/minute
Humidity Range	0% to 100% Relative Humidity
Relays	Three (3) SPDT 60 Watt contacts Three (3) SPST 60 Watt contacts
Relay functions	Six relays for: Warning; Danger; Fault; Horn, Calibration-in-Progress and Service Needed
Alarm Function	Adjustable alarm ranges
Analog Output	4-20mA, 275 Ω max. includes line length
Digital Output	RS-485 Serial, Modbus protocol
Flame Cell Material	Hard-coat aluminum
Sample Train Material	Hard-coat aluminum & stainless steel
Flame Cell Rating	Explosion Proof Class I, Division 1
Hazardous Area Rating	Class I, Div 2, Groups A, B, C, D Purged to Class I Division 1 (optional)
Enclosure Rating	NEMA 12/13, indoor
Assembly Dimensions	16" H x 12.1" W x 8. 5" D
Approvals	FM (standard) FMc, CE, ATEX (optional)

Analyzer Design

The Model SNR675 is an industrial strength assembly consisting of a heated flame cell and an integrated controller that continuously measures total flammable vapor concentrations from 0 to 100% of the Lower Flammable Limit (LFL) range. Optional modifications allow the SNR675 to sample low oxygen and inert atmospheres.

Control Instruments' proprietary flame temperature technology assures an accurate and linear response. A carefully metered pilot flame incinerates the sample; the resulting change in flame characteristics is proportional to the total concentration of flammable vapors present.

Heated Sampling System

To avoid condensation during sampling, the entire analyzer pneumatic assembly is heated up to 270°C (518°F). This eliminates both inaccurate readings caused by solvent dropout as well as excessive maintenance time due to sample condensation and clogging. A concentric sampling probe further assures accurate, trouble-free sampling.

It is suitable for monitoring many common solvent vapors. The analyzer is unaffected by the temperature of the process and can sample streams above 1500°F.

The assembly mounts directly onto the process ductwork, as close as possible to the sample pickup point. This eliminates external heated sample lines and allows the fastest response time.

The analyzer employs customer-supplied compressed air to drive its integrated air-aspirated sampling system. This method is simple, has no moving parts and requires very little maintenance. The sampling system does not require bottled air or sample pumps.

Autocalibration solenoids, which allow remote activation of calibration tests, are standard.

Failsafe Operation

A fault relay de-energizes whenever any of the following occur: controller electrical failure; loss of system power; loss of heat; loss of flow through the flame cell; and downscale readings caused by loss of flame or fuel.

Outputs

The system includes six relays: single-pole, double-throw relays for Warning, Danger, Fault; and single-pole, single-throw relays for Horn, Calibration-in-Progress and Service Needed. Other standard outputs include a 4-20mA analog output and an RS-485 serial port with Modbus protocol. Digital remote access and control is made possible with optional operator interface panels.

Performance

Detector response time is less than 1 second. The analyzer exhibits a very stable zero: less than one percent drift in thirty days. Calibration accuracy has less than five percent error per year.

As a result of our commitment to continual product improvement, specifications are subject to change without notice. Copyright 2010 Control Instruments Corporation. All Rights Reserved. IDTA141 Rev H 2/2010

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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From: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Sent: Wednesday, June 24, 2020 9:50 PM
To: John Pinion <jpinion@rka-inc.com>
Subject: LEL.docx

For you review!

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Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:38 AM
To: Layman, Robb
Subject: FW: GIII Revised Draft.docx

From: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, June 25, 2020 4:07 AM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Subject: [External] RE: GIII Revised Draft.docx

Thank you Eric.

We will tackle the dust plan issues and then the permit

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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From: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Sent: Thursday, June 25, 2020 6:05 AM
To: John Pinion <jpinion@rka-inc.com>
Subject: GIII Revised Draft.docx

There may be other edits based on discussions on FDP.

Please provide comments as soon as possible. Preference would be before noon but no later than 1.

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Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, June 25, 2020 4:04 PM
To: Jones, Eric E.; Layman, Robb
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) ; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com); Steve Joseph; GII, LLC; Kallas, Jim (jimkallas@general-iron.com); Zwick, Ann M.
Subject: [External] Description of Proposed LEL Monitoring System for GIII
Attachments: 2020-06-25 GIII LEL Monitoring System Description.pdf

Eric,

Attached is the description of the proposed LEL monitoring system proposed for GIII.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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RK
& Associates, Inc.

June 25, 2020

R17421-6.2

Mr. Eric Jones
Illinois Environmental Protection Agency - Bureau of Air
1021 North Grand Avenue East
Springfield, IL 62702

Proposed Shredder LEL Sensor and RTO Bypass Stack
General III, LLC – 11600 South Burley - Chicago, Illinois
Construction Permit 19090021; Site ID No.: 031600SFX

Dear Mr. Jones:

On May 18, 2020, GII, LLC (GII) experienced an explosion in the Regenerative Thermal Oxidizer (RTO) used to control Volatile Organic Compounds (VOC) emissions from a hammermill metal shredder. Although an investigation of this incident has not yet been finalized, GII believes that the source of the explosion may have been either the failure of equipment or instrumentation on the RTO resulting in a buildup of natural gas in the RTO or the volatilization of VOCs in the shredder resulting in a VOC-rich gas stream exceeding its Lower Explosive Limit (LEL) which traveled from the shredder to the RTO.

If the explosion was the result of a failure of the RTO or any of its systems, GII will rely on the RTO manufacturer to make the necessary repairs or design changes to prevent another explosion. These repairs or design changes will be made prior to startup.

To address the possibility that the explosion was caused by VOC-rich exhaust gas from the shredder, GII is proposing to install a gas flammability monitor immediately downstream of the shredder emission capture hood to continuously measure the percent of the LEL in the shredder exhaust gas. Upon sensing a an LEL concentration at, or above the monitor's set point, the proposed system would simultaneously stop the shredder feed , isolate the RTO by closing the poppet valves, shut off the RTO natural gas supply, and activate a bypass damper in the duct work upstream of the RTO inlet fan forcing the VOC-rich shredder exhaust gas to vent to atmosphere. Preventing VOC-rich exhaust gas from reaching the RTO will eliminate the potential for an explosion.

The information in this correspondence presents a detailed description of the LEL monitor and bypass vent proposed for General III, LLC (GIII) and further describes how the measured LEL value from the monitor will be used to estimate VOM (lbs) released to the atmosphere during a Bypass Event.

2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
(630) 393-9000
Fax (630) 393-9111

LOWER EXPLOSIVE LEVEL (LEL) MONITOR

Following the above referenced explosion, GIII consulted with various experts, which included the incident investigation contractor, manufacturer of the RTO and the manufacturers of the LEL monitors to select and design the installation of the proposed monitor.

The term, Lower Explosive Limit (LEL) is defined as the lowest concentration (by volume percent) of a gas or vapor in air that is capable of producing a flash of fire in the presence of an ignition source. Concentration of a combustible gas that is lower than its LEL is too lean to burn. The term Lower Flammability Limit (LFL) is defined as the lowest concentration of a flammable gas required to create a flame. For the purposes of this document, the terms LEL and LFL are interchangeable.

The Flammability Analyzer, also referred to as a LEL monitor, selected for this application is a PrevEx Model SNR674 Flammability Analyzer manufactured by Control Instruments Corporation located in Fairfield, New Jersey.

This monitor contains a carefully metered hydrogen pilot flame used to directly measure the total flammability of a sample gas. The flame burns continuously inside a small chamber in the monitor housing. Potentially flammable vapors from the process exhaust gas are drawn into the chamber, where they are incinerated by the flame. A temperature detector measures the resulting change in flame temperature and transmits the information for display in % LFL (equivalent to % LEL) format

This LEL monitor operates with a response time of 1 second or less and an accuracy of +/- 3% of full scale. This is due the monitor's direct mounting design. By mounting the monitor directly on the process exhaust duct, without heat traced sample lines, pumps, or blowers, the unpredictability of moving parts is eliminated, and the sample path length is shortened significantly. Under normal operating conditions, given the existing configuration of the shredder exhaust gas ducting, it is anticipated that gas exiting the shredder emission capture hood will reach the RTO in five to six seconds. The one second response time of the LEL monitor will provide sufficient time to activate the bypass vent and prevent VOC-rich gas from reaching the RTO.

Control Instruments' brochure for its line of PrevEx Flammability Analyzers and the specifications for the Model SNR674 are attached to this correspondence for your review.

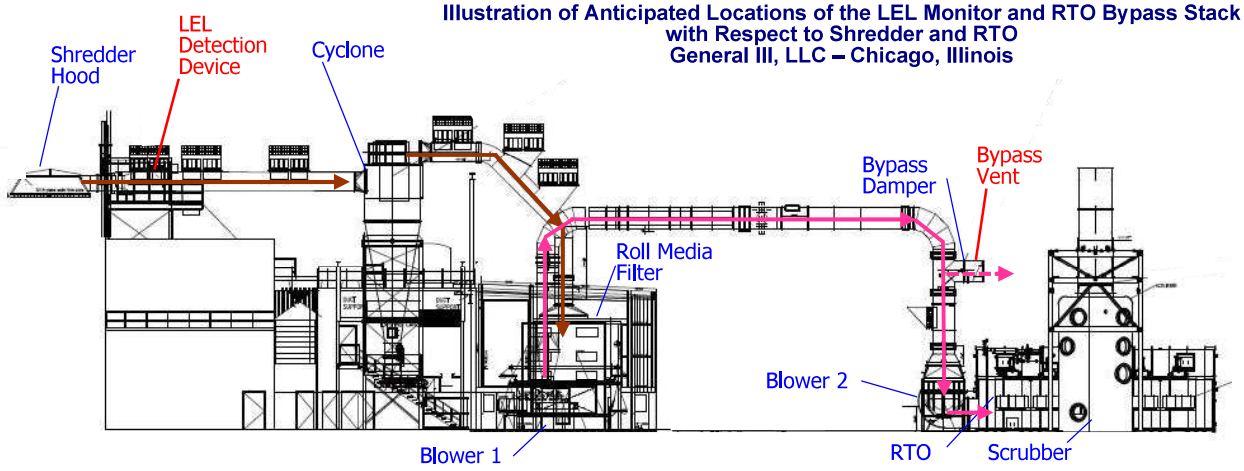
LOCATION OF LEL MONITOR AND RTO BYPASS VENT

The LEL monitor at GIII will be located outside of the shredder enclosure in the duct work close to the discharge from the shredder emissions collection hood. The bypass vent will be located in the duct work upstream of the RTO inlet fan at a location that will provide the maximum distance between the monitor and bypass vent to maximize the time for the system to react to an alarm before VOC-rich gas reaches the RTO.

As an example, the following illustration depicts the anticipated locations for the LEL monitor and RTO bypass vent with respect to the shredder emissions control system components. An induced draft fan (Blower 1) pulls the shredder exhaust gas from the hood, past the LEL monitor and then through the cyclone and roll media filter. Blower 1 then pushes the exhaust gas to the RTO inlet fan, which boosts its pressure to force the gas through the RTO and scrubber.

As shown in the example illustration below, the proposed location of the LEL monitor and RTO bypass stack will maximize the time available between an LEL alarm and opening of the bypass vent to prevent a VOC-rich gas from entering the RTO.

Illustration of Anticipated Locations of the LEL Monitor and RTO Bypass Stack with Respect to Shredder and RTO General III, LLC – Chicago, Illinois



BYPASS VENT MONITORING

A position monitor will be installed on the actuator for the bypass damper to monitor the damper position. Data from this monitor (open/close) will be captured by a Programmable Logic Controller (PLC) and maintained in the electronic database.

LEL MONITOR ALARM SET POINT

The proposed LEL monitor will measure the % of LEL in the shredder exhaust gas on a second by second basis. This data will be captured by a PLC programed to trigger an alarm at a designated set point. There is no industry data regarding LEL setpoints for a hammermill shredder. Therefore, it is not possible to identify a set point without knowing what the site specific range of expected LEL data will be.

There are two objectives for establishing a LEL alarm point. In the order of importance, they are:

1. minimize the LEL alarm set point to minimize the chance that a gas stream exceeding the LEL could reach the RTO; and,
2. establish an LEL alarm set point that will avoid unnecessary Bypass Events.

The lack of available data on the expected range and frequency of LEL values makes it impractical to identify an LEL alarm set point at this time. For the purposes of permitting, it would be reasonable to identify a maximum LEL set point, satisfactory to the Agency and to GII, that would provide an adequate margin of safety against a future explosion but still provide the flexibility for the facility to evaluate the site specific relationship between a lower LEL setpoint and the corresponding frequency of Bypass Events.

GIII's primary goal is to minimize the probability of another explosion, but at the same time, GIII does not want unnecessary Bypass Events. The process of establishing the relationship between a LEL setpoint and corresponding frequency of Bypass Events will be a continuous one and will require periodic changes in the LEL set point over time. Any permit condition addressing an LEL setpoint must provide the flexibility to adjust the LEL alarm setpoint at the facility's discretion.

In support of the RTO design , measurements of the GII shredder exhaust gas downstream of the roll media filter taken during emission testing, identified an average observed % LEL value of approximately 2.7%. This means that the average observed volume of combustible gas in the shredder exhaust stream during the sample period was 2.7% of the LEL. Applicable safety rules (NFPA 86) states that a process can operate up to a level of 50% of the LEL when equipped with a continuous LEL analyzer. In the absence of a continuous analyzer, the maximum recommended LEL is 25%.

Based on the above, a permit condition could require that the LEL alarm setpoint should be set at a value of no greater than 25%. That being said, in order to minimize the number of unnecessary Bypass Events, the alarm set point should be set at a level that represents the upper end of the observed range of % LEL. After initially establishing this set point, LEL data will be periodically evaluated by GIII to determine if the LEL alarm set point can be further reduced without causing unnecessary Bypass Events.

BYPASS EVENT

A Bypass Event as described herein, would occur when the alarm set point of the LEL monitor is reached. When an LEL alarm occurs, the following will occur automatically (not necessarily in this order).

- An alarm will sound in the shredder control room.
- The Shredder feed will be stopped.

- The RTO bypass vent will be opened to prevent VOC-rich gas from reaching the RTO.
- The natural gas supply to the RTO will be shut off.
- The RTO poppet valves will close to further isolate the RTO.

RESTART SHREDDER AND RTO

After a Bypass Event, when GII determines that operation of the shredder can safely resume, the following will occur.

- The RTO poppet valves will resume normal operation.
- Natural gas supply to the RTO will be restored.
- The RTO will go through a normal startup procedure.
- The bypass damper will be closed.
- Once the RTO reaches its established operating temperature, the shredder feed will resume operation.

ESTIMATE OF BYPASS EVENT VOM EMISSIONS

The monitor manufacturer will provide calculations that the facility can use to convert the % LEL output from the LEL monitor to an equivalent concentration of propane in parts per million dry basis. This concentration will be combined with the estimated volume of shredder exhaust gas following the initiation of a Bypass Event. These values will be used to calculate the VOM emissions (lb/hr) from each Bypass Event.

VOM is generated from the material being shredded due to the heat generated from breaking apart the metal. The heat generated is sufficient to cause water injected into the shredder to instantaneously flash to steam. Based on the above, it is assumed that VOM related to the scrap metal being fed is also flashed, or immediately volatilized, upon contact with the shredder hammers. Based on the above, once the feed to the hammermill shredder is stopped, the generation of VOM in the shredder is expected to continue for only one to two seconds. The second by second data from the LEL monitor will be used to confirm the duration of the elevated % LEL.

GIII will monitor the fan amperage of the Roll Media Filter exhaust fan motor on a minute by minute basis. The amperage monitor will have an accuracy of +/- 5 percent. At the time of a Bypass Event, the fan amperage will be used to estimate the shredder exhaust gas flow rate. The amperage at the start of an event will be compared to fan amperage from the most recent successful VOM emission test of the shredder RTO. If the amperage values are consistent, the shredder exhaust gas flow rate will be assumed

to be equal to the RTO inlet gas flow rate from the emission test. If the amperage differs significantly, a fan curve will be used to identify the estimate flow rate, corresponding to the measured fan amperage at the start of an event.

This estimated volume of exhaust gas, combined with the propane concentration equivalent to the measured % LEL will be used to estimate total VOM emission (lbs/event) from a Bypass Event.

BYPASS EVENT DATA COLLECTION

The output from the LEL monitor and the bypass damper position will be captured by a PLC and stored in the electronic database.

For each event when the emergency bypass vent on the RTO is open while feed material is being sent to or being processed in the Hammermill Shredder System, the following records will be used to document the event: the date, starting time and duration of the event; a description of the event; the monitored flammability of the gas stream at the start of the event; an estimate of the additional VOM emissions attributable to the event, with supporting data; the likely explanation for the event.

In addition, based on normal data collection, the shredder and RTO/Scrubber operating data prior to and during a Bypass Event will also be available.

BYPASS EVENT REPORTING

GIII will generate a summary report for each Bypass Event that will identify the time the event, the estimated uncontrolled VOM emissions, identification of any unusual characteristics of the scrap being processed (if any), the potential cause of the event (if one can be identified), corrective actions that may be warranted (based on an identified cause of the event), and the time the bypass damper was closed and shredder feed resumed.

We trust that the above information is sufficient to meet your needs at this time. An electronic copy of this document has also been forwarded to you, Bob Bernoteit, and Ms. Julie Armitage.

If you have any questions or need any additional information, please don't hesitate to contact us at 630-393-9000.

AdYours very truly,
RK & Associates

John G. Pinion
Associate Engineer

cc: Mr. Jim Kallas – General III, LLC – Chicago, Illinois (via e-mail)
Ms. Julie Armitage – IEPA Bureau of Air – Springfield, Illinois (via-e-mail)
Mr. Bob Bernoteit - IEPA Bureau of Air – Springfield, Illinois (via-e-mail)

RK
& Associates, Inc.

Proposed Shredder LEL Monitor
and RTO Bypass Stack
GII, LLC – Chicago, Illinois
Site ID No.: 031600BTB

GII, LLC
1909 North Clifton Avenue
Chicago, Illinois 60614

ATTACHMENT A

CONTROL INSTRUMENTS CORPORATION
PREVEX FLAMMABILITY ANALYZER BROCHURE AND
SPECIFICATIONS FOR MODEL SNR674 FLAMMABILITY ANALYZER.

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PrevEx
Flammability Analyzer
Control Instruments
Corporation

PrevEx

The PrevEx, formerly the 670 series of analyzers, is Control Instruments' Flammability Analyzer for Lower Flammable Limit monitoring. Its new name boasts its ability to prevent explosions and its new look adds flavor to the industrial environment. To top it off, it still solves all of the sampling, measuring, and reporting problems found in industrial process applications while promising accuracy, consistency, and reliability. The PrevEx allows you to protect your investment: it keeps your facility, employees, and environment safe while increasing your productivity and eliminating downtime. Its accuracy surpasses that of any other analyzer, due to its unique flame temperature technology, delivering the highest degree of safety. This exclusive design is based on a sensing-flame concept that has since proven itself to be the most reliable detection system in the industry. Unlike catalytic sensors that can become contaminated, give false readings or fail outright, the PrevEx has many impressive features to ensure unmatched safety, extreme accuracy, and ultra-fast response time, even when sampling a mixture of several different flammable vapors. The PrevEx Flammability Analyzer is efficient and economical, leaving you feeling confident in its performance. After all, a monitoring system is only as good as the sensor it employs! Read on to find out more of the PrevEx's exclusive features and see how it truly prevents fires and explosions.

Prevent Exp

PrevEx Delivers
Unmatched Safety

The PrevEx Flammability Analyzer incorporates several fail-safe features designed to ensure perfect safety under all conditions. In fact, the inherent design of the sensing flame technology is that the flame must always be on and the system working properly or an alarm is given. This leaves no problem undetected. Whether it is a loss of fuel, air, sample flow or power, a malfunction relay is automatically tripped and the operator is notified immediately of a status change. By contrast, catalytic sensors and other "indirect" measuring systems can become corroded, obstructed or poisoned, yet still register as normal. The alarm relays include warning, danger, fault, horn, service needed, and system under calibration. These built-in relays guarantee complete safety and reliability, allowing for only true indications on the meter. From a safety viewpoint, the sensing flame technology has no equal. The PrevEx also exhibits a very stable zero with a calibration accuracy of less than 5% error per year. In recognition to the PrevEx's inclusive fail-safe features, our flammability analyzer has received the following approvals:

FM APPROVED CE CSA Ex ATEX

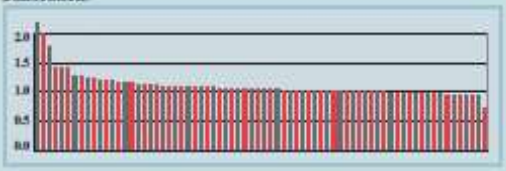
No Condensation
Yields True Sample

The essence of the PrevEx detection system lies in its ability to perform accurately under the demands of the industrial environment. Industrial processes contain compounds that condense and contaminate a sensor. With condensation comes clogging, fouling, and poisoning, which restricts the sample flow to the analyzer, removing important elements from the sample stream. This results in an inaccurate reading. To combat this problem and assure a true sample, the PrevEx has a corrosion resistant, heated sample train through which the sample is delivered. The heat eliminates that condensation and withstands corrosive elements, leaving you with an accurate representation of your process. To be doubly sure that you are receiving an accurate reading free of contamination, the PrevEx Flammability Analyzer collects the sample using an aspirator, driven by compressed air. There is no pump or blower; instead microprocessor control guarantees constant sample flow and pressure through the train, assuring you of the highest level of accuracy. To top it off, even the sensor itself is free of poisoning from various organo-metallics, halogenated hydrocarbons, silicones, or plasticizers. This reliable performance leaves your plant safe and secure, avoiding unnecessary downtime and frequent maintenance.

losions

Universal Calibration

The PrevEx gives consistent and reliable readings even when faced with multiple or changing solvent concentrations. In fact, the PrevEx Flammability Analyzer has the ability to read multiple solvent formulations more accurately than any other sensor in the entire industry, resulting in the least amount of detection error from solvent to solvent. This is due to the powerful universal calibration feature, made possible through the PrevEx's sensing flame technology. This technology provides the ability to accurately measure solvent concentrations for an array of solvents, even though the meter was calibrated on only one specific solvent. That's right with the PrevEx there is no need for recalibration, giving you excellent cross-calibration accuracy and ultimately eliminating incorrect readings. So, there is no need to shut down your system or buy multiple sensors to monitor various solvents simultaneously, with the PrevEx just one calibration offers protection with accuracy for your present and future needs. In the graph below, each bar illustrates the response factor for a particular solvent. For most combustible gases it ranges from 0.8 to 1.2 and for solvents from 0.9 to 1.1. The uniformity of the bars indicates Universal Calibration.

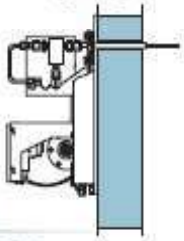


Sensing Flame Technology

The PrevEx Flammability Analyzer contains a carefully metered pilot, or sensing flame. It is a direct measure of the total flammability of the sample, not to be confused with the industry's FID. This flame burns continuously inside a small chamber of the sensor housing. Flammable vapors are drawn from the sample point into the chamber, where they are incinerated by the flame. A temperature detector measures the resulting change in flame temperature and transmits the information for display in % LFL format. Should a problem of any kind arise the flame temperature must change and the control monitor always lets you know immediately.

Direct Mount Provides Fastest Response Time

When it comes to giving you early warning no other design even comes close to the PrevEx's less than 1-second response time. This impressive response, which is eight times faster than the industry's average sensor, is due to the PrevEx's direct mount design. By mounting the sensor directly on the process duct without heat trace sample lines, pumps, or blowers, you eliminate the unpredictability of moving parts and shorten the sample path significantly. This radically reduces sample delivery time, while ultimately accelerating response time. The PrevEx Flammability Analyzers are readily accessible. They easily attach to a wide variety of process walls and duct types and are unaffected by high process temperatures, making installation and operation uncomplicated. Field pneumatic and electrical connections are easily made at the bottom of the analyzer. If necessary, an optional wall-mount design is available.

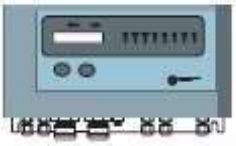


PrevEx mounted directly on process duct

Efficient Operation Reduces Maintenance

The PrevEx Flammability Analyzer's all inclusive design is easily operated and maintained. The front panel includes a complete set of status indicators and an eight-character alpha-numeric LCD display. Using just two pushbuttons, you can access all calibration, programming and diagnostic routines. And for complete access, contacts are also provided for two external control inputs. A window in the outer cover lets you see the entire front panel. This is where calibration adjustments can be initiated. Since the PrevEx comes equipped with solenoid valves for both zero and span test gas, an integral microprocessor automatically makes all calibration adjustments for you. The window also permits non-intrusive local access; you simply shine a flashlight at photo-transistors to activate a command menu. To make operation even more efficient the PrevEx can be accessed remotely. You simply connect directly to your PLC or a display meter in the operator panel through the built-in 4-20mA analog output. If you need true, two-way digital communication with remote control, the PrevEx provides a Modbus RS-485 serial port and optional operator interface panels. This extremely efficient process greatly reduces maintenance time. Of course, all parts are readily available and quickly replaced when needed, so when you want to inspect or service a unit the job is fast and easy.

Field pneumatic and electrical connections made at bottom of PrevEx



PrevEx Tailored
To Your Requirements

The PrevEx Flammability analyzer consists of several models designed to fit your specific monitoring needs. All models monitor a number of common vapors and are unaffected by processes as diverse as flexographic printing and ceramic kilns. The first two industrial strength analyzers, the SNR675 running at 270°C and the SNR674 running at 200°C, are suitable for the most demanding conditions of industrial monitoring, where high flash point solvents, resins, and plasticizers may be present. The next model, the SNR672 running at 120°C above the dew point of water vapor and most industrial solvents, is intended for application conditions that aren't as severe. These models are all available with the NEMA 4X outdoor housing for outdoor installation in any kind of climate. And for relatively clean applications such as rotogravure and flexographic printing we offer the SNR671 which is run at 60°C.

NEMA 12/13
Indoor Housing

NEMA 4X
Outdoor Housing

Find Out More
Today

Control Instruments Corporation has been engineering solutions to gas and solvent vapor monitoring problems since 1969. We work hard to assess your risks and carefully tailor a monitoring system to meet your needs. For detailed information, system specifications, and pricing, please contact us today.

PrevEx

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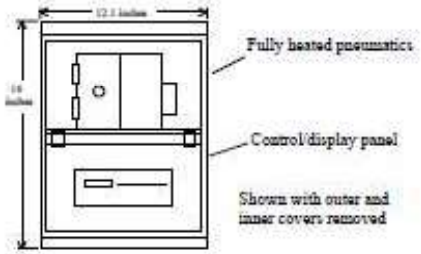
Product Specifications



SNR674 PrevEx® Flammability Analyzer

Specifications

Calibration:	0 to 100% Lower Flammable Limit (LFL)
Operating Temperature	Sensor heated to 200°C (392°F)
Accuracy	± 3% of full scale reading or 10% of applied gas whichever is greater.
Repeatability	Within 1% of measurement range
Zero Stability	± 1% in 30 days
Span Stability	± 5% per year
Cell Response Time	Less than 1 second
Power Requirement	120 VAC +10% –15% 50/60 Hertz 400 Watts maximum, 230 VAC optional
Oxygen	12 to 21% oxygen in sample 0 to 21% oxygen in sample (optional)
Fuel Requirements	99.99% prepurified Hydrogen
Fuel Consumption	58 liters/day 40-45PSIG hydrogen
Compressed Air	20 PSIG, regulated, clean, dry
Air Consumption	42 SCFH, 21 LITERS/minute
Humidity Range	0% to 100% Relative Humidity
Relays	Three (3) SPDT 60 Watt contacts Three (3) SPST 60 Watt contacts
Relay functions	Six relays for: Warning; Danger; Fault; Horn; Calibration-in-Progress and Service Needed
Alarm Function	Adjustable alarm ranges
Analog Output	4-20mA, 275 Ω max. includes line length
Digital Output	RS-485 Serial, Modbus protocol
Flame Cell Material	Hard-coat aluminum
Sample Train Material	Hard-coat aluminum & stainless steel
Flame Cell Rating	Explosion Proof Class I, Division 1
Hazardous Area Rating	Class I, Div 2, Groups A, B, C, D Purged to Class I Division 1 (optional)
Enclosure Rating	NEMA 12/13, indoor NEMA 4X, outdoor (optional)
Assembly Dimensions	16" H x 12.1" W x 8.5" D
Approvals	FM (standard) FMc, CE, ATEX (optional)

Analyzer Design

The Model SNR674 is an industrial strength assembly consisting of a heated flame cell and an integrated controller that continuously measures total flammable vapor concentrations from 0 to 100% of the Lower Flammable Limit (LFL) range. Optional modifications allow the SNR674 to sample low oxygen and inert atmospheres.

Control Instruments' proprietary flame temperature technology assures an accurate and linear response. A carefully metered pilot flame incinerates the sample; the resulting change in flame characteristics is proportional to the total concentration of flammable vapors present.

Heated Sampling System

To avoid condensation during sampling, the entire analyzer pneumatic assembly is heated to 200°C (392°F). This eliminates both inaccurate readings caused by solvent dropout as well as excessive maintenance time due to sample condensation and clogging. A concentric sampling probe further assures accurate, trouble-free sampling.

It is suitable for monitoring many common solvent vapors. The analyzer is unaffected by the temperature of the process and can sample streams above 1500°F.

The assembly mounts directly onto the process ductwork, as close as possible to the sample pickup point. This eliminates external heated sample lines and allows the fastest response time.

The analyzer employs customer-supplied compressed air to drive its integrated air-aspirated sampling system. This method is simple, has no moving parts and requires very little maintenance. The sampling system does not require bottled air or sample pumps.

Autocalibration solenoids, which allow remote activation of calibration tests, are standard.

Failsafe Operation

A fault relay de-energizes whenever any of the following occur: controller electrical failure; loss of system power; loss of heat; loss of flow through the flame cell; and downscale readings caused by loss of flame or fuel.

Outputs

The system includes six relays: single-pole, double-throw relays for Warning, Danger, Fault; and single-pole, single-throw relays for Horn, Calibration-in-Progress and Service Needed. Other standard outputs include a 4-20mA analog output and an RS-485 serial port with Modbus protocol. Digital remote access and control is made possible with optional operator interface panels.

Performance

Detector response time is less than 1 second. The analyzer exhibits a very stable zero: less than one percent drift in thirty days. Calibration accuracy has less than five percent error per year.

As a result of our commitment to continual product improvement, specifications are subject to change without notice. Copyright 2010 Control Instruments Corporation. All Rights Reserved. 1078TA123 Rev J 2/2010

Layman, Robb

From: Layman, Robb
Sent: Thursday, June 25, 2020 6:14 PM
To: Zwick, Ann M.
Subject: Fwd: GIII Documents
Attachments: 19090021.pdf; General Iron Responsiveness Summary.pdf

For your information... mailed to Jim Kallis but evidently not forwarded due to something or other. Can you forward? Thanks.

Get Outlook for iOS

From: Frost, Brad <Brad.Frost@Illinois.gov>
Sent: Thursday, June 25, 2020 5:48:21 PM
To: Layman, Robb <Robb.Layman@Illinois.gov>
Subject: GIII Documents

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued: June 25, 2020
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted pursuant to the above-referenced application to the above-designated Permittee to CONSTRUCT a Scrap Metal Recycling Facility consisting of the following emission source(s) and/or air pollution control equipment:

Hammermill Shredder System:

One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor

Ferrous Material Separation System:
70 Material Transfer Points including:
- Seven (7) Magnetic Separators;
- Two (2) Z-Box Separators with Cyclones;
- Two (2) Ferrous Metal Stacking Conveyors;
- One (1) Auto Shredder Residue (ASR) Stacking Conveyor

2 Truck/Rail Loading Area
1 Barge Loading Point
7 material stockpiles including:
- 2 Poker Picker Stockpiles
- 2 Ferrous Metal Stockpiles
- 1 ASR Stockpile
- 1 Raw Material Stockpile
- 1 Fluff Stockpile (bin).

Non-Ferrous Material Separation System:
88 Uncontrolled Transfer Points including:
- Fifty-three (53) Conveyors;
- Twenty (20) Magnetic Separators;
- Fourteen (14) Eddy Current Separators (ECS) located in Enclosures;
- One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;

11 Controlled Transfer Points including:
Nine (9) Conveyors;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Vibratory Batch Feeder;
13 Uncontrolled Screening Points including:
Five (5) Polishers (Air Classifiers) with Cyclone;
One (1) Vibratory Feeder;
Three (3) Tec Screeners;
12 Controlled Screening Points including:
Six (6) Wind Sifters (Air Classifiers) with Cyclones;
Three (3) Tec Screeners;
Six (6) AEI Ecostar Screeners;
2 Truck Loading Points including:
One (1) ASR Feed Hopper with Vibratory Batch Feeder;
13 Stockpile Loading Points
Fines Processing Building - with All Equipment in Building Controlled by Dust Collector DC-01

Miscellaneous Fugitive Sources

Raw Material Unloading/Handling;
Intermediate Ferrous Material and Product Stockpiles;
Fluff Storage and Loadout;
Material Loadout;
Roadways-Paved and unpaved; and
Parking Areas

This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major

modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 - Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave, Chicago).

f. Operation of the Scrap Metal Recycling Facility listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder. This condition supercedes Standard Condition 1 of this construction permit

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one-hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The RTO associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the National Emission Standards for Hazardous Air

Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Primary Nonferrous Metals Area Sources–Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be

causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. The Scrap Metal Recycling Facility shall be operated under the provisions of a Fugitive Emissions Operating Program. This operating program was submitted by the Permittee and designed to limit fugitive particulate matter emissions to ensure compliance with 35 Ill. Adm. Code 212.301.

b. The Fugitive Emissions Operating Program, as submitted by the Permittee pursuant to Condition 10(a) dated June 25, 2020, is incorporated herein by reference. The source shall comply with the provisions of this Program and any amendments to the Program submitted pursuant to Condition 10(c).

c. The Fugitive Emissions Operating Program shall be amended from time to time by the Permittee so that the operating Program is current. Such amendments shall be consistent with Condition 10(a) and shall be submitted to the Illinois EPA within thirty (30) days of amendment. Any future revision to the Program made by the Permittee during the permit term is automatically incorporated by reference unless expressly disapproved by the Illinois EPA within thirty (30) days of submission. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

d. The Hammermill Shredder System shall be operated under the provisions of a Feedstock Management Plan. This plan shall be submitted to the

Illinois EPA for review and approval at least ninety (90) days prior to initially receiving recycling materials at the facility. At a minimum, this plan must contain the following:

i. Incoming material restrictions;

ii. Load inspection procedures;

iii. List of materials accepted requiring special handling;

iv. Procedures for each of the materials requiring special handling;

v. Personnel training procedures.

11a. The Roll-Media Filter, RTO, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

b. The RTO combustion chambers shall be preheated to at least the manufacturer's recommended temperature, but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three-hour block average.

c. The RTO shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

d. The RTO associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

e. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a 15 block minute averages basis and on an hourly average in an electronic database.

f. The Roll-Media Filter associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a 15-block minute average basis and on an hourly average in an electronic database.

g. The Dust Collector (DC-01) associated with the Fines Processing Building shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least an hourly basis in an electronic database.

h. The monitoring devices required in conditions 11(e)-(h) shall be installed and fully operational at prior to first processing material through the Hammermill Shredder System.

i. The Permittee shall operate the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive Emissions Operating Program under the provisions of an Operation and Maintenance Plan. At least thirty (30) days prior to first processing material through the Hammermill Shredder System, the Permittee shall submit to the Illinois EPA for review and approval an Operation and Maintenance Plan for the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive Emissions Operating Program. This plan shall provide specific operating parameters and inspection, and maintenance practices and procedures for the for each system or control device identified in this condition, including frequencies of such specific activities and actions and associated recordkeeping procedures.

j. The Permittee shall install, operate, and maintain a continuous gas flammability monitoring device for the shredder exhaust gas stream. This device shall measure the percent of the Lower Explosive Limit (% LEL) or percent of the Lower Flammability Limit (% LFL) of the shredder exhaust gas. This monitoring device shall have an accuracy of at least +/-3 percent of full scale. Values measured by this device shall be automatically recorded at least once per second and stored in an electronic data base.

k. The Permittee shall install, operate and maintain a continuous monitoring device for the control train for the Hammermill Shredder System for one of the following operational parameters. This monitoring device shall make measurements at least every minute and have an accuracy of at least ± 5 percent. The data measured by this device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database. The Permittee shall determine the gas flow rate to be used to calculate VOM emissions from a Bypass Event using data collected by this monitoring system.

    i. The amperage or usage of electrical power by the motor for the Roll Media Filter fan;

ii. The shredder exhaust gas flow rate; or.

iii. Other operational parameter(s) approved by the Illinois EPA.

l. The Permittee shall install, operate, and maintain a continuous monitoring device for the status of the emergency bypass damper for the RTO in the control train for the Hammermill Shredder System, i.e., whether this damper is closed or open. The data collected by this device shall be automatically recorded in an electronic database.

m. The Permittee shall operate the continuous monitoring devices required by Condition 11(j), (k) and (l) at all times that the Hammermill Shredder System is in operation.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack and Rail and Truck Loading)	7:00 AM - 7:00 PM	12 hrs/day	7:00 AM - 5:00 PM	10 hrs/day
Barge, Loading	7:00 AM - 3:00 PM	8 hrs/day	7:00 AM - 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM - 11:00 PM	18 hrs/day	5:00 AM - 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM - 7:00 PM	14 hrs/day	5:00 AM - 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the RTO associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
2 Rail/Truck Loading areas and 1 Barge loading point	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
2 Rail/Truck Loading areas and 1 Barge loading point	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	(Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	(Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	(Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	(Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	(Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	(Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12-month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the Permittee shall:

i. Conduct opacity observations from the Hammermill Shredder System stack, each emission unit in the Ferrous Material Separation

System, Fines Processing Building (DC-01), each emission unit in the Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123 and Condition 3(a) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

ii. Measure and quantify (gr/dscf and lb/hr) the emissions of PM, PM_{10}, and $PM_{2.5}$ from the Fines Processing Building (DC-01) during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 212.324(b), and Conditions 3(d)-(g), and 12(e)(i) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

iii. Measure and quantify the emissions of PM (gr/dscf and lb/hr), PM_{10} (gr/dscf and lb/hr), $PM_{2.5}$ (gr/dscf and lb/hr), SO_2 (ppmv and lb/hr), CO (ppmv and lb/hr), HCl (ppmv and lb/hr), and Metals (ppmv and lb/hr) emissions from the Hammermill Shredder System during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, and Conditions 3(d)-(g), 12(b)(ii), (b)(iii) and (c) of this permit.

iv. Measure (ppmv) and quantify (lb/hr) from the inlet and outlet emissions of VOM from the RTO, measure VOM capture efficiency of capture system, determine the destruction efficiency of the RTO, and calculate overall VOM control efficiency for the capture system and RTO, during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 218.986(a), and Condition 12(b)(i) of this permit. If VOM capture efficiency meets the criteria of a PTE as determined by USEPA Method 204 or an alternate method adopted by the USEPA to demonstrate capture efficiency, testing under this condition shall be conducted once every five (5) years from the preceding testing date. However, if the VOM capture efficiency does not meet the criteria of a PTE, subsequent testing shall be conducted within twelve (12) months from the preceding testing.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A

Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Gas Analysis for the Determination of Dry Molecular Weight-Instrumental Method	USEPA Method 3A
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29**
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202
Criteria for and Verification of a Permanent or Temporary Total Enclosure	USEPA Method 204, 204(A-F)

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. Within sixty (60) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may

be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status regarding the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control

equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying using emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the RTO and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Roll Media Filter, RTO, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. A copy of the Fugitive Emissions Operating Program, any amendments or revisions to the Fugitive Emissions Operating

Program, and a record of activities completed according to the Fugitive Particulate Operating Program.

iii. A. Daily records demonstrating the temperature for the RTO;

B. Daily records demonstrating pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber

C. Daily records demonstrating scrubbant liquid flow rate of the Quench/Packed Tower Scrubber;

D. Daily records demonstrating the pH of the scrubbant of the Quench/Packed Tower Scrubber;

E. Daily records demonstrating inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream

F. Daily records demonstrating amperage or usage of electrical power by the motor for the fan in the control train or inlet gas flow rate of the control train.

G. Daily records demonstrating status of the emergency bypass vent on the RTO in the control train for the Hammermill Shredder System, i.e., whether this vent is closed or open.

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken.

v. Natural gas usage for RTO (mmscf/month and mmscf/year).

vi. Hours of operation for Non-Ferrous System, Barge loading, Hammermill Shredder System, RTO, and Quench/Packed Tower Scrubber (hours/day, hours/month and hours/year).

vii. Type and amount material received by the facility (tons/month and tons/year).

viii. Type and amount material processed by Hammermill Shredder System (tons/month and tons/year).

ix. Material throughput (tons/month and tons/year) for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building.

x. Amount of non-metallic materials (fluff) shipped offsite (tons/month and tons/year).

xi. Hours of operation for Dust Collector DC-01 (hours/month and

hours/year).

xii. For each event when the emergency bypass vent on the RTO is open while feed material is being sent to or being processed in the Hammermill Shredder System, the Permittee shall maintain records that include: the date, starting time and duration of the event; a description of the event; the monitored flammability of the gas stream at the start of the event; an estimate of the additional VOM emissions attributable to the event, with supporting data; the likely explanation for the event.; and, if the stoppage of feed to the Hammermill Shredder System when this vent opens is not automated, the time that feed to this system ceased.; and

xiii. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required under this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and

after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24a. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt date of material to be processed in the Hammermill Shredder within seven (7) calendar days after the initial receipt date.

b. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager within seven (7) calendar days from the date that raw material is first processed through the hammermill shredder.

c. If, during a Bypass Event, the feed to the hammermill shredder continues for 30 seconds or more after the start of a Bypass Event, the Permittee shall notify the Illinois EPA within 3 hours of the start of the event, with this notification made by email to the Manager of the Compliance Section in the Illinois EPA, Bureau of Air. For all other Bypass Events, the Permittee shall submit to the Illinois EPA, Bureau of Air, Compliance Section Manager, within seven (7) calendar days of such event, a report for detailing the following information for each event when feed to the shredder was interlocked due to the LEL system: % of LEL detected, duration of the event, and VOM emissions with supporting documentation.

25a. The Permittee shall submit a quarterly report containing the following information for each month of the quarter:

i. Type and amount material received by the facility;

ii. Type and amount material processed by Hammermill Shredder System;

iii. Throughput for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building;

iv. PM, PM_{10}, and HAPs emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System, with supporting calculations;

v. A summary of all bypass events that occur during the quarter and for each event, this summary shall include the date, time, duration, description, likely explanation and estimated additional VOM emissions due to the event.

vi. VOM emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System, with supporting calculations; and

vii. Amounts of "fluff" and other non-metallic materials shipped offsite (truckloads/month).

b. The Permittee shall submit this quarterly report to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) calendar days of the end of a calendar quarter.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and an electronic copy of test protocols and test results to epa.boa.smu@illinois.gov

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

Responsiveness Summary
June 25, 2020
Construction Permit General III, LLC
Source ID No.: 031600AGJ
Application No.: 19090021

Table of Contents

INTRODUCTION 1
RECENT EVENTS 1
PUBLIC OUTREACH 2
SPECIAL MENTION 3
DECISION 3
BACKGROUND 3
AVAILABILITY OF DOCUMENTS AND ILLINOIS EPA CONTACT 4
QUESTIONS AND COMMENTS WITH RESPONSES BY THE ILLINOIS EPA 4
Public Participation 4
Environmental Justice 13
Information Sharing 17
Cumulative Risk 18
Zoning 23
Permitting 25
Single Source 38
Periodic Monitoring/ Practical Enforceability 40
Stack Testing 47
Fugitive Particulate Operating Program 53
Ambient Air Monitoring 56
Modeling 59
Inspections/Oversight/Compliance/Enforcement/Penalties 66
Explosion 68
Miscellaneous 70
Attachment 1: Listing of Significant Changes Between the Draft Construction Permit and the Issued Construction Permit 73

INTRODUCTION

This document is a Responsiveness Summary prepared by the Illinois EPA in conjunction with the issuance of a construction permit to General III, LLC (General III) for a scrap metal recycling facility to be located at 11600 South Burley Avenue in Chicago, IL. This document provides a written response to significant, permit-related comments raised at public hearing and during the related written public comment period.

RECENT EVENTS

The Director and staff of the Illinois EPA share a sincere appreciation and sympathy for the hardships that many residents of Illinois and particularly Chicago's Southeast Side have endured in recent months due to the COVID-19 pandemic. The pandemic dramatically altered daily life for almost everyone in our Nation and in many other countries around the globe. The public health impact of the virus has been felt most severely by several vulnerable segments of our society including the elderly and patients living in long-term healthcare facilities, individuals with certain respiratory or cardiovascular co-morbidities or weakened immune systems, and, as we have learned more recently, communities of color have contracted and died from the disease in disproportionate numbers. The related social and economic impacts caused by the virus, which have ranged from the closures of our schools, governmental offices and religious activities, the shut-down of non-essential businesses, and the fears and isolationism that accompanies social distancing, to the loss of friends and loved ones who succumbed to the contagion, are nothing short of profound. Regrettably, these and other effects of the pandemic are still being felt, even as medical science and public health officials continue to fight and monitor the disease, and our collective efforts turn to restoring some semblance of normalcy to our lives.

The recent protests posed a separate set of physical and emotional difficulties for many residents in Chicago and surrounding communities. National events that ignited the protests are slowly giving way to a renewed sense of commitment to end systemic racism. For the many thousands of peaceful protesters marching in the region, these events have given voice to their frustrations with our institutions, past and present, and sounded a call for not just institutional reforms but for a change in how we interact with each other as human beings. For others, the shadow of violence in the wake of some protests provoked anxieties about the safety of their communities, as suggested by comments received during the public comment period urging a delay in the current proceeding.

The confluence of these events during the current permitting process was unfortunate. However, while various regulatory activities at different levels of government were canceled or delayed, essential activities conducted by state agencies continued without significant interruption as part of Governor J.B. Pritzker's Disaster Proclamations and Executive Orders responding to the COVID-19 crisis. This essential work included activities overseen by the Illinois EPA in the area of environmental permitting.

The Illinois EPA administers its permit programs pursuant to the requirements of the Illinois Environmental Protection Act and implementing regulations, including a decision deadline under which the Illinois EPA must act on a given permit application. These requirements are at the heart of why the current action cannot be delayed. Moreover, permit applications remained pending with the Illinois EPA from before the start of the pandemic, and some applicants, including General III, continued to work with Illinois EPA Permits staff throughout the Spring in anticipation of securing the necessary permits. As more people return to work and businesses reopen, and as broader sectors of our economy become more functional again, applicants are inquiring about their projects and submitting new applications. These signs point to the need for us to continue the administration of permit programs.

Due to the COVID-19 pandemic and subsequent Proclamations and Executive Orders by Governor Pritzker limiting large public gatherings, the Illinois EPA as with all other agencies and governmental bodies in the State, was not able to provide an "in-person" hearing in this matter. In lieu of a traditional hearing venue, the Illinois EPA opted to provide a "virtual" hearing, where participants called in by phone or joined by computer to make comments or listen to the proceedings. A virtual hearing comports with all requirements of 35 IAC Part 166, Subpart A, while also minimizing the threat of COVID-19 exposure to the public. These steps sought to balance the interests of public safety with the need to implement existing programs consistent with legal requirements.[1]

PUBLIC OUTREACH

Pursuant to an IEPA environmental justice notification for the new construction permit, advocacy groups submitted a request for hearing on the project. Recognizing the significant public interest in the facility, IEPA issued a notice of public comment period beginning on March 30, 2020 and two virtual public hearing sessions on May 14, 2020. The purpose of this action was to allow for public participation in the permitting process for a draft construction permit developed by the Illinois EPA's Bureau of Air.

The public outreach associated with the application for construction permit was not required by statute or regulation but, rather, was discretionary on the part of the Illinois EPA's Director. A hearing officer was designated, the notice was issued, and the comment period and the informational permit hearing were all conducted, in accordance with applicable regulations found at 35 Ill. Adm. Code Parts 166 and 252. The notice of the comment period and virtual hearing was posted to the agency website, as well as forwarded to numerous elected officials and persons known to be interested in the matter, including representatives from various environmental advocacy groups. Contemporaneous with the notice, the draft permit and related documents from the administrative record were also posted to the Illinois EPA's website.

Instructions detailing how to participate in the informational hearing, either through oral comments or simply listening in to the proceedings, were also posted. The notice and instructions for hearing participation included numerous references to agency contacts (either the Hearing Officer or the Office of Community Relations) for any questions or concerns (e.g., requests for interpretation, informational or special needs, assistance with WebEx).

The public hearing was held on May 14, 2020. As originally scheduled, the Illinois EPA held two sessions: the first session was held at 1:30 pm and featured seven speakers and approximately 117 participants, and the second session was held at 6:00 pm and featured 14 speakers and approximately 86 participants. All told, over 200 people participated in the public hearing, far exceeding the level of participation shown in recent informational permit hearings concerning projects in EJ areas. A Webex recording of the hearing sessions was later posted to the agency website.
https://www2.illinois.gov/epa/public-notices/boa-notices/Pages/default.aspx

[1] **Even now, public gatherings of uncertain size are still prohibited. A gathering of more than 200 people as participated in the public hearing is not envisioned until the state has reached Level 5 of the Governor's plan. This would only result in the issuance of a permit by default or a permit denial, the latter of which is not supported by the administrative record.**

It can be noted that the Hearing Officer and Office of Community Relations assisted participants in advance of the hearing and several speakers during the two sessions. They also worked assiduously with all commenters who contacted the Illinois EPA to assure timely receipt of comments, including several commenters who sought help with more voluminous comments to avoid the necessity of printing and mailing.

The public comment period ran for 77 days, thus affording the public nearly two and half months to consider the planned permitting action. Approximately 329 people submitted written statements, submissions and exhibits during the comment period, again exceeding the level of past participation in previous projects impacting EJ areas. Oral and written comments generally expressed opposition to the project and the accompanying participation process, with many people urging the Illinois EPA to suspend or deny the application for construction permit. While acknowledging the voiced opposition to the process, the level of participation supports the Illinois EPA's position that the right of the public to voice their concerns about the project was assured.

SPECIAL MENTION

Before the company can begin operations at the Burley Avenue location, it must also receive permits from the City of Chicago, including one pursuant to the City's new rules for large recycling facilities. The new rules, effective June 5, 2020, implement the City's Recycling Facility ordinance and include additional requirements that General Iron meet in order to begin operating at the southeast side location. The City's rules provide minimum standards for what is required in a permit application, including information to demonstrate that the facility will be designed and operated in a manner that prevents public nuisance and protects the public health, safety, and the environment. The rules also contain location, operational, and design standards applicable to large recycling facilities such as General III, including vehicle and traffic requirements, noise monitoring, air quality standards, and air emission monitoring.

DECISION

On June 25, 2020, the Illinois EPA issued a construction permit for General III, LLC. This final permit determination was rendered after consideration of all comments and in accordance with the Illinois Environmental Protection Act.

Significant changes have been made to the draft permit in response to public input and are noted in Attachment A to this Responsiveness Summary.

BACKGROUND

On September 25, 2019, General III, LLC applied for a permit to construct a scrap metal recycling facility to be located at 11600 South Burley Avenue in Chicago, Illinois.

This application for permit arises based on an agreement between the City of Chicago, General Iron Industries, and RMG Investment Group that the existing scrap metal recycling operations of General II, LLC, at 1909 North Clifton Avenue in Chicago, Illinois cease and relocate, matters for which the Illinois EPA had no involvement and for which it has no legal role.

Rather, the Illinois EPA is the state permitting authority charged with permitting Illinois sources consistent with applicable state and federal laws and regulations. General III is required to obtain an air pollution control construction permit from the Illinois EPA Bureau of Air prior to beginning construction because it is a new emission source. For additional background information, please refer to the Project

Summary, which is available on the Illinois EPA Public Notice webpage:
https://www2.Illinois.gov/epa/public-notices/boa-notices/Pages/archive.aspx.

As the scrap metal recycling facility is relocating to a site that the Agency would deem to be within an environmental justice area, the Agency sent an EJ notification on October 1, 2019, consistent with its environmental justice public participation policy. This letter was mailed to 48 persons, including numerous groups and elected officials representing the local community. This environmental justice letter elicited a response sent to Director Kim on October 30, 2019, from Keith Harley, on behalf of Southeast Environmental Task Force, the Chicago South East Side Coalition to Ban Petcoke and the Natural Resources Defense Council, requesting an Environmental Justice Analysis, a hearing and a subsequent written public comment period for the proposed facility. Acknowledging the request for hearing, and in recognizing the public interest in the proposed project, the Agency determined that it was appropriate to hold a public hearing on the permitting transaction.

AVAILABILITY OF DOCUMENTS AND ILLINOIS EPA CONTACT

Copies of the construction permit that has been issued, as well as this Responsiveness Summary, are available for viewing by the public at the Illinois EPA's Headquarters at 1021 North Grand Avenue East in Springfield.

Copies are also available electronically at:
https://www2.illinois.gov/epa/public-notices/boa-notices/Pages/archive.aspx

Printed copies of these documents are also available free of charge by contacting
Brad Frost
Office of Community Relations.
217-782-7027
brad.frost@illinois.gov

QUESTIONS AND COMMENTS WITH RESPONSES BY THE ILLINOIS EPA

Comments are shown in conventional text and responses are shown in boldface. Comments and responses are arranged by subject matter, paraphrasing and grouping similar comments and questions. Numerous comments in this document are depicted in a condensed or paraphrased from, rather than recited in full. In other instances, comments are retained in original form because of their complexity or level of specificity.

All significant comments relating to the draft construction permit or that otherwise fall within the Illinois EPA's scope of permit authority are being addressed in this Responsiveness Summary. This framework necessarily does not answer some of the comments raised at the public meeting or during the comment period but this is appropriate due to the inability to address matters outside of the Illinois EPA's regulatory expertise.

Public Participation

1. The Illinois EPA should take public comment on the proposed issuance of the permit into consideration.

The Illinois EPA held extensive public outreach on its permitting transaction. The outreach included a 77-day written public comment period and a two-session public hearing wherein individuals could make oral comments that were entered into the hearing record. The Agency has reviewed those comments and this document responds to significant comments that are pertinent to the Agency's decision, process and review.

2. The affected community is largely Hispanic yet there was no information in Spanish including the notice.

The Agency frequently interacts with bilingual residents throughout the State on a number of issues. When a need or desire for services is evidenced or expressed, the Agency does everything in its power to provide those services to the best of its ability. The Agency has not been lax in providing translation services where local representatives or persons expressed simply a desire for such services, even while the use of those services at Agency meetings has not been robust; this includes recent outreach for permitting, rulemaking and cleanup programs. The Agency has also been responsive to local groups and representatives that have come forward with suggestions for changes and enhancements to the translation services that it provides. Additionally, the Agency has made strides in providing routine Spanish language services including by the hiring of a bilingual employee in its Office of Community Relations to help with such needs.

The Agency has conducted extensive outreach on the SE side of Chicago going back decades, with established contacts and regular communications with advocacy groups, elected officials and individuals on the SE side of Chicago including the East Side neighborhood, including holding and attending meetings and hearings on numerous projects and subjects. In past Agency meetings and hearings on the SE side of Chicago, neither need or desire for translation services have been requested or evidenced, nor has the Agency received comment previously that these services were not provided at hearings and meetings on the SE side of Chicago. Translation services are a large expense, and while the Agency is happy to provide those services when there is a need or an expressed desire, the Agency policy to this point has been to allow for the request of translation.

In the case of General III, a statement allowing for the request for translation, specifically including American Sign Language services, was included in the public notice. The Agency was in regular communication with local groups and their representatives and did not receive a request for translation either prior to issuance of the notice or subsequently to the notice but prior to the hearing. A simple request, by phone, letter, e-mail or other communication, would have produced from the Agency such notice and translation. No request was forthcoming until comments made at the public hearing and post-hearing and beyond a general complaint, the complainants did not identify individuals that needed the service. The good faith efforts of the Agency are adduced by the fact that although no request was received, the Agency was prepared to provide services during the hearing and had a translator available. No commenters used the services of the translator.

It should be here noted that in keeping with current Agency practice that since a request was received during this transaction, although at too late a point in the process to provide services during this transaction, for future transactions in this area, the Agency will provide translation of notices and other documents and work with community groups to determine the need for translation services at meetings and hearings.

3. This permitting process did not allow for meaningful public participation as the hearing was not

being translated into Spanish—the language of a significant proportion of the affected community—and the notice to ask for Spanish translation was not in Spanish. It seems highly unlikely that people would be able to ask for translation service if the notice is in a language that they do not understand. Thus, interested and affected persons likely missed out on any information shared in the public hearing.

As mentioned in other responses, the Agency had numerous communications with representatives of groups representing neighboring residents. Neither in conversations nor submittals by these groups, although other specific perceived deficiencies were outlined, was a request for translation enumerated.

It should be here noted that in keeping with current Agency practice that since a request was received during this transaction, although at too late a point in the process to provide services during this transaction, for future transactions in this area, the Agency will provide translation of notices and other documents and work with community groups to determine the need for translation services at meetings and hearings.

4. Very few local residents knew about the hearing or how to participate.

   There are also issues with advertising for an online [hearing].

   SETF cannot provide training to remedy this problem because its office is closed and its leadership, members and local residents are required to be distant from one another. As a small non-profit, SETF is experiencing almost insurmountable complications to continue functioning, let alone to mount a major campaign to facilitate public participation in an unfamiliar venue.

The Illinois EPA in performing notification of a hearing must meet certain statutory requirements of 35 IAC 166 Subpart A. In addition to those requirements, the Agency seeks to inform persons and groups that it may be aware have an interest in the project. In no instance does the Agency have complete information on the residents that may be interested in participating in its outreach proceedings and relies to a certain extent on groups and elected officials that are interested in environmental issues in the locality. One such group is the Southeast Environmental Task Force (SETF) who has been a longstanding and reliable partner in helping the Agency provide community outreach to interested residents on the South East side of Chicago.

However, while the Agency appreciates that groups are willing to partner in assistance, in particular SETF, this does not abrogate the Agency's responsibility for community relations. The Agency was thoughtful in establishing the procedures for its first virtual hearing. The Agency established the hearing in such a manner that the only need to participate was a telephone.

5. The Illinois EPA needs to work with elected officials at the city and state level to get information to the community members who will be impacted by this facility.

The Agency has contacts with officials in the City and specifically on the South East side. Notice of the hearing was sent to many elected officials, including Chicago's Mayor and Clerk, the County Board Chair, Clerk and State's Attorney, Chicago City Council's Environmental Protection and Energy Committee, federal Senators and Representatives, the state Senator and Representative, the local Alderman, the Attorney General, and the Cook County Board Environment Committee. Additionally,

various local and state agencies were notified as well as numerous non-profit and local interest groups.

6. A virtual public hearing during a pandemic is not acceptable; it did not provide a meaningful opportunity for public participation.

With respect to holding a public hearing/comment period during a pandemic, state government is still functioning and has responsibilities regardless. Also, the statutory and regulatory provisions associated with the evaluation of permitting requests, such as acting in a timely manner (permit application), are still in place. Illinois EPA is obligated to act in a certain period of time in regard to state construction permits. The initial 90 days set forth in Section 39a of Act was waived by the applicant late last year and two times since. The current decision deadline is June 25, 2020 and the applicant has made clear it will not waive this decision beyond this date. The permit will be issued by default if the Illinois EPA fails to act on the permit by this date. General III would have a legal defense or protection from having to obtain a construction permit; under this scenario, important conditions of the draft permit (e.g. testing, reporting, monitoring, record keeping) would not be put in put in place. Therefore, Illinois EPA makes all manner of attempt to avoid issuing permits by default.

Although this process is a departure from the past with respect to hearing venues, the procedural rules for Agency hearings at 35 IAC 166 accommodate for this type of hearing – the purpose of which is to enable the Agency to receive comments from the public regarding a draft permitting action.

7. The permitting process utilized for the Draft Permit hindered meaningful public participation. Outside of a pandemic, limiting public hearing to an online forum is a deterrent to public participation for those who do not have the broadband width to participate. It impedes the spirit of an actual public hearing—people cannot see any visual aids that would otherwise be present, and both they and the decisionmakers do not see the numbers of people in support of or opposed to a position. Neither body language nor emotion are conveyed as well over the phone or computer. A public hearing also does not usually have people register ahead of time to speak as was the case here, thereby limiting the voices of those who did not receive notice in time.

The online format of the hearing was established in a thoughtful manner to as closely resemble an "in-person" hearing as possible. As noted in other responses, the purpose of a hearing is to accept oral comments accurately into the hearing record for review by the Agency staff as part of a permit review. The Agency at any hearing tries to maximize the amount of time for public comment. The Agency typically minimizes its presentations at a hearing and rarely if ever utilizes visual aids as these tend to make Agency presentations lengthier with detriment to the amount of time available for public comment. In this instance the Agency did provide some visual aids that it believed to be helpful because of the new nature of the "virtual" format without taking extra time away from the amount of time to comment. It is also typical to have commenters register to speak prior to the hearing so that the Agency hearing officer may gauge how much time to allow for each speaker without impeding the opportunity to make comment for those who register later. Further, the hearing officer allowed all commenters that had contacted him prior to the beginning of the hearing a slot to provide comments regardless of whether they had met the deadline established in the notice. As noted in other responses, the Agency's decision-making is not based on opposition or support for a project but instead on the legal and technical merits of the proposal outlined in the application.

8. Illinois EPA has persisted with holding the public hearing and written comment period during the

local, state and national COVID-19 pandemic, coupled with demonstrations around racial injustice that have rocked Chicago and the nation. During this time, it is absurd to expect the residents of this overburdened community – residents who are struggling to protect themselves and their families from disease, layoffs, racial injustice and literally bullets in their streets – to be able meaningfully to participate in a permit process. This non-inclusive process has a clear impact on an environmental justice community and requires Illinois EPA to step back from issuing a permit until true community participation is made possible.

During the pandemic, people didn't have the health, means, or resources to participate, particularly in low income/minority community, already disadvantaged.

This reflects the racism that causes southeast Chicago to be a sacrifice zone.

This process lacked regard for the community and was racist.

While the pandemic has certainly caused changes to the usual or customary proceedings of numerous public bodies, the operation of public business must continue, particularly in light of the uncertainty in the length of time needed to have in place real remedies to COVID-19. Protection of the environment is important enough public business that the legislature has passed numerous laws over the last 50 years directing Agencies to be established, actions to be taken on regulation, and public monies to be expended in this pursuit.

While a public process is not a statutory requirement of the review of projects such as General III, the Agency believes it important to solicit public input on its decisions, particularly in areas it designates as environmental justice, and make such improvements to a permit as may come about as review of public comments allow. The Agency also believed it important to hold a public hearing and the associated process and comment period for this project and to seek the additional time necessary to achieve that end. Changes and improvements have been made to the permit mainly because of its location and the comments received. Due to the proposed location of the facility the Agency took additional considerations in regard to the impact on the community and provided additional outreach.

While the hearing was of necessity different than the usual hearing, the Agency made several enhancements and was thoughtful about the process such that it was inclusive for the public. Any hearing at any time will not allow all members of the public to participate. By the Agency historical standards, the hearing for General III was well attended with significant participation and written comments exceeding all but a few of the actions for which the Agency has held comment periods. In example of this, two recent, pre-pandemic, highly controversial permit hearings in the Chicagoland area, concerning the CAAPP permits for BWAY and Midwest Generation's Waukegan coal-fired power plant, drew attendance of approximately 40 and 35 respectively. Both were "in-person" hearings for controversial sources located in environmental justice areas.

It should also be noted that written comments submitted during the comment period carry the same weight as oral comments made at the hearing, as evidenced by this responsiveness summary.

9. In a pandemic, people are even further limited in their ability to participate—people can have broadband connection limitations, and moreover, people—especially on the East Side—are facing

the health implications of a pandemic and are rightfully more consumed with surviving this global emergency. The public should not be limited in their ability to meaningfully participate.

As noted in other answers, the Agency's intent within the strictures imposed by the pandemic and the requirements of Illinois law is to provide robust and effective outreach. As also noted, the process resulted in a public hearing and lengthy written comment period. Based on the number of comments received, participation in the hearing, and the resulting enhancements made to the permit as a result of the outreach process, the Agency believes that meaningful participation through its community outreach process has been effective in this case.

10. The hearing was inaccessible to community residents many of which are poor and lack technology.

    [I have] received many text messages/phone calls from community members that cannot login or participate or do not have the resources or capability.

    Neither SETF's members nor other local residents have participated in this type of hearing. Many do not have the technology and/or technical capability to participate.

The only technology needed to participate in the hearing was a telephone. Consideration was also give to the fact that people connecting by telephone may be using a cell phone and potentially limited cell phone minutes, thus the Agency established procedures allowing for commenters to have a relatively defined time when they would be called on for comment and allowed for commenters to request a more specific time if they had a need for such. The meeting was also recorded so that those who couldn't otherwise listen to a particular session or to the hearing as a whole could peruse the hearing at their convenience.

Additionally, contact information for the Agency was included in the notice and the Agency responded to all requests for assistance sent to it before and even during the hearing. These included e-mails directly to the Office of Community Relations and chats through the WebEx system. Further, between the two sessions, the Agency proactively contacted persons that had signed up to speak at the first session but that did not come on the line and at the commenters choice either scheduled them to speak at the 2nd session or gave them information on how to submit written comments; Similarly, the one person who did not come on the line to make comment at the second session was contacted after the hearing to inform on how to submit written comments.

For those that did not choose to comment but instead wanted to listen to the hearing, in addition to the live event, a recording was posted such that anyone of the public could listen to the proceedings at a later time.

11. The hearing process was difficult, and people struggled to connect and failed to connect.

The Agency is unaware of any specific persons and was not contacted before, during or after by any persons that were not able to connect and thus missed the opportunity to make oral comments. Additionally, for those who only desired to listen to the hearing, the Agency posted a recording of the hearing. The point of the public comment period and hearing is to afford the public and opportunity to comment. That opportunity to comment in writing or orally existed beginning March 30, 2020 and ending June 15, 2020.

12. People with impairments could not participate.

A statement allowing for the request for translation, specifically including American Sign Language services, was included in the public notice. The Public Notice provided guidance on contacting the Agency for an accommodation in this regard and no requests were made.

13. There should be another hearing so comments from Spanish speaking people are not limited to writing.

While this comment was made at the hearing, as noted in other responses, the Agency had a translator available at the hearing to translate for any person that would have needed such service to make their comment. All commenters that signed up to make oral comments were accommodated in the process.

14. Was there both translation of Agency statements and the opportunity for commenters to be translated?

Without a request for translation, the Agency did not have a good understanding of what services would be needed or who would need those services and thus how best to provide those services in the virtual hearing format. The Agency had a Spanish language translator available at the hearing if a commenter had come onto the line with a need to speak Spanish to make their comment. Without a request, this may have resulted in a slower or different process than the process that would have been established if a request was received timely before the hearing. No commenters requested or availed themselves of the translation services.

15. The process should provide for more public interaction and different ways to engage.

Since no specifics are provided, the Agency is unclear on the process changes desired. The Agency works with representatives and groups to provide appropriate and effective outreach; however, a hearing is a more structured and defined process both statutorily and in practice. While Agency hearings tend to be more interactive, and therefore the Agency feels, more informative than some similar agencies, notably federal counterparts, the purpose is still primarily to accept public comments into the record through recording or transcription. The Agency's Office of Community Relations is available to work with communities and groups to provide other forms of outreach and tools for public interaction. An OCR contact is listed in this document if further discussions along these lines is desirable.

16. More communication between the Illinois EPA and community is requested.

The Agency also desires to build substantive and lasting connections with communities in the State. This serves to help the Agency better understand the local environmental conditions as experienced by the local community and helps inform Agency decisions. To this end, the Agency has an established Office of Community Relations, whose purpose is to establish and participate in mutual dialogue with communities in the State relative to the authorities of the Agency. The Office of Community Relations has been in existence since the early days of the Agency. Similarly, and more recently, the Agency has established an Office of Environmental Justice. One among other duties is to specifically provide additional services of a similar nature to communities that meet the Agency definition of Environmental Justice.

17. Illinois EPA's website is not user-friendly and time consuming when searching for documents.

While the Agency houses numerous programs and services on its website, the Agency has prioritized certain programs on the front page, including public notices. The webpage provides a direct "Quicklink" easily visible for users of the website. Nonetheless, if difficulty is experienced in finding information on the website, the Agency's Office of Community Relations is always available to provide additional assistance. Most of the contacts on the Agency Contacts page go directly to the Office of Community Relations and the notice itself included contact information for two employees of the Office.

18. Will a hearing transcript be available?

The relevant hearing regulations require a transcript or recording of the hearing to be made available. A recording of the hearing was made and link to the recording posted to the Agency website on May 26, 2020. Interested persons can find the link at https://www2.illinois.gov/epa/public-notices/boa-notices/Pages/archive.aspx

19. How does the Illinois EPA weigh our comments? For example, if 100% of our comments are fully opposed to this permit, will the Illinois EPA not grant the permit?

As mentioned in the hearing officer's opening statement in the General III permitting matter, the Illinois EPA bases its decisions on the governing law and regulations. There is no way for the Illinois EPA to account for general opposition comments in the permit review. However, the Illinois EPA reviews and considers all comments received. And certain comments such as suggestions on enhancements to the permit may be reflected as part of permit decisions.

20. A petition was received with over 5500 signatures opposing General III.

    A petition was received with over 1500 signatures supporting General III.

The Agency must act on substantive issues within its express statutory and regulatory authority, not public opposition or favor for projects. That a project is located in one place or another, or is moving from one place to another, is properly the realm of zoning and land-use decision-making. To this end, the City of Chicago made clear decisions, where those decisions properly rest at the local level. A note here is made that the City must make additional decisions in approval of this project pursuant to its new rules for large recycling facilities.

21. Most of the participants who testified asserted that Illinois EPA's decision was fundamentally unfair and defeated the purpose for a public hearing.

The express intent of a public hearing and the associated process is the solicitation of public comments so that the Agency, within its authority, may contemplate and act on these comments in its permitting transaction. A virtual hearing achieved this end and comports both with the regulations and the practice of numerous other public bodies under similar circumstance. While there may be aspects differing between a "virtual" and "in-person" hearing, the underlying intent of a hearing was served, and even secondary considerations not provided for in regulation or guidance such as answering of questions and explication of the Agency permit were achieved.

22. Polluters request one-year construction permit or a 5-year, 10 year, or lifetime permit, so it is prudent to have more public hearings, more public notice, and more public input so that the community is fully aware of what is coming into their neighborhood.

The Agency has established an Environmental Justice notification process to do just this in areas that meet the Agency definition for environmental justice, such as the SE side of Chicago which includes the East Side neighborhood. As discussed above, this process resulted in the request for hearing and numerous communications with representatives of local groups interested in the proposed facility. Information on the Agency Environmental Justice program and how to sign-up for EJ notifications may be found at https://www2.illinois.gov/epa/topics/environmental-justice/Pages/default.aspx

23. [Due to] COVID-19 and local civil unrest it was not feasible for these aligned organizations to coordinate fully on a single set of comments [and thus] meaningfully participate.

The Agency does not require groups or individuals to coordinate their submissions. The Agency reviews all comments received and from all sources. As noted in other responses, the Agency has received an extraordinary number of comments in this matter. As always, the Agency appreciates the engagement by the public in its process and recognizes the considerable sacrifice in time and energy that the public makes in reviewing documents and commenting on permit transactions. The comments are valuable to the Agency's review and have helped the Agency to provide an enhanced permit that has significant conditions and requirements for the protection of the environment.

24. The agency lawyer did not appropriately respond to a hearing question regarding the consideration of violations by General Iron at its existing facility in the review of the permit application for the new facility.

The Illinois EPA conducts informational permit hearings, such as was done in this instance, to hear concerns from the public with the draft permit and/or proposed project.[2] While questions are sometimes asked of the panel, these questions commonly only elicit brief answers from the panel members. This is by design, as it allows for maximum participation by those in the hearing audience who wish to speak and assure that the hearing can be completed within the allotted time. General questions are usually answered by the hearing panel with a general answer, and a drawn-out answer by a panel member can risk taking away time otherwise best given to members of the public for their presentations. More detailed responses are provided to those hearing questions that are significant or complex, together with similar questions or comments submitted during the comment period, in the Responsiveness Summary.

In this instance, the response to the question raised at hearing was appropriately responsive to the question posed to the panel and was not prejudicial error. A speaker in the first session of the hearing asked two questions at the conclusion of his remarks, including how the Illinois EPA had considered the violations at the existing General II facility in the review of the project. The panel member, answered the question in roughly three parts. First, the panel member stated that the Illinois EPA did not consider alleged violations in its review of the permit application. Second, the

[2] **This general point was evident in the Hearing Officer's opening remarks**.

panel member briefly provided the reasoning for his answer.[3] Lastly, the panel member acknowledged exceptions to the rule that he had briefly described, stating that "there are limited exceptions to that but, by and large, that is the rule that we are controlled by."[4]

25. In the same incident as above, the Agency lawyer did not refer to the three parts of the statute that governed the legal issue, conflating them in a confusing and misleading fashion and did not adequately explain the caselaw authorities and existing law.

As discussed elsewhere, only two of the three cited parts to Section 39(a) are relevant to the consideration of adjudicated noncompliance or a past compliance history. The third part of the statute cited by the comment is a general authority by which the Illinois EPA is guided in developing conditions for a permit, allowing for the inclusion of terms that are "necessary to accomplish the purposes of this Act, and as are not inconsistent with the [Board] regulations…"[5] As mentioned, while this legal authority served as the basis for the inclusion of many of the construction permit's terms, including new conditions added in response to comments, there was no error committed by not mentioning it in relation to matters of prior enforcement history. Written comments and the Illinois EPA's more detailed response to comments are for matters such as this.

Environmental Justice

26. The most important reason to deny this permit is because it epitomizes institutional environmental racism. Racist outcomes do not require racist intent. We do know the intent behind the permit request, nor of the reviewers, and we are not claiming to. But based on the following three components, we are confident of the outcome.

The Illinois EPA strongly rejects any insinuation that racism played any role in the review of this permit application. The Agency's review was performed strictly according to relevant legal and technical requirements.

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[3] "And the reason for that is that our review is pretty much constrained to what is outlined within a permit application and is pretty much just addressing whether or not there are operational or design capabilities that are set out in a project that… whether those will meet applicable requirements. We cannot review or consider violations at another facility as in the case of GIII here having a previous operation at the Clifton Avenue address. The reason for that boils down to caselaw that Illinois courts have developed in the past in interpreting the Environmental Protection Act. That caselaw has directed the Agency to assure that we confine our review to just matters of the application and not to compliance and enforcement considerations."

[4] *See,* Hearing Recording beginning at 36.26. A related written comment regarding the panel member's response to the same question is baseless. The comment states: "[A hearing speaker], a resident living near General Iron, testified about the negative health consequences and a history of violations, prompting an Illinois EPA attorney to immediately intervene to discount this testimony." SETF comments, dated June 15, 2020. The panel member was "prompted" only by a general question asked by the speaker, at the conclusion of his remarks, concerning any review of violations in the permit review. The response by the panel member did not discount any testimony of the speaker.

[5] *See,* 415 ILCS 5/39(a). This authority bears no relation or significance to the consideration of alleged violations, which are addressed by the more specific criteria identified in the two preceding sentences of Section 39(a).

27. Why was there no EJ analysis as requested?

In order to analyze the environmental justice impacts of the proposed relocation of the source, the Illinois EPA first looked to the demographics and then reviewed discretionary modelling conducted by the permit application. In order to evaluate demographic information, the Illinois EPA utilized the Agency's Geographic Information System (GIS) mapping tool EJ Start. EJ Start identified the area as an "area of EJ concern" pursuant to the Illinois EPA's EJ Public Participation Policy (https://www2.illinois.gov/epa/topics/environmental-justice/Documents/public-participation-policy.pdf). As such, the Illinois EPA sent an environmental justice notification letter early in the application process and which ultimately led to requests for a public hearing, which was not statutorily required, but was granted given significant public outreach. The Illinois EPA therefore conducted enhanced public outreach in accordance with existing policies. In addition, recognizing the concern for the proposed location of the source being located in an area of EJ concern, the Illinois EPA requested and obtained modelling from the permit applicant in order to determine whether there would be significant impacts for emissions from the shredding operation.

28. The public hearing was not consistent with the Agency's EJ policy.

Much of the Agency's Environmental Justice Policy is concerned with enhanced public outreach, which as discussed herein, the Illinois EPA conducted via an environmental justice notification letter and subsequent discretionary public hearing.

On September 25, 2019, the Agency received an application from General III, LLC to construct a new scrap metal recycling facility at 11600 South Burley Avenue in Chicago. The Agency is subject by law to a maximum 90-day review time for an application of this nature unless the applicant waives such restriction. Additionally, for an application of this nature, public notice is not required by law or regulation. As such, to provide an opportunity for the public to become aware and have an opportunity to request information and provided feedback, the Illinois EPA has established an EJ notification process for facilities that will be located in a designated EJ area. It is important in cases such as this where a 90 day decision deadline is in place that the Agency send the EJ notification letter in a timely manner so that the public has as much notification and time as possible to request and review documents and ask questions of the Agency. In keeping with this practice, on October 1, 2019, the Agency issued an Environmental Justice notification letter. This letter was mailed to 48 persons, including numerous groups and elected officials representing the local community. This environmental justice notification letter elicited a response sent to Director Kim on October 30, 2019, from Keith Harley, on behalf of Southeast Environmental Task Force, the Chicago South East Side Coalition to Ban Petcoke and the Natural Resources Defense Council, groups that the Illinois EPA routinely works and has conversations with about projects on the South East side of Chicago; groups that as evidenced by past interactions represent a broad swath of residents in SE Chicago including the East Side neighborhood. The letter expressly requested an Environmental Justice Analysis, a hearing and a subsequent written public comment period for the proposed facility. Acknowledging the request and in recognizing the public interest in the proposed project, the Agency determined that it was appropriate to hold a public hearing on the permitting transaction. The Agency had numerous communications with these groups or their representatives. Additionally, Agency staff had conversations with these same parties to discuss issues and answer questions about the other facilities that are currently on the site and that will be a single source with GIII once the facility has relocated.

As an additional point, the Agency places great importance on its Environmental Justice program and ensuring that minority and low- income persons in Illinois are able to have information about and input into Agency decisions consistent with sound EJ principles. The seriousness of our consideration of the input received leads the Agency frequently, as in the case of the GIII application and permit, to make demands of facilities over and above legal requirements in the submittal and review of application materials and conditions of the permit. Demands made of the applicant are described in other responses in this document and changes to the draft permit may be found in Appendix A of this document.

29. The public hearing was inadequate: (a). it was only in English;
the Illinois EPA Spanish interpreter did not interpret anything said by Agency officials or English speaking participants so the hearing discriminated against Spanish speaking residents in this community;
(c) there is no way for Spanish speaking residents to listen to the recorded hearing unless they found their own interpreter; and

> According to the Illinois EPA's EJ Policy, "The EJ Officer will determine when public notices should be bi- or multi-lingual, where these notices should be published, and when translators should attend hearings. The EJ Officer will also review and approve the proposed response to EJ comments raised at hearing or in written comments, and coordinate this response among the Bureaus, Division of Legal Counsel and the Office of Community Relations.

The Illinois EPA Office of Environmental Justice coordinates with the Office of Community Relations in accordance with the Illinois EPA's Environmental Justice Policy on translation issues, with the EJ Office goal to establish guidelines and Community Relations to implement those within the Agency outreach. As mentioned elsewhere, the public notice requested that anyone needing translation services contact the Illinois EPA and no one did. Notwithstanding, the Illinois EPA had a Spanish speaking employee on hand at all times during the hearing. As discussed elsewhere, the Illinois EPA seeks to work with local communities and representatives to determine appropriate outreach. The Illinois EPA acknowledges the comment and though the Agency believed that it had been having sufficient conversations in the days and months leading up to the notice and hearing, the Agency hopes to work closely with groups in the future to ensure that these types of issues are more fully addressed.

30. Agency did not translate its own comments during hearing (e.g. how to submit written comments)

> Although the Illinois EPA hearing notice mentioned the process to request interpretation, the Illinois EPA should not place the burden of requesting interpretation on an Environmental Justice community, a low-income minority community. Instead, the Illinois EPA should proactively research the basic demographic and linguistic isolation statistics of every Environmental Justice community (available on the US Census website) before every public hearing (whether in-person or virtual) to ensure full public participation in the permitting process.

The Illinois EPA recognizes this concern and, in the future, hopes to work closely with community members and groups to evaluate the need for translation services in addition to the steps mentioned in the comment. As mentioned elsewhere, while the Agency must operate within its statutory constraints, including time constraints, the Agency prides itself on being responsive to communities

and their needs or desires as relate to the outreach the Agency performs and did not believe that its outreach was lacking as it related to the need or desire for translation. The Illinois EPA has in the past and will continue to evaluate issues concerning translation and appreciates the input of local community groups as expressed in these comments and dialogues that the Agency enjoys in its regular outreach.

31. In addition to the problematic public participation process, Illinois EPA's broader permitting action will result in significant, disproportionate impacts on communities of color and other protected classes, in violation of federal and state civil rights laws

There is no information in the record to suggest that issuance of the construction permit will result in significant, disproportionate impacts. The Illinois EPA reviewed modelling conducted by the permit applicant, which did not demonstrate any significant adverse impacts. Furthermore, the Illinois EPA has an air monitor at nearby Washington High School, which will provide information concerning emissions impacts of the shredding operation.

32. The Agency should especially pay attention to the history of this facility because General Iron is moving to an area of environmental justice concern. The Illinois legislature has recognized that the principle of environmental justice requires that no segment of the population, regardless of race, national origin, age, or income, should bear disproportionately high or adverse effects of environmental pollution. 415 Ill. Comp. Stat. Ann. 155/5. Moving this facility to the East Side community does just that.

415 Ill. Comp. Stat. Ann. 155/5 references the Findings in the Illinois Environmental Justice Act. The Act goes on to provide for the formation of the Illinois Environmental Justice Commission to address these Findings. An Illinois EPA representative is designated by the EJ Act to serve as a Commissioner on the Commission and the Agency is further directed to provide administrative support to the Commission. The EJ Act does not place additional authority with the Agency to address permitting, zoning, or otherwise provide regulatory direction to the Agency.

33. The Draft Permit fails to consider the cumulative impacts on the East Side community to which the facility is moving. When there are potential environmental impacts in an area of environmental justice concern, the Agency is supposed to look at the information provided as well as other available information to assess whether there are potentially significant adverse environmental impacts.

As described above, the Illinois EPA looked at the modelled emissions impacts and has an air quality monitor on Washington High School, both of which provide information concerning potential environmental impacts. While the Illinois EPA can and does evaluate environmental impacts from sources during a permit transaction, there is not currently any Illinois or federal law or regulation addressing cumulative impacts in the context of a permitting transaction. Without a legal mandate, the Illinois EPA is limited as to what it do can regarding cumulative impacts (e.g., more stringent permit conditions).

34. [I] oppose yet another heavy industrial facility notorious polluter relocating from the well-off, predominantly white Lincoln Park community, to this environmental justice community. The Mayor's Office behind closed doors facilitated an agreement whereby General Iron would leave the higher income and largely white Northside Lincoln Park neighborhood by 2020 and relocated to the

Southeast Side environmental justice community. Mayor Lightfoot's election in 2019 did not change the overall trajectory.

As noted in this comment, the Agency does not have authority or review over land-use and zoning decisions. For decisions within the boundary of the City, this authority resides with the City.

35. This is not the just and equitable process or outcome that Illinois EPA purports to uphold.

The Agency followed its Environmental Justice Public Participation Policy, a policy that has well served the Agency and the commenters on numerous occasions including the present instance. Notwithstanding, the Illinois EPA has acknowledged and demonstrated in practice that the policy is a living document, one that has and will be revised based on real world experience and input from environmental justice communities. While the commenters may not like the decision at the end of the review process, the Illinois EPA strives to ensure that the public outreach process is as robust as possible. The steps taken in this case, pursuant to the Agency's EJ Public Participation Policy, provided for meaningful input from the public.

The Agency issued an environmental justice notification letter which solicited a hearing request. The Agency held a hearing including written comment period. Additionally, the Agency worked with various local groups to answer questions related to the application. While the hearing was of necessity different than the usual hearing, the Agency made several enhancements and was thoughtful about the process such that it was inclusive for the public.

Information Sharing

36. How may I get access to the readings taken from the air monitoring station at G.W. High School?

The monitoring information is readily available to the public through requests to the Agency under the Freedom of Information Act. For ease, requests of this nature may be submitted to Brad Frost of the Office of Community Relations, who will then forward them to the Agency Records Unit for response. To directly request the documents, the FOIA request form may be found at https://external.epa.illinois.gov/FOIA

37. What is the best way to maintain a direct line of communication with the Illinois EPA if emissions are seen from this facility?

Directions on how to submit complaints and observations are found on the Agency's pollution complaint page, https://www2.illinois.gov/epa/pollution-complaint/Pages/default.aspx There you will find an online form for ease of submittal that includes all of the information that the Agency requests.

All complaints are investigated by the Illinois EPA. Notably, for complaints relating to sources located within the City of Chicago, the Illinois EPA often seeks the assistance of the City of Chicago Department of Public Health. Of course, any violations of City ordinances would be addressed by the City and violations of the Environmental Protection Act would be addressed by the Illinois EPA.

38. Can members of the general public request information directly from the source?

The public is certainly free to communicate with a source regarding requests, questions, comments or concerns. Often, sources welcome the exchange and find it mutually beneficial. For example, some sources afford tours so that the public may see what it is they do. However, the source is not under a statutory obligation to directly provide to the public reports relative to its operations that are regulated by the Agency. Notwithstanding, the information required to be reported to the Agency under the permit is available under the Freedom of Information Act; and, as noted elsewhere herein, the reporting obligations have been expanded under the issued permit.

39. The permit should require notification to the public, in addition to Illinois EPA, of any emissions violations.

The permit contains numerous reporting obligations incumbent upon General III. Notably, a key reporting requirement relates to deviations from the terms of the permit. Information reported to the Illinois EPA by General III is available to the public under the Freedom of Information process. FOIA requests may be made by request to the Agency; the online FOIA request form may be found at https://external.epa.illinois.gov/FOIA For assistance in this regard, please contact the Office of Community Relations contact listed in the introductory section of this responsiveness summary.

40. Page 23 of the draft construction permit says "the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years." The Illinois EPA should require the company to post all monitoring data weekly on a publicly available website, given the company's record of past violations.

The permit contains numerous recordkeeping obligations incumbent upon General III. The records that are to be maintained are voluminous. Reporting all of this information to the Illinois EPA or posting same to a website would not be practical. Rather, key information in ensuring compliance with applicable terms is reported to the Illinois EPA. This information is available to the public.

Cumulative Risk

41. I would hope that the Illinois EPA will consider the cumulative burden on the Southeast Side community when evaluating this new facility.

While not statutorily or regulatorily required to perform any cumulative impact analysis, General III performed air dispersion modeling to address its impacts on ambient air quality. The modeling looked at metallic hazardous air pollutants, with special attention to lead and manganese. The modeling demonstrated that the air impact will not exceed any established standards. A robust inventory of other local sources was included in the modeling inventory and any other potential sources are accounted for through use of the monitoring station at Washington High School for background monitoring values.

42. EPA should consider all emissions (total amount) not just from this location, but other nearby emission sources.

The Illinois EPA has endeavored to address the contributions from other sources in the region to the two hazardous air pollutant metals believed to be of significance – lead (Pb) and manganese (Mn). Not only was there a robust inventory of other sources included in the modeling inventory, but a background monitored concentration was added to the modeled impacts to account for potentially unknown, unpermitted, natural and/or distant sources.

43. The EPA to not just consider the emissions from this one location, but instead add these emissions to the total amount that the neighbors of Eastside and the students of GWHS will be exposed to. If we think of the environment surrounding this facility and the school as a bathtub, the proposed emissions are only adding to a bathtub that is already full of emissions from other sources nearby and there is little to nothing being done to empty the tub. I have already cited the Air Dispersion Modeling Protocol document. In that same section, RK & Associates are asking the EPA to allow them to not count emissions collected at the Washington High School air monitoring station on days when the wind is not blowing from the southwest.

The Illinois EPA has endeavored to address the contributions from other sources in the region to the two hazardous air pollutant metals believed to be of significance – lead (Pb) and manganese (Mn). Not only was there a robust inventory of other sources included in the modeling inventory, but a background monitored concentration was added to the modeled impacts to account for potentially unknown, unpermitted, natural and/or distant sources. The Illinois EPA directed the permit applicant's consultant to use conservative background values obtained from the analysis of total suspended particulate samples from the Washington High School monitor. For lead, this represented the highest three-month rolling average concentration for years 2016-2018. For manganese, the background values represented the maximum 24-hour average and annual average concentrations during those same years. The monitored values did not selectively eliminate emissions collected from any wind direction, including "when the wind is not blowing from the southwest." The Illinois EPA is well aware of air pollutant levels in the Lake Calumet region of Cook County and the need for maintaining health-protective levels.

44. Another failure of the EPA was its failure to consider the George Washington High School air monitoring data when drafting the permit. This data shows that the Southeast Side neighborhood already deals with the state's highest levels of toxic heavy metals, chromium and cadmium, as well as sulfates."

The Illinois EPA required the company to perform ambient air modelling and submit such to the Agency as part of its application, an atypical request for a facility of this size. This modeling used data from the Washington monitor as its background ambient data.

45. The applicant has failed to describe and Illinois EPA has failed to consider cumulative impacts of permitting a new source of heavy metals in an already overburdened EJ community, which has among the highest monitored levels of airborne metals in entire state.

While not statutorily or regulatorily required to perform any modeling in the application, the Agency required General III to perform air dispersion modeling demonstrating that the air impact will not exceed any established standards for the HAP metals. lead and manganese. Notwithstanding that the monitor at Washington High School registers metals as a fraction of the captured PM emissions, the levels do not exceed any health-based ambient air standards for metals.

46. GIII did not consider the impact of the existing operations at the site.

GIII performed air dispersion modeling for metallic HAPs in support of the air construction permit application and demonstrated that the air impact will not exceed any established standards. The Illinois EPA later evaluated the increase in metallic HAPs from the four SCPM facilities in conjunction with the GIII HAP emissions but did not find any increases of potential concern. Metal HAP emissions from the SCPM Entities' ROSS affected sources are less than 0.1 tons annually.

47. The cumulative effects of this pollution are already causing negative health consequences to residents, including asthma and other respiratory illnesses.

The community already has health problems like asthma. The cumulative effects of existing pollution are already causing negative health consequences to residents, including asthma and other respiratory illnesses.

Concern with health issues (e.g. students with asthma, chronic lung problems) in area with citation of data from Respiratory Health Association

The Agency recognizes that low-income and minority communities may struggle with health issues at rates disproportionate to the general population. While certain state and federal environmental regulations are based on health data, e.g National Ambient Air Quality Standards, the Agency's statutory authority rests with the regulation of sources of air pollution. The statutory authority to work toward healthy outcomes for the State's population rests with the federal, state and local Health Departments as health outcomes are resultant from numerous and complex factors of which ambient air quality may be one, but except in rare instances, only as a secondary or aggravating factor to other more systemic issues. The past fifty years of environmental regulation have resulted in large reductions in point source emissions and large improvements to ambient air quality throughout the state.

48. The site is located within the Calumet Industrial Corridor and the greater Calumet region, where multiple industries contribute to poor air quality. Compared to citywide averages and most other industrial corridors in Chicago, there are higher rates of chronic obstructive pulmonary disease and heart disease within this corridor, signaling existing negative health impacts. Residents of the Southeast Side should not be asked to bear yet another health burden.

While the Agency recognizes that the SE side is home to the Calumet Industrial Corridor these designations and the resultant zoning are City of Chicago land use planning decisions. As regards the Illinois EPA's authorities, the area is in attainment for all health-based National Ambient Air Quality Standards with the exception of ozone, a non-attainment area that generally covers six counties and two partial counties in the Chicago metropolitan area.

49. What is the Illinois EPA doing to address environmental health disparities and inequities? How can Illinois EPA continue to allow heavy polluters negatively impact the health of residents on the southeast side?

Within its statutory authority, the Agency provides certain enhancements to its permitting. In this instance, these included requiring ambient air modeling in the application; permit enhancements

including increased recordkeeping; a plan to mitigate fugitive emissions; and an Environmental Justice outreach process by which the public was notified of the application receipt triggering a request for a public hearing. The resulting public comments had an impact on the final content of the issued permit.

50. The neighborhood (East Side) adjacent to the proposed General Iron facility is an Environmental Justice community. According to the US Environmental Protection Agency's EJSCREEN tool, the area within 1 mile of this proposed facility falls in the 93rd percentile for particulate matter (PM2.5)

The whole of the East Side neighborhood is defined an environmental justice area by the Illinois EPA's EJ mapping tool. As such, and described in more detail elsewhere in this document, there were certain enhancements made to the Agency process and ultimately to the permit based on this designation.

51. Concern that this is a residential area with school and parks in vicinity of the proposed location.

The Agency has no role in zoning, neither in the siting of facilities, nor in the emplacement of public or educational facilities, nor in the determination of appropriate barriers, distance or otherwise, between residential and commercial or industrial parcels. More specifically, local land use is the exclusive determination of local units of government, in this instance, the City of Chicago.

52. Potential and likely effects—direct, indirect and cumulative—of the proposed action should be taken into consideration.

Historically, the evolution of environmental regulation is such that the underlying statutes and rules are developed to address and minimize the likely potential emissions and effects from a particular industry and for larger sources to account for the impact of a facility on ambient air quality. Although this facility will not be a major source; nonetheless, the Agency had the company perform certain analysis to evaluate the impact of likely pollutants on ambient air quality.

53. Requests that any new facility be evaluated for its capacity to provide a net reduction in the air pollution burden on the community.

This suggestion is a requirement for new major sources of air pollution in non-attainment areas under the state rules for Major Stationary Source Construction and Modification (35 IAC 203). In this case, the Chicago metropolitan area is non-attainment for ozone. Chicago and indeed the whole of the state has demonstrated attainment for all other NAAQS pollutants. As a non-attainment area for ozone, oxides of nitrogen and volatile organic material are regulated as precursor chemicals. New major sources or major modifications to existing sources of NOx or VOM pollution must obtain reductions over and above the potential amount of new pollution. General III does not meet the definition of a major new source or major modification for either NOx or VOM and thus this requirement does not apply to this permitting transaction.

54. The EPA has already designated the Southeast Side neighborhood as an area that is "environmentally overburdened." (See, https://www.epa.gov/il/environmental-issues-southeast-chicago). The EPA's website boasts that it has "empowered" this community and suggests that it is attempting to "ensure the area's continued progress." Granting the proposed permit makes a mockery of the EPA's environmental justice designation and discredits the EPA's own promise to help this community.

The commenter is pointing to a United States Environmental Protection Agency webpage and verbiage. Nonetheless, the Illinois EPA does not dispute that most if not all of the SE side of Chicago has an environmental justice designation, indeed, it is the Illinois EPA's mapping that designates the area as such; USEPA's EJSCREEN tool does not give such designation. With such designation, the Illinois EPA enhances its review and outreach on projects. As mentioned elsewhere, this does not remove Illinois EPA's responsibility to take action on applications in a timely manner or to make determinations in compliance with state and federal law and rules.

55. The Illinois EPA should deny General Iron a permit based on the on the levels of pollution the new facility is expected to emit, taking into consideration the EPA's own recognition that the Southeast Side neighborhood is already overburdened with environmental hazards.

The USEPA includes this language on its website, and defines overburdened in its EJ 2020 Glossary, https://www.epa.gov/environmentaljustice/ej-2020-glossary Notwithstanding there are no statutory or regulatory authorities assigned to this definition but rather it guides policy. Similarly, there is not a state-level definition of "overburdened communities" either in statute or SIP and no clear state-level activities that should occur for such community except as provided for in the Illinois EPA's Environmental Justice Policy and EJ Public Participation Policy.

The Illinois EPA does define the area as environmental justice[6], and had no statutory bases for denial, but included enhancements to its outreach and permitting process which resulted in a more robust permit.

56. It is time for the Illinois EPA to protect the health of our community for future generations.

The environmental laws as currently written, specifically the Clean Air Act, include mechanisms to reduce air pollution over time including requirements for development of state plans to improve and maintain ambient air quality and reduce emissions from stationary sources, among other emission reductions. This has achieved for the State and nation significant and important reductions in pollutants since the inception of the Clean Air Act in 1970, including improved air quality for ozone, sulfur dioxide, and particulate matter, including lead and other heavy metal emissions. These mechanisms in the Act still apply and continue to drive environmental progress on air quality. That said, the Act does not prohibit new stationary sources; it instead provides for regulation of stationary sources, including a requirement for permitting to provide a legally enforceable document that sets out the relevant and applicable environmental regulations, compliance, recordkeeping and reporting requirements that must be met.

57. It is critical that we don't add another massive polluter on the Southeast side.

While the facility is an addition to several operations currently at the site, it is not a major source of emissions as defined by the Clean Air Act. The source will have emissions that are below major

[6] It should be noted that the Illinois EPA does not define "communities" or municipalities definitionally as environmental justice. The Illinois EPA uses census block groups for demographic analysis, defines each block group and includes a buffer to ensure largely unpopulated industrial or commercial areas do not inadvertently fall out of the definitional area, see Illinois EPA's Environmental Justice Public Participation Policy and EJ Mapping Tool, http://www.epa.illinois.gov/topics/environmental-justice/index

source levels. And in fact, the existing sources at the site, which all currently are ROSS sources will be required to obtain FESOP permits as a single source with these additional operations.

58. The Southeast Side faces among the highest cumulative environmental burdens in the City of Chicago and the state, given these impacts and numerous other environmental threats in combination with sociodemographic factors that make the community more susceptible to environmental impacts. As a matter of environmental justice, the community overall should not be subjected to the additional pollution from the proposed facility.

While it is not within the statutory or regulatory authority of the Agency to determine zoning or deny permits that otherwise would comply with the applicable environmental laws and rules, the Agency has had the company submit additional information, including modeling to assess the impact on local ambient air quality, and added enhancements to the permit because of the recognition that the facility is proposed for an area that meets the Agency definition of environmental justice.

59. The record claims that there is a buffer between the facility and residences, but several residences are within a half-mile radius of the proposed site. There are also a high school and a park about a half-mile away, along with an elementary school and another park within a mile of the proposed site.

It is not within the statutory or regulatory authority of the Agency to determine zoning including the establishment of appropriate setbacks or buffers between residential and commercial or industrial areas. Indeed, the Act does not consider setbacks or buffers as acceptable for sources of air pollution. Instead, the Act determines the property boundary as the only acceptable division between neighboring parcels and provides that visible emissions may not cross the property boundary except under certain limited conditions.

60. There are at least 10 permitted facilities in the area that will continue to negatively impact the health of the residents.

The Illinois EPA is aware of the sources in the area as companies must obtain and keep current either permits or registrations for sources of air emissions. Indeed, this is one of the substantive requirements of the Act to ensure that the Agency has an accurate inventory of sources such that when further reductions are needed to meet State Implementation Plan goals, an inventory is on hand to assess how best to reduce emissions to achieve state and federal air quality goals.

Zoning

61. Why is this plant not acceptable in Lincoln Park, but is acceptable down here?

Zoning and local land use decisions are not the purview of the State. This authority rests with local decision makers, in this instance the City of Chicago and Chicago City Council.

62. Why is it that these companies are coming to the southeast and southwest sides?

Again, the Agency has no role in zoning or siting of facilities. More specifically, where a facility may locate is the exclusive determination of local units of government. In this instance, the determination that General III may locate at Burley Avenue was the decision of the City of Chicago.

63. Why did this company pick this area?

The Illinois EPA does not play a role in determining where a facility may locate. An agreement between the City of Chicago, General Iron Industries, and RMG Investment Group was reached such that the existing scrap metal recycling operations of General II, LLC, at 1909 North Clifton Avenue in Chicago, Illinois cease and relocate, matters for which the Illinois EPA had no involvement and for which it has no legal role.

64. This permit involves racially unjust siting. GIII is proposing to relocate a harmful industrial use from a wealthier, whiter part of the city to one that has more black and brown residents. Again, racist outcomes do not require racist intent. The outcome of this relocation is to remove a health hazard from an affluent white neighborhood and place it in a lower-income Latinx neighborhood. Institutional racism, intentionally or not, produces outcomes that chronically favor or disfavor racial groups. That is exactly what a permit for this would do. This is most assuredly a racist outcome.

    There is environmental racism embedded in this relocation and it represents poor land-use planning.

The Illinois EPA has no role in locating or relocating sources nor in land use planning.

65. The City of Chicago has embarked upon a process of Industrial Corridor Modernization, reviewing and potentially modifying existing land uses within its industrial corridors. Some corridors, such as along the North Branch of the Chicago River, are complete, while others, such as the Calumet River, are not. At best, it is premature to relocate an industrial facility of this magnitude given that this planning process has not yet occurred. At worst, relocating this project would have an outsized influence on any future planning efforts, incentivizing other businesses to similarly move to the Southeast Side. This plant should not be relocated until a planning process is allowed to occur.

As the commenter notes, it is the City of Chicago who has embarked upon this process of industrial corridor modernization. And it is the City of Chicago that is making determinations as to where particular sources may locate. Indeed, the City still has determinations and permits that must be obtained by the company prior to relocation and certainly before construction and or operation of the scrap metal recycling operations at the Burley site.

Such activity is not within the statutory purview of the Illinois EPA. The issuance of the construction permit to General III is independent of and does not bear on the relocation. Indeed, while the permit would authorize the source to construct at the Burley Avenue location, it does not require the source to relocate there.

66. This permit involves racially unjust siting. GIII is proposing to relocate a harmful industrial use from a wealthier, whiter part of the city to one that has more black and brown residents. Again, racist outcomes do not require racist intent. The outcome of this relocation is to remove a health hazard from an affluent white neighborhood and place it in a lower-income Latinx neighborhood. Institutional racism, intentionally or not, produces outcomes that chronically favor or disfavor racial

groups. That is exactly what a permit for this would do. This is most assuredly a racist outcome.

Once again, the Illinois EPA does not make zoning or siting decisions. An agreement between the City of Chicago, General Iron Industries, and RMG Investment Group was reached such that the existing scrap metal recycling operations of General II, LLC, at 1909 North Clifton Avenue in Chicago, Illinois cease and relocate, matters for which the Illinois EPA had no involvement and for which it has no legal role.

Permitting

67. The application was not complete. General Iron's current facility experienced an explosion that caused significant damage to the facility and equipment in use there. The permit application represents that this equipment will be relocated to and used at the 11600 S. Burley Avenue site. The transfer of any equipment that can cause this kind of catastrophic failure requires that the permit application be revised to address risks related the proposed use of any equipment, its control efficiency, and the applicant's ability to operate the equipment safely and effectively. Further, existing emission estimates and air quality models do not account for emissions during periods of catastrophic failure and also must be revised. And, additional permit terms and conditions are clearly necessary to prevent future accidents and to ensure the integrity of the equipment and the applicant's operating systems.

The application contained the necessary information for the Illinois EPA to issue the construction permit. As a rule, permit forms seek information to assist an agency's evaluation of an application, however, the Illinois EPA is not without jurisdiction to base its permit decision on matters outside of the permit forms (e.g. its own institutional knowledge or judgement). In this instance, the application contained enough information to demonstrate that the source would not cause a violation of the Act.

The existing site did experience an incident at the Hammermill Shredder system on May 18th that damaged the control for the shredder system including the RTO. By letter dated May 20th, the Illinois EPA communicated its expectation that GII, LLC, retain a third-party consultant to perform a comprehensive investigation and evaluation of the incident and submit a report of same to Illinois EPA for its review. That evaluation would include a root cause analysis of the incident and of any necessary replacement of or repairs to the control train. Such investigation and evaluation was undertaken and is ongoing. Based on recent communications between Illinois EPA's staff and General III, as well as counsel for same, it appears that the RTO is reparable and that measures can be put in place to ensure that a further incident of this type can be avoided including a safety bypass valve. The Illinois EPA will continue to monitor that situation along with the USEPA and the City including reviewing the reports of the evaluation.

The construction permit is issued to the scrap metal recycling facility on the basis that it can comply with applicable requirements most notably Pollution Control Board Part 218, Subpart TT, which requires an overall reduction in uncontrolled VOM emissions of 81%. With the proposed RTO and enclosure, the requisite demonstration has been made. This demonstration will be verified via post construction emissions testing of the control and enclosure. The permit is for an RTO, not necessarily the RTO from the existing site. In the event, it is determined that the existing RTO cannot be utilized, a like RTO could be constructed. Regardless, the issued permit requires the source to install, operate

and maintain a continuous monitoring device for the inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the LEL of this stream. The LEL monitor would ensure that prior to reaching the LEL and potentially causing an explosion, the scrap metal feed to the shredder would be cut and the gaseous emissions stream would bypass the control train. Bypass events cannot be predicted but would be expected to be limited in number and duration. The estimated emissions impact is expected to fit within the established permit limits. Records and reports of such events are required under the issued permit.

68. Is the permit decision being rushed? What is the Illinois EPA's timeframe?

The permit is not being rushed, as the timeframe for permit decisions is governed by the Environmental Protection Act. The relevant provisions of Section 39(a) of the Act provide that if there is no action by the Illinois EPA within 90 days of receipt of the permit application, the applicant may deem the permit issued by operation of law. *See, 415 ILCS 5/39(a).* A permit that issued by operation of law is simply a type of enforcement shield, protecting a permittee from the allegation that source is constructing or operating without a permit. A permit issued by operation of law does not provide for substantive requirements that would ordinarily appear in a permit, such as numerous testing, monitoring, recordkeeping and reporting requirements detailed in the permit. Consequently, the Illinois EPA strives to avoid permit issuance by default.

General III's permit application was received by Illinois EPA on September 25, 2019, and multiple extensions of the statutory decision deadline were obtained to allow sufficient time to review the application, prepare a draft permit, and allow for public input. In fact, the time taken by the Illinois EPA to review the application and allow for public outreach was three times longer than the standard statutory time allowed for this type of permit application.

69. The permit should be denied. It is within the Illinois EPA's discretion.

Under the Environmental Protection Act, the Illinois EPA is required to issue a permit to an applicant upon proof that the proposed facility or equipment will not cause a violation of the Act or promulgated regulations. *See*, *415 ILCS 5/39(a).* This standard is a mandatory one, expressed in the language of the provision as a "duty" that is imposed upon the Illinois EPA. While agency deliberation of certain aspects of the permit may be grounded in the exercise of discretion, the broader legal standard governing permit issuance or denial limits the discretion of the Illinois EPA. The Illinois EPA finds that the legal standard noted above has been met. Nothing in the record, including the public comments on the draft construction permit, adduces otherwise.

70. Will you consider extending this process and making an adjustment to your decisional timeline, to allow equitable and robust participation for the community?

The decisional deadline associated with this construction permitting action is statutorily established – 90 days from receipt of application. That decision has already been waived more than once to accommodate for modeling and public participation, among other. The applicant has indicated an unwillingness to provide a further waiver. To avoid a default decision on the matter, the Agency must take action by June 25, 2020.

71. Please create a moratorium on permitting during a pandemic.

The Illinois EPA is a creature of statute. It does not possess the authority to create a moratorium on permitting.

72. The Illinois EPA cannot ignore public comment and approve the construction permit.

The Illinois EPA reviewed all comments provided at the public hearing and submitted during the public comment period. The Illinois EPA is generally responding to all comments that are significant and, as frequently happens, has made various changes to the permit in response to the comments, as discussed later in this document.

73. No company should be permitted to operate if that company poses a risk of serious health issues to the public.

Permits for the construction or operation of emissions units or control equipment may be acquired under the Environmental Protection Act upon a showing that there is no violation of the Act or applicable regulations. 415 ILCS 5/39(a). Except for some requirements that are developed on a health-based standard (e.g. National Ambient Air Quality Standards), this legal standard for permit issuance may not appear to directly account for risks posed to human health from an activity or exposure to a particular pollutant. This does not mean that the permitting process ignores these risks, only that they are accounted for, indirectly, through an evaluation of the rules and regulations that a stationary source must meet when constructing and operating new emissions units or control devices. The Act contains several enforcement provisions that are available to restrain violations, such as injunctions that can be sought by prosecutorial authorities under Sections 42(e) and 43, and by any persons adversely affected in fact under Section 45. Other statutory or common law remedies exist that complement the enforcement remedies under the Act.

74. Is it fair to say public comments would not prevent the permit's issuance, unless a commenter can somehow prove General Iron would violate said regulations?

Again, permits for the construction or operation of emissions units or control equipment may be acquired under the Environmental Protection Act upon a showing that there is no violation of the Act or applicable regulations. 415 ILCS 5/39(a).

75. How does the permit process work for existing equipment?

To remove emission units or air pollution control equipment from a property, a permit is not required. To relocate or "construct" that same piece of equipment at a new property a permit is required. In this case, General III has indicated that the RTO is being relocated. Thus, a construction permit for that RTO is necessary. However, it must be noted that there is no requirement to relocate any of the equipment from the existing location to the new location. Rather, the requirement is to obtain a permit for the operations that will be conducted at a given site and to demonstrate that the source can operate in compliance with applicable requirements.

76. It was misleading for the hearing panel to state that the Illinois EPA has no choice but to issue a permit to a source if the source will be in compliance with the regulations.

Under the Environmental Protection Act, the Illinois EPA is required to issue an air permit to an applicant upon proof that the proposed facility or equipment will not cause a violation of the

Environmental Protection Act or the Pollution Control Board's Subtitle B regulations. This standard is expressed as a statutory duty, not an exercise of discretion, and it focuses on whether the proposed facility or equipment will possess the design and operational capabilities to comply with environmental requirements.

Public comments frequently question why compliance problems occurring at another facility operated by the applicant (as relevant here), or at the same facility in the case of a new or renewed operating permit, are not factored into the permit review process. In general, and for the reasons described elsewhere, the Illinois EPA's review of an application does not look to past practices at the source (or the same source at another location) but, rather, on the ability of an applicant to comply prospectively with the applicable requirements that govern the emissions source that is being constructed or operated. In the case of air construction permits, this review reflects the required standard of issuance and the application content requirements mentioned above, which focus on prospective compliance and not aspects of enforcement.

77. How did the Illinois EPA consider violations from General II's existing facility in the review of the construction permit application for a new facility on the East Side.

As stated at the public hearing, the Illinois EPA did not consider alleged violations at the existing facility in its review of the construction permit application for the new facility. As a general rule, the Illinois EPA does not consider the enforcement-related history of an applicant as part of the permit review process. This is because the structure of the Environmental Protection Act, as revealed in its provisions, divides permitting and enforcement functions into separate programs, though there are limited exceptions that will be discussed later. The Act provides for a state-wide program that is aided by private remedies, namely, the enforcement provisions found at Titles VIII and XII, to hold polluters responsible for the harm that they cause.[7]

Civil enforcement can be brought through a filing of a complaint in a circuit court or with the Board against any person that violates the Act, Board regulations or a permit. Legal actions can be initiated by state prosecutorial officials or by any person through a citizen's suit. Such cases can involve extensive discovery proceedings, pre-trial procedures, and eventually either a settlement or a trial (or evidentiary hearing) to determine liability and requested relief (civil penalties, injunction, cease and desist, etc.) sought in the complaint. A complainant bears the burden of proof in a civil enforcement action.

Permitting programs are codified at Title X of the Act and in the Board's implementing regulations, including 35 Ill. Adm. Code Part 201 governing state air construction permits. These requirements assure that the permit review is conducted as a record proceeding, which is part of an intricate administrative continuum between the Illinois EPA and the Pollution Control Board. Under Section 39(a) and Part 201, the Illinois EPA reviews an application for air construction permit according to a formal standard of issuance and permit content requirements, as discussed above, and other rules of procedures.

If an applicant appeals an agency decision to deny or issue the permit, the Board acts as an overseer to determine whether the permit decision, based exclusively on the record prepared by the Illinois EPA, is supported by the relevant standard of administrative review. The burden of proof in a permit

[7] **415 ILCS 5/2(b).**

appeal is on the applicant and because the review is based only on the record assembled by the Illinois EPA, discovery proceedings are usually limited. Other procedures not addressed by the Act or implementing regulations may also be relevant to the Illinois EPA's permitting role. This includes procedural due process implications outlined by appellate court rulings beginning nearly forty years ago. A seminal case is *Martell v. Mauzy,*[8] which laid the groundwork for later recognition that the programs are separate. The federal district court decision held that the Illinois EPA's denial of an operating permit based on "putative" (or alleged) violations[9] required a pre-denial hearing by the Illinois EPA, as opposed to the usual post-decision appeal procedures before the Board, because it deprived the applicant of recognized liberty interests protected by procedural due process.

Other cases followed, establishing the basic principles that have frequently been cited by the Illinois EPA at informational permit hearings and in responsiveness documents for many years. The Illinois Third District Appellate Court affirmed the Pollution Control Board's decision that a special waste stream permit was improperly denied on the grounds of alleged violations cited from a parallel pre-enforcement action.[10] In citing to the Board's opinion that the Act's procedures for permitting and enforcement are "separate and distinct," the appellate court affirmed the Board and upheld the latter's inference that the permit denial process was "improperly" used in lieu of enforcement.[11] [12]

As mentioned, there are limited exceptions to the general rule described above. Notably, two exceptions originate from statutory amendments by the Illinois General Assembly to the Act in 2003 in P.A. 93-575 (93rd General Assembly). The amendments introducing these exceptions to Section 39(a) of the Act did not eclipse the existing framework of the Act or its implementing regulations, as much of that construct was left untouched. The legislature also did not overrule existing caselaw and, as such, the changes simply memorialized existing caselaw and other provisions of the Act that existed at the time.

The first exception created by the amendments to Section 39(a) allows for agency discretion in considering "prior adjudications of noncompliance" with the Act for environmental releases by an

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[8] **511 F. Supp. 729 (N.D. Ill. 1981).**

[9] **The purported authority for the permit denial was Section 39(e), later re-codified at 39(i). The grounds for the denial of the operating permit rested with a history of alleged violations involving refuse disposal facilities, including a past enforcement action involving USEPA, two past and one pending state enforcement actions, a pending *quo warranto* action and agency inspection reports.**

[10] ***See, EPA v. PCB,* 252 Ill. App. 3d 828 (3rd Dist. App. Ct. 1993).**

[11] ***Id.* at 830. The ruling also illustrates the difference between evaluating a source's compliance status (viewed through an enforcement lens) and determining whether a permit application meets the Act's requirements for permit issuance (viewed through the Act's standard for permit review). This is shown by the court citing to application materials showing that the applicant's analyses of compounds used in its special waste streams were below regulatory limits, thus negating the grounds cited for permit denial.**

[12] ***See also, ESG Watts, Inc., v. PCB,* 286 Ill. App.3d 325, 334-335 (3rd Dist. App. Ct. 1997)(agency consideration of alleged violations was not proper permit denial was supported for other reasons); *The Grigoleit Co. v. EPA*, PCB No. 89-184 (November 29, 1990)(if IEPA has waste concerns, the proper mechanism to address those concerns is an enforcement action rather than a denial of a permit).**

applicant. The Illinois EPA only uses this authority rarely, in large part, because judicial (or quasi-judicial) rulings based 'on the merits' of an environmental enforcement case are uncommon. The bar set by these criteria is high, as it is perhaps meant to protect against a potential deprivation of the same interests claimed by the applicant in *Martell v. Mauzy.* Based on institutional knowledge, the Illinois EPA has used analogous, but more specific authority found in Section 39(i) in a handful of prior occasions.[13]

The other exception introduced in the 2003 amendments allows for agency discretion in imposing reasonable conditions relating to a "past compliance history" with the Act as is necessary to correct, detect, or prevent "noncompliance." *See,* 415 ILCS 5/39(a). The Illinois EPA does not routinely employ this authority, as it is also prudently viewed to hold a high bar by requiring demonstrated, not merely alleged, noncompliance. However, the Illinois EPA will sometimes incorporate relevant requirements from a final adjudication into a construction or operating permit, often doing so at the request of a respondent who has been directed to undertake a permitting change as a result of a settlement.

78. The Illinois EPA should deny the permit application for a construction permit because of adjudicated violations relating to the General Iron (or General II) facility.

A permit denial of General III's application for a construction permit based on the application before the Illinois EPA is not justified or authorized by the provisions of the Environmental Protection Act. Section 39(a) provides that the Illinois EPA may consider a permit applicant's prior adjudications of noncompliance with the Environmental Protection Act if the noncompliance involved a release of some contaminant to the environment. The Illinois EPA did not consider the entirety of General Iron's past compliance history cited in the comments to this proceeding because nearly all of it fails to satisfy the legal criteria set forth in the provision.

For purposes of this exception to the rule, an adjudication is generally regarded as a judgment by a court (or quasi-judicial body), relating to the Latin term "*judicare*," which means "to judge."[14] The concept of an adjudication consists of a formal determination 'on the merits' of the legal controversy.[15] The federal district court's ruling in *Martell v. Mauzy* is informative in this regard, as

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[13] **Sheridan-Joliet Land Development, LLC, denial letter dated August 14, 2018 (denying a renewal of clean construction and demolition debris development/operating permit due to a PCB enforcement adjudication); City of Morris and Community Landfill Company, denial letter dated May 11, 2001 (denying a request for significant modification to a development permit as a result of a criminal felony conviction); and *ESG Watts Inc. v. PCB,* 286 Ill. App.3rd 325 (3rd Dist. App. Ct. 1997)(denying renewal applications for a landfill's waste-streams based on a circuit court finding of liability and administrative citations).**

[14] ***See, Merriam-Webster On-line Dictionary*** **(www.merriam-webster.com) ("transitive verb: to make an official decision about who is right in (a dispute)"); Wikipedia (https://en.m.wikipedia.org) ("the legal process by which an arbiter or judge reviews evidence and argumentation, including legal reasoning set forth by opposing parties or litigants, to come to a decision which determines rights and obligations between the parties involved").**

[15] **Some might assert that the term should also include any type of court decree, including a settlement agreement resolving a case short of actual litigation, but such a notion misses the mark. A consent decree approving a settlement does not entail a judicial determination "on the merits."**

the "risk of erroneous deprivation" of the applicant's protected liberty interests was, at least in part, because the alleged violations had not been adjudicated.[16]

In many instances cited in comments, the claimed adjudications stem from administrative citations issued by the City of Chicago. It is not plainly evident that the resolution of those citations constituted a formal adjudication of noncompliance under the Act. The administrative citations issued by the City do not address infractions that arise from the Environmental Protection Act but, rather, are ordinance violations. A municipality's ordinances are entirely separate from the General Assembly's legislative enactments and, in this instance, nothing in the Act signals that the legislature meant for the Illinois EPA's purview to act upon ordinance violations. In this regard, it is not relevant that the facts relating to the citations correspond to matters that might be alleged under the Act, as Section 39(a) speaks to only the State's sovereignty.

79. The Illinois EPA should deny approval of the construction permit application for General III due to both admitted and adjudicated violations historically caused by Reserve Management Group/South Chicago Property Management ("RMG/SCPM") operating at the site of the planned construction of the General III facility.

For clarification of the record, and based on institutional knowledge, there are four manufacturing facilities that conduct metal recycling operations at the existing South Burley Avenue site where the planned construction of the General III facility will occur. The entities consist of Reserve FTL (d/b/a Reserve Marine Terminals), Napuck Salvage of Waupaca, LLC, South Shore Recycling, LLC, and RSR Partners, LLC (d/b/a Regency Technologies) and are collectively known as South Chicago Property Management, Ltd. ("SCPM"). SCPM is a corporate affiliate of two holding companies, RMG Investment Group, LLC, and RMG Investment Group II, LLC, who are doing business as Reserve Management Group ("RMG").

As previously discussed, the administrative citations issued by the City concerning the SCPM-related facilities are not adjudications involving the Environmental Protection Act but, rather, violations of City ordinances. There is also no indication in the record of this proceeding that violations by SCPM, who currently oversees the operations of the four manufacturing facilities at the existing site, would constitute a formal adjudication, or even noncompliance with the Act, relative to GIII's permit application.

Although the permit application indicates that the General III will be a single source together with the SCPM-related facilities, and the construction permit includes a permit condition to that effect, a source designation only addresses the respective roles and responsibilities of facilities recognized as a single source in the context of permit classification, though it can, on rare occasion, affect rule applicability too. However, a source designation used in classifying permitted sources under the Clean Air Act Permit Program ("CAAPP") and the FESOP should not be confused with shared or joint liability amongst related entities under applicable laws. As discussed elsewhere, how General III and the SCPM-related facilities opt to permit their single FESOP source, whether as single or multiple FESOP permits, will be addressed in the operating phase of the project.

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[16] **511 F. Supp at 741 (i.e. applicant lacked an "evidentiary hearing of any kind" regarding state settlement order and pre-enforcement orders considered by the Illinois EPA in its denial).**

80. RMG/SCPM has admitted to noncompliance with the Environmental Protection Act in a letter sent to the Illinois EPA in November 2019, such that there is a basis for a past adjudication with the Act for permit denial. The noncompliance relates to the failure of the manufacturing facilities to historically obtain the proper operating permits and the admission(s) addressed in the letter are not paper violations but involve unpermitted releases of pollutants to the environment.

As mentioned in a prior response, the Illinois EPA does not view SCPM to be the same legal entity as the permit applicant involved in this proceeding.[17]

Additionally, the Illinois EPA does not view a voluntary self-disclosure letter submitted under the enforcement provisions of Section 42(i) as evidence of a formal adjudication for purposes of Section 39(a), such that it could be considered in a permit review. Although a pre-enforcement letter could contain admissions, they would not be adjudicative in nature.

81. The noncompliance by the SCPM-related facilities occurred over many years and the discovery of such violations was inevitable given that they are mentioned in the General III permit application. It was grossly unfair and contrary to the Act [for the Illinois EPA] to offer the companies enforcement protections with respect to the noncompliance.

For reasons mentioned above, the Illinois EPA did not consider the pre-enforcement investigation of the SCPM-related facilities, including the self-disclosure letter, as evidence of noncompliance by General III in this permit proceeding.[18]

82. The structure of the Environmental Protection Act should compel the Illinois EPA to recognize the past violations being addressed by the City of Chicago, who acts as a local environmental agency and maintains a close relationship with the Illinois EPA, as adjudications of noncompliance with the Act. Such recognition will promote the goal of encouraging the coordination of environmental protection by local governments.

The Illinois EPA recognizes the strong working relationship with the City of Chicago in the investigation of emissions sources in the region, as well as the significance and value that the relationship provides to the residents and the State of Illinois. However, the reach of Section 39(a), including the Illinois EPA's consideration of a possible permit denial based on adjudicated noncompliance with the Act, depends upon the applicability of facts to the law. In this case, even the most liberal construction of the Act's relevant provisions cannot reconcile the issuance of a permit denial with the absence of a formal adjudication of noncompliance with the Environmental Protection Act. Recognizing and promoting the involvement of local governments in environmental protection efforts is important but not germane to the analysis of this permit application.

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[17] **Because the Illinois EPA declines to consider the SCPM self-disclosure letter to be within the scope of review of the General III application, the notion that the nature of the unpermitted operations should constitute a release of contaminants to the atmosphere for purposes of Section 39(a) is moot.**

[18] **To assist the public's understanding concerning a matter of possible interest, the Illinois EPA notes that any relief (i.e., enforcement protections) in a civil penalty assessment provided by the State of Illinois in response to a voluntary self-disclosure letter does not arise unless or until a formal enforcement action is commenced and resolved through either a negotiated settlement or adjudication.**

83. Nowhere does the Act expressly state that the Illinois EPA cannot consider adjudications of local air ordinances as a basis for denying a permit under Section 39(a).

The Illinois EPA is a creature of state law, which means that its legal authority derives from the laws enacted by the General Assembly and approved by the Governor. Such authority takes the form of expressed powers, as found within the enactment's provisions, or implied powers, to the extent necessary to execute the expressed powers. The absence of specific authority in the law (e.g., "nowhere in the Act does it say") does not create a source of authority for an administrative agency, it simply confirms that no such authority exists. Put another way, the Illinois EPA's powers are defined in relation to the Act, and do not include the vast universe of authorities that are not otherwise specifically prohibited.

In this instance, if the Act does not expressly provide for the consideration of enforcement-related matters that stem from local air ordinances, or are not implied from those expressed powers contained in the Act, the Illinois EPA plainly lacks the authority to consider such things in its permitting capacity. The Act neither expressly provides for, nor otherwise implies, that violations of local air ordinances are within the purview of the Illinois EPA's permit review under Section 39(a).

84. Thirty-three unresolved administrative citations involving General Iron are currently pending with the City of Chicago, delayed in their resolution and rescheduled for hearings due to the COVID-19 pandemic. Because the citations involve repeated and substantive violations that relate to matters addressed by this permitting action, the Illinois EPA should postpone the permit decision to allow for the resolution of the citations so that they may be considered in the permit's review.

The Illinois EPA acknowledges the administrative delays associated with governmental affairs during the COVID-19 pandemic and understands the desire expressed by the comment to account for all relevant information that could support a basis for a permit denial. However, the Illinois EPA is unable to extend the decision deadline and, in any event, could not evaluate the citations even if resolved in favor of the City. This is because the Illinois EPA lacks an ability to unilaterally postpone or extend the current decision deadline and, as mentioned elsewhere, the administrative citations process represents the sovereign power of the City to enforce violations its municipal ordinances, not noncompliance with the Environmental Protection Act.

85. Evidence of noncompliance by the SPCM-related facilities from multiple sources, including prior admissions from a pre-enforcement process overseen by the Illinois EPA, liability findings by the City of Chicago and past City inspection reports, should be considered by the Illinois EPA in imposing more stringent conditions in any issued permit.

As discussed elsewhere, SCPM is not the permit applicant in this proceeding. The fact that the SCPM-related facilities will be treated as a single source for purposes of future FESOP permitting does not now, and will not prospectively, affect issues relating to the liability. As also discussed, the cited allegations from the comments do not relate to noncompliance with the Act.

Separately, the Illinois EPA does not construe Section 39(a) of the Act as authorizing permit conditions based only on allegations of noncompliance with the Environmental Protection Act, as suggested by

the comment. The text of this part of Section 39(a) provision speaks plainly to "noncompliance"[19] and does so without qualifying its meaning as either alleged or adjudicated. In comparison to other provisions of the Act, when the legislature means "alleged violations" it employs the modifier expressly, as in the case of the Act's pre-enforcement process where it is quite sensible. 415 ILCS 5/31(2018).[20] In other contexts, the General Assembly seems to find reliance on mere allegations as antithetical to the Act's history and purpose. For example, the Board is not able to consider past enforcement history of a respondent in its determination of civil penalties unless the noncompliance is adjudicated.[21] It is also incongruous to suggest that the Illinois EPA can permissibly craft permitting conditions from mere allegations under the Section 39(a) when any revocation of a permit by the Board requires a formal enforcement action.[22]

In the recent past, the Illinois EPA asserted that the "noncompliance" language of the statute's text is best thought synonymous with "adjudications," in part, for reasons to avoid constitutional problems.[23] However, the Illinois EPA will allow for the consideration of admitted or uncontested matters in this analysis, to the extent that such proof support a showing of noncompliance. Note that court-approved settlement agreements containing admissions of liability or a clause allowing the Illinois EPA's use of the agreement for purposes of an adjudication under Section 39(a) would signal a court's affirmation of such a finding.

86. Evidence of noncompliance by the General Iron facility from multiple sources, including liability findings by the City of Chicago, pending citations before the City and past City inspection reports, and USEPA enforcement actions against General Iron should be considered by the Illinois EPA in imposing more stringent conditions in any issued permit.

The previous response answers several of the reasons why evidence of many of the alleged violations cited by comments cannot be considered by the Illinois EPA in this proceeding. One issue remaining is the effect of USEPA's consent agreements and administrative settlements on the Illinois EPA's ability to impose permit conditions under Section 39(a).

Based on the comment and its supporting attachments, prior USEPA investigations and resulting lawsuits involving the former owner of the facility, General Iron, occurred on at least three occasions in the last two decades, culminating in lawsuits resolved by way of a consent decree in 2006 and two

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[19] The language used in the relevant text, as introduced to the Act as an amendment in 2003, essentially refers to "noncompliance" twice: the first time indirectly, as "past compliance history" would seem synonymous with noncompliance, and the second time directly.

[20] There are also instances where the term is unqualified but there is no need for a modifier, as the context is one in which the liability for actual noncompliance is being, or already has been, determined. *See,*

[21] 415 ILCS 5/42(h)(5). *See also,* 415 ILCS 5/42(b)(4-5)(2018)(assessing an additional penalty amount for certain administrative citation matters is restricted to a "second or subsequent adjudication violation" of the relevant provision).

[22] 415 ILCS 5/33(b).

[23] See, Illinois EPA Responsiveness Summary for Sterigenics U.S., LLC, Willowbrook I, pages 68-70, dated September 20, 2019.

administrative settlement agreements in 2012 and 2019. The earlier consent decree from 2006 does not purport to be a fully executed order, as it is not signed by the parties or the presiding judge, and it is not clear whether it is still in effect, as it contains a termination clause that may likely have been executed by now. The decree also only addressed federal matters[24] and therefore does not fall within the scope of the Section 39(a).

The administrative order from 2012 cites a single day of violation by the facility with the Board's fugitive emissions standard[25] and the regulatory equivalent of Section 9(a) of the Act. The 2019 administrative order cites to four inspection dates alleging that the facility failed to control VOM emissions below the applicability thresholds of the Board's Part 218 regulations.[26] The order also alleges that the facility operated as a major source without a requisite Title V operating permit, citing to the Illinois Clean Air Act Operating Permit Program.[27] Both orders required corrective action by the facility, including obtaining the necessary permits from the Illinois EPA.

The two administrative orders are within the scope of the Illinois EPA's authority under Section 39(a) for the consideration of permit conditions, as they reflected noncompliance with the Act through the State's Implementation Plan. The Illinois EPA reads the administrative orders as a fair acknowledgement by General Iron of its agreement with the terms of the orders, including statements asserting the company's failure to meet emission control requirements from the Board's Subtitle B regulations (i.e., fugitive emissions standard and Part 218, Subpart TT.

However, the Illinois EPA will not exercise discretion to apply the administrative orders to impose new conditions in the construction permit, as circumstances do not warrant them. It would also require significant record support, should General III appeal the imposed permit conditions, to support a showing of the *necessity* for conditions to correct or prevent the noncompliance addressed by the administrative orders.[28] It is noted that comment(s) do not allude to specific conditions that are necessary to address noncompliance covered by the orders.

87. Evidence of noncompliance by another facility, Chicago Rail and Port, should be considered for the GII facility because of fugitive dust violations addressed by USEPA in a Notice of Violation letter.

The record of this proceeding does not indicate that the referenced facility currently has any relationship to General III or the SCPM-related facilities such that it should be considered in this permit proceeding.

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[24] **The complaint alleged that the respondent knowingly disposed of appliances containing substances used as a refrigerant pursuant to 40 C.F.R. §82.154(a) and 82.156(f).**

[25] **35 Ill. Adm. Code 212.301.**

[26] **35 Ill. Adm. Code 218.980(a)(1) and (b)(1).**

[27] **415 ILCS 5/39.5(2)(c)(1).**

[28] **At this stage of development, the facility has already installed the controls and performed the necessary emissions testing that were an outgrowth of the allegations, and the related permitting requirements addressed only the existing facility, not a new one at a different location.**

88. The Illinois EPA should ask Governor Pritzker to postpone the statutory deadline or declare the permit application incomplete.

The Illinois EPA is not inclined to seek a postponement of the current decision deadline through use of an executive order or otherwise, as the permit application contains all the requisite information to be deemed complete. To be accurate, the current deadline of June 25th governing the Illinois EPA's review of the construction permit application reflects the applicant's waiver of the decision deadline, not the original timeframe set forth in Section 39(a) of the Act.

89. Another source of authority under Section 39(a), which references the use of conditions "necessary to accomplish the purposes of the Act, and as not inconsistent with" Board regulations," is relevant to this proceeding. It provides broad authority for the imposition of conditions that go beyond the regulations if the two criteria reflected in the text are met.

The Illinois EPA agrees that this authority is relevant to this proceeding and, indeed, it is by far the most common source of authority used in the development of a construction permit for emission sources or equipment required by Section 39(a). Generally speaking, the language reflects a kind of catch-all authority and for many permits issued by the Bureau of Air, the authority is usually cited generically, and usually only once, for a wide range of conditions that are not expressly identified elsewhere in the Act or implementing regulations.

But this authority does not extend beyond its plain wording, as this comment contemplates. In fact, the Illinois EPA's role as a permit authority is tempered as much by the role that the Pollution Control Board shares under the Act as by Section 39(a). The Illinois EPA cannot misappropriate the role of the Board as the State agency charged with setting environmental control standards. The Board may even be guided by this concept when the statute's text comes into focus in permitting appeals, as more often than not, the Board sets a noteworthy bar in judging the "necessity" of operating conditions.[29]

90. The plain language of the [catch-all] authority of Section 39(a) contrasts with a misleading statement by one of the members of the hearing panel, who said that the Illinois EPA had no choice but to issue a construction permit to a source if the source will be in regulatory compliance.

This comparison tries to combine different concepts, leading to an incorrect conclusion. The reference to Section 39(a) relates to the scope of authority in setting permit conditions and the statement regarding permit issuance based on regulatory compliance is a restatement of the standard of permit issuance. Incidentally, because the restatement is a fairly accurate representation, there is nothing misleading about it.

91. The Illinois EPA is in error when it contends that it may only deny a permit a permit under Section 39(a) if there is an adjudicated liability finding by a circuit court or the Board (citing to a previous responsiveness summary discussion and footnote accompanying the Sterigenics permit proceeding).

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[29] ***See, IEPA v. Jersey Sanitation Corp.,* 784 NE2d 867, 875-875 (4th Dist. Ct. App. 2003)(holding that petitioner was required to show that its [closure/post-closure] plan, which agency found lacking, "would not result in any violation of the Act and the modifications, therefore, were arbitrary and unnecessary").**

The discussion referenced in the cited responsiveness summary responded to a question regarding whether the Illinois EPA could deny a permit on grounds of past violations. The answers outlined in that earlier discussion are generally in accord with responses in this document, including the Illinois EPA's contention that the Act requires an adjudication if a past history of violations is the basis for a permit denial under Section 39(a).[30] The comment is mistaken in the belief that the document cites to a proposition that no other basis for permit denial exists under Section 39(a) than for of an adjudicated liability, as there are numerous other grounds that can form the basis for a permit denial.

92. The Illinois EPA is hypocritical when it claims that permitting is separate from enforcement, especially given the lack of enforcement activities conducted by the Illinois EPA in the last 15 years. The Illinois EPA cannot fail to meet its enforcement and permitting responsibilities and then rely on those failures to justify agency inaction, as it causes a vicious cycle and evidence of a failed agency.

The Illinois EPA appreciates the candor of this and related comments, but its enforcement programs are not at issue here. Certainly, the Illinois EPA is not above criticism in the performance of its responsibilities, and residents of the local community and throughout the State are free to express their displeasure with the Illinois EPA's implementation of its many roles.

The point at issue is about how an organization, a state agency whose authorities are defined by statute, perceives its roles, and performs its responsibilities, under existing laws and regulations. As mentioned, the Illinois EPA's permitting and enforcement programs typically operate independently of one another as a matter of course, as they have for many years. There is no doubt that the caselaw authorities cited in this document, and the principles that informed them, have been an organizing principle in bringing about this separation.

93. Illinois EPA must include permit conditions that provide the community with data about the facility's emissions.

The permit as revised has enhanced recordkeeping and reporting requirements. Notably, records and reports of the results of emissions testing are required under the revised permit. Also, quarterly reports are required under the final permit. These reports would include data about the facility's emissions. All reports required under the permit will be available to the public.

94. I am concerned for what a permit application review is constrained to.

Illinois EPA is generally constrained to what is contained in a permit application, such as whether applicable requirements will be met. The Illinois EPA cannot review/consider violations at another facility, as in this case, due to Illinois case law and interpretation of the permit Environmental Protection Act. As a result, Illinois EPA review is confined to matters of the application and not to compliance or enforcement considerations, with some limited exceptions.

95. The draft permit should require General Iron to keep records of emissions control testing and emissions for a longer period of time and should be made available to the public upon request.

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[30] **In retrospect, footnote 6 could have observed that a liability adjudication might also originate with a federal district court (or body acting in a quasi-judicial capacity) provided that the Act or implementing regulations in Illinois is the basis for the noncompliance addressed in the controversy.**

Generally, the records that are required under the permit have a retention period of five years. This is the customary retention period for FESOP and CAAPP sources. Unlike the records of the State, the records of a facility are not available to the public upon request. However, the records are available to the State upon request, which records would then be available to the public under the Freedom of Information Act.

96. Both Condition 19 and Condition 21 require that records be kept for "at least" a period of time, these two conditions contain inconsistent lower bounds – three years and five years.

Condition 19 merely recites the recordkeeping required by specific rule. Condition 21 addresses recordkeeping that goes beyond that rule. The timeframe for record retention in Condition 21 is consistent with that required of FESOP and CAAPP sources. That there are two discreet record retention periods is not an issue. To reconcile the two would serve to undermine the greater retention requirement.

97. Descriptions of the Ferrous and Non-Ferrous Material Separation Systems on page 1 of the draft permit are inconsistent with the emission limits for these Systems contained on pages 14-16. Illinois EPA must correct all descriptions and ensure that all emissions estimates, modeling based on those estimates, and proposed limits and monitoring, recordkeeping and reporting requirements encompass all proposed emission sources/units associated with their respective Systems.

The Illinois EPA acknowledges the inconsistency and has revised the permit to accurately list emission units. In short, the magnetic separators, box separators, and the stacking conveyors are not in addition to, but are the 70 conveyor transfer points.

98. We note that there appears to be a grammatical error in Cond. 10(b) – it may be that the provision omits an "and" between "unpaved areas" and "shall be treated."

This comment has been addressed.

Single Source

99. As part of its permit review and contrary to its well-established permitting standards, the Illinois EPA failed to address the SCPM-related manufacturing facilities that will be co-located with General III at the new facility.

The Illinois EPA addressed the single source permitting issue relating to this proceeding in accordance with applicable law and consistent with past practices. The permit application acknowledged that the General III facility will comprise a single source for purposes of permitting under the Act with the existing SCPM-related entities located at the site. In view of the relevant single source criteria that is reflected in Section 39.5 of the Act, together with the acknowledgement from the application, the Illinois EPA did not question treating the various facilities as a single permitted source. This is reflected in the draft and final permit at Condition 1e.

100. Despite apparently concluding that the General III and SCPM-facilities are a single stationary source, the Illinois EPA is conducting separate permitting activities of the two, which improperly segments all of the pollutant-emitting activities at the source. The current application provides an incomplete picture of the source and a single application is needed that combines the comprehensive emission-requirements into a single construction permit for the source.

As this permit proceeding involves an application for construction permit, the Illinois EPA is addressing matters relating to the development of the project, including the design and operating capabilities of General III's emissions units and control equipment that will be authorized by the permit. The application does not address activities relating to the SCPM-related activities due to the fact that those sources do not require a construction permit, independently or in conjunction with the project. At present, the SCPM facilities are operating pursuant to an existing Registration of Smaller Source ("ROSS") registered under SCPM's name. Condition 1e of the draft construction permit recognizes that General III is a single source with SCPM. Beyond this recognition, it is not necessary for the draft permit to contain any other requirements relative to the issue.

The Illinois EPA is aware that General III must submit a Federally Enforceable State Operating Permit ("FESOP") application on CAAPP forms in order to avoid major source status under the CAAPP. Based on institutional knowledge, the Illinois EPA is also aware that SCPM will be submitting a FESOP application at the same time. This indicates that the sources anticipate obtaining separate FESOP permits, notwithstanding that the facilities are sharing the same FESOP source status.

This approach is consistent with applicable law and past practices, which is illustrated in a USEPA petition response involving U.S. Steel Corporation issued December 3, 2012 (Petition No. V-2011-2). In denying a petition point addressing similar concerns expressed by the comment, USEPA observed that Title V permit authorities may issue "multiple title V permits to a single Title V source" provided that the compliance obligations for each facility are clear and that all applicable requirements are contained in a Title V permit. *Id.* at page 26. In its decision, USEPA declined to require the Illinois EPA's processing of U.S. Steel's Title V permit to be consolidated with a separate supporting facility, Gateway Energy & Coke Company. Both facilities were treated as a single source. The discretion in the permit authority likely relates to a recognized need to provide flexibility in reporting and other permit obligations in the context of a single source classification, given that different responsible officials or personnel will be overseeing the responsibilities of the respective facilities.

101. General Iron's operating permit application has not been acted on by the Illinois EPA in years. Deferring a single source determination to the operating permit phase of permitting for the source is inadequate.

The Illinois EPA is not deferring any single source determination, as the decision to treat the General III and SCPM-related facilities as a single FESOP source is being memorialized in the construction permit. The processing of the operating permits for the sources will be addressed in the future, in parallel fashion to the extent practicable.

102. The applicant has failed to describe, and the Illinois EPA has failed to consider the proposed new source along with the other sources already located at South Burley as a single source for air permitting purposes.

As elsewhere discussed, the existing SCPM Entities will be a single source with General III and will be

required to obtain a Federally Enforceable State Operating Permit. The other entities will be addressed, along with General III, during that operating permit application process.

103. "The Draft Permit fails to consider all of the RMG facilities in the Potential to Emit or air quality modeling of the proposed GIII."

The SCPM Entities continue to qualify for eligibility under the Registration of Smaller Sources (ROSS) program. Sources are eligible for the ROSS program if combined actual emissions of PM, CO, NOx, VOM and SO2 from non-exempt sources are less than 5.0 tons per year, or less than 10 tons over the two most recent years and total hazardous air pollutant (HAP) emissions are less than 0.50 tons per year. The ROSS program is mandatory meaning that if a source meets the eligibility criteria, it must be registered in the program. Absent changes in operation or new information, the SCPM entities must remain in the ROSS program until General III triggers the requirement to seek an operating permit.

Ambient air impacts from these operations are accounted for in the background monitoring values at the Illinois EPA's monitoring station at Washington High School, which evidences attainment of the NAAQS for PM.

Periodic Monitoring/ Practical Enforceability

104. The Draft Permit is unenforceable. Numerous permit limits, in particular on fugitive sources, are vague, require only weak or nonexistent testing or monitoring, and/or require insufficient recordkeeping, with virtually no mandated reporting.

As is explained elsewhere, this construction permit for this minor source does not require the content associated with permitting of major sources of emissions and specifically that associated with Clean Air Act Permit Program permitting. There is no requirement for periodic monitoring such as testing, monitoring, recordkeeping and reporting in this minor source construction permit. Notwithstanding, in response to comment, the Agency has clarified and enhanced many requirements within the permit.

105. The permit lacks specificity and is not enforceable.

Further specificity is not needed to make the permit enforceable. The applicable regulations and requirements that would apply to the facility are clear. Further, the construction permit requires General III to conduct emission testing, monitoring, and recordkeeping to show compliance with new emission limits and control requirements. The permit also requires GIII to prepare and implement plans for Operation and Maintenance and Feedstock Management as well as a Fugitive Emissions Operating Program.

106. The permit lacks monitoring and recordkeeping/reporting requirements to ensure compliance with and enable enforcement of the limits on the hours of operation. With respect to the shredder, noise monitoring can and should be used to track shredder operations on a continuous basis for purposes of determining compliance with the limit on hours of operations.

The permit as revised now includes a recordkeeping requirement relative to hours of operation per day, month and year for each process area. The draft permit already required deviation reporting from the hours of operation requirement. Illinois has no noise program, and regardless is not inclined to use noise to know whether a source is operating. Hours of operation is a very common consideration in determining and limiting the emissions of a source. Never has noise been the means by which compliance with the hours of operation was assured or determined.

107. Concern with Agency undercounting emissions from metal recyclers; these facilities have been miscategorized as minor emitters of pollution.

It is true that there is limited data on the emissions from scrap metal recyclers and that their emissions impact has not been readily understood. Given its national presence and role, USEPA took the lead on the matter in Illinois seeking emissions testing of select sources. Through that testing it was determined that the scrap metal recycling operation on Clybourn was a major source of VOC emissions. The USEPA entered an administrative order mandating the installation and destruction efficiency testing of an RTO. Under this construction permit, the Illinois EPA is also requiring emissions testing. That testing and the data resulting therefrom will prove instructive relative to the emissions from such operations.

108. The Draft Permit is utterly lacking in any control requirements and monitoring, recordkeeping and reporting requirements sufficient to ensure compliance with these limits by various "fugitive" sources on an ongoing, continuous basis.

The draft permit was not completely devoid of control, recordkeeping and reporting requirements. Fugitive control requirements included enclosure, sweeping and watering, and reporting was required for deviations. However, in response to comment additional the Fugitive Emissions Operating Program has been enhanced as has the recordkeeping and reporting.

109. Illinois Environmental Protection Agency should impose new permit conditions to control emissions and address General Iron's long history of non-compliance.

It is not clear what additional control requirements the commenter seeks to have imposed. The scrap metal operation is only subject to regulatory requirements for visible and particulate matter emissions and for emission of volatile organic material. The sole control requirement to which the source is subject applies to the Hammermill Shredder System and necessitates the reduction of uncontrolled VOM emissions by at least 81%. The Illinois EPA cannot unilaterally create and impose additional control requirements by way of this permit.

110. I am concerned for boilerplate restatements in the permit.

The use of boiler plate restatements of regulatory requirements is a practice of the Agency for efficiency in certain types of permitting as well as to minimize errant restatements of regulatory requirements. This approach creates no legal or technical issues, rather it serves to identify applicable rules and related provisions such as test methods.

111. Condition 10, merely contains vague, general control obligations for storage piles, roadways, vehicle loading and unloading, and other transfer points that simply list available control measures in the alternative and state that control shall be done "in accordance with" a required operating program,

for which Condition 10 lays out minimum requirements, along with incorporation by reference of a December 2019 fugitive particulate operating program and a provision for updating the operating program and incorporating it into the permit.

This approach presents no legal or technical issues. However, in response to comment, requirements addressing fugitive visible emissions have been clarified and enhanced in the permit and fugitive particulate operating program.

112. Condition 13 sets forth a restatement of Section 201.282 that confusingly includes a directive that sources "shall" conduct testing, followed by a permissive clause that Illinois EPA "may" require an owner or operator to conduct testing and a clause that Illinois EPA "shall have the right" to conduct tests at Illinois EPA's request; 13(a) only includes a vague commitment by Illinois EPA to require the facility to test its pollution control equipment when Illinois EPA deems it is a "reasonable time[]" to do so.

The condition does not include a directive that sources shall conduct testing followed by two clauses. Rather, the condition indicates that the source shall be subject to Agency requests for source testing as well as Agency conducted testing. Also, condition 13 is a mere recitation of the regulatorily established obligations for a source to test. Any testing specifically called for in the permit is set forth elsewhere in the permit.

113. Condition 14 sets forth references to the methods for conducting monitoring and testing of various emissions sources set out in Sections 212.107 to 212.110, including methods for visible emissions and opacity;

The condition simply makes clear the appropriate reference methods for testing.

114. Cond. 16(g) includes a statement that satisfactory completion of the initial test is a prerequisite to issuance of an operating permit, which in theory could set an outer boundary on delays. However, given Illinois EPA's practice of sitting on permit applications for extended periods of time we have concerns that testing may be delayed indefinitely.

Initial testing required under the permit is to be conducted within a defined window of time. Subsequent testing addressed in the permit is also to be conducted at a defined point. As drafted, the permit does not provide for delays in testing. As to permitting, the Illinois EPA has never had a practice of sitting on permits. However, there was a period, when for myriad reasons including limited resources, the Illinois EPA fell behind in permitting and a backlog was created. In recent years that backlog has largely been eliminated in the CAAPP and it has been significantly reduced in the FESOP program.

115. Condition 25 sets forth a requirement to submit a report to Illinois EPA "[i]f there is an exceedance of or deviation from the requirements of this permit as determined by the records required by this permit or otherwise."

This condition is one of the most if not the most important permit condition. This condition requires the reporting of any deviation from any requirement in the permit as determined not just by the records required under the permit but by any credible evidence.

116. Section 9(a) on page 8 does not indicate how often the facility should be required to do visual inspections or otherwise inspect or evaluate its pollution controls.

In response to comment, the Illinois EPA is requiring the expansion of the Maintenance Plan required at condition 11(h) in the draft permit to include all maintenance activities required under this issued permit. This plan will address practices and frequency, among other.

117. I have concern for the operating program and maintenance plan. The permit should specify what, at a minimum, must be in those plans to ensure protection of public health.

As is stated on the face of the permit, the terms of the operating program are incorporated into the permit, with the program itself as an attachment. The practices detailed in the program are intended to minimize visible fugitive particulate matter emissions and ensure compliance with the Board's Part 212 regulations. In response to comment the operating program has been enhanced. The maintenance plan, which has been expanded to additional equipment, is now required to be submitted 90 days prior to startup of the covered equipment. The plan will address maintenance activities and frequencies among other.

118. The hazardous air emissions permitted in section 12(b) should be reduced to 0 tons per year. Alternatively, Illinois EPA and General Iron should demonstrate to the public why this cannot be done and demonstrate that the pollution controls selected are those that will reduce hazardous air emissions to the lowest possible amount, i.e. that they are the best available control technologies.

Among its other responsibilities, the Illinois EPA is the permitting authority in Illinois. In that role, pursuant to and consistent with statutory and regulatory requirements, it is the Illinois EPA's duty to ensure sources are appropriately permitted. During the permit review process, the Illinois EPA determines whether a source has demonstrated that it can comply with the Environmental Protection Act and applicable regulations thereunder. The purpose of any issued permit is to memorialize the statutes, regulations and related terms such as recordkeeping and reporting applicable to the permittee and with which the source must comply as it is constructed and operated. In this instance, there is no basis for the imposition of an emission limit of 0 on the hazardous air pollutants.

119. "Emissions limitations in the Draft Permit are based on underestimated emissions of air pollutants, Likewise, the permit is based on artificially high control assumptions and greatly underestimated emissions for a range of fugitive sources including paved roads, vehicle loading/unloading, and piles)."

As has been stated elsewhere, where technically feasible, testing to validate the nature and quantity of emissions and the efficiency of controls has been required in the draft permit and further enhanced in the final permit.

120. The Draft Permit improperly assesses emissions from torch cutting and fails entirely to propose controls for torch cutting.

General III does not perform torch cutting, thus this activity is not addressed in the permit.

121. Conditions are lacking in the permit for emission controls that will achieve compliance with permit limits, and other conditions of the draft permit are unenforceable as being too vague, have no objective sufficiency or have no measures, including monitoring, record-keeping and reporting, by which to ensure compliance with particulate matter source and fugitive emissions.

The comment presumes the Illinois EPA can impose emissions standards and any related means of ensuring that a source will meet the requisite standards through this proceeding. However, the Illinois EPA does not wield a broad, or plenary, authority in its permitting role under the Act. The Act vests rulemaking authority for environmental control standards in the Board, not the Illinois EPA.[31] Analogous to the rule that permitting is no substitute for enforcement, it can be said that the Illinois EPA's permitting function is no substitute for the Board's rulemaking function.

From a legal perspective, it must also be observed that the state construction permit process for minor or synthetic air emission sources does not possess the rigors of major source programs. There is not a clear path to achieving controls and ancillary measures ordinarily reserved for New Source Review permitting. Periodic monitoring, a notion that springs from the Title V program, is similarly out of reach. USEPA has previously approved the relevant parts of the Illinois SIP as it relates the existing legal framework for state construction permits issued pursuant to Section 39(a) of the Act and the Board's Part 201 regulations. Region V staff also routinely reviews draft and final FESOP permits issued under this same regulatory framework, as they did in the case of the draft permit.

In general, a permit issued by the Illinois EPA is merely a vessel containing the relevant requirements that apply to the stationary source. The permitting role required of the Illinois EPA for a state construction permit (and operating permits that do not comprise major sources) is to mirror the basic control standards imposed upon a stationary source by the Act and Board regulations, and to provide basic measures for assuring compliance with the regulations and/or the permit. This approach is supported by the Part 201 regulations in the monitoring and testing provisions (Subpart J) and the records and reports provisions (Subpart K).

As mentioned elsewhere, the final construction permit includes additional monitoring that will be obtained through the development and operation of plans, and additional emissions testing, records and reporting requirements.

122. Many of the requirements of the fugitive particulate operating program ("FPOP") are practically unenforceable because they are overly vague and lack sufficient monitoring, recordkeeping and reporting details, or general sufficiency, to ensure continuous compliance with 35 Ill. Adm. Code Part 212.

The permit contains appropriate conditions for a state construction permit for the proposed emission source and control equipment. The more substantive rules for fugitive emissions (or dust) is commonly addressed by the Board's Subpart K regulations found at Section 212.301 and Sections 212.302-212.310 and 212.312). The former is a narrative standard that prohibits fugitive particulate emissions from any process that is visible beyond the property's boundaries when looking towards the zenith. The latter is the fugitive particular matter operating program requirements, which is designed to identity and implement best management practices to control fugitive dust activities at a site. General III is subject to the narrative visible emissions standard but not the operating program,

[31] **415 ILCS 5/5(b).**

as the facility's Standard Industrial Classification (SIC) code does not include the two-digit major groups specified in Section 212.302.

In the absence of applicability of the Board's Subpart K regulations, the Illinois EPA could have attempted to impose broad, cut-from-whole-cloth permit conditions, possibly even compelling many of the dictates regarding controls and timing requested by some comments. But given the possibility of an appeal, the Illinois EPA opted to pursue an alternative path for obtaining comprehensive measures for fugitive dust control. Successfully negotiated in other permits under similar circumstances, the FPOP is essentially a product of General III's willingness to commit to voluntary measures for controlling fugitive dust from the site. These voluntary measures, in turn, are incorporated into the construction permit and made enforceable through the most recent version of the plan submitted by General III on June 25, 2020.

123. The draft permit fails to ensure that the 30% opacity limit will be met for the facility's fugitive emissions sources, thus excluding them from a requirement that applies to process units and fugitive sources alike.

In response to comments, the draft permit will be amended to clarify that fugitive sources at the facility are subject to the opacity requirements of 35 Ill. Adm. Code 212.123. In addition, opacity observations are being included in the final permit to assure that the fugitive sources demonstrate an ability to comply with the emissions standard.

124. The draft permit allows for an improper automatic approval of a future revision to the FPOP and, in doing so, disallows the right to public review and comment prior to its approval.

Condition 10(i) of the draft permit provides that in the event a future revision to the FPOP is made during the permit term, the revision is automatically incorporated into the permit subject to the right of the Illinois EPA to approve the revision. The comment is therefore not correct in stating that the revision is automatic. However, the comment does correctly note that in the event that a future revision is incorporated to the permit, it will occur without undergoing public review, as there will be no permitting transaction contemporaneous with the change to the FPOP. In view of the FPOP's relative importance for source compliance with the permit's fugitive emission standards, and the protective requirement that the revisions must be consistent with Condition 10e and 10f, the Illinois EPA believes it is appropriate for FPOP revisions to go into the permit sooner rather than later. In this regard, the benefits obtained from fugitive dust controls through in-term revisions to the FPOP out-weighs the right of public review.

125. The draft permit allows for an improper post-issuance submission of the Contingency Plan required by 35 Ill. Adm. Code Part 212, Subpart U, thus disallowing the right to public review and comment of the document.

The submission of the Contingency Plan is tied to the submittal requirements set forth in Subpart U in Part 212. More specifically, sources subject to the rule after July 1, 1994, must submit contingency measure plans to the Illinois EPA for review and approval within 90 days following of the date that the source becomes subject to the rules. Condition 9b simply mirrors the regulatory requirement governing submission of the plan.

126. The permit allows several conditions of the permit to improperly defer the selection of multiple control options to the source and relegates the specificity of the permit's obligations to the FPOP.

For the reasons described above, the Illinois EPA exercised its discretion to address fugitive particulate emissions from the site through the avenue of a FPOP that the permittee has agreed to implement, and which will be enforceable through the incorporation by reference of the permit.

127. The emissions testing and monitoring under the draft permit is virtually nonexistent and contains conflicting requirements with respect to the Illinois EPA's testing authorities.

Emissions testing from the draft permit obligates the applicant to undertake an initial test with 60 days of the date that raw materials are first processed through the shredder, with an emissions protocol for the emissions testing submitted to the Illinois EPA within 90 days of issuance of the construction permit. *See,* Condition 16. Additional emissions testing and monitoring requirements have been added in response to public comment, as detailed elsewhere in this document. This includes capture efficiency testing as part of the testing evaluation of the RTO, testing of select pollutants from the fines processing system, testing of select pollutants from the Shredder system and opacity observations.

Contrary to the comment, there is no contradictions in the conditions relating to the testing authorities, as found in Condition 13. These requirements merely restate the testing requirements set forth in Part 201, Subpart J.

128. The permit does not contain any references to Section 9(a) of the Act and 35 Ill. Adm. Code 201.141, which are an on-going compliance requirement and was addressed by the Illinois EPA through its evaluation of air quality impacts in its air quality modeling.

The comment misapprehends the nature of the Section 9(a) prohibition and the similar standard found at 35 Ill. Adm. Code 201.141 in the Board's Part 201 regulations. The prohibitions contained in both requirements are narrative standards designed for implementing the Act's broad enforcement remedies.[32] Prohibitions are enforceable but only on a relative basis, as when evidence is adduced to show that conduct does not comport with the standard. The relativity of prohibitions make them meaningful in the enforcement realm, where they provide a broad outline with which to allege elements of a violation, as in the case of a polluter who is alleged to have caused air pollution or a violation of the Board's standards. But they are less relevant in permitting, where emission standards or limitations must be quantitatively certain.

Generally speaking, the use of statutory or regulatory prohibitions urged by comments are not included to air construction or operating permits. In addition, it is not clear how the cited prohibitions would have been factored into the air quality modeling of the project, in contrast perhaps to noncompliant sources. Efforts to gauge the impacts of general prohibitions would be futile.

129. The FPOP states that certain emission sources located within the Shredder system are potential sources of fugitive emissions.

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[32] **Similar statutory prohibitions are found in close proximity to Section 9(a) that include the prohibition against constructing or operating any equipment or facility without a permit and the open burning of refuse. *See,* 415 ILCS 5/9(b) and (c).**

In response to comments, the draft permit will be amended to clarify that the three conveyors associated with the Shredder system and referenced in the FPOP are not potential sources of fugitive sources.

130. The FPOP contains repeated usage of "as needed" in describing when controls will be applied and is in need for elaboration of objectivity. Similarly, the FSOP fails to specify which sources or areas are subject to the different controls.

In response to comments, some changes to the FPOP will be made to enhance the specificity of its provisions. However, neither the FPOP or draft permit is the appropriate venue for dictating the time, place and manner of fugitive dusts controls, as that venue is more appropriately addressed by the Board in its rulemaking role. In the absence of a type of operating program that applies to a source under Subpart K, which similarly does not dictate the requirements suggested by the comments, the Illinois EPA's broader approach to employing the use of the FPOP is not unreasonable and reflects considered judgment.

Stack Testing

131. What is emissions testing or stack testing and why is it not performed before the permit is issued and before the controls are used at the source to confirm that the controls will work and should be permitted?

Stack testing is a tool used to determine a source's compliance status with applicable control efficiencies. General III is subject to a control efficiency. Compliance with this efficiency will be determined by an initial stack test, and thereafter periodic stack testing.

Stack testing appropriately and necessarily is to be conducted after construction or installation of emission units and air pollution control equipment. Testing before construction is not an option as the units would not yet exist nor be in operation at a location. The purpose of the testing is to assess the efficiency of the control systems when in use at the source. As such, the testing necessarily must occur after issuance of the construction permit and when in use at the source.

132. Why are the details of the emissions testing to be performed not set forth in the permit?

Certain details of the testing will be set forth in an emissions test protocol. This protocol shall be prepared by an independent third-party consultant and submitted by General III and, after review and approval by the Illinois EPA, will serve as the guide for testing. However, the requirement for testing, the frequency of that testing and the methods to be used for testing are all set forth in the issued permit.

133. With respect to testing, are there standards of how frequent testing results would be available. Testing every week is requested.

For the scrap metal recycling operations addressed by this permit, there are no standards addressing the frequency of testing beyond the initial testing required by rule or permit. That lack of standards in

not unique to this sort of operation Given this is a construction permitting action for what will be a minor source of emissions falling within the Federally Enforceable State Operating Permit program, periodic monitoring in the form of testing (beyond the initial testing) is neither necessary nor the norm. The draft construction permit did require initial testing to demonstrate compliance with applicable rules and emissions and permitted emissions limits. And, in response to comments, the Illinois EPA has expanded emissions testing. For example, the RTO is now subject to periodic testing as frequently as annually under certain circumstances.

134. The draft construction permit lists emission limits based on stack tests conducted in May/June 2018 and November 2019 at General Iron II, LLC (ID#031600BTB), located at 1909 N Clifton Ave, Chicago. These emission limits are improper as they rely on tests conducted at the company's current location and not at the proposed location. The Illinois EPA should require stack tests during the 1-year construction phase at the proposed facility location (11600 South Burley Avenue, Chicago).

The limited reliance on the earlier testing of the RTO is not improper. Indeed, that earlier testing evidences the destruction efficiency of the RTO that may be constructed at the Burley site. In the absence of such testing information, the Illinois EPA would be forced to rely upon information from the manufacturer, information from similar units in similar operations, estimations, institutional knowledge and reasoned engineering judgement. As a practical matter, testing necessarily occurs after the construction of an emission unit and or air pollution control equipment. It simply cannot occur prior. Thus, in making construction permitting decisions, unit or control-specific test data is often not available. As to post construction, the draft permit required initial emissions testing and the final issued permit has expanded the requisite testing. With this site-specific testing, compliance with applicable regulatory requirements and emissions limits under the permit can be assessed for the General III operations at the Burley site.

135. The permit should contain measures that require General Iron III LLC to more frequently check and publicly report the current destruction efficiencies of the RTO and other pollution control technology.

As previously noted, the source will be conducting initial and periodic testing of the RTO and balance of the control train. The information from the testing will be available to the public.

136. With respect to pollution mitigations, what is being done at the new facility compared to current facility to give residents peace of mind?

Notably, the Hammermill Shredder System is new and there will be improved capture at the enclosure. And, in contrast to the existing site, there will be Method 204 capture testing of the enclosure that will definitively establish the extent of the capture. There will also be a Feedstock Management Plan and an Operations and Maintenance Plan, as well as an enhanced Fugitive Emissions Operating Program. There will be differential pressure monitoring of the roll media filter. And there will also be limits on hours of operation for purposes of limiting emissions.

137. Condition 6-2(c)(iii). If the control devices are not run with the same parameters during testing as they are for normal operations, then the test would not address normal operation and therefore could not verify compliance.

The cited condition does not exist in the draft permit, however the comment seems to relate to testing conditions. Emissions testing is to be performed under conditions that are representative of

how the source normally operates. How a source operates during successful testing establishes parameters on future operations until the next test event.

138. The Draft Permit is based on artificially high control assumptions and underestimated emissions from the Hammermill Shredder. There is substantial evidence of uncontrolled emissions from the shredder in its current location, including with the hood/RTO set-up. These shortcomings are exacerbated by weak testing and monitoring requirements that omit continuous monitoring, FLIR and other options.

    The application describes the shredder as being located within a "partial enclosure with… a vented metal roof," outfitted with a "capture hood" for routing shredder emissions to the RTO and scrubber.

The Hammermill Shredder will be located in a partial enclosure with acoustic roof and wall panels. The majority of one side of the enclosure, adjacent to the shredder, is a solid wall extending to ground level. The remainder of that wall and the other three walls consist of acoustic panels that extend to approximately 18 feet from ground level. Rubber belts extend downward covering a portion of the lower 18 feet. There will be an open area at the bottom to allow access to the interior of the enclosure for equipment maintenance. Shredder emissions are captured by a hood located over the top of the shredder and are routed to the shredder emission control system. The capture of the enclosure will be determined by testing. Short of testing, there is no definitive way to establish the actual capture efficiency and thus to quantify any uncontrolled emissions. Destruction efficiency testing will also be performed. After testing, compliance with Subpart TT of the Pollution Control Boards' regulations and with emission limits will be confirmed. The destruction efficiency set forth in the application is technically reasonable and has been demonstrated previously with the RTO at the Clifton location. The capture efficiency presented in the application was 95%. It is reasonable that with the proposed air flow and the improved enclosure the capture could achieve 100%. The permit as drafted aggressively addresses both destruction efficiency and capture.

139. The capture efficiency of the rubber-lined conceptual enclosure (in combination with wet suppression for PM) is unlikely to exceed 50% as an engineering judgement. It could be even lower given the high degree of wear of this type of enclosure over time, which makes the effectiveness over the long-term even more questionable, and the potential for irregular use of wet suppression (see below with respect to General Iron's and RMG's track record with wet suppression). 81% control.

As noted above, the capture efficiency set forth in the application is not unreasonable as a technical matter. Regardless, the capture efficiency will be established by way of initial emissions testing. Thereafter periodic testing will ensure the level of capture at the time of testing and at which the source can demonstrate compliance with Subpart TT and emissions limitations set forth in the permit. In keeping with its historical practice, the Agency did not factor in any degradation of emission units or controls. Rather, periodic emissions testing is the primary means by which the Illinois EPA ensures the continuing integrity of emission units and air pollution control equipment.

140. To the extent that such shredders require a cleaner, more specific feedstock on the front end, Illinois EPA should require enforceable feedstock sorting and cleaning.

The Illinois EPA has revised the construction permit to require a Feedstock Management Plan. This plan will address the materials that the facility receives, cleans, sorts and processes. This plan is to be submitted for Illinois EPA review and approval 90 days prior to General III receiving any materials at the Burley site.

141. The hood structure at the current General Iron location has been reported as allowing emissions to escape before the control devices. CDPH inspectors have observed "untreated emissions" and sometimes smoke escaping the top and sides of the shredder. Indeed, CDPH inspectors have noted that the emission controls do not appear to be working, and that the shredder has a hood but is not fully enclosed, causing emissions to escape the shredder before the treatment process and rendering the RTO and scrubber ineffective for those escaped emissions. As one inspector stated in January 2020, "being able to observe emissions escaping the shredder leads me to believe that the equipment capturing the emissions is insufficient."

The Illinois EPA is aware of the observations of the City of Chicago Department of Public Health. Indeed, these observations have been the subject of discussions with USEPA as well as the City. Learning of the observations by the City and knowing that the USEPA had brought and technically resolved an administrative action against General Iron for noncompliance with Subpart TT, requiring that the RTO be installed and subjected to emissions testing, had witnessed the testing, and had reviewed and approved the test report, the Illinois EPA reached out to the USEPA inquiring of any requirement for full enclosure or 100% capture, any concern for the destruction efficiency of the RTO, and any concern for noncompliance with Subpart TT, indicating that any concerns would most appropriately be addressed by the USEPA given the earlier order. Also, the Illinois EPA not only discussed the matter with the City but accompanied City inspectors to the facility where the Illinois EPA and City observed the Hammermill Shredder, enclosure and control system, and discussed the nature and function of same.

The Illinois EPA is not aware of information that suggests that the RTO is not achieving the destruction efficiency of 98% demonstrated during the most recent testing. Thus, there is no basis to conclude that "the controls are not working or are ineffective." The Illinois EPA is likewise not aware of any information that suggests that the capture efficiency is not what is was on the day of the most recent testing. The hooding is not a full enclosure, nor does it need to be as a regulatory matter nor pursuant to the federal administrative order. As it is not fully enclosed it should be understood that some quantity of emissions will be uncontrolled as they will not reach the RTO, whereas the emissions that do reach the RTO will be reduced by 98%. (And one must ensure that the steam that is often present at the enclosure is not confused for emissions.) This does not evidence that the "enclosure or capture is insufficient." Rather, the enclosure is a partial enclosure, and it achieves whatever capture such partial enclosure can achieve. The capture and control together shall provide for an overall control of 81% as is required under Subpart TT.

However, any issues with the Hammermill Shredder System at the Clifton site are not being formally considered as part of this permit proceeding. Rather, what is being considered is the application that delineates a new Hammermill Shredder and an enhanced enclosure with control train and contains a demonstration of compliance with applicable regulatory requirements.

142. Illinois EPA must require GIII to employ a fully enclosed shredder design with no openings.

The shredder is subject to Subpart TT, which requires 81% overall control of emissions. Subpart TT does not establish a floor for capture nor a floor for control. It does not require 100% capture nor full enclosure nor does it require 100% control nor specify the control equipment to be utilized. As such, the Illinois EPA has no basis to require General III nor any other source subject to Subpart TT to install a total enclosure.

143. If the applicant and Illinois EPA determine such a fully enclosed design is infeasible, they must fully explain this determination on the record and provide further measures to continuously and stringently control the emissions that will escape the shredder, the enclosure, and the hood capture setup as proposed. Additional VOM measures may be needed in order to meet Subpart TT's 81% control requirement (additional feedstock cleaning measures are one additional front end VOM control that may significantly reduce VOM from the shredder and so that should be considered). Such measures must be accompanied by robust recordkeeping and mandated reporting obligations.

As explained elsewhere, full enclosure is not in the first instance a matter of feasibility. Rather, it is a matter of statutory and regulatory authority and applicability. The Illinois is obligated to permit units that emit that are not otherwise exempt and air pollution control equipment. In doing so it is obligated to apply applicable regulatory provisions. It may add conditions to permits to further the purposes of the Act, but not without limitation. In a situation such as this, where there is an applicable regulation that quite clearly establishes the regulatory requirement, the Illinois EPA is not at liberty to utilize its permitting process to create a different more onerous requirement. That would be a matter for rulemaking.

The permit makes clear the applicability of Subpart TT. The permit establishes an initial test to demonstrate compliance with Subpart TT. The permit as enhanced also provides for testing thereafter to ensure ongoing compliance between test events. Based on the application, compliance with TT has been demonstrated. The Agency has required a Feedstock Management Plan in the final permit.

144. Monitoring of uncontrolled emissions must be included and consist of ground-based continuous VOM monitoring, such as AERARAE monitors and ground-based continuous PM monitoring as well as FLIR monitoring. The Draft Permit should require at least monthly, and preferably real-time, reporting of this monitoring data to be made public on Illinois EPA's website, The Draft Permit should require upfront provision of "stack" testing protocols for the Hammermill Shredder, and mandatory repeat testing on a quarterly, with requirements to do regular feedstock characterization testing and conduct emissions testing with significant changes in the feedstock. Such mandatory repeat testing is also needed given the likely deterioration of the hood over time.

The initial VOC emissions testing will assess the nature of the enclosure and definitively determine its capture efficiency. The revised permit now calls for subsequent emissions testing. The frequency of testing is either annually or every 5 years depending on the nature of the enclosure. It is not more frequent as these test events will be time involved; there will be protocol submittals and reviews, testing, and test result submittals and reviews. These activities associated with testing cannot reasonably be completed within any one quarter. The suggestion for testing quarterly is impractical as it would have the effect of the source and the Agency being in a never-ending testing mode – never establishing the compliance status from one test before the chain of activities commenced for the next test. And, periodic monitoring will be established based on testing. The monitoring will not consist of ambient monitoring nor will is consist of FLIR monitoring as neither can determine the quantity of emissions escaping from a unit at the facility nor the facility as a whole. The testing will be pursuant to protocol submitted before conduct of the testing as has been the long-standing practice of the state and federal government. As always, the testing will be representative and will establish the operating parameters for the tested units until the next test event. And, the feedstock concern is now addressed via a Feed Stock Management Plan and will also be addressed as part of any emissions testing protocol.

145. The November 2019 stack test conducted at the existing facility, and upon which the permit's emission limits are based, was performed with 50 percent ELVs in the feed. However, the permit does not include permit conditions that take into account this operating condition at the time of the stack test. EPA's experience with hammermill metal shredders indicates that, in general, the higher the proportion of ELVs in the feed the higher the VOM and organic hazardous air pollutant (HAP) emissions from the shredder. EPA has also observed that draining of fluids from ELVs before they are fed to the shredder will generally reduce actual VOM and organic HAP emissions from hammermill shredders. EPA requests that ILLINOIS EPA consider incorporating into the permit terms and conditions that address the maximum percentage of ELVs allowed in the feed, and whether or not fluids are drained from ELVs before they are fed to the shredder, consistent with the operating conditions at the time of the relevant stack test. Alternatively, Illinois EPA may clarify in the permit record how such permit provisions are unnecessary for this facility.

As addressed elsewhere herein, the Illinois EPA is requiring capture and control efficiency testing. The conditions under which testing will occur will form the basis for conditions relating to later operations. The Illinois EPA is inclined to limit conditions in this construction permit based on prior test events. Rather, it will create conditions based on test events at the new location that are reflective of the conditions during those test events including feed. The test events will seek to ensure the destruction efficiency under representative worst case conditions, which may or may not be the 50% ELV feed. As to the fluid draining, the Illinois EPA has required the development and implementation of a Feed Stock Management Plan, which plan is to be submitted to and approved by the Illinois EPA well before the testing. Fluid draining would be addressed in this Plan. Prior to testing, an emissions testing protocol is to be submitted to the Illinois EPA for approval. This protocol will address the particulars of the testing including test methods and procedures and feed among other.

146. Condition 5d requires the Permittee to operate emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit. Based on the emission estimates included in the permit record, it appears Illinois EPA assumed the hood capture efficiency to be 100 percent. EPA requests Illinois EPA to supplement the permit record to provide support for the 100 percent hood capture efficiency used for calculating emissions and setting emission limits. If Illinois EPA's analysis shows that the proposed facility would not continuously achieve 100 percent capture in practice, please consider adjusting the emission factor in Condition 12b(i) to account for potential uncaptured VOM emissions. In this regard, it may be necessary to incorporate into the permit additional provisions for estimating the capture efficiency that would be used to calculate actual emissions. EPA is available to assist Illinois EPA with developing appropriate procedures for this purpose, which may include the use of EPA Test Methods 204 through 204F, computational fluid dynamics modeling, or visible emissions observations, as appropriate.

The Illinois EPA did assume a hood capture efficiency of 100 percent. This is not unreasonable based on the application which set forth a capture efficiency of 95%, high air flow, and an enhanced enclosure relative to the existing site (where the assumed capture seemingly approximated 83%). In addition to destruction efficiency testing, the permit calls for capture testing. After compliance with regulatory provisions and permitted emissions, limits can be evaluated.

147. We note as discussed with respect to conveyors within the shredder enclosure, that sources that can in fact be enclosed are not properly considered sources of fugitive emissions and their emissions count towards major source thresholds for facilities like GIII.

Correct, the Hammermill Shredder System in the entirety is a process emission unit. No part of the system including the conveyors is considered a fugitive emission source. All emissions from the Hammermill Shredder System count toward major source thresholds.

Fugitive Particulate Operating Program

148. Fugitive Particulate Operating Program fails to acknowledge applicable legal requirements.

The Fugitive Emissions Operating Program identifies 35 IAC 212.301 as the rule for which the program is designed to ensure compliance. This rule prohibits visible fugitive emissions beyond the property line.

149. The FPOP characterizes itself as a "voluntary" program because the source is not otherwise covered by the express requirement to prepare such a plan contained in Section 212.302.

Notwithstanding that the source is not subject to the regulatory requirement to develop and implement a FPOP, the permit requires such a program and the measures set forth within. Identified as a Fugitive Emissions Operating Program, neither the Program nor the measures set forth in the Program are voluntary.

150. FPOP is otherwise unenforceable as a practical matter.

The Fugitive Emissions Operating Program addresses the operations and best management practices that will serve to minimize fugitive emissions. It also sets forth record keeping and reporting. The program is not required to satisfy the letter of practical enforceability given that this is a state construction permit transaction for a minor source of emissions who is not even subject to the regulatory requirement for such program.

151. The applicant can include specificity on the operations that are expected to generate more fugitive emissions, and specificity on the controls to be deployed to these areas and specifics on how they will be deployed, control can be built into the front-end design.

The Ferrous Separation System, Non-Ferrous Separation System, and the Miscellaneous Fugitive sources are the categorical operations that generate fugitive emissions. The June 25th version of the Fugitive Emissions Operating Program more clearly delineates the best management practices to be utilized in these areas.

152. There is little to no discussion of controls to be used for truck, rail or barge unloading or even confirmation that rail and/or barge loading occurs on the GIII property.

The Fugitive Emissions Operating Program has been revised to clarify that General III will conduct loading of rail and barge. Additionally, the location of these activities and the measures that will be used to address fugitive emissions from truck, barge and rail loading have been clarified.

153. As noted above loading of at least trucks and rail cars should occur in enclosures.

There is no regulatory requirement applicable to the source that requires an enclosure for truck or rail car loading. However, measures to minimize fugitive emissions from these activities are addressed in the Fugitive Emissions Operating Program. For example, tarping, sweeping and watering address visible emissions from truck travel. For rail car loading, watering and minimization of drop distances are employed.

154. Illinois EPA must impose objective, stringent measures to control fugitive dust from piles, transfer points, and roadways.

Again, the scrap recycling facility is not subject to the regulatory requirement for a fugitive emissions operating program. However, to ensure compliance with 35 IAC 212.301 which prohibits visible emissions from crossing the property line, the Illinois EPA has required the development of a Fugitive Emissions Operating Program. This program addresses the best management practices for piles, transfer points and roadways.

155. Illinois EPA should require evaluation and deployment of full enclosure for conveyors, vehicle loading/unloading, piles and other transfer points associated with all three Systems.

There is no regulatory requirement applicable to the source that requires full enclosures for conveyors, vehicle loading and unloading, piles or other transfer points. Notwithstanding, the Fugitive Emissions Operating Program addresses the measure that will be taken to minimize fugitive emissions from these areas.

156. Must specify where specifically the Dust Bosses will be deployed and under what operating and weather conditions Illinois EPA should require that Dust Bosses “shall” be used at all times during active working of piles and vehicle loading, as opposed to allowing for use of this equipment “as needed” or only after the fact if visible emissions are identified.

The Fugitive Emissions Operating Program contains diagrams indicating where the Dust Bosses will be located. The Program as revised in response to comments is more robust in terms of specific commitments.

157. Illinois EPA also should require use of dry fogging systems at low temperatures when regular wetting procedures cannot be deployed effectively.

The Illinois EPA could see minimal distinction between the use of the Dust Bosses and the dry fogging system. Further, there is no legal basis for such technical requirement.

158. Chicago’s Department of Public Health June 2020 large recycling facility regulations require substantial control of ASR, Section4.4.2. That ASR can reasonably be stored in a full enclosure also renders emissions from ASR piles point source emissions, not fugitive emissions.

As addressed in the fugitive plan incorporated by reference into this permit, that subset of ASR that is fluff will be stored in a 3-walled, covered enclosure. It is not a full enclosure as the source needs to access the pile with material moving equipment such as end loaders. There are no applicable state or federal regulations that specifically call for enclosure much less a full enclosure of ASR. However, in looking at the ordinance as a point of reference, and while the Illinois is not in the habit of interpreting City ordinances, it notes that in the cited provision the enclosure requirement applies to post processed ASR, which is seemingly the fluff. Further, the ordinance does not expressly call for a full enclosure. Moreover, there is nothing that suggests that the ASR can reasonably be stored in a full enclosure. It is true that the ASR piles are point sources.

159. Illinois EPA must impose conditions to prevent auto fluff from migrating offsite.

Auto fluff is a subset of ASR. The conveyor to the fluff storage is covered. The fluff will be stored in a 3-walled, covered enclosure. Also, trucks hauling the fluff from the site will be tarped. This and other mitigative measures such as visual observations, watering and sweeping will ensure that the fluff does not migrate offsite.

160. Regular (at least monthly) testing of ASR should be required to characterize the content of the material, which may vary significantly with feedstock.

Illinois EPA is requiring a Feedstock Management Plan to address material screening and sorting and related issues.

161. The Illinois EPA should require regular moisture content testing for ASR.

The ASR comes off the shredder sufficiently wet (having been wetted by the spray system on the shredder) so as to make moisture content testing unnecessary.

162. The application mischaracterizes Section 212.123 as follows: "Section 212.123(a) prohibits the emission of smoke or other particulate matter from any process source to exceed 30% opacity." The FPOP repeats this misstatement of Section 212.123 by recognizing only the applicability of the prohibition on visible emissions beyond the fence line contained in Section 212.301 to fugitive sources. Nor does the FPOP include any mention of opacity limits as applicable to fugitive sources, let alone actual monitoring of opacity using Method 22 at each source of fugitive emissions to ensure compliance with this applicable provision. Indeed, the word "opacity" is only used three times in the operating program, in each case to explain that certain point sources that do have opacity limits are not in fact fugitive sources.[89] This omission/mischaracterization creates a conflict with the Draft Permit, which as discussed above appears to recognize the applicability of 212.123 to fugitive emission units.

The revised permit makes clear the applicability of 35 IAC 212.123 to all emission units encompassed within the Hammermill Shredder System, Ferrous Separation System, Non-Ferrous Separation System, Fines Building, and Miscellaneous Fugitive Emissions. The Fugitive Emissions Operating Program is the means of ensuring compliance with 35 IAC 212.301. Separate compliance assurance measures are included in the permit for 35 IAC 212.123.

163. The FPOP creates a conflict with the Draft Permit with respect to the applicable legal requirements.

The final permit has attempted to address any confusion or conflict.

The practically enforceable constraints on fugitive emissions are those found in the Pollution Control Board's Part 212 regulations. The measures in the FPOP are intended to assure compliance with the applicable provisions of the Part 212 regulations. There is no obligation for periodic monitoring in this construction permit much less periodic monitoring to assure compliance with a prohibition against air pollution.

164. The FPOP mysteriously claims that the three conveyors located within the shredder enclosure and uncaptured emissions from the shredder itself constitute "potential sources of fugitive emissions," in contrast to shredder emissions within the enclosure that in fact end up captured by the hood setup.

The FPOP has been revised to exclude the shredding operation. Indeed, as the permit makes clear, the shredding operation in the entirety is not a fugitive source. Rather it is a point source with emissions capture and control, with the extent of capture and control to be established by way of destruction efficiency and capture testing.

165. The FPOP fails to objectively describe the specific conditions under which the limited visible emissions testing will occur. See e.g., FPOP at p8, stating that visual observations will be conducted "three times per day," without specifying when, under what operating and weather/atmospheric conditions, and for what duration such observations will occur.

The revised Fugitive Emissions Operating Program now specifies that visible emissions observations will be taken from one to three times daily at raw material unloading/handling, material transfer points, intermediate and product stockpiles, fluff storage and loadout, material loadout, traffic areas, employee parking, barge, rail and truck loading, and the plant boundary. The precise time of the readings is not mandated, however, records of the date, time, location, observation and any response are to be kept.

166. The fugitive particulate operating program also contains a puzzling provision that describes additional visible emissions identification by "other employees" who are "trained to identify Visible Emissions," but whose observations will NOT be recorded in the same format as the visible emissions monitoring by "designated trained personnel."

This provision has been deleted within the latest revision to the program.

167. How will pollution from the roads be addressed?

Roads within property will be addressed by way of visible observation, sweeping and watering. The fugitive plan also includes vehicle speed limitations. Lastly, the permit limits the hours of operation of General III including truck operations.

Ambient Air Monitoring

168. What will the ambient monitoring tell us?

It will tell us the amount of a particular pollutant in the ambient air. While it is sometimes possible, under certain conditions, to determine the approximate direction from which pollution is originating, it will not directly identify the contributing source or sources of the pollutant.

169. More ambient monitoring stations are needed.

The Illinois EPA has designed its ambient air monitoring network to provide timely air pollution data to the public, to meet federal requirements, to support compliance with ambient air quality standards and emissions strategy development, and support air pollution research studies. This network satisfies or exceeds all relevant criteria. Regardless, the expansion of the network would not occur in the context of a permitting action.

170. Continuous ambient air monitoring is necessary to ensure that facilities are not causing or contributing to levels of PM and/or air toxics that exceed the NAAQS or other health-based thresholds, in particular with respect to fugitive emissions.

Again, ambient monitoring will only tell us the amount of a particular pollutant in the ambient air. It will not directly identify the contributing source or sources of the pollutant. Further, the existing monitoring network is sufficient to address the emissions from General III. Lastly, the existing monitoring data evidences compliance with the NAAQS for PM.

171. Illinois EPA must require fence line continuous monitoring of PM and metals to ensure compliance with the prohibition of air pollution.

The existing monitors in the vicinity, including those at Washington High School, evidence compliance with the NAAQS for PM. In the context of this construction permit for a minor source, there is no statutory or regulatory requirement for and the Illinois EPA is not inclined to attempt to stretch its authority to insert a requirement for the installation of fence line monitors.

172. The Illinois EPA should require fence line particulate monitoring surrounding the perimeter of the facility to ensure compliance with Illinois fugitive dust regulations. A combination of fence line monitoring and video surveillance can help ensure the facility is following Illinois pollution regulations and would represent a step forward in Illinois EPA requiring state-of-the-art technology to protect the health and wellbeing of Illinois residents.

As noted, the Illinois EPA is not inclined to require fence line PM monitoring at the perimeter of General III, nor video surveillance. The existing monitors in the vicinity, including those at Washington High School, evidence compliance with the NAAQS for PM.

173. Recent resident observations have frequently contended that General Iron facility in Lincoln Park frequently operates beyond their permitted hours of operation. If the Illinois EPA is to issue this permit, the Illinois EPA should require the installation of a 24/7 surveillance camera to ensure hours of operations restrictions are being followed.

Hours of operation is a common constraint found in a permit, the purpose of which is generally to limit emissions. The typical practice for ensuring compliance with such requirement is the inclusion of recordkeeping and reporting requirements. There is no legal or technical basis for surveillance

monitoring to ensure compliance with this limitation on hours of operation. It is believed that the hours of operation referred by the commenter relates to the relocation agreement with the City.

174. The federal monitors are not near the current site of General Iron. The data gathered around the existing General Iron location shows concentrations of air quality that are unhealthy (or "show unhealthy levels of fine particulates"). See Exhibit A, Maps of Air Quality Monitoring Data Around General Iron Facility.

These concentrations are from personal, small sensors. These monitors measure very short timeframe concentrations – down to the second in some cases. While these sensors can provide useful indicator information, they are not federally approved for comparison to any NAAQS and are not subject to the same rigorous standards of quality control and quality assurance as Illinois EPA monitors. Additionally, the reported concentrations, often listed as "brief" or for only a few seconds, have no direct comparison to PM2.5 standards. The current standards for PM2.5 are measured on an annual basis and a 24-hour basis. For the small sensor concentrations to be compared to an Air Quality Index value, a 24-hour concentration needs to be established. Exceedances of the 24-hour standard are rare. The Illinois EPA monitoring data at monitors nearest to the current site do not show unhealthy levels of fine particulates and, in fact, that area, along with the entire State of Illinois, is in attainment with the PM2.5 National Ambient Air Quality Standard.

175. Given that much of the pollution control equipment will be moving to the South Burley Avenue location, which is in a frontline community, the Agency should first consider the monitoring data from the existing facility. David, relate that the monitoring data on Clifton and monitoring data for Burley say the same thing.

As noted above, the monitoring data from the monitors nearest to the existing facility demonstrate that the area is in attainment of the particulate matter standards, as is the case for the new location and the entire State of Illinois. One benefit of the new location is that the prevailing winds will typically carry emissions toward nearby Illinois EPA monitors, which will provide good information about the nearby ambient air.

176. In General II, LLC's initial submission of repository documents, the introduction states: "There are no Illinois EPA or USEPA regulations limiting emissions of specific metals or requiring an ambient impact analysis." Can this truly be the case and if so, has it always been the case?

Yes, it is true that there are no regulations limiting specific metals that apply to this scrap metal recycling facility. Rather, the scrap metal recycling facility it is subject to the Pollution Control Board's rules applicable to visible and particulate matter emissions and to volatile organic material emissions. Further, it is true that there is no requirement for an ambient impact analysis for a facility of this type and size. And this has always been the case.

177. Have any of the applicable standards currently being applied to this proposed permit changed over the course of the last 3 ½ years and if so, in what way.

It is not clear whether the commenter is referring to the standards that govern the permitting process or the source itself. Regardless, the answer is the same – no, there have not been any changes in the last 3 ½ years. The requirements applicable to construction permitting and the public process are long

established. Likewise, the Pollution Control Board's air pollution control regulatory requirements that are applicable to this source are long established.

178. In October 2019, ELPC air quality monitoring data showed concentrations of poor air quality close to existing General Iron facility, which creates doubts about the adequacy of the pollution controls to protect the community. Of great concern are the intersections at Clifton and Kingsbury, and the intersection at Kingsbury and Wisconsin which have had PM 2.5 readings greater than 35 ug/m^3. See Attachment A.

As noted above, while these sensors can provide useful indicator information, they are not federally approved for comparison to any NAAQS and are not subject to the same rigorous standards of quality control and quality assurance as Illinois EPA monitors. Additionally, the reported concentrations, often listed as "brief" or for only a few seconds, have no direct comparison to PM2.5 standards. The current standards for PM2.5 are measured on an annual basis and a 24-hour basis. For the small sensor concentrations to be compared to an Air Quality Index value, a 24-hour concentration needs to be established. Exceedances of the 24-hour standard are rare. The Illinois EPA monitoring data at monitors nearest to the current site do not show unhealthy levels of fine particulates and, in fact, that area, along with the entire State of Illinois, is in attainment with the PM2.5 National Ambient Air Quality Standard. Based on a review of the application, the source has demonstrated that it can comply with the Pollution Control Board's regulations for organic material and visible emissions.

Modeling

179. Why was the modeling performed?

The Illinois EPA requested air quality modeling of hazardous air pollutant (HAP) metal emissions from General III in support of the construction permit application.

180. Who performed the modeling?

A third-party consultant for General III performed the modeling which was then audited by the Illinois EPA.

181. What does the modeling conclude?

Predicted modeled concentrations were compared against the National Ambient Air Quality Standard for lead, and for other metals against the Agency for Toxic Substances and Disease Registry (ATSDR) risk levels and Wisconsin Department of Natural Resources (WDNR) air toxics rule. Predicted concentrations were well below the identified limits. For carcinogenic substances, the inhalation risk was calculated using USEPA or California Air Resource Board unit risk factors. Estimated risk levels for all carcinogenic substances were less than 1 in 1,000,000.

182. The prevailing wind direction of the proposed new site (from SW to NE) means that majority of emissions will be blown toward G.W. High School and G.W. Elementary School and students will be exposed to PM and other emissions, such as manganese.

It is true that prevailing wind direction in the Chicago area is generally from the southwest. In such a situation, the prevailing winds would typically carry emissions toward the George Washington schools and thus the monitors that are located there. There are three types of monitors at George Washington High School – PM10, PM2.5, and lead/metals/TSP. The Illinois EPA would consider the Washington High School monitors to be very well situated to measure the air that may be impacted by emissions from this source. And, the monitors are measuring attainment with the National Ambient Air Quality Standard for PM10, which is designed to be protective of human health and the environment.

183. "The Draft Permit is based on deficient air quality modeling. The modeling assumes exceptionally high and artificial levels of control from the Hammermill Shredder; omits the co-located, unpermitted sources already operating at Burley as well as other known nearby sources of fugitive air toxics; fails to justify employing Wisconsin's air toxics rules versus other available state approaches; and omits PM10 modeling altogether."

Since the proposed General III PM10 emission rates would not exceed regulatory thresholds triggering the requirement for modeling, the applicant was not required to do so. Rather, the modeling was performed at the request of the Illinois EPA. The Illinois EPA was aware that Wisconsin had promulgated a rulemaking that had resulted in a relatively comprehensive set of toxic air contaminant air quality standards. Many of them comparable to or identical with values issued or used by other entities that may be regarded as more appropriate for off-site health risk evaluation. Capture and control of emissions is discussed elsewhere herein. Importantly, the actual capture and control will be definitively determined through emissions testing required under the issued construction permit. As to the other operations at the Burley site, they will be addressed along with General III during the operating permit phase of review.

184. The Illinois EPA cannot issue permit as the modeling demonstrates General III will violate the prohibition on air pollution.

The Lake Calumet region of Cook County (and the entire State of Illinois) are in attainment with the primary and secondary PM10 NAAQS. Since the proposed General III PM10 emission rates would not exceed regulatory thresholds triggering the requirement for modeling, the applicant was not required to do so. Equally relevant, however, is the Agency's firm expectation that Genera III's proposed PM10 emission rates would not "cause air pollution" as a result of the facility's contribution to existing ambient loadings in the Lake Calumet region. There was not an "omission" of PM10 modeling, there was simply a targeted focus on metallic HAPs. Manganese concentrations were modeled that represent 24-hour average and annual average concentrations. The 24-hour average concentrations are considered short-term average impact predictions. Though California has an 8-hour average Reference Exposure Level for manganese, the Agency is unaware of any federal agency or any other states issuing or using an 8-hour exposure level. The modeling analysis reflects conservative assumptions about facility operations and emissions-generating activities. These are believed to be consistent with the language of the draft permit and therefore lend support to the permit decision.

185. Emissions estimates in the air quality modeling are unsupported and otherwise inappropriate. The proposed hammermill shredder will not be completely enclosed. Therefore, any assumption that 100% of the particulate matter generated will be captured and controlled is not correct. Unless and until the shredder fugitive emissions are quantified and included in the metals and particulate matter modeling, the application materials before the agency cannot be relied upon for permit issuance.

The Agency stands by the permit and modeling. Notwithstanding, the actual capture and control will be addressed through emissions testing as set forth in the permit. With the results of that testing, additional modeling will be performed.

186. The conveyor emission factors are of concern. The applicant provided detailed particulate matter emission calculations regarding the ferrous material processing emissions, that largely rely upon AP-42, Section 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing. The emission factor tables in AP-42, Section 11.19.2 provide two factors (controlled and uncontrolled) with controlled factors applicable to operations utilizing wet suppression. The controlled factors reflect an approximate 95% reduction in emissions due to wet suppression. The applicant assumes that a natural moisture content above 1.5% allows the use of the controlled factors without wet suppression equipment in operation. There is nothing magical about a 1.5% moisture content that immediately affords 95% reduction in fugitive dust emission generating potential equivalent to wet suppression. Depending on the material involved, significant fugitive dust emission generating potential can exist at moisture contents significantly in excess of 1.5%. Unless and until the conveyor emission calculations are corrected and the revised estimates included in the metals and particulate matter modeling, the application materials before the agency cannot be relied upon for permit issuance.

It is acknowledged that there are shortcomings in attempting to apply some AP-42 emission factors and associated emission suppression assumptions to scrap metal processing operations. Despite that, the Agency believes that the applicant adopted a reasonable approach in developing the conveyor emission estimates. And again, the modeling was not statutorily or regulatorily required to be performed as part of the application nor review process for this construction permit.

187. The non-ferrous material processing system includes a fines processing system controlled by four dust collectors. Three of the dust collectors vent indoors with the fourth venting to atmosphere. The applicant estimates particulate matter emissions from the fourth dust collector (DC-01) utilizing the potential airflow and an assumed exit loading of 0.005 grains per cubic foot (gr/cf). A more appropriate grain loading to estimate particulate matter emissions from DC-01 is in the range of 0.04 gr/cf. The applicant's proposed factor is simply not tenable given the type of collection systems in use at these types of operations nationwide. The applicant's proposed 0.005 gr/cf factor represents the pinnacle of particulate control from a state of the art, brand new baghouse equipped with polyester filter bags and reverse jet pulse cleaning. Absent substantial justification and documentation, the usual and customary factor of 0.04 gr/cf should be used. Unless and until the DC-01 emission calculations are corrected and the revised estimates included in the metals and particulate matter modeling, the application materials before the agency cannot be relied upon for permit issuance.

Regulatorily, the factor would need to be at least 0.03 gr/cf for PM10, thus the suggested factor could not be utilized. The permit requires testing of the DC-01 dust collector, to demonstrate compliance with the expected grain loading performance of this control device.

188. The modeling approach relative to roadways is not appropriate. A more robust and appropriate approach given general engineering knowledge/experience, the history of failed paving at General Iron and the RMGSCPM facilities and the vagueness of pavement-related requirements in the Draft Permit and FPOP is to use a simplified fugitive dust estimate, taken from AP-42 Section 13.2.3 Heavy Construction Operations. The recommended emission factor is 1.2 tons/acre/month. Annual

emissions can be therefore estimated using estimates of potentially erodible acreage. To allow for a portion of the area which might be paved (assumed to be 20%), we suggest that this emission factor be applied to the rest (i.e., 80%) of the total GII acreage at the rate of 1.2 tons/acre/month. Unless and until the vehicle traffic emission calculations are provided for review and comment, the application materials before the agency cannot be relied upon for permit issuance.

Ideally, estimates of re-entrained roadway particulate emissions should be based upon site-specific (road segment-specific) characteristics and established (generally accepted) emission factors. Speculation regarding pavement degradation as the basis for applying an alternative emission factor that is based only upon a single set of field studies (AP-42, p.13.2.3-1), rather that the applicant's use of an emission factor that "is based on a regression analysis of 83 tests" (AP-42, Section 3.2.1), should be considered suspect and potentially without merit. The commenter's proposed emission factor choice would potentially grossly overstate paved roadway fugitive emissions, certainly for a newly constructed operation. If the City of Chicago requires that all roadways at the GIII facility be paved, then the modeling analysis becomes more conservative, since it includes unpaved roadway emission estimates, which are typically higher.

189. Modeling Inputs/Assumptions Used by the Applicant and Illinois EPA are Unsupported and Otherwise Inappropriate particularly as to meteorological datasets. Two National Weather Service meteorological datasets were used. Surface data was taken from the Midway Airport in conjunction with coincident air sounding data from Davenport, Iowa for the years 2012 through 2016. In general, use of one year of onsite meteorological data is the preferred approach in U.S. EPA modeling guidance. Use of five years of "off-site" meteorological datasets may be used unless (1) specific terrain, coastal proximity, or other unique geographical issues make such data unsuitable and/or (2) "on-site" meteorological datasets are available. In this case, given the proximity of the site to Lake Michigan and the Calumet River and the availability of surface data from three meteorological stations in close proximity to the site (KCBX, S.H. Bell, and Watco Terminal), use of the surface data from the Midway Airport cannot be supported. Unless and until the modeling is revised to include the surface data from the local meteorological stations, the application materials before the agency cannot be relied upon for permit issuance.

The Agency acknowledges that the use of "on-site" meteorological data is preferred in regulatory modeling applications. Unfortunately, the commenter's three recommended "meteorological stations near the site" do not actually represent "on-site" locations for the proposed General III facility. Furthermore, it hasn't been demonstrated that those datasets are sufficiently robust for a refined modeling application. The Midway International Airport surface observations were chosen because of the proximity of this National Weather Service site to the GIII site and because the data is representative of the complex circulation patterns and other meteorological factors that influence the GIII site.

190. With the exception of the regenerative thermal oxidizer (RTO) and DC-01, all of the proposed emission generating activities are treated as a volume source. Volume source representation for air dispersion modeling purposes is a complex combination of location, release height, initial lateral dimensions, and initial vertical dimensions. However, because the applicant redacted the process flow diagrams from the original modeling submittal with a claim of Trade Secret, this reviewer cannot vet the volume source representations. And while the applicant does provide some information about the location of the haul roads, the depiction is spartan. Unless and until all volume source

representations can be fully vetted, the application materials before the agency cannot be relied upon for permit issuance.

The applicant did indeed redact the diagrams showing the volume source groupings of emission sources from the original modeling submittal. However, these diagrams, though pictorially useful, did not actually show the precise location and dimensions of the volume sources modeled. That information is found in the model input files and the supporting documentation.

191. Unless and until all particulate matter emissions from the co-located operations are included in the modeling, the application materials before the agency cannot be relied upon for permit issuance.

Since analyzing for total PM, PM10, and/or PM2.5 was outside the scope of the modeling analysis for General III (which focused exclusively on metallic HAPs), any extension of that modeling analysis would not have included evaluating particulate matter (PM, PM10, PM2.5) for the four SCPM facilities. The Illinois EPA did evaluate the increase in metallic HAPs from the four SCPM facilities in conjunction with the General III HAP emissions but did not find any increases of potential concern.

192. Based on the applicant's own emissions estimates and modeling, the proposed General III will result in exceedances of the PM10 NAAQS and unacceptable short-term manganese impacts. Impacts of manganese exceed the 8-hour Reference Exposure Level of 0.17 micrograms per cubic meter (ug/m3) established by the California Office of Environmental Health Hazard Assessment OEHHA. Unless and until impacts (including regional sources such as the significant known sources of fugitive manganese along the Calumet River that are not reflected in Illinois EPA's inventory can be shown to reside below 0.17 ug/m3, the application materials before the agency cannot be relied upon for permit issuance. This is especially true given the history of manganese issues in this environmental justice community.

The manganese modeling conducted by the applicant and reviewed by the Agency simulated 24-hour and annual averaging periods. A Wisconsin air quality standard and an ATSDR Minimal Risk Level (MRL), respectively, represented the human health standards against which the 24-hour and annual modeling results were compared. Modeling was not conducted for an 8-hour averaging period. The California Environmental Protection Agency Office of Environmental Health Hazard Assessment (OEHHA) 8-hour inhalation Reference Exposure Level of 0.17 ug/m3 can be viewed as a guideline level rather than as a bright line standard. As indicated in OEHHA's Air Toxics Hot Spots Program Technical Support Document for the Derivation of Noncancer Reference Levels, "a reference exposure level (REL) is an airborne level of a chemical that is not anticipated to present a significant risk of an adverse non-cancer health effect."

193. PM air quality modeling was not conducted, without explanation, despite the prohibition on air pollution, which encompasses causing or tending to cause air pollution in violation of the National Ambient Air Quality Standards. Based on the applicant's own emission calculations and modeling approach, impacts of particulate matter less than 10 microns in aerodynamic diameter (PM10) (added to background) exceed the 24-hour National Ambient Air Quality Standard (NAAQS) of 150 ug/m3. Unless and until PM10 impacts (including background) can be shown to reside below 150 ug/mg (24-hour average), the application materials before the agency cannot be relied upon for permit issuance.

As indicated previously, an expansion of the modeling analysis to address total PM10 was considered unnecessary by the Agency in a minor source construction permit transaction particularly when the Lake Calumet region of Cook County (and the entire State of Illinois) are in attainment with the primary and secondary PM10 NAAQS.

194. The applicant proposes to control emissions from the hammermill shredder with a control train including a regenerative thermal oxidizer (RTO). The presence of the RTO indicates high levels of volatile organic compounds (VOC), organic hazardous air pollutants (HAP), and other air toxics. Unless and until all reasonably identified HAP and air toxics are identified, quantified, and modeled, the application materials before the agency cannot be relied upon for permit issuance.

Organic hazardous air pollutants were not modeled because Table 3-1C of the permit application and Table 3-1C in the Updated Emissions Estimate document (January 27, 2020) indicated that the quantity of emissions would be quite small. The presence of an RTO does not at all automatically suggest that organic HAPs will be present, as many facilities use RTOs to control non-HAP VOCs. Further, there was no requirement to do modeling in the first instance.

195. We support Illinois EPA's investigation into the air toxics impacts of this facility on air quality and health, however, the following short list identifies high-level issues identified in the health analysis:
    - Failure to assess PM10
    - Failure to fully justify use of the Wisconsin approach for air toxics, versus other available approaches for assessing air toxics in states such as Michigan, Minnesota, Ohio, California, and Texas
    - Failure to assess the combined impacts of multiple metals and other hazardous air pollutants ("HAPs") from the proposed GIII, and in the context of the overburdened Southeast Side
    - Failure to take into account non-cancer impacts of HAPs
    - Failure to assess the impacts of VOCs along with metallic HAPs
    - Failure to account for the toxicity of hexavalent chromium
    - Failure to evaluate available short-term health thresholds for certain HAPs, such as the 8-hour manganese threshold of 0.17 ug/m3
    - Failure to accurately account for fugitive emissions from nearby facilities, given shortcomings in the state's emissions inventory for such sources
    - Failure to take into account the mobile source-related emissions from the trucks, trains and barges that will accompany the proposed GIII and related sources
    - Failure to evaluate other proposed and/or in-construction nearby sources of air pollution, such as a proposed new SCPM recycling facility immediately to the East of GIII200 and large warehousing facilities by developer NorthPoint
    - Failure to take into account the multiple pollutant exposures via air, water and soil; historic and existing health burdens; and sociodemographic characteristics of the impacted population, as pertain to the overall cumulative vulnerability to impacts from air pollution that would be emitted from the proposed GIII Illinois EPA must address at least these shortcomings in a revised assessment of whether the proposed GIII will run afoul of the prohibition on air pollution.

The Illinois EPA was aware that Wisconsin had promulgated a rulemaking that had resulted in a relatively comprehensive set of toxic air contaminant air quality standards. Though many of the standards are apparently based on Threshold Limit Values established by the American Conference of Governmental Industrial Hygienists (ACGIH), and may be thought of by some as insufficiently protective of the general public and the environment, they are clearly comparable to or identical with

values issued or used by other entities that may be regarded as more appropriate for off-site health risk evaluation. The Illinois EPA had no obligation to perform the modeling much less to fully research what other state regulatory agencies are using, and how those standards were developed. The Illinois EPA does prefer using ATSDR Minimal Risk Levels, however, many of these may not be available for specific toxic air contaminants and specific averaging periods. The other "high-level issues" identified by the commenter above are either simply beyond the scope of the analysis, were known but considered insignificant, have already been addressed, and/or are excessively difficult to quantify or incorporate into the Agency's analysis.

196. The modeling seems to include approximate rather than precise locations for emissions sources. Do these sources need to remain at these locations? If so, what guarantees they will be so located.

There are no specific guarantees or express requirements that these sources will be precisely located at their identified locations; however, any significant deviation from the proposed locations could give rise to concern or even a violation of the issued construction permit. This is a matter that would be addressed in the compliance or enforcement process as would other deviations at this or any other source.

197. In the modeling GIII did not consider the impact of all sources of pollutants and assumed control levels that it cannot meet**.**

General III modeling accounted for emissions from the Hammermill Shredder system, conveyors, separators, storage piles and roadway traffic. Manufacturer-guaranteed control efficiencies are used to estimate emissions from point sources, which is standard practice particularly prior to or in the absence of facility specific emissions testing which is not possible during the construction permitting phase.

Published USEPA emission factors for material handling operations at metal shredding facilities do not exist. Therefore, surrogate emission factors from crushed stone processing were utilized. These surrogate emission factors may overstate particulate matter emissions because the material processed through a hammermill has a high moisture content, thereby reducing the potential for particulate matter emissions from the ferrous material processing operations.

198. GIII did not consider the cumulative impact in the community and the impact of the existing operations at the site.

While not statutorily or regulatorily required to perform any cumulative impact analysis, General III performed air dispersion modeling demonstrating that the air impact will not exceed any established standards for lead or manganese. Modeling of the existing SCPM entities was not performed. However, ambient impacts from these operations are accounted for in the background monitoring values at the monitoring station at Washington High School. The monitors have identified no NAAQS concerns.

199. I am concerned that diesel trucks were not included in the pollution assessment and that truck traffic will increase additionally because of the seven warehouses that are coming to the area.

The construction permit application includes emissions from roadways within site boundaries. There is no requirement to address off-site emissions from mobile sources. The warehouses that may be

added in the area are not relevant to this permitting action.

Inspections/Oversight/Compliance/Enforcement/Penalties

200. An additional concern is the lack of Illinois EPA inspections of and enforcement actions against pollution law violations at General Iron.

Inspections and compliance and enforcement actions are important statutory functions. However, any concerns in that regard are not germane to this permitting decision. Notwithstanding, federal air program guidance addresses the frequency of inspection. For a minor source of emissions such as this scrap metal recycling facility, that inspection frequency would be every five years. In addition, the source is the subject of periodic report reviews. Additionally, as discussed elsewhere, the Illinois EPA utilizes its partnership with the local unit of government, requesting assistance from them regarding complaint response. And, in a further measure to most effectively utilize the available resources, the Illinois EPA coordinates its efforts with the USEPA.

201. There has been issues at the existing site, what will you do about issues at the new site.

As a general matter, permits address applicable requirements and the means to assure compliance with such requirements, rather than the actions or consequences that would ensue from issues encountered in attempts to implement or comply with an issued permit. This is, in part, because one cannot anticipate all issues that might later develop, much less how those might be appropriately addressed in the permitting context. Further, some issues that may develop may not be permitting considerations but compliance or enforcement considerations. However, the Illinois EPA will be overseeing GIII operations in a myriad of ways and will appropriately address any identified issues.

202. Illinois EPA's statutory mandates not only include permitting but monitoring and enforcement of compliance of permits. By issuing this construction permit while refusing to acknowledge a well-documented negative track record of this company, the Illinois EPA is burdening the city and passing its mandate to a city government as opposed to taking responsibility for monitoring the permits issued by the agency.

The Illinois EPA is aware of its statutory mandates and takes them seriously. In making this permitting decision, the Illinois EPA is not ignoring its mandates but rather following them. Specifically, it is making this permitting decision as directed by statute. By no means does the issuance of this permit pass any state mandates to the City. Further, the City is not responsible for ensuring compliance with Illinois EPA issued permits nor state or federal regulations. Rather, the City is responsible for ensuring compliance with its ordinances and regulations.

203. Illlinois EPA has chosen not to conduct inspections or commence enforcement proceedings against General Iron or RMG, at most they have conducted limited investigations that have failed to remedy the ongoing problems.

The inspection, compliance and enforcement history at the existing scrap metal operations on Clifton is not relevant to this permitting action. Notwithstanding, the Illinois EPA did not make a choice to

not inspect the Clifton operations. It has been to the Clifton site twice in the last six months. In addition, the Illinois EPA utilized its local partner to respond to complaints relative to the source. Also, it coordinated with the USEPA in its efforts. Additionally, records received from the source were reviewed.

204. Staffer Eric Jones recommended that a voluntary self-disclosure be submitted.

Mr. Jones is an employee of the Bureau of Air Permit Section. In response to a phone call from the source informing the Agency of noncompliance, he simply conveyed that the information needed to be disclosed to the Compliance Section, and that disclosure indeed occurred. That disclosure formed the basis for a VN that is pending resolution. Irrespective of his message, a source can follow the state or federal self-disclosure provisions. Whether the disclosure satisfies the criteria of these provisions is a separate consideration.

205. Illinois EPA has dramatically downsized its staff in recent years, causing reductions in inspection and enforcement. Inspections of air-polluting facilities have declined 80 percent since 2003. Enforcement cases referred to the Attorney General have also declined. The community, City and USEPA have been left to police pollution on the Southeast Side, addressing pet coke, manganese and identifying multiple facilities operating without state permits, due to Illinois EPA's absence in its role of primary environmental regulator and enforcer.

There have not been any staffing cuts in recent years, rather staff losses through retirements or attrition that are the subject of very aggressive hiring efforts. Since the time Gov. Pritzker took office, the IEPA has made a renewed emphasis on both hiring and enforcement. In fact, in the first year of Gov. Pritzker's administration the IEPA issued the most violation notices since 2011 and issued the most referrals to the Attorney General's Office since 2015.

206. Illinois EPA has a delegation agreement with the City of Chicago, Department of Public Health essentially deputizing them as an enforcement partner carrying out the Act and to assist with the state Agency's enforcement actions, conduct inspections, note violations of state law, respond to citizen complaints, and keep records of inspections and violations.

The Illinois EPA has an agreement with the City; however, it is an IGA or Intergovernmental Agreement, not a delegation agreement. As such, the City is not delegated any of the authorities under the Environmental Protection Act and is not "deputized" in any regard. It does not carry out the Act nor does it have the authority to do so. The agreement does seek inspection services by the City, most notably in response to citizen complaints. In investigating these complaints under the IGA, the City is accessing the facilities via its own rights of access. In identifying any potential violations of state law or regulation, the City reports such information to the Agency. Any actions by the City relate to violation of local ordinance or regulation.

207. Chicago's Department of Public Health enforcement activities are a critical part of the state-local partnership, and recognition of this important role warrants treating the violations of local ordinances and rules in this case as constituting "non-compliance" with the Illinois Environmental Protection Act. Chicago's Department of Public Health actions as the primary air regulator and enforcer in Chicago, including under an express delegation agreement with the Illinois EPA.

The inspections under the IGA and particularly the complaint response are an important aspect of the state-local partnership. However, inspections by the local unit of government are not inspections by the State. Such inspections may serve to inform the Illinois EPA and may serve to address or resolve a citizen complaint. But, the City is not delegated inspection authority. It is not delegated compliance or enforcement authority. It is not delegated the authority to implement state regulations. Thus, observations of the City and any tickets issued for ordinance violations do not translate to a violation of the Environmental Protection Act. And while it plays a significant role in environmental protection, the City is not the primary regulator and enforcer of the Environmental Protection Act.

208. When these provisions are not met, General Iron III LLC must face severe enforcement penalties, these penalties should be acknowledged within the permit.

The Illinois Environmental Protection Act provides for the imposition of civil penalties for violation of the Act. It is not necessary to recite the provisions of the Act in this regard in a permit.

Explosion

209. That explosion renders the current permit application incomplete.

The explosion does not render the application incomplete. The application sets forth information that demonstrates that the source can comply with the applicable provisions of the Act and regulations thereunder.

210. I am concerned for the recent explosion at current facility and ask that the construction permit be delayed until a complete investigation can be done. The failed equipment is not reliable to control emissions at new facility.

Proximate to the explosion the Illinois EPA sent a letter that among other things sought both a report of any damage to the RTO and root cause of the explosion. The letter has been acknowledged and there exists a commitment to provide the reports when final. In the meantime, in the context of the pending application, General III has represented that it remains committed to the use of an RTO at the new site and believes that the use of the existing RTO remains a viable option. It further represents that measures have been identified to prevent explosions in the RTO. Those measures including the installation, operation, and maintenance of a continuous monitoring device for the inlet gas stream to the control train to the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit of this stream, have been added to the issued permit.

211. “The transfer of any equipment that can cause this kind of catastrophic failure requires that the permit application be revised to address risks related the proposed use of any equipment, its control efficiency, and the applicant's ability to operate the equipment safely and effectively. Further, existing emission estimates and air quality models do not account for emissions during periods of catastrophic failure and also must be revised. And, additional permit terms and conditions are clearly necessary to prevent future accidents and to ensure the integrity of the equipment and the applicant’s operating systems.”

The incident at the RTO was not a failure of the control device, nor does is render the device unreliable at reducing the organic emissions from the shredder. The destruction efficiency of the RTO will be tested at the new location. As noted above measures have been added to the permit to guard against future incidents of this type. Emissions from events of this type will be included in the calculation of total VOM emissions from the shredder. However, an event of this type is likely of limited duration and impact. Information provided by General III estimates an impact of approximately 3 pounds of VOM per event. The Operations and Maintenance Plan and the Feedstock Management Plan will also serve to improve operations.

212. Illinois EPA must impose additional permit conditions to prevent explosions.

The draft permit has been revised to include a Lower Explosive Level monitor and set point. It has also been revised to include a bypass safety vent to ensure the release of VOM-rich materials that would otherwise threaten an explosion. This bypass safety vent will be equipped with a device that ensures and monitors its use. The emissions from the vent will be included in the determinations of compliance with Subpart TT and the permit emission limits.

213. Measures that ensure that General Iron III LLC will employ a sufficient amount of qualified operators that are highly trained in operating applicable pollution control technologies such as the Regenerative Thermal Oxidizer (RTO). As demonstrated by the recent explosion at General Iron's current location in the Lincoln Park neighborhood, General Iron III LLC does not currently have the capability to operate these technologies safely.

The Illinois EPA does not have the authority to dictate who a regulated or permitted entity employs nor their credentials with limited exception. An RTO is a well-established and common means of controlling volatile organic compounds and hazardous air pollutants. There are no operator or training requirements for an RTO under the Environmental Protection Act or the Clean Air Act.

214. The record for the Draft Permit also fails to take into consideration a recent explosion at the Clifton Ave. site. On May 18, 2020, General Iron was shut down due to two explosions there. Subsequently, Chicago Department of Public Health issued two citations totaling up to $6000 to General Iron for violation of Illinois state pollution standards. See Chicago Dept of Public Health, "Statement from CDPH on Citations to General Iron on Explosions at the Facility," Public Health (May 21, 2020), available at https://www.chicago.gov/city/en/depts/cdph/provdrs/healthy_communities/news/2020/may/statement-from-cdph-on-citations-to-general-iron-on-explosions-a.html. The City's investigation is still ongoing. Given that much of the equipment is supposed to be transferred to the South Burley Ave site on the East Side, the Agency should (or "at a minimum") reassess the permit to determine if the pollution control equipment and other operating equipment at the Clifton Avenue site still meets the parameters of the Draft Permit without resulting in noncompliance.

The City, the Illinois EPA and the USEPA are all aware of, involved with, and in communication on the explosion. The Illinois EPA has added provisions in the permit to minimize the risk of explosions in the RTO at the Burley site.

215. The permit should be denied because the EPA did not consider the George Washington air monitoring data or consider the likelihood and effect of failures of the Hammermill Shredder System.

The Illinois EPA did consider the data. There are three types of monitors at George Washington High School – PM10, PM2.5, and lead/metals/TSP. These monitors are very well situated to measure the air that may be impacted by emissions from this source. And, the monitors are measuring attainment with the National Ambient Air Quality Standard for PM10, which is designed to be protective of human health and the environment.

216. They require a lot of maintenance to ensure the controls are effective.

It is unclear what controls are being referenced. Regardless, the permit addresses maintenance of equipment with the requirement for an Operations and Maintenance Plan.

217. This permit must have provisions in place that require General Iron III to regularly prove that it operates the pollution control technologies to the highest standard.

The permit includes periodic monitoring including testing to ensure compliance with applicable regulatory requirements and the terms of the permit.

Miscellaneous

218. Can a third-party auditor be in charge of reporting and report to community?

General III, as owner or operator of the scrap metal facility bears responsibility for the obligations under the Environmental Protection Act and regulations thereunder. It is General III that is required to comply with the requirements to obtain a permit and to comply with the terms of the permit. As with all permits, the construction permit issued to General III includes record keeping and reporting requirements. Records and reports are subject to review by the Illinois EPA, among other. Reports and other information within the possession of the Illinois EPA constitute state records and are generally available to the public. Access to the information occurs by way of requests under the Freedom of Information Act. Failure to maintain the requisite records or to submit the requisite reports subjects a source to compliance and enforcement actions as provided for under the Environmental Protection Act. In this instance, there is no basis for the inclusion of a condition requiring the retention and use of a third-party auditor by General Iron. Notwithstanding, the permit has been revised to require that the testing required under this permit will be performed by independent-third party contractors. Also, the protocols and plans required under this permit will be prepared by third-party contractors.

219. How do we know that you can't be influenced by this economic powerhouse?

The Illinois EPA is a creature of statute and its responsibilities and authorities are dictated by same. Employees of the Illinois EPA are individually subject to ethical constraints. The permitting program affords structure, by which facilities must operate consistent with governing rules and regulations. Reporting, record keeping, and monitoring is also required. The records within the Illinois EPA are generally readily available to the public.

220. The facility has not proposed any "community benefits agreement" or made efforts to reach out to community.

Community benefits agreements are often executed between community groups and the developer of a project and delineate measures that the developer will afford the community that are not otherwise required. These agreements are often used in low-income and communities of color. Such agreements are not a requirement under the Environmental Protection Act.

221. Why can't the Illinois EPA mandate that GIII employees live within 5-10 miles of the source?

State laws and regulations concerning environmental protection generally address sources of pollution and not ancillary issues related to the residency of employees.

222. Nowhere does the FPOP attempt to demonstrate how the proposed measures in fact will ensure that fugitive sources will not cause levels of air contaminants that are injurious to human, plant, or animal life. The program solely focuses on the prohibition of visible emissions beyond the fence line, which is at best a very rough proxy for PM or air toxics particles in the air.

As discussed elsewhere, the prohibitions reflected in the Act and Board regulations are an enforcement tool separate from the FPOP's implementation of measures designed to assure compliance with Part 212. There is no direct means of measuring enforcement with the prohibitions through a permit evaluation.

223. Illinois EPA must impose conditions that prevent odors. Illinois EPA should include specific odor management provisions in the Draft Permit, including use of available odor monitoring systems.

General III is subject to the statutory prohibition against air pollution. In simplest terms, the statute prohibits General III from causing, threatening or allowing air pollution that would cause a violation of a Pollution Control Board regulation or create a nuisance.

224. Neither the Draft Permit nor the fugitive particulate operating program nor the yet-to-be- submitted Contingency Plan contain any practicably enforceable limits on fugitive emissions that demonstrate compliance with the prohibitions on air pollution.

The fugitive emissions from sources such as General III are addressed by state standards. Specifically, they are addressed by provisions within Part 212 Visible and Particulate Matter Emissions of the Pollution Control Board's regulations. These regulations address fugitive emissions by way of limitation on opacity from material handling and processing activities and by way of a prohibition on visible fugitive emissions beyond the plant property line. These regulations also address fugitive emissions through a fugitive particulate operating program, however, General III is not subject to same. Notwithstanding, the Illinois EPA has required General III to develop and implement a fugitive emissions operating program, that was submitted for Agency review, the current version of which is incorporated into the permit. This is the means by which the source ensures compliance with 212.301.

The Contingency Plan that is regulatorily required to be submitted but not at this time, will later be reviewed by the Agency and available to the public. However, it is of limited relevance as it is only activated in the event of a violation of the National Ambient Air Quality Standard for PM10.

The Board's Part 212 regulations were developed with an eye toward the protection of human health and the environment, and the goal of ensuring compliance with the National Ambient Air Quality Standard for Particulate Matter. Indeed, the entire state of Illinois is in compliance with this standard.

Attachment 1: Listing of Significant Changes Between the Draft Construction Permit and the Issued Construction Permit

1. Added a Miscellaneous Fugitive Sources category in the equipment listing to clarify these units are part of the permit.
2. Clarified the requirements for VOM emissions capture from the Hammermill Shredder System.
3. Clarified that the Miscellaneous Fugitive Sources are subject to 35 Ill. Adm. Code 212.123.
4. Clarified that the Ferrous Material Separation System, Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources are to be operated under the provisions of a Fugitive Emissions Operating Program.
5. Clarified the emission sources in the Ferrous and Non-Ferrous Material Separation equipment listing.
6. Clarified emission testing for Fine Processing Building and Hammermill Shredder System.
7. Added a requirement for the development of and operation under a Feedstock Management Plan for the Hammermill Shredder System.
8. Added a requirement for the development of and operation under an Operation and Maintenance Plan for the control systems.
9. Added a condition to monitor the pressure differential for the Roll-media filter associated with the Hammermill Shredder System and recordkeeping for the differential pressure to ensure proper operation of the control.
10. Added a condition to monitor the pressure differential for Dust Collector (DC-01) associated with the Fines Processing Building to ensure proper operation of the control.
11. Added a requirement for opacity observations from the Hammermill Shredder System stack, each emission unit in the Ferrous Material Separation System, the Fines Processing Building (DC-01), each emission unit in the Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources.
12. Added recordkeeping for Scrubber differential pressure, scrubbant flow rate, and scrubbant PH monitoring data to ensure proper operation of the control.
13. Added recordkeeping requirement for hours of operation.
14. Added recordkeeping requirement for material receipts.
15. Added recordkeeping requirement for type and amount of material processed by the Hammermill Shredder System.
16. Added recordkeeping requirement for amount of fluff shipped offsite.
17. Added LEL Monitoring system to the exhaust from the capture system associated with the Hammermill Shredder System and associated recordkeeping, and reporting requirements.
18. Added reporting requirement for initial startup for Hammermill Shredder System
19. Added quarterly reporting requirement for type and amount of material received, type and amount of material processed by the Hammermill Shredder System, throughput for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building, PM, PM_{10}, and HAPs emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations, VOM emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations, and amount of non-metallic materials (fluff) shipped offsite.
20. Reconciled the records retention requirements for all records required by the permit requiring retention for at least 5 years.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Raw Material Receiving and Handling System:
NEED TO HAVE A LIST AND DESCRIPTION OF THE EMISSION UNITS ANY AIR POLLUTION CONTROL EQUIPMENT THAT COMPRISE THIS SYSTEM

Hammermill Shredder System:
One (1) ____ Ton/Hour Hammermill Shredder with Integral Water Injection System equipped with capture hood and controlled by Cyclone, Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber;
One (1) ____Ton/Hour Vibratory Feeder; and
NUMBER (#) _Ton/Hour Belt Conveyors (skirted or troughing);

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
NUMBER (#) _Ton/Hour Magnetic Separators with **NUMBER (#)** Takeaway Conveyors;
NUMBER (#) _Ton/Hour Secondary Magnetic Separators with **NUMBER (#)** Conveyors;
Two (2) Ton/Hour Z-Box Separators with Cyclones with Integral Conveyors;
NUMBER (#) Light Material Magnetic Separators with **NUMBER (#)** Conveyors;
Two (2) ____Ton/Hour Stacking Conveyors;
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System:
One (1) ____Ton/Hour Automobile Scrap Residue (ASR) Vibratory Batch Feeder with Covered Conveyor;
One (1) ____Ton/Hour Magnetic Separator with Covered Conveyor;
One (1) ____Ton/Hour Sizing Material Screen with Conveyor;
Two (2) ____Ton/Hour Vibratory Sizing Screens with Conveyor;
Seven (7) Eddy Current Separators (ECS) with ECS Conveying System;
Four (4) ___Ton/Hour Wind Sifters (Air Classifiers) with Cyclone, **NUMBER (#)** Rotary Valve Conveyors and Takeaway Conveyor;
Eight (8) __Ton/Hour Induction Sorters and **NUMBER (#)** Connecting Conveyors Controlled by Dust Collector (DC-01);

Five (5) ___Ton/Hour Polishers (Air Classifiers) with Cyclone and Takeaway Conveyor;
One (1) ____Ton/Hour Air Vibe (Vibratory Air Separator) and **NUMBER (#)** Connecting Conveyors controlled by Closed Loop Capture Device with Built-in Cyclone;
One (1) _____Ton/Hour Low Speed Shredder; and

One (1) _____Ton/Hour Fines Processing System and **NUMBER (#)** Connecting Conveyors controlled by Dust Collectors (DC-01 – DC04)

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}) and Particulate Matter less than 2.5 microns ($PM_{2.5}$) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d For purposes of this permit, General III, LLC is considered a single source with Reserve Marine Terminals (located at 11600 South Burley Ave), Regency Technologies (located at 11600 South Burley Ave), Napuck Salvage of Waupaca (I.D. No. 031600GYI, located at 11600 South Burley Ave), and South Shore Recycling ((located at 11600 South Burley Ave).

e. Operation of the equipment listed above is allowed under this

construction permit for a period of twelve (12) months from the date of initial startup of any of the above-listed equipment.

e. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation.

2a. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart UU (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

3. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

4a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less,

or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

5. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

6a. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System,

Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subaprt GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

8a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm.

Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must

include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

9a. All storage piles of materials which are located within the source's property shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by Condition 9(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by Condition 9(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 9(e).

e. The emission units described in Conditions 9(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 9(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Metal Shredder System and associated RTO and Quench/Packed Tower Scrubber operations. This inspection will be completed three times each day when the Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded per the operating program procedures.

h. The Fugitive Particulate Operating Program, as submitted by the

Permittee pursuant to Condition 9(e) dated **DATE PLAN WAS SUBMITTED**, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 9(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 9(e) and (d) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of notification to address the deficiency.

10a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Cyclones, Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Cyclones associated with the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System; Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System; Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System and Fines Processing System such that the Cyclones, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer’s recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may

require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

11a. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

	Process Rate		Emission Factor	VOM Emission	
Emission Unit	(Tons/Mo)	(Tons/Yr)	(lb/Ton)	(Tons/Mo)	(Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.243	0.24	2.43

These limits are based upon maximum shredder material throughput, an uncontrolled emission factor derived from a stack test, and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

	Single HAP		Combined HAPs	
Emission Unit	(Tons/Mo)	(Tons/Yr)	(Tons/Mo)	(Tons/Yr)
Metal Shredder RTO/Scrubber Stack	0.03	0.30	0.06	0.61

These limits are based upon maximum shredder material throughput in Condition 11(a)(i) above, combined HAPs comprising 25% of the

THC emissions and any single HAP comprising no more than 50% of the combined HAPs (12.5% of the THC emissions).

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.24	2.36

These limits are based upon maximum shredder material throughput, emission factors derived from stack test captured and measured filterable PM emissions, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

b. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 52.5 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	131.43	0.43	3.45
Nitrogen Oxides (NO_x)	100.0	0.28	2.20
Particulate Matter (PM)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.02
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, approximately 1% (1.22 tons/year) of uncontrolled VOM emissions being emitted as CO emissions due to incomplete combustion, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

c. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
57 Conveyor Transfer Points	1,245,450	12,454,500	0.00014	0.08	0.82
Truck, Railcar, & Barge Loading	174,000	1,740,000	0.00020	0.02	0.18

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.83

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading.

ii. Combined HAP emissions from Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Combined HAPs (Tons/Mo)	Combined HAPs (Tons/Yr)
Ferrous Material Separation Process	0.01	0.04

These limits are based upon metal HAPs being 1.33% of the total PM emission measured at the discharge of existing roll media filter during June 2018 metal emission test at General II, LLC.

d. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for sources inside building:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
74 Conveyor Transfer Points (Uncontrolled)	110,624	1,106,236	0.00300	0.17	1.66
74 Conveyor Transfer Points (Controlled)	13,436	134,361	0.00014	0.01	0.01
8 Screening Points (Uncontrolled)	2,820	28,196	0.02500	0.04	0.35
8 Screening Points (Controlled)	1,541	15,406	0.00220	0.01	0.02
17 Stockpile Loading Points	838	8,381	0.00761	0.01	0.03
				Total:	2.07*

* These sources located inside building exhaust to the atmosphere through Dust Collector DC-01, estimated emissions may be calculation by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf (1.36 tons/year)

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

ii. PM, PM_{10}, and $PM_{2.5}$ emissions from outdoor emission units:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM & PM_{10} Emission (Tons/Mo)	PM & PM_{10} Emission (Tons/Yr)
59 Conveyor Transfer Points (Uncontrolled)	215,368	2,153,675	0.00300	0.32	3.23
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	26,003	260,027	0.00020		0.03
10 Stockpile Loading Points	23,073	230,725	0.00761	0.08	0.85
				Total:	6.27

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. Combined HAP emissions from Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Combined HAPs (Tons/Mo)	Combined HAPs (Tons/Yr)
Non-Ferrous Material Separation Process	0.01	0.10

These limits are based upon metal HAPs being 1.33% of the total PM emission measured at the discharge of existing roll media filter during June 2018 metal emission test at General II, LLC.

e. This permit is issued based on negligible emissions of particulate matter (PM, PM_{10}, and $PM_{2.5}$) from the raw material receiving and handling, one Vibratory Feeder, and # Belt Conveyors (skirted or troughing). For this purpose, emissions from each emission unit shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 ton/year for PM, PM_{10}, and $PM_{2.5}$.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

12a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 13, 14, and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

13a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be

conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

14. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

15a. Within sixty (60) days after initial startup of the scrap metal recycling plant, the emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System shall be measured and the efficiencies of Cyclones, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.122 and 212.321, 35 Ill. Adm.

Code 218.986(a), and Condition 10 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

*USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section

Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill.

Adm. Code 201.160(b).

16a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

17. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

18a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain

records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.

ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:

A. The name and address of the source;

B. The name and address of the owner and/or operator of the source;

C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;

D. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;

E. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent, and, if diluted, percent of concentration, used each day; and

F. A log recording incidents when control measures were not used and a statement of explanation.

iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), copies of all records required by 35 Ill. Adm. Code 212.316shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records.

iv. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

c. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

v. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

19a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

20a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Cyclones associated with the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System; Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System; Quench/Packed Tower Scrubber associated with the Metal Shredder System; and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System and Fines Processing System:

   A. Records for periodic inspection of the Cyclones, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

   B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, indivisual performing the observation, observation deails including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operations for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 20(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

21a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.

c. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

22a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may

have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

23a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

    a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

    b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

    c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

    d. to obtain and remove samples of any discharge or emission of pollutants, and

    e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

    a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

    b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

    c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

    d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Barria, German
Sent: Thursday, October 24, 2019 11:55 AM
To: John Pinion (jpinion@rka-inc.com); 'General Iron; Kallas, Jim (jim@general-iron.com)'
Cc: Bernoteit, Bob
Subject: General III, LLC - ID #031600SFX
Attachments: 19090021 - General III LLC - Const Permit - 10-23-2019.docx

John & Jim
Please find attached draft construction permit #19090021 for your review.

Thank you.

German Barria
Enviromental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Tuesday, November 5, 2019 9:37 PM
To: Bernoteit, Bob; Barria, German
Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com); 'Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com)'; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com); GII, LLC; Labkon, Adam (adamlabkon@general-iron.com)
Subject: [External] Applicant Comments on General III's Draft Construction Permit 19090021; Site ID 031600SFX
Attachments: 2019-11-06 Draft GIII CP w app-comments.docx; 2019-11-06 Applicant Comments on Draft GIII Const Pmt.pdf

Please find attached GIII's comments on Draft construction permit 19090021.

Please review the attached and forward your comments or questions to my attention.

I will bring hard copies of the attached to our meeting tomorrow morning.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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RK
& Associates, Inc.

November 6, 2019

R17421-7

Mr. German Barria
Illinois Environmental Protection Agency - Bureau of Air
1021 North Grand Avenue East
Springfield, IL 62702

Applicant Comments on Draft Construction Permit 19090021 for a Scrap Metal Recycling Facility
General III, LLC. - Chicago, Illinois - Site ID. 031600SFX

Dear Mr. Barria:

We have reviewed the draft construction permit for the above referenced application and have identified the applicant's comments on the attached copy of the construction permit using the Track Changes feature of Microsoft Word.

Please review the attached comments and forward any questions or comments to me at your convenience.

If you have any questions, please do not hesitate to contact me at 630-393-9000.

Yours very truly,
RK & Associates, Inc.

John G. Pinion
Principal Engineer

cc: Mr. Jim Kallas – General III, LLC – Chicago, Illinois – via e-mail

2 South 631 Route 59
Suite B
Warrenville, IL 60555

(630) 393-9000
Fax (630) 393-9111

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR **JOHN J. KIM**, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

November 6, 2019 –
Comments identified herein are from the applicant.

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Raw Material Receiving and Handling System:
NEED TO HAVE A LIST AND DESCRIPTION OF THE EMISSION UNITS ANY AIR POLLUTION CONTROL EQUIPMENT THAT COMPRISE THIS SYSTEM

Hammermill Shredder System:
One (1) ~~__ Ton/Hour~~ Hammermill Shredder with Integral Water Injection System equipped with capture hood and ~~controlled by~~ Cyclone, and controlled by a~~,~~ Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) ~~__ Ton/Hour~~ Vibratory Conveyor~~Feeder~~; and
One (1) NUMBER (#) ~~___ Ton/Hour~~ Shredder Infeed ~~Belt~~ Conveyor~~s (skirted or troughing)~~;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) NUMBER (#) ~~Ton/Hour~~ Magnetic Separators ~~with NUMBER (#) Takeaway Conveyors~~;
NUMBER (#) ~~_____ Ton/Hour Secondary Magnetic Separators with NUMBER (#) Conveyors;~~
Two (2) ~~Ton/Hour~~ Z-Box Separators with Cyclones ~~with Integral Conveyors~~;
~~NUMBER (#) Light Material Magnetic Separators with NUMBER (#) Conveyors;~~
Fifty two (52) conveyor transfer points;
Two (2) ~~__ Ton/Hour~~ Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System (Located Outdoors):
One (1) ~~__ Ton/Hour Automobile Scrap Residue (~~ASR~~)~~ Feed Hopper with

Commented [R11]: Raw material receiving and handling emission are included in the Ferrous Processing emissions and consist only of truck dumping of raw material to the ground, placing raw material on a stock pile with a crane equipped with a magnet or grapple, and then transferring material from the stockpile to the shredder infeed conveyor with a magnet or or grapple.

Commented [R12]: Number of pieces of equipment will be identified in an attachment that lists equipment.

Commented [R13]: For purposes of this permit, all magnetic separators should be in one category (on one line) – not split between magnetic separators, secondary magenetic separator, and light material magnetic separators, etc.

Commented [R14]: Note: the cyclones on the Z-Box separators are integral to the process and are not control devices.

Vibratory Batch Feeder ~~with Covered Conveyor~~;

One (1) ~~Ton/Hour~~ Magnetic Separator ~~with Covered Conveyor~~;

Three (3) ~~One (1) Ton/Hour Sizing Material~~ Screens ~~with Conveyor~~;

~~Two (2) Ton/Hour Vibratory Sizing Screens with Conveyor;~~

Seven (7) Eddy Current Separators (ECS) ~~with ECS Conveying System~~ located in Enclosures;

Four (4) ~~Ton/Hour~~ Wind Sifters (Air Classifiers) with Cyclones~~, NUMBER (#) Rotary Valve Conveyors and Takeaway Conveyor~~;

Four (4) Polishers (Air Classifiers) with Cyclone;

One (1) Air Vibe (Air Classifier) with Cyclone;

One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material; and,

Ninety two (92) Outdoor Material Transfer Points;

~~Eight (8) Ton/Hour Induction Sorters and NUMBER (#) Connecting Conveyors Controlled by Dust Collector (DC-01);~~

Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

Commented [R15]: These cyclones are integral to the process and are not control devices.

Commented [R16]: This cyclone is integral to the process and is therefore not a control device.

Commented [R17]: This cyclone is integral to the process and is therefore not a control device.

Commented [R18]: Induction sorters located inside fines processing building.

~~Five (5) ___Ton/Hour Polishers (Air Classifiers) with Cyclone and Takeaway Conveyor;~~
~~One (1) ____Ton/Hour Air Vibe (Vibratory Air Separator) and **NUMBER (#)** Connecting Conveyors controlled by Closed Loop Capture Device with Built-in Cyclone;~~
~~One (1) ____Ton/Hour Low Speed Shredder; and~~

~~One (1) ____Ton/Hour Fines Processing System and **NUMBER (#)** Connecting Conveyors controlled by Dust Collectors (DC-01 – DC04)~~

Commented [R19]: Incorporated above

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}) and Particulate Matter less than 2.5 microns ($PM_{2.5}$) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d For purposes of this permit, General III, LLC is considered a single source with Reserve Marine Terminals (located at 11600 South Burley Ave), ~~Regency Technologies (located at 11600 South Burley Ave)~~, Napuck Salvage of Waupaca (I.D. No. 031600GYI, located at 11600 South Burley Ave), and South Shore Recycling ((located at 11600 South Burley Ave).

Commented [R110]: Regency Technologies does not have emission units and should be removed for the description of a single source. Do we need to modify a submittal to make this change?

e. Operation of the equipment listed above is allowed under this

construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder~~of initial startup of any of the above-listed equipment~~.

e. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code ~~Part~~ 212.301 ~~Subpart K~~ (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined

Commented [R111]: Proposed change is the milestone date that marks the start of the 12 month period identified in this conditions. There can be no emissions from any of the equipment until the shredder is operated to process material.

Commented [R112]: The only part of Subpart K that is applicable to GIII is §212.301 because GIII's SIC Code (5093) is not included in the subject codes identified in this Subpart.

by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U~~U~~ (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

3. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

4a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the applicable requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) as identified below.

Emission capture and control equipment which achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit pursuant to 35 IAC 218.986(a).

5. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

6a. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subaprt GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

7a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply ~~and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required~~ when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

Commented [R113]: Sections 212.304-310 and 312 are not applicable.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

8a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall

maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code

212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

9a. All storage piles of materials which are located within the source's property shall be ~~protected by a cover or~~ sprayed with a surfactant solution or water ~~on a regular basis, as needed~~, or treated by an equivalent method, in accordance with the operating program required by Condition 9(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 9(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 9(e) ~~on a regular basis~~. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied ~~on a regular basis~~, as needed, in accordance with the operating program required by Condition 9(e).

Commented [R114]: All stockpiles at the facility are working stockpiles which mean material is always being added and removed. Therefore, covering these stockpiles not feasible.

Frequency of water application will be addressed in the operating program required by Condition 9e.

Commented [R115]: The term "regular basis" is not defined and should not be referened here if the frequency of application is identified in the operating plan.

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 9(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 9(e).

e. The emission units described in Conditions 9(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 9(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit ~~significantly reduce~~ fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

Commented [R116]: "Significantly reduce" is not a defined term and should not be used.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

   vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill ~~Metal~~ Shredder enclosure~~System and associated RTO and Quench/Packed Tower Scrubber operations.~~ This inspection will be

completed once ~~three times~~ each day when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 9(e)~~per the operating program procedures~~.

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 9(e) dated **DATE PLAN WAS SUBMITTED**, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 9(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 9(e) and (d) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of notification to address the deficiency.

10a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The ~~Cyclones,~~ Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on ~~the Cyclones associated with~~ the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System~~, and Fines Processing System~~; Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System; Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the ~~Non-Ferrous Material Separation System and~~ Fines Processing System such that the Cyclones, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition~~ and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.~~

Commented [R117]: Should this be the date the plan is approved by IEPA, meaning approval by absence of letter identifying deficiencies.

Commented [R118]: The cyclone is not a control device.

Commented [R119]: The cyclones at the facility are integral tot the process and are therefore not control devices.

Commented [R120]: The fines processing system is part of the non-ferrous separation system.

Commented [R121]: This language be eliminated. Violation of a reulation or limit can be caused by reasons unrelated to maintenance.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

11a. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	~~0.243~~	0.7324	7.29~~2.43~~

These limits are based upon maximum shredder material throughput, an uncontrolled emission factor derived from a stack test, and 98% removal efficiency by the RTO/Scrubber. All measured total

Commented [R122]: The identified factor is an uncontrolled emission factor from the testing performed at the outlet of the roll media filter in May/June 2018. The purpose of this test was to establish an emission factor at the historical rate of processing cars (20% of total feed). It is likely at the new facility that a higher rate of cars will be incorporated into the permit. The uncontrolled emission factor will change with an increase in the percentage of feed that is comprised of cars. For the purposes of this draft permit, this factor should be left blank with a note that indicates the factor will be incorporated after RTO testing.

Commented [R123]: In the application,there was no safety factor applied to the VOM emission calculations from the RTO. Based on the comment above, that the new facility may want to process a higher percentage of cars, we are proposing to incorporate a safety factor of 3 to the estimated emissions to provide flexibility in future operation. Can the emission factor be put in the note below the emission table?

hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Single HAP (Tons/Mo)	Single HAP (Tons/Yr)	Combined HAPs (Tons/Mo)	Combined HAPs (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	0.10~~03~~	0.92~~30~~	0.19~~0.06~~	1.83~~0.61~~

These limits are based upon maximum shredder material throughput in Condition 11(a)(i) above, combined HAPs comprising 25% of the THC emissions and any single HAP comprising no more than 50% of the combined HAPs (12.5% of the THC emissions).

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47~~24~~	4.72~~2.36~~

These limits are based upon maximum shredder material throughput, emission factors derived from stack test captured and measured filterable PM emissions, and all measured filterable PM assumed to be PM_{10}~~ and $PM_{2.5}$~~.

b. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 52.5 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	241.65~~131.43~~	0.62~~43~~	6.22~~3.45~~
Nitrogen Oxides (NO_x)	100.0	0.28	2.20
Particulate Matter (PM)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.02
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, approximately 1% (3.65~~1.22~~ tons/year) of uncontrolled VOM emissions from the Hammermill Shredder being emitted as CO emissions due to incomplete combustion, and standard emission

Commented [R124]: Adjusted based on increased VOM.

Commented [R125]: This emission factor is from testing at the exit of the roll media filter. The emission factor at the discharge of the scrubber will likely be different. Can the emission factor be included in the note instead of the emission table?

Commented [R126]: In the application,there was no safety factor applied to the PM emission calculations from the RTO. We are proposing to add a safety factor of 2 to increase the PM emissions estimates to the revised values shown on the right.

Commented [R127]: It seems reasonable that all filterable PM at the outlet of the scrubber is PM10; however, filterable PM2.5 will likely be less than filterable PM10. If a PM2.5 limit must be included, it should be based on a particle size analysis of the material captured on a Method 5 filter.

Commented [R128]: Revisions based on increased VOM emissions from RTO/Scrubber.

factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

c. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. PM, ~~PM_{10}, and $PM_{2.5}$~~ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	Filterable PM, ~~PM_{10}, and $PM_{2.5}$~~ Emissions (Tons/Mo)	Filterable PM, ~~PM_{10}, and $PM_{2.5}$~~ Emissions (Tons/Yr)
57 Conveyor Transfer Points	1,245,450	12,454,500	0.00014	0.08	0.82
Truck, Railcar, & Barge Loading	174,000	1,740,000	0.00020	0.02	0.18
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.83

Commented [R129]: Based on the identified emission factor source, the overall PM10 emissions is estimated to be 43% of PM and the estimated PM2.5 emissions is estimated to be 8% of PM.

Based on the above, assuming all PM is PM2.5 likely significantly overestimates actual PM2.5.

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading.

ii. Combined Metal HAP emissions from Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Combined Metal HAPs (Tons/Mo)	Combined Metal HAPs (Tons/Yr)
Ferrous Material Separation Process	0.01	0.054

Commented [R130]: Corrected values for metal HAP based on revised Metal HAP as % of filterable PM (1.67%)

These limits are based upon metal HAPs being 1.33% of the total PM emission measured at the discharge of existing roll media filter during June 2018 metal emission test at G~~eneral~~ II, LLC.

Commented [R131]: We identified an error in our calculations. The correct value is 1.67%.

d. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, ~~PM_{10}, and $PM_{2.5}$~~ emissions for sources inside building:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, ~~PM_{10}, and $PM_{2.5}$~~ Emissions (Tons/Mo)	PM, ~~PM_{10}, and $PM_{2.5}$~~ Emissions (Tons/Yr)
74 Conveyor Transfer	110,624	1,106,236	0.00300	0.17	1.66

Commented [R132]: Based on the identified emission factor source, the overall PM10 emissions is estimated to be 43% of PM and the estimated PM2.5 emissions is estimated to be 8% of PM.

Based on the above, assuming all PM is PM2.5 likely significantly overestimates actual PM2.5.

Points (Uncontrolled)					
74 Conveyor Transfer Points (Controlled)	13,436	134,361	0.00014	0.01	0.01
8 Screening Points (Uncontrolled)	2,820	28,196	0.02500	0.04	0.35
8 Screening Points (Controlled)	1,541	15,406	0.00220	0.01	0.02
17 Stockpile Loading Points	838	8,381	0.00761	0.01	0.03
				Total:	2.07*

* These sources located inside building exhaust to the atmosphere through Dust Collector DC-01, estimated emissions may be calculated~~ion~~ by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf (1.36 tons/year).

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

ii. PM, ~~PM_{10}, and $PM_{2.5}$~~ emissions from outdoor emission units:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM & PM_{10} Emission (Tons/Mo)	PM & PM_{10} Emission (Tons/Yr)
59 Conveyor Transfer Points (Uncontrolled)	215,368	2,153,675	0.00300	0.32	3.23
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	26,003	260,027	0.00020		0.03
10 Stockpile Loading Points	23,073	230,725	0.00761	0.08	0.85
				Total:	6.27

These limits are based upon maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M

Commented [R133]: The sources in paragraph 11.d.i are calculated as if the sources were outdoors with no controls. Why was the permit not set at 1.36 tph from the baghouse?

Commented [R134]: Based on the identified emission factor source, the overall PM10 emissions is estimated to be 43% of PM and the estimated PM2.5 emissions is estimated to be 8% of PM.

Based on the above, assuming that all PM is PM2.5 significantly over estimates actual PM2.5.

(minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. Combined Metal HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Combined Metal HAPs (Tons/Mo)	(Tons/Yr)
Non-Ferrous Material Separation Process	0.01	0.13~~0~~

These limits are based upon metal HAPs being 1.67~~33~~% of the total PM emission measured at the discharge of existing roll media filter during June 2018 metal emission test at G~~eneral~~ II, LLC.

~~e. This permit is issued based on negligible emissions of particulate matter (PM, PM_{10}, and $PM_{2.5}$) from the raw material receiving and handling, one Vibratory Feeder, and # Belt Conveyors (skirted or troughing). For this purpose, emissions from each emission unit shall not exceed nominal emission rate of 0.1 lb/hour and 0.44 ton/year for PM, PM_{10}, and $PM_{2.5}$.~~

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

12a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide,

Commented [R135]: Corrected values for metal HAP based on revised Metal HAP as % of filterable PM (1.67%)

Commented [R136]: We identified an error in our calculations. The correct value is 1.67%.

Commented [R137]: The emission points described in this condition consist of:
E01 (conv.)discharge to shredder feed rollers;
Shredder discharge to E05 vibratory conv.;
E05 vibratory Conv discharge to C001;
C001 discharge to C002; and.
C002 discharge to Poker Picker.

As this condition reads, it assigns a PM limit of 0.44 tpy to each of the above units for a total of 1.74 tpy.

However; the emission points identified above were included in the Ferrous Plant PM emissions.

without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 13, 14, and 15 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

13a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

14. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part

218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

15a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder~~completion of initial startup and shakedown of the scrap metal recycling plant~~, the emissions from the Hammermill Shredder System, ~~Ferrous Material Separation System~~, and Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency~~ies of Cyclones~~, of the Regenerative Thermal Oxidizer (RTO) and~~,~~ Quench/Packed Tower Scrubber~~, and Dust Collectors (DC-01 through DC-04)~~ shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code ~~212.122 and~~ 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 10 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A

Commented [R138]: Change milestone date to be consistent with Condition 1.e. At GIII, the hammermill cannot be operated until all downstream equipment has been installed and made operational. In order for DC-01 to operate, the shredder and ferrous metal separation must be operating to produce material that can be fed to the non-ferrous separation system. DC-01 cannot operate if the fines processing system has no material to process.

Commented [R139]: There are no emission units in the Ferrous Material Separation System that require testing.

Commented [R140]: The Fines Processing System is part of the Non Ferrous Separation System and is vented through DC-01 only.This includes the Fines Processing Building which is vented through DC-01 only.

Commented [R141]: The cyclone located after the shredder collection hood is not a control device as described abvove and should not be subject to testing. The purpose of the cyclone is to remove large particles (i.e. PM100 and above, which is the upper end of the range that defines particulate matter considered in the development of the NAAQS for total PM).

Commented [R142]: The dust collector does not require PM revmoal efficiency to demonstrate compliance. Emissions at the discharge of the dust collector must meet the process weight rate and the permitted PM emission rate.

Commented [R143]: DC-01 is the only dust collector that vents to the atmosphere. Dust Collectors that vent into a building should not require testing because they do not emit to the atmosphere and are not incorporated into any emission limits.

Commented [R144]: 35 IAC 212.122 addresses VOM emsisions from organic material loading pipes and is not applicable to this facility.

Commented [R145]: For the purposes of a compliance demonstration test, what emission units will be subject to testing and how would testing be performed?

Determination of Metals Emissions from Stationary Sources	USEPA Method 29
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

*USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an

observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

16a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

17. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability

status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

18a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

~~b. i. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.~~

Commented [R146]: 35 IAC 212.316 is not applicable to GIII based on its SIC code and therefore Condition 18.b. should be removed.

~~ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:~~

~~A. The name and address of the source;~~

~~B. The name and address of the owner and/or operator of the source;~~

~~C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;~~

~~D. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;~~

~~E. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent, and, if diluted, percent of concentration, used each day; and~~

~~F. A log recording incidents when control measures were not used and a statement of explanation.~~

~~iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(43), copies of all records required by 35 Ill. Adm. Code 212.316 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records.~~

~~iv. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.~~

be. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

~~iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.~~

Commented [R147]: This is a duplication of 18.be.iii. above and should be deleted.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

19a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

20a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the ~~Cyclones associated with the~~ Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, ~~and Fines Processing System~~; Regenerative Thermal Oxidizer (RTO) and Quench Packed Tower Scrubber associated with the Hammermill Shredder System; ~~Quench/Packed Tower Scrubber associated with the Metal Shredder System~~; and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System ~~and Fines Processing System~~:

A. Records for periodic inspection of the ~~Cyclones~~, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, indivisual performing the observation, observation deails including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operations for RTO and Quench/Packed Tower Scrubber

Commented [R148]: This cyclone is not a pollution control device as described above.

Commented [R149]: The Fines Processing System is part of the Non-Ferrous Material Separation System and does not need to be separately identified in this paragraph.

Commented [R150]: Cyclone is not considered a pollution control device because it is not meant to remove particulate matter (defined as PM100 and above).

(hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 20(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

21a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

~~b. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.~~

Commented [R151]: 35 IAC 212.316 is not applicable to GIII based on its SIC code. Therefore, his condition should be deleted.

c. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

22a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the date that raw material is first processed through the Hammermill Shredder~~initial start-up date~~ by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

23a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)

Commented [R152]: This paragraph is not clear. What is the intent of this paragraph?

Commented [R153]: There does not appear to be an applicable compliance dae identified in 35 IAC 218.106.

218.106(a) requires compliance for all sources in Cook County by September 1, 1991.

218.106(c) addresses units subject to Subpart TT, but the compliance data is " by March 15, 1991."

Commented [R154]: Change milestone date to be consistsent with Condition 1.e.

Commented [R155]: Data included in the permit application includes descriptions, performance specifications for the RTO at GII that will be moved to GIII. A VOM compliance test is scheduled for November 14 and 15, 2019. The results of this test will be submitted to IEPA pursuant to the GII construction permit. This will be the only test data for the RTO that will be available at the time it is installed at GIII. Will this be sufficient to meet this requirement?

Commented [R156]: There does not appear to be an applicable compliance dae identified in 35 IAC 218.106.

P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

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STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Barria, German
Sent: Friday, March 6, 2020 11:20 AM
To: Armitage, Julie; Mohr, Kent; Layman, Robb; Jones, Eric E.; Pilapil, Ray
Cc: Bernoteit, Bob
Subject: General III, LLC - ID #031600SFX
Attachments: 19090021 - General III LLC (03-06-2020).docx

Here is the revised draft permit.

German Barria
Enviromental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767the draft
Illinois Environmental Protection Agency

From: Barria, German
Sent: Friday, March 6, 2020 10:49 AM
To: John Pinion <jpinion@rka-inc.com>; 'General Iron; Kallas, Jim (jim@general-iron.com)' <jim@general-iron.com>
Cc: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Pilapil, Ray <Ray.Pilapil@Illinois.gov>
Subject: General III, LLC - ID #031600SFX

Hi John & Jim,

Please find attached the revised draft construction permit #19090021 that addresses comments from you and the result of the modeling.
Please provide us with your comments as soon as possible so we can move forward with public noting and scheduling the hearing.

Thank you.

German Barria
Enviromental Protection Specialist,
IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit
Phone: 217-785-0767
Illinois Environmental Protection Agency

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Fifty two (52) conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System (Located Outdoors):
One (1)ASR Feed Hopper with Vibratory Batch Feeder;
One (1) Magnetic Separator;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
Four (4) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material; and

Ninety two (92) Outdoor Material Transfer Points;
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source’s Lead (Pb) emissions, that relate to the expected emissions from the source to the maximum off-site ambient air impact not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS), specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and all other HAPs, that relate to the expected emissions from the source to the maximum off-site ambient air impact not to exceed the Agency for Toxic Substances and Disease Registry (ATSDSR), and Minimal Risk Levels, hazardous air contaminant air quality standard in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic substances with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K

(Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subaprt GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall

not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure

plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal

traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure This inspection will be completed once each day when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (d) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of notification to address the deficiency.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04)

shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Cyclones, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM - 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM - 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM - 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM - 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Trafic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the discharge of existing roll media filter in May/June 2018 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrocloric Acid (HCl) (T/Mo)	Hydrocloric Acid (HCl) (T/Yr)	Combined HAPs (T/Mo)	Combined HAPs (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.0003	0.0028	0.00004	0.0004	0.15	1.54	0.27	2.69

These limits are based on the maximum shreder material throughput in Condition 12(b)(i) above and measured emission rates from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 4.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.94	9.40

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 4.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 52.5 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.28	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.02
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, approximately 1% (12.86 tons/year) of uncontrolled VOM emissions from the Hammermill Shredder being emitted as CO emissions due to incomplete combustion, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
59 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
59 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions (Tons/Mo)	Combined HAP Emissions (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.01	0.02

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon metal HAPs being 0.49% of the total PM emissions measured at the discharge of existing roll media filter during June 2018 metal emission test at GII, LLC (I.D. # 031600BTB).

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for emission units and actitivies

inside building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of outdoor emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.41

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.60	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.77			0.42

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor

derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions (Tons/Mo)	Combined HAP Emissions (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

These limits are based on metal HAPs being 0.83% of the total PM emissions measured at the discharge of existing roll media filter during June 2018 metal emission test at GII, LLC (I.D. # 031600BTB).

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including

scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in

35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubbershall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 10 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A

Determination of Metals Emissions from Stationary Sources	USEPA Method 29
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

*USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an

observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability

status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench Packed Tower Scrubber associated with the Hammermill Shredder System;; and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, indivisual performing the observation, observation deails including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, Outdoor Material Transfer Points, and Fines Processing System at this source, with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

    a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

    b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

    c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

    d. to obtain and remove samples of any discharge or emission of pollutants, and

    e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

    a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

    b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

    c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

    d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Pilapil, Ray
Sent: Thursday, March 12, 2020 2:05 PM
To: Layman, Robb; Jones, Eric E.
Cc: Armitage, Julie
Subject: FW: GIII comments on revised draft construction permit 19090021
Attachments: 2020-03-11 R1 Draft GIII CP - Applicant comments.docx

FYI - - Comments on draft received.

Eric, please let me know when the revised Operating Program is received.

Thanks.

Ray

From: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Sent: Thursday, March 12, 2020 1:54 PM
To: Pilapil, Ray <Ray.Pilapil@Illinois.gov>
Cc: Barria, German <German.Barria@Illinois.gov>
Subject: FW: GIII comments on revised draft construction permit 19090021

FYI. Just received this.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, March 12, 2020 1:53 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>
Subject: [External] GIII comments on revised draft construction permit 19090021

RK & Associates, Inc.

Attached is a copy of the revised March 6, 2020, revised draft Construction Permit 19090021 that identifies General III, LLC (GIII) comments. A Microsoft Word version of the draft permit with GIII's comments identified using the track changes feature has been e-mailed to your attention. A hard copy of the attached document has also been sent to you via overnight delivery for your receipt on March 13, 2020.

Please review the comments identified in the attached document and forward any comments or questions you may have to my attention at your earliest convenience.

Thank you for your consideration in this matter.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR **JOHN J. KIM**, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Seventy (70) ~~Fifty two (52)~~ conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading; and
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System ~~(Located Outdoors)~~:
One (1)ASR Feed Hopper with Vibratory Batch Feeder;
~~One~~ Eight (~~1~~8) Magnetic Separator;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
~~Four~~Five (~~4~~5) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material; and

Ninety nine (99) ~~Ninety two (92)~~ ~~Outdoor~~ Material Transfer Points;
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

Commented [R11]: Emission estimates and modeling assessment included emissions from 70 conveyor transfer points.

Commented [R12]: Non-Ferrous system is comprised of the fines process (located indoors) and all other Non-Ferrous equipment is generally described as being outdoors; however, select equipment will be installed in a weather resistance enclosure to protect integrity of equipment.

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, ~~Outdoor Material Transfer Points,~~ and Fines Processing System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, ~~Outdoor Material Transfer Points,~~ and Fines Processing System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the source to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and ~~all~~ other metal HAPs, that relate ~~to~~ the expected emissions from the source to corresponding ~~the~~ maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDSR)~~,~~ ~~and~~ Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals ~~substances~~ with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

Commented [R13]: Outdoor transfer points are part of the Non-Ferrous system and should not be identified separately to avoid double counting.

Commented [R14]: Outdoor transfer points are part of the Non-Ferrous system and should not be identified separately to avoid double counting.

Commented [R15]: Should specify that only metal HAPs were modeled – not all other HAPs

Commented [R16]: Metal HAPs mean the HAP metals included in the list of metal analytes identified in USEPA Test Method 29 for metal emissions from stationary sources.

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System, ~~Outdoor Material Transfer Points, and Fines Processing System~~ are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

Commented [R17]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K

(Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System, ~~Outdoor Material Transfer Points, and Fines Processing System~~ are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

Commented [R18]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation ~~System, Outdoor Material Transfer Points, and Fines Processing System~~ are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

Commented [R19]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~,~~ ~~Outdoor Material Transfer Points, and Fines Processing System~~ at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~,~~ ~~Outdoor Material Transfer Points, and Fines Processing System~~ at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~,~~ ~~Outdoor Material Transfer Points, and Fines Processing System~~ at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 ~~Subaprt~~Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~,~~ ~~Outdoor Material Transfer Points, and Fines Processing System~~ at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~,~~ ~~Outdoor Material Transfer Points, and Fines Processing System~~ at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall

Commented [R110]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary

Commented [R111]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

Commented [R112]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

Commented [R113]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

Commented [R114]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary.

not apply ~~and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required~~ when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

Commented [R115]: 35 IAC 212.304 through 212.310 and 212.313 are not applicable requirements to GIII because GIII's SIC code (5093) is not listed among the affected SIC codes

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure

plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

i. The name and address of the source;

ii. The name and address of the owner or operator responsible for execution of the operating program;

iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal

traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure ~~This I~~inspection(s) will be completed at a frequency pursuant to the operating program for this facility ~~will be completed once each day~~ when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (d) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference provided the revision is not expressly disapproved, in writing, by the Illinois EPA. In the event that the Illinois EPA notifies the Permittee of a deficiency with any revision to the Fugitive Particulate Operating Program, the Permittee shall be required to revise and resubmit the Fugitive Particulate Operating Program within thirty (30) days of receipt of notification to address the deficiency.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the ~~Cyclones,~~ Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

Commented [R116]: Cyclone is integral to the process has been removed from other parts of this condition, therefore, it should be removed here.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test~~, or 1400°F in the absence of a compliance test~~. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

Commented [R117]: Testing of the RTO at GII was successfully completed in November 2019, and the demonstrated operating temperatures are identified in the test report.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM – 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM – 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM – 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM – 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle ~~Trafic~~Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the ~~discharge of~~ RTO in November 2019 ~~existing roll media filter in May/June 2018~~ at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	~~Hydroclori~~Hydrochloric Acid (HCl) (T/Mo)	~~Hydroclori~~Hydrochloric Acid (HCl) (T/Yr)	Combined HA (T/Mo)	Combined HA (T/

Commented [R118]: HAP emissions revised to match modeled emission rates. Safety Factor of 2 was used for modeling.

Commented [R119]: Does there need to be a definition of Combined HAPs for the shredder/RTO or can a foot note be added to refer to Combined HAPs pursuant to the permit application. For instance, total metal HAPs is limited to the 12 HAP metals identified in USEPA Test Method 29. Organic HAP are those identified in the ISRI handbook, and inorganic HAP is limited to HCl and HF.

Metal Shredder RTO/Scrubber Stack	0.0001 383	0.00138 28	0.000199 04	0.00199 04	0.0815	0.771.5 4	0.1327	1.332. 69

These limits are based on the maximum shredershredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 24.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.4794	4.709.40

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 24.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

Commented [R120]: Metal HAPs are a function of PM emissions. Metal HAPs were modeled with a safety factor of 2, therefore PM emission limits should be based on a safety factor of 2.0.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 512.475 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.268	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.092
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, ~~approximately 1% (~~12.86 tons/year~~)~~ of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB)~~of uncontrolled VOM emissions from the Hammermill Shredder being emitted as CO emissions due to incomplete combustion~~, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process

shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
7059 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
7059 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. Metal HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	~~Combined~~Total Metal HAP Emissions (Tons/Mo)	Total Metal HAP Emissions (Tons/
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.00151	0.01432

Commented [R121]: This value represents total Metal HAPs and the total value is the sum of the HAP metals identified in USEPA Tests Method 29.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.~~measured at the discharge of existing roll media filter during June 2018 metal~~

~~emission test at GII, LLC (I.D. # 031600BTB).~~

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and ~~actitivies~~activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other ~~outdoor~~ Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40~~1~~

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59~~60~~	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	~~-~~0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading	0.00351	0.04	0.41	0.00051	0.01	0.06

Points

Totals:	2.767	0.412

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. Metal HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	~~Combined~~Total Metal HAP Emissions (Tons/Mo)	Total Metal HAP Emissions (Tons/Y
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

Commented [R122]: This value represents total Metal HAPs and the total value is the sum of the HAP metals identified in USEPA Test Method 29.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing~~measured at the discharge of existing roll media filter during June 2018 metal emission test at GII, LLC (I.D. # 031600BTB)~~.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA

Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's

own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 12~~10~~ of this permit.

Commented [R123]: Should be Condition 12 to reference emission limitations.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
~~Determination of Inorganic Lead Emissions from Stationary Sources~~	~~USEPA Method 12~~**

Commented [R124]: Lead will be measured by USEPA Method 29. If identification of this method is retained in this permit, the indicated footnote (**) should be added to specify that Method 29 can be used as an alternate to Method 12 to measure lead emissions.

~~Visual Determination of Fugitive Emissions From Material Sources~~	~~USEPA Method 22~~
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

Commented [R125]: There is no standard for visible emission from equipment, only opacity. This test method is not required to determine compliance with applicable requirements.

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section ~~Section~~ Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the

standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission ~~source~~source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition

and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source

category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for

at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench/~~–~~Packed Tower Scrubber associated with the Hammermill Shredder System~~;~~ and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, ~~indivisual~~individual performing the observation, observation ~~deails~~details including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~, Outdoor Material Transfer Points, and Fines Processing System at this source,~~ with supporting calculations (tons/month and tons/year).

Commented [R126]: The Non-Ferrous Material Separation System consists of the elements identified on Page 1 and breaking out the individual parts of the system are not necessary

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance ~~on and after a date consistent with 35 Ill. Adm. Code 218.106, or on~~ and ~~after the initial start-up date~~ by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Commented [R127]: The reference to 218.106 and initial startup date do not need to be repeated here and should be removed for clarity.

Commented [R128]: Do the emission calculations in the permit application and specified emission limits in this permit satisfy this requirement?

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Bernoteit, Bob
Sent: Tuesday, March 17, 2020 4:06 PM
To: Layman, Robb
Subject: FW: GIII comments on revised draft construction permit 19090021
Attachments: 19090021 - General III LLC (03-17-2020).docx

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: Bernoteit, Bob
Sent: Tuesday, March 17, 2020 3:00 PM
To: John Pinion <jpinion@rka-inc.com>; Barria, German <German.Barria@Illinois.gov>
Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>
Subject: RE: GIII comments on revised draft construction permit 19090021

John,

Please see the attached for the latest version of the draft construction permit for G III.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, March 12, 2020 1:53 PM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>
Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>
Subject: [External] GIII comments on revised draft construction permit 19090021

RK & Associates, Inc.

Attached is a copy of the revised March 6, 2020, revised draft Construction Permit 19090021 that identifies General III, LLC (GIII) comments. A Microsoft Word version of the draft permit with GIII's comments identified using the track changes feature has been e-mailed to your attention. A hard copy of the attached document has also been sent to you via overnight delivery for your receipt on March 13, 2020.

Please review the comments identified in the attached document and forward any comments or questions you may have to my attention at your earliest convenience.

Thank you for your consideration in this matter.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR **JOHN J. KIM**, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Seventy (70) conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System:
One (1) ASR Feed Hopper with Vibratory Batch Feeder;
Eight (8) Magnetic Separators;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
Five (5) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;
Ninety nine (99) Material Transfer Points; and
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218

Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent

from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

Commented [BB1]: This is the full regulatory language from 35 Ill. Adm. Code 212.314.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits

contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall

be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure. Inspection(s) shall be completed at a frequency pursuant to the operating program for this facility when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (f) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Fugitive Particulate Operating Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

Commented [BB2]: This construction permit requires a new test. We need to specify a minimum preheat temperature before test is performed.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM – 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM – 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM – 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM – 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic)

operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1]Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2]Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	Combined HAP Emissions[3] (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3]Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including

scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in

35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 12 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A

Determination of Metals Emissions from Stationary Sources	USEPA Method 29**
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the

test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is

unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information

each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw

Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

Commented [BB3]: This condition reflects the language in 35 Ill. Adm. Code 218.991(a)(1).

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, March 18, 2020 4:33 PM
To: Bernoteit, Bob; Barria, German; Layman, Robb
Cc: Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com); GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) ; GII, LLC; Kallas, Jim (jimkallas@general-iron.com)
Subject: [External] Applicant comments on the March 17, 2020 version of the draft GIII construction permit
Attachments: 2020-03-18 GIII CP w-applicant comments.docx

Bob,

Please find attached GIII's comments on the March 17th draft of construction permit 19090021.

There are only two minor edits we have identified in the attached document to be consistent with previous comments accepted by IEPA.

The attached construction permit should be ready to issue after addressing the two minor edits.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Seventy (70) conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System:
One (1) ASR Feed Hopper with Vibratory Batch Feeder;
Eight (8) Magnetic Separators;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
Five (5) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;
Ninety nine (99) Material Transfer Points; and
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System~~, and Fines Processing System~~ being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218

Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent

from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits

contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall

be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

   vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure. Inspection(s) shall be completed at a frequency pursuant to the operating program for this facility when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (f) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Fugitive Particulate Operating Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM - 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM - 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM - 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM - 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic)

operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	Combined HAP Emissions[3] (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including

scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in

35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 12 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A

Determination of Metals Emissions from Stationary Sources	USEPA Method 29**
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

    i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

    ii. A summary of results;

    iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

    iv. Detailed description of test conditions, including:

        A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

        B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

        C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

    v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the

test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is

unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information

each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw

Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

    a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

    b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

    c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

    d. to obtain and remove samples of any discharge or emission of pollutants, and

    e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

    a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

    b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

    c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

    d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Bernoteit, Bob
Sent: Monday, March 30, 2020 8:46 AM
To: John Pinion
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) ; GII, LLC; Kallas, Jim (jimkallas@general-iron.com); Pilapil, Ray; Barria, German
Subject: General III, LLC (031600SFX, 19090021) - NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES
Attachments: 19090021 FEES 20-03-30.doc

John,

Please see the attached Notice of Additional Construction permit Application Fees letter. We are also sending a hard copy through the US mail. Thank you.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES

March 30, 2020

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.:	19090021
I. D. No.:	031600SFX
Applicant's Designation:	
Received:	September 25, 2019
Construction of:	Scrap Metal Recycling Facility
Location:	11600 South Burley Avenue, Chicago, Cook County, 60617
Additional Fee Now Due:	$10,000.00

This letter provides written notice that the Illinois EPA has determined that the application for construction permit referenced above is subject to additional application fees under Section 9.12 of Illinois' Environmental Protection Act (Act).

Based on its initial review of the application for purposes of fees, the Illinois EPA has determined that an additional fee of $10,000.00 is due.

You have 30 days to remit the assessed fee and revised Form 197-FEE to the Illinois EPA. Please submit payment to the Illinois EPA at the following address. Make either a check or money order payable to: "Illinois Environmental Protection Agency" and reference both the application and I.D. numbers assigned above. The Illinois EPA will not accept cash payments.

Illinois Environmental Protection Agency
Division of Air Pollution Control
Permit Section (MC 11)
P.O. Box 19506
Springfield, Illinois 62794-9506

The following explains the Illinois EPA's determination with respect to the fees that are due for this application.

1. Pursuant to Section 9.12(b)(3) of the Act, if a public hearing is held regarding the construction permit application, an administrative fee of $10,000. This fee shall be submitted within 30 days after the applicant is informed by the Illinois EPA that a public hearing will be held.

If you do not agree with the Illinois EPA's fee determination for this application, you may ask for reconsideration. A request for fee reconsideration must include a new certified estimate (e.g., Form 197-FEE) of

the fees that are due and payment for any additional fees that are due based on your new estimate. Two copies of this fee reconsideration request must be submitted and must include any supporting material used in the new estimate. On all submittals, please reference both the application and I.D. numbers assigned above.

If you have any questions on this fee determination, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:mlm

Layman, Robb

From: Bernoteit, Bob
Sent: Tuesday, March 31, 2020 11:38 AM
To: John Pinion
Cc: Barria, German
Subject: RE: Word version of GIII const permit
Attachments: 19090021 DRAFT 20-03-27.doc

John,

Please see the attached.

Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: John Pinion <jpinion@rka-inc.com>
Sent: Tuesday, March 31, 2020 11:15 AM
To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>
Cc: Barria, German <German.Barria@Illinois.gov>
Subject: [External] Word version of GIII const permit

Can you provide me with a copy of the Microsoft Word version of the final draft construction permit for GIII?

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Seventy (70) conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System:
One (1) ASR Feed Hopper with Vibratory Batch Feeder;
Eight (8) Magnetic Separators;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
Five (5) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;
Ninety nine (99) Material Transfer Points; and
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218

Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are

located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure. Inspection(s) shall be completed at a frequency pursuant to the operating program for this facility when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (f) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Fugitive Particulate Operating Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM - 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM - 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM - 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM - 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

	Process Rate	Emission Factor	PM, PM_{10}, and $PM_{2.5}$ Emissions

Emission Unit	(Tons/Mo)	(Tons/Yr)	(lb/Ton)	(Tons/Mo)	(Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	(Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	(Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	Combined HAP Emissions[3] (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as

may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 12 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29**

Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five

(5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated

compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA

and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material

Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall

notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

    a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

    b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

    c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

    d. to obtain and remove samples of any discharge or emission of pollutants, and

    e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

    a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

    b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

    c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

    d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:37 AM
To: Layman, Robb
Subject: FW: Please review and confirm

From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, June 24, 2020 9:39 AM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com) <haltolin@reserve-group.com>; Steve Joseph <SteveJoseph@reserve-group.com>
Subject: [External] RE: Please review and confirm

RK & Associates, Inc.

Eric,

Were these modified from the earier version of the Draft Permit or are just asking us to confirm what was already in the Draft permit?

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
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From: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Sent: Wednesday, June 24, 2020 11:37 AM

To: John Pinion <jpinion@rka-inc.com>
Subject: Please review and confirm

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
Ferrous Material Loading	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
7 Magnetic Separators	87,800	878,000	0.00014	0.01	0.06
1 Poker Picker	200	2,000	0.000204	0.01	0.01
2 Z-Box Separators	800	8,000	0.00014	0.01	0.01
ASR Stacker	25,800	258,000	0.00014	0.01	0.02
				Total:	3.03

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
7 Magnetic Separators	0.000046	0.01	0.02	0.000013	0.01	0.01
1 Poker Picker	0.00010	0.01	0.01	0.000015	0.01	0.01
2 Z-Box Separators	0.000046	0.01	0.01	0.000013	0.01	0.01
ASR Stacker	0.000046	0.01	0.01	0.000013	0.01	0.01
		Totals:	1.30			0.27

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum

moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

Eric E. Jones
Bureau of Air/Office of Air Pollution Control/ Permit Section
217/558-1264
Eric.E.Jones@Illlinois.gov

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Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:37 AM
To: Layman, Robb
Subject: FW: Please review and confirm

From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, June 24, 2020 1:36 PM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com) <haltolin@reserve-group.com>; Steve Joseph <SteveJoseph@reserve-group.com>
Subject: [External] RE: Please review and confirm

RK & Associates, Inc.

Eric,

The emission limits in Condition 12d for the Ferrous Material Processing System are correct as shown. As we discussed the descrepancies are in the equipment list on Page 1 of the permit.

To that end, I have included below a revised equipment list for the Ferrous Material Processing System (on Page 1 of the permit) to replace the existing equipment list

Ferrous Material Separation System:

70 Material Transfer Points including:

- Seven (7) Magnetic Separators;
- Two (2) Z-Box Separators with Cyclones;
- Two (2) Ferrous Metal Stacking Conveyors;
- One (1) Auto Shredder Residue (ASR) Stacking Conveyor

3 Truck/Rail/Barge Loading Points

7 material stockpiles including:

- 2 Poker Picker Stockpiles
- 2 Ferrous Metal Stockpiles
- 1 ASR Stockpile
- 1 Raw Material Stockpile
- 1 Fluff Stockpile (bin).

The above should resolve your questions.

We are working on the revised Non-Ferrous Material Processing System equipment list now and should have it for your in about 30 minutes.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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To: John Pinion <jpinion@rka-inc.com>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com) <haltolin@reserve-group.com>; Steve Joseph <SteveJoseph@reserve-group.com>
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See higlighted

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Sent: Wednesday, June 24, 2020 11:37 AM
To: John Pinion <jpinion@rka-inc.com>
Subject: Please review and confirm

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
Ferrous Material Loading	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
7 Magnetic Separators	87,800	878,000	0.00014	0.01	0.06
1 Poker Picker	200	2,000	0.000204	0.01	0.01
2 Z-Box Separators	800	8,000	0.00014	0.01	0.01
ASR Stacker	25,800	258,000	0.00014	0.01	0.02
				Total:	3.03

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
7 Magnetic Separators	0.000046	0.01	0.02	0.000013	0.01	0.01
1 Poker Picker	0.00010	0.01	0.01	0.000015	0.01	0.01
2 Z-Box Separators	0.000046	0.01	0.01	0.000013	0.01	0.01

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
ASR Stacker	0.000046	0.01	0.01	0.000013	0.01	0.01
		Totals:	1.30			0.27

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

Eric E. Jones
Bureau of Air/Office of Air Pollution Control/ Permit Section
217/558-1264
Eric.E.Jones@Illlinois.gov

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Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:38 AM
To: Layman, Robb
Subject: FW: Revised Page 1 Equipment List for Non-Ferrous Material Processing System

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From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, June 24, 2020 2:27 PM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com) <haltolin@reserve-group.com>; Steve Joseph <SteveJoseph@reserve-group.com>; Zwick, Ann M. <azwick@freeborn.com>
Subject: [External] Revised Page 1 Equipment List for Non-Ferrous Material Processing System

RK & Associates, Inc.

The emission limits in Condition 12.e.ii. (A&B) for the Non-Ferrous Material Processing System are correct as shown.

As we discussed the discrepancies are in the Non-Ferrous equipment list on Page 1 of the permit.

To that end, I have included below a revised equipment list for the Non-Ferrous Material Processing System (on Page 1 of the permit) to replace the existing equipment list.

The permit limits for the following categories of equipment in the Non-Ferrous system are identified in 12.e.ii

Non-Ferrous Material Separation System:

88 Uncontrolled Transfer Points including:
- Eight (8) Magnetic Separators;
- Seven (7) Eddy Current Separators (ECS) located in Enclosures;
- One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material

11 Controlled Transfer Points including:
- One (1) Air Vibe (Air Classifier) with Cyclone;

13 Uncontrolled Screening Points;
- Five (5) Polishers (Air Classifiers) with Cyclone;

12 Controlled Screening Points including:
- Four (4) Wind Sifters (Air Classifiers) with Cyclones;

2 Truck Loading Points including:
- One (1) ASR Feed Hopper with Vibratory Batch Feeder;

13 Stockpile Loading Points

Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

Note that the Fines Processing Building permitted emissions limits are identified in Condition 12.e.i. and is not included

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
E-mail: jpinion@rka-inc.com

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Layman, Robb

From: Jones, Eric E.
Sent: Tuesday, September 1, 2020 11:41 AM
To: Layman, Robb
Subject: FW: LEL.docx
Attachments: LEL.docx

From: Jones, Eric E.
Sent: Wednesday, June 24, 2020 7:50 PM
To: John Pinion <jpinion@rka-inc.com>
Subject: LEL.docx

For you review!

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1a. The Permittee shall install, operate, and maintain a continuous monitoring device for the inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream. This monitoring device shall make measurements at least every second and have an accuracy of at least ±1 percent. The data measured by this monitoring device shall be automatically recorded on at least a second by second basis in an electronic database.

b. The Permittee shall install, operate and maintain a continuous monitoring device for the control train for the Hammermill Shredder System for one of the following operational parameters. This monitoring device shall make measurements at least every minute and have an accuracy of at least ± 5 percent. The data measured by this device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database.

i. The amperage or usage of electrical power by the motor for the fan in the control train, or

ii. The inlet gas flow rate of the control train.

c. i. The Permittee shall install, operate and maintain a continuous monitoring device for the status of the emergency bypass vent on the RTO in the control train for the Hammermill Shredder System , i.e., whether this vent is closed or open. The data collected by this device shall be automatically recorded in an electronic database.

ii. For each event when the emergency bypass vent on the RTO is open while feed material is being sent to or being processed in the Hammermill Shredder System, the Permittee shall maintain records that include: the date, starting time and duration of the event; a description of the event; the monitored flammability of the gas stream at the start of the event; an estimate of the additional VOM emissions attributable to the event, with supporting data; the likely explanation for the event; and, if the stoppage of feed to the Hammermill Shredder System when this vent opens is not automated, the time that feed to this system ceased.

iii. If the duration of a bypass event exceeds 30 seconds and the feed to the Hammermill Shredder System continued during the event, the Permittee shall notify the Illinois EPA within 3 hours of the start of the event, with this notification made by email to the Manager of the Compliance Section in the Illinois EPA, Bureau of Air.

Iv.. The Permittee shall provide a summary of all bypass events that occur during a quarter in the Quarterly Reports required by Condition 25. For each event, this summary shall include the date, time, duration, description, likely explanation and estimated additional VOM emissions due to the event.

d. The Permittee shall operate the continuous monitoring devices required by Condition 1(a), (b) and (c)(i) at all times that the Hammermill Shredder System is in operation, including periods when the operation of this system is only temporarily out of service on an operating day.

Layman, Robb

From: Jones, Eric E.
Sent: Thursday, June 25, 2020 4:18 PM
To: Bernoteit, Bob
Subject: FW: GIII comments on Revised Construction Permit
Attachments: 2020-06-25 GIII Revised Draft CP with GIII Team Comments made.docx

---

From: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, June 25, 2020 2:11 PM
To: Jones, Eric E. <Eric.E.Jones@Illinois.gov>
Cc: GII, LLC; Labkon, Adam (adamlabkon@general-iron.com) <AdamLabkon@General-Iron.com>; Zwick, Ann M. <azwick@freeborn.com>; Reserve Management Group; Tolin, Hal (haltolin@reserve-group.com) <haltolin@reserve-group.com>; Steve Joseph <SteveJoseph@reserve-group.com>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <jimkallas@general-iron.com>
Subject: [External] GIII comments on Revised Construction Permit

RK & Associates, Inc.

Attached is a copy of the revised GIII construction permit with GIII's comments.

We may have a few minor items that we may identifiy and will let know if we do.

If you have any questions, please do not hesitate to contact me.

Regards,
John Pinion

RK & Associates, Inc.
2 South 631 Route 59, Suite B
Warrenville, Illinois 60555
Phone: 630-393-9000 x 208
Fax: 630-393-9111
Cell: 630-917-1455
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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

June 25, 2020:
This is the redline copy Eric Jones sent to John Pinion. All Agency redlines were accepted to create a 'clean' copy that GIII then make their comments on.

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted pursuant to the above-referenced application to the above-designated Permittee to CONSTRUCT a Scrap Metal Recycling Facility consisting of the following emission source(s) and/or air pollution control equipment:

Hammermill Shredder System:

One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor

Ferrous Material Separation System:

70 Material Transfer Points including:

Seven (87) Magnetic Separators;

Two (2) Z-Box Separators with Cyclones;

Two (2) Ferrous Metal Stacking Conveyors;

One (1) Auto Shredder Residue (ASR) Stacking Conveyor

32 Truck/Rail~~/Barge~~ Loading Area~~Points~~

1 Barge Loading Point

7 material stockpiles including:

2 Poker Picker Stockpiles

2 Ferrous Metal Stockpiles

1 ASR Stockpile

1 Raw Material Stockpile

1 Fluff Stockpile (bin).

Non-Ferrous Material Separation System:

Formatted: Underline

Commented [R11]: One of the magnet stands has a supports a dual magnet. All transfer point up to, through and discharging from the dual magnets were included in emission estimates and modeling. If somebody goes to the site and counts individual magnet (drums) they would count 8. If you counted only magnet stands, they would count 7. Can you change this to eight magnets to prevent confusion in the future.

Commented [R12]: These are three loading areas, two for truck and rail loading of ferrous scrap and one ferrous scrap barge loading. Rain and Truck loading occur in a common area adjacent to the ferrous metal stockpiles.

The truck and rail loading was part of a ferrous system area source in modeling. Emission factors for truck loading and rail car loading are the same.

88 Uncontrolled Transfer Points including:

- Fifty three (53) Conveyors;
- Twenty (20) Magnetic Separators;
- Fourteen (14) Eddy Current Separators (ECS) located in Enclosures;
- One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;

11 Controlled Transfer Points including:

- Nine (9) Conveyors;
- One (1) Air Vibe (Air Classifier) with Cyclone;
- One (1) Vibratory Batch Feeder;

13 Uncontrolled Screening Points including:

- Five (9) Polishers (Air Classifiers) with Cyclone;
- One (1) Vibratory Feeder;
- Three (3) Tec Screeners;

12 Controlled Screening Points including:

- Six (6) Wind Sifters (Air Classifiers) with Cyclones;
- Three (3) Tec Screeners;
- Six (3) AEI Ecostar Screeners;

2 Truck Loading Points including:

- One (1) ASR Feed Hopper with Vibratory Batch Feeder;

13 Stockpile Loading Points

Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

Miscellaneous Fugitive Sources

Raw Material Unloading/Handling;
Intermediate Ferrous Material and Product Stockpiles;
Fluff Storage and Loadout;
Material Loadout;
Roadways-Paved and unpaved; and
Parking Areas

This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and

other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave, Chicago).

f. Operation of the Scrap Metal Recycling Facility listed above is allowed under this construction permit provided an operating permit application is submitted to IEPA within ~~for a period of~~ twelve (12) months from the date that raw material is first processed through the Hammermill Shredder. This condition ~~supercedes~~supersedes Standard Condition 1 of this construction permit.

Commented [R13]: How can GIII be responsible for IEPA's challenge in issuing a FESOP (if public review is extended).

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one-hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The RTO associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Scrap Metal Recycling Facility not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the

wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. The Scrap Metal Recycling Facility ~~Ferrous Material Separation System, Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources~~ shall be operated under the provisions of a Fugitive Emissions Operating Program. This operating program was submitted by the Permittee and designed to limit fugitive particulate matter emissions to ensure compliance with 35 Ill. Adm. Code 212.301.

~~—~~b. The Fugitive Emissions Operating Program, as submitted by the Permittee pursuant to Condition 10(a) dated June 25, 2020, is incorporated herein by reference. The source shall ~~be~~ comply with the provisions of this ~~F~~ Program and any amendments to the Program submitted pursuant to Condition 10(c~~e~~).

c. The Fugitive Emissions Operating Program shall be amended from time to time by the Permittee so that the operating Program is current. Such amendments shall be consistent with Condition No. 10(a) and ~~(b)~~ shall be submitted to the Illinois EPA within thirty (30) days of ~~—~~amendment. Any future revision to the Program made by the Permittee during the permit term is automatically incorporated by reference unless expressly disapproved by the Illinois EPA within thirty (30) days of submission. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

d. The Hammermill Shredder System shall be operated under the provisions of a Feedstock Management Plan. This plan shall be submitted to the Illinois EPA for review and approval at least ninety (90) days prior to initially receiving recycling materials at the facility. At a minimum, this plan must contain the following:

i. Incoming material restrictions;

ii. Load inspection procedures;

iii. List of materials accepted requiring special handling;

iv. Procedures for each of the materials requiring special handling;

v. Personnel training procedures.

~~i. Applicable regulations and restrictions on the receipt of materials;~~

~~ii. List of materials that cannot be accepted by the facility;~~

~~iii. Procedures for identifying materials that cannot be accepted and procedures for when materials that cannot be accepted are discovered during inspection of materials by the facility;~~

~~iv. List of materials that can be accepted and conditions under which they can be accepted;~~

~~v. Inspection procedures for each category of material accepted (Appliances, vehicles, scrap peddlers, etc.);~~

~~vi. Sorting procedures; and~~

~~vii. Training procedures.~~

11a. The Roll-Media Filter, RTO, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

b. The RTO combustion chambers shall be preheated to at least the manufacturer's recommended temperature, but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three-hour block average.

c. The RTO shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

d. The RTO associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

e. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a 15 block minute averages~~minute by minute~~ basis and on an hourly average in an electronic database.

f. The Roll-Media Filter associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a 15 block minute average ~~minute by minute~~ basis and on an hourly average in an electronic database.

g. The Dust Collector (DC-01) associated with the Fines Processing

Building shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated, and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a hourly basis in an electronic database.

h. The monitoring devices required in conditions 11(e)-(h) shall be installed and fully operational at ~~least 30 days~~ prior to first processing material through ~~initial startup of~~ the Hammermill Shredder System.

i. The Permittee shall operate the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive Emissions Operating Program under the provisions of an Operation and Maintenance Plan. At least thirty (30) ~~ninety (90)~~ days prior to first processing material through ~~initial startup of~~ the Hammermill Shredder System, the Permittee shall submit to the Illinois EPA for review and approval an Operation and Maintenance Plan for the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive Emissions Operating Program. This plan shall provide specific operating parameters and inspection, and maintenance practices and procedures for the for each system or control device identified in this condition, including frequencies of such specific activities and actions, ~~individuals responsible for such activities and actions~~, and associated recordkeeping procedures.

~~j.~~ The Permittee shall install, operate, and maintain a continuous gas flammability monitoring device for the shredder exhaust gas stream. This device shall measure the percent of the Lower Explosive Limit (% LEL) or percent of the Lower Flammability Limit (% LFL) of the shredder exhaust gas. This monitoring device shall have an accuracy of at least ±3 percent of full scale. Values measured by this device shall be automatically recorded at least once per second and stored in an electronic data base.~~The Permittee shall install, operate, and maintain a continuous monitoring device for the inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream. This monitoring device shall make measurements at least every second and have an accuracy of at least ±1 percent. The data measured by this monitoring device shall be automatically recorded on at least a second by second basis in an electronic database.~~

~~k. The Permittee shall install, operate and maintain a continuous monitoring device for the control train for the Hammermill Shredder System for one of the following operational parameters. This monitoring device shall make measurements at least every minute and have an accuracy of at least ± 5 percent. The data measured by this device shall be automatically recorded on at least a minute by minute~~

~~basis and on an hourly average in an electronic database.~~

k. The permittee shall determine the shredder exhaust gas flow rate to be used to calculate VOM emissions from a Bypass Event. For this purpose, the exhaust gas flow rate shall be determined using one of the options identified below. When a monitoring device is used, the accuracy of the device shall have be at least +/- 5 percent. Data measured by a monitoring device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database.

i. By monitoring t~~T~~he amperage or usage of electrical power by the motor for the Roll Media Filter exhaust fan, ~~in the control train, or~~

ii. By monitoring the shredder exhaust gas flow rate; or~~The inlet gas flow rate of the control train~~.

~~ii.~~iii. By an alternate method of calculation approved by the Illinois EPA.

~~l~~. The Permittee shall install, operate, and maintain a continuous monitoring device for the status of the RTO emergency bypass damper~~vent on the RTO in the control train for the Hammermill Shredder System~~, i.e., whether this damper ~~vent~~ is closed or open. The data collected by this device shall be automatically recorded in an electronic database.

m. The Permittee shall operate the continuous monitoring devices required by Condition 11(j~~a~~), (k~~b~~) and (l~~c~~) ~~(i~~) at all times that the Hammermill Shredder System is in operation.~~, including periods when the operation of this system is only temporarily out of service on an operating day.~~

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack and Rail and Truck Loading)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM – 5:00 PM	10 hrs/day
Barge, ~~Railcar, or Truck~~ Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM – 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM – 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM – 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

Commented [R14]: ferrous material loadout to railcar or truck was included in the modeled emission rate and hours of operation of the Ferrous System.

Commented [JEE5]: Pinion

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the RTO associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
2 Rail/Truck Loading areas and 1 Barge loading point~~3 Truck & Barge Loading Points~~	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	(Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	(Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
2 Rail/Truck Loading areas and 1 Barge loading point~~3 Truck & Barge Loading Points~~	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	(Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	(Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	(Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and

grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to

light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	Combined HAP Emissions[3] (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12-month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the Permittee shall:

i. Conduct opacity observations from the Hammermill Shredder System stack, each emission unit in the Ferrous Material Separation

System, Fines Processing Building (DC-01), each emission unit in the Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123 and Condition 3(a) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

ii. Measure and quantify (gr/dscf and lb/hr) the emissions of PM, PM_{10}, and $PM_{2.5}$ from the Fines Processing Building (DC-01) during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 212.324(b), and Conditions 3(d)-(g), and 12(e)(i) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

iii. Measure and quantify the emissions of PM (gr/dscf and lb/hr), PM_{10} (gr/dscf and lb/hr), $PM_{2.5}$ (gr/dscf and lb/hr), SO_2 (ppmv and lb/hr), CO (ppmv and lb/hr), HCl (ppmv and lb/hr), and Metals (ppmv and lb/hr) emissions from the Hammermill Shredder System during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, and Conditions 3(d)-(g), 12(b)(ii), (b)(iii) and (c) of this permit. ~~If during this initial test, VOM capture efficiency meets the criteria of a PTE as determined by USEPA Method 204, testing required under this condition shall be conducted once every five (5) years from the preceding testing date. However, if the VOM capture efficiency does not meet the criteria of a PTE as determined by USEPA Method 204, subsequent testing required under this condition shall be conducted once every twelve (12) months from the preceding testing date.~~

~~a.~~ Measure (ppmv) and quantify (lb/hr) from the inlet and outlet emissions of VOM from the RTO, measure VOM capture efficiency of capture system, determine the destruction efficiency of the RTO, and calculate overall VOM control efficiency for the capture system and RTO, during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 218.986(a), and Condition 12(b)(i) of this permit. If VOM capture efficiency meets the criteria of a PTE as determined by USEPA Method 204 or an alternate method approved by the Illinois EPA to demonstrate capture efficiency, testing under this condition shall be conducted once every five (5) years from the preceding testing date. ~~However, if the VOM capture efficiency does not meet the criteria of a PTE, as determined by USEPA Method 204, subsequent testing required under this condition, shall be conducted once every twelve (12) months from the preceding testing date.~~

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA:(refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods).

Commented [R16]: None of the pollutants in paragraph iii are impacted by capture efficiency. Capture efficiency testing is only valid for VOM.

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Commented [R17]: Does Method 204 used here mean 204 A-F as identified in the list of required test methods in 16b below?

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Gas Analysis for the Determination of Dry Molecular Weight-Instrumental Method	USEPA Method 3A
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions from Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29**
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202
Criteria for and Verification of a Permanent or Temporary Total Enclosure	USEPA Method 204, 204(A-F)

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. Within sixty ~~ninety~~ (60~~90~~) days prior to the actual date of testing~~of issuance of this permit~~, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager.

This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance

was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with

any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status regarding the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and

repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying using emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the RTO and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Roll Media Filter, RTO, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. A copy of the Fugitive Emissions Operating Program, any amendments or revisions to the Fugitive Emissions Operating Program, and a record of activities completed according to the Fugitive Particulate Operating Program.

iii. A. Daily records demonstrating the temperature for the RTO;

B. Daily records demonstrating pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber

C. Daily records demonstrating scrubbant liquid flow rate of the Quench/Packed Tower Scrubber;

D. Daily records demonstrating the pH of the scrubbant of the Quench/Packed Tower Scrubber;

E. Daily records demonstrating inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream

F, If a monitoring device is used to measure fan amperage of the Roll Media Filter discharge fan or the Scrubber exhaust gas flow rate, d~~D~~aily records demonstrating amperage or usage of electrical power by the motor for the fan in the control train or inlet gas flow rate of the control train, if a calculation method is used a copy of the calculation and supporting information shall be maintained in facility records.~~;~~

G. Daily records demonstrating status of the emergency bypass vent on the RTO in the control train for the Hammermill Shredder System, i.e., whether this vent is closed or open.

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken.

v. Natural gas usage for RTO (mmscf/month and mmscf/year).

vi. Hours of operation for Non-Ferrous System, Barge loading, Hammermill Shredder System, RTO, and Quench/Packed Tower Scrubber (hours/day, hours/month and hours/year).

vii. Type and amount material received by the facility (tons/month and tons/year).

viii. Type and amount material processed by Hammermill Shredder System (tons/month and tons/year).

ix. Material throughput (tons/month and tons/year) for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building.

x. Amount of non-metallic materials (fluff) shipped offsite (tons/month and tons/year).

x~~i~~i. Hours of operation for Dust Collector DC-01 (hours/month and hours/year).

xii. For each event when the emergency bypass vent on the RTO is open while feed material is being sent to or being processed in the Hammermill Shredder System, the Permittee shall maintain records that include: the date, starting time and duration of the event; a description of the event; the monitored flammability of the gas stream at the start of the event; an estimate of the additional VOM emissions attributable to the event, with supporting data; the likely explanation for the event.~~; and, if the stoppage of feed to the Hammermill Shredder System when this vent opens is not automated, the time that feed to this system ceased..;~~. and

xiii. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required under this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24a. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt date of material to be processed in the Hammermill Shredder within seven (7) calendar days after the initial receipt date.

b. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager ~~of the initial startup date of the Hammermill Shredder~~ within seven (7) calendar days from the date that raw material is first processed through the hammermill shredder.~~after initial startup.~~

c. If, during a Bypass Event, the feed to the hammermill shredder continues for 30 seconds or more after the start of a Bypass Event, ~~the duration of a bypass event exceeds 30 seconds and the feed to the Hammermill Shredder System continued during the event,~~ the Permittee shall notify the Illinois EPA within 3 hours of the start of the event, with this notification made by email to the Manager of the Compliance Section in the Illinois EPA, Bureau of Air. For all other Bypass

Eventsevents, the Permittee shall submit to the Illinois EPA, Bureau of Air, Compliance Section Manager, within seven (7) calendar days of such event, a report for detailing the following information for each event when feed to the shredder was interlocked due to the LEL system: % of LEL detected, duration of the event, and VOM emissions with supporting documentation.

25a. The Permittee shall submit a quarterly report containing the following information for each month of the quarter:

i. Type and amount material received by the facility;

ii. Type and amount material processed by Hammermill Shredder System;

iii. Throughput for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building;

iv. PM, PM_{10}, and HAPs emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations;

v. A summary of all bypass events that occur during the quarter and for each event, this summary shall include the date, time, duration, description, likely explanation and estimated additional VOM emissions due to the event.

vi. VOM emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations; and

vii. Amount of non-metallic materials (fluff) shipped offsite.

b. The Permittee shall submit this quarterly report to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) calendar days of the end of a calendar quarter.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276

Commented [R18]: This information is of competitive value and should be treated as Confidential Business Information.

Commented [R19]: This information is of competitive value and should be treated as Confidential Business Information.

Springfield, Illinois 62794-9276

and an electronic copy of test protocols and test results to epa.boa.smu@illinois.gov

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

Layman, Robb

From: Jones, Eric E.
Sent: Thursday, June 25, 2020 6:05 AM
To: John Pinion
Subject: GIII Revised Draft.docx
Attachments: GIII Revised Draft.docx; 19090021 DRAFT 20-03-27.doc

There may be other edits based on discussions on FDP.

Please provide comments as soon as possible. Preference would be before noon but no later than 1.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
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JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted pursuant to the above--referenced application to the above-designated Permittee to CONSTRUCT a Scrap Metal Recycling Facility consisting of the following emission source(s) and/or air pollution control equipment ~~consisting of~~:

Hammermill Shredder System:

One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor~~;~~

Ferrous Material Separation System:

70 Material Transfer Points including:

- Seven (7) Magnetic Separators;
- Two (2) Z-Box Separators with Cyclones;
- Two (2) Ferrous Metal Stacking Conveyors;
- One (1) Auto Shredder Residue (ASR) Stacking Conveyor

3 Truck/Rail/Barge Loading Points

7 material stockpiles including:

- 2 Poker Picker Stockpiles
- 2 Ferrous Metal Stockpiles
- 1 ASR Stockpile
- 1 Raw Material Stockpile
- 1 Fluff Stockpile (bin).

~~Ferrous Material Separation System:~~
~~One (1) Poker Picker with Gravity Chutes;~~
~~Seven (7) Magnetic Separators;~~
~~Two (2) Z-Box Separators with Cyclones;~~

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~~Seventy (70) conveyor transfer points;~~
~~Two (2) Ferrous Metal Stacking Conveyors;~~
~~One (1) Auto Shredder Residue (ASR) Stacking Conveyor~~;
~~Ferrous Material Barge Loading;~~
~~Ferrous Material Rail Car Loading; and~~
~~Ferrous Material Truck Loading~~

~~Non-Ferrous Material Separation System~~:
~~One (1) ASR Feed Hopper with Vibratory Batch Feeder;~~
~~Eight (8) Magnetic Separators;~~
~~Three (3) Screens;~~
~~Seven (7) Eddy Current Separators (ECS) located in Enclosures;~~
~~Four (4) Wind Sifters (Air Classifiers) with Cyclones;~~
~~Five (5) Polishers (Air Classifiers) with Cyclone;~~
~~One (1) Air Vibe (Air Classifier) with Cyclone;~~
~~One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;~~
~~Ninety nine (99) Material Transfer Points; and~~

Fines Processing Building - with All Equipment in Building Controlled by Dust Collector DC-01

Miscellaneous Fugitive Sources

Raw Material Unloading/Handling;
Intermediate Ferrous Material and Product Stockpiles;
~~;~~
Fluff Storage and Loadout;
Material Loadout;
Roadways-Paved and unpaved; and
Parking Areas

~~pursuant to the above-referenced application.~~ This Permit is subject to standard conditions attached hereto and the following special condition(s):

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1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave, Chicago).

f. Operation of the ~~equipment~~ Scrap Metal Recycling Facility listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder. This condition supercedes Standard Condition 1 of this construction permit

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, ~~and~~ Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage

activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any ~~one hour~~one-hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The ~~Regenerative Thermal Oxidizer (RTO)~~RTO associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person

shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d),

or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Scrap Metal Recycling Facility ~~Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source~~ not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Scrap Metal Recycling Facility ~~Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source~~ not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Scrap Metal Recycling Facility ~~Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source~~ not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Scrap Metal Recycling Facility~~Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source~~ not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Scrap Metal Recycling Facility ~~Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source~~ not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind

speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. ~~All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).~~

~~b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).~~

~~c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).~~

~~d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).~~

~~e.~~ The Ferrous Material Separation System, Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources ~~emission units described in Conditions 10(a) through (d)~~ shall be operated under the provisions of a~~n~~ Fugitive Emissions O~~o~~perating P~~p~~rogram.~~, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such~~This operating program was submitted by ~~shall be~~ the Permittee and designed to limit fugitive particulate matter emissions to ensure compliance with 35 Ill. Adm. Code 212.301.~~applicable limits and standards.~~

b. ~~f. As a minimum the operating program shall include the following:~~

~~i. The name and address of the source;~~

~~ii. The name and address of the owner or operator responsible for execution of the operating program;~~

~~iii. A map or diagram of the source showing approximate locations of storage~~

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piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

iv. Location of unloading and transporting operations with pollution control equipment;

v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure. Inspection(s) shall be completed at a frequency pursuant to the operating program for this facility when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Emissions Operating Program, as submitted by the Permittee pursuant to Condition 10(ea) dated March 20, 2020June 25, 2020, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

ic. The Fugitive Particulate Emissions Operating Program shall be amended from time to time by the Permittee so that the operating pProgram is current. Such amendments shall be consistent with Condition No. 10(ae) and (bf) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference. unless expressly disapproved by the Illinois EPA within thirty (30) days of submissionIn the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Fugitive Particulate Operating Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification..

d. The Hammermill Shredder System shall be operated under the provisions of a Feedstock Management Plan. This plan shall be submitted to the

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Illinois EPA for review and approval at least ninety (90) days prior to initially receiving recycling materials at the facility. At a minimum, this plan must contain the following:

i. Applicable regulations and restrictions on the receipt of materials;

ii. List of materials that cannot be accepted by the facility;~~.~~

iii. Procedures for identifying materials that cannot be accepted and procedures for when materials that cannot be accepted are discovered during inspection of materials by the facility;

iv. List of materials that can be accepted and conditions under which they can be accepted;~~ and~~

v. Inspection procedures for each category of material accepted (Appliances, vehicles, scrap peddlers, etc.);

vi. Sorting procedures; and

vii. Training procedures.~~;~~

~~11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.~~

~~b~~a. The Roll-Mmedia Filter, ~~Regenerative Thermal Oxidizer (~~RTO~~)~~, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

~~c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.~~

~~d~~b. The ~~Regenerative Thermal Oxidizer (RTO)~~RTO combustion chambers shall be preheated to at least the manufacturer's recommended temperature, but no less than the temperature at which compliance was demonstrated in the most recent compliance test, or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a ~~three hour~~three-hour block average.

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ec. The ~~Regenerative Thermal Oxidizer (RTO)~~RTO shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

~~d f~~. The ~~Regenerative Thermal Oxidizer (RTO)~~RTO associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

~~g~~e. ~~,~~ The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database.

~~h~~f. The Roll-Media F~~f~~ilter associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database.

g. The Dust Collector (DC-01) associated with the Fines Processing Building shall be equipped with a monitoring device for pressure differential. This monitoring device shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications. The data measured by this device shall be automatically recorded on at least a hourly basis in an electronic database.

h. The monitoring devices required in conditions 11(e)-(~~*~~h)~~(~~ shall be installed and fully operational at least 30 days prior to initial startup of the Hammermill Shredder System.

i. The Permittee shall operate the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive Emissions Operating Program under the provisions of an Operation and Maintenance Plan. ~~Within 30 days of the~~At least ninety (90) days prior to initial startup of the Hammermill Shredder System, the Permittee shall submit to the Illinois EPA for review and approval an Operation and Maintenance Plan for the capture system, Roll-Media Filter, RTO and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, Dust Collectors (DC-01 through DC-04) and equipment used for the control of fugitive dust identified in the Fugitive

Emissions Operating Program~~Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval.~~ ~~a Metal Shredder System operation and maintenance plan that~~This plan shall provide ~~details~~ specific ~~operation~~operating parameters and inspection, and maintenance practices and procedures for the for each system or control device ~~equipment~~ identified in this ~~Permit~~condition, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

j. The Permittee shall install, operate, and maintain a continuous monitoring device for the inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream. This monitoring device shall make measurements at least every second and have an accuracy of at least ±1 percent. The data measured by this monitoring device shall be automatically recorded on at least a second by second basis in an electronic database.

k. The Permittee shall install, operate and maintain a continuous monitoring device for the control train for the Hammermill Shredder System for one of the following operational parameters. This monitoring device shall make measurements at least every minute and have an accuracy of at least ± 5 percent. The data measured by this device shall be automatically recorded on at least a minute by minute basis and on an hourly average in an electronic database.

i. The amperage or usage of electrical power by the motor for the fan in the control train, or

ii. The inlet gas flow rate of the control train.

l. The Permittee shall install, operate and maintain a continuous monitoring device for the status of the emergency bypass vent on the RTO in the control train for the Hammermill Shredder System, i.e., whether this vent is closed or open. The data collected by this device shall be automatically recorded in an electronic database.

m. The Permittee shall operate the continuous monitoring devices required by Condition 1(a), (b) and (c)(i) at all times that the Hammermill Shredder System is in operation, including periods when the operation of this system is only temporarily out of service on an operating day. ~~ninety ()~~ ~~forty-five ()~~

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

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Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM – 5:00 PM	10 hrs/day
Barge, Railcar, or Truck Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM – 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM – 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle ~~Traffic)*~~Traffic)—*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM – 5:00 PM	12 hrs/day

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* The roadway fugitive emissions (Facility Vehicle Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Mo)	PM, PM_{10}, and $PM_{2.5}$ Emissions (Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

~~c.~~ Emissions from fuel combustion in the ~~Regenerative Thermal Oxidizer (RTO)~~RTO associated with the Hammermill Shredding System shall not exceed the following limits:

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i. Natural gas u~~U~~sage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	Emissions (Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09
~~Volatile Organic Material (VOM)~~	~~5.5~~	~~0.02~~	~~0.14~~

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process

shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

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Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	PM Emissions (Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile

loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points	0.00074	0.01	0.14	0.00005	0.01	0.01

(Controlled)						
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	(Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	(Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	(Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running ~~12 month~~12-month total).

13a~~a~~. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

~~b. Testing required by Conditions 14, 15, and 16 shall be performed upon a~~

~~written request from the Illinois EPA by a qualified independent testing service.~~

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the Permittee shall:

i. Conduct o~~O~~pacity observations from the Hammermill Shredder System stack, each emission unit in the Ferrous Material Separation System, Fines Processing Building (DC-01), each emission unit in the Non-Ferrous Material Separation System, and Miscellaneous Fugitive Sources during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.123 and Condition 3(a) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

ii. Measure and quantify (gr/dscf and lb/hr)~~,~~ ~~the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and~~ the emissions of PM, PM_{10}, and $PM_{2.5}$~~, Pb and Mn emissions~~ from the ~~Non-Ferrous Material Separation System~~ Fines Processing Building (DC-01) ~~shall be measured and the VOM capture and destruction efficiencies of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined~~ during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code ~~218.986~~212.324(~~ab~~), and Conditions 3(d)-(g), and 12(e)(i) of this permit. Thereafter, this testing shall be conducted once every five (5) years from the preceding testing date.

iii. Measure and quantify the emissions of PM (gr/dscf and lb/hr), PM_{10} (gr/dscf and lb/hr), $PM_{2.5}$ (gr/dscf and lb/hr), SO_2 (ppmv and lb/hr), CO (ppmv and lb/hr), HCl (ppmv and lb/hr), and Metals (ppmv and lb/hr) emissions from the Hammermill Shredder System during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, and Conditions 3(d)-(g), 12(b)(ii), (b)(iii) and (c) of this permit. If during this initial test, VOM capture efficiency meets the criteria of a PTE as determined by USEPA Method 204, testing required under this condition~~i~~ shall be conducted once every five (5) years from the preceding testing date. However, if the VOM capture efficiency does not meet the criteria of a PTE as determined by USEPA Method 204, subsequent testing required under this condition shall be conducted once every twelve (12) months from the preceding testing date.

iv. ~~five ()~~Measure (ppmv) and quantify (lb/hr) from the inlet and outlet emissions of VOM from the RTO, measure VOM capture efficiency of capture system, determine the destruction efficiency of the RTO, and calculate overall VOM control efficiency for the capture system and RTO, during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 218.986(a), and Condition 12(b)(i) of this permit. If VOM capture efficiency meets the criteria of a PTE as determined by USEPA Method 204, testing under this condition shall be conducted once every five (5) years from the preceding testing date. However, if the VOM capture efficiency does not meet the criteria of a PTE, as

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determined by USEPA Method 204, subsequent testing required under this condition, shall be conducted once every twelve (12) months from the preceding testing date.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA—: ~~Refer~~ (refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods).

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources ~~With~~ with Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume ~~Through~~ through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Gas Analysis for the Determination of Dry Molecular Weight-Instrumental Method	USEPA Method 3A
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions f~~F~~rom Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions f~~F~~rom Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
~~Determination of Hydrogen Chloride Emissions From Stationary Sources~~	~~USEPA Method 26~~
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29**
Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202
Criteria for and Verification of a Permanent or Temporary Total Enclosure	USEPA Method 204, 204(A-F)

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. ~~At least~~Within ~~thirty~~ ninety (~~9~~30) days of issuance of this permit ~~prior to the actual date of testing~~, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five (5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager ~~without delay,~~ within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

~~g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).~~

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer's specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status ~~with regard to~~regarding the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63

for this purpose for ~~particular categories~~categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. ~~These records shall be retained for at least three (3) years after the date a test is performed.~~

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained. ~~for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.~~

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying ~~by the use of~~using emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day ~~and maintain the information at the source for a period of three years~~:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device,

monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the ~~Regenerative Thermal Oxidizer (RTO)~~RTO and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Roll Media Filter, ~~Regenerative Thermal Oxidizer (RTO)~~RTO, Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. ~~The Permittee shall keep a~~A copy of the Fugitive ~~Particulate~~ Emissions Operating Program, any amendments or revisions to the Fugitive ~~Particulate~~ Emissions Operating Program, and ~~the Permittee shall also keep~~ a record of activities completed according to the Fugitive Particulate Operating Program.

iii. A. Daily records demonstrating the temperature for the RTO;

B. Daily records demonstrating pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber

C. Daily records demonstrating scrubbant liquid flow rate of the Quench/Packed Tower Scrubber;

D. Daily records demonstrating ~~and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and~~ the pH of the scrubbant of the Quench/Packed Tower Scrubber;

E~~liquid~~. Daily records demonstrating inlet gas stream to the control train for the Hammermill Shredder System for the flammability of this gas stream as a percentage of the lower explosive limit (LEL) of this stream~~;~~

F, Daily records demonstrating amperage or usage of

electrical power by the motor for the fan in the control train or inlet gas flow rate of the control train.;

G. Daily records demonstrating status of the emergency bypass vent on the RTO in the control train for the Hammermill Shredder System, i.e., whether this vent is closed or open.

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken.~~;~~

v. Natural gas usage for RTO (mmscf/month and mmscf/year).~~;~~

vi. Hours of operation for Non-Ferrous System, Barge loading, Hammermill Shredder System, RTO, and Quench/Packed Tower Scrubber (hours/day, hours/month and hours/year).~~;~~

vii. Type and amount material received by the facility (tons/month and tons/year).~~;~~

viii. Type and amount material processed by Hammermill Shredder System (tons/month and tons/year).~~;~~

ix. Material throughput (tons/month and tons/year) for the ~~Raw Material Receiving and Handling System, Hammermill Shredder System,~~ Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing ~~System~~Building.~~;~~

x. Amount of non-metallic materials (fluff) shipped offsite (tons/month and tons/year).~~;~~

~~viii~~xii~~i~~. Hours of operation for Dust Collector DC-01 (hours/month and hours/year).~~;~~

~~xiii~~xiii~~v~~. ~~For~~ For each event when the emergency bypass vent on the RTO is open while feed material is being sent to or being processed in the Hammermill Shredder System, the Permittee shall maintain records that include: the date, starting time and duration of the event; a description of the event; the monitored flammability of the gas stream at the start of the event; an estimate of the additional VOM emissions attributable to the event, with supporting data; the likely explanation for the event; and, if the stoppage of feed to the Hammermill Shredder System when this vent opens is not automated, the time that feed to this system ceased.~~:~~.; and

~~ix~~xii. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required ~~by Condition 21(a) of~~under this permit

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shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. ~~i.~~ By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

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ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the

use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24a. The Permittee shall submit a written notification to ~~notify~~ the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt date of material to be processed in the Hammermill Shredder ~~and the date of the initial startup of the Hammermill Shredder~~ within seven (7) calendar days after the initial receipt date ~~each event has occurred~~.

b. The Permittee shall submit a written notification to the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial startup date of the Hammermill Shredder within seven (7) calendar days after initial startup.

c. If the duration of a bypass event exceeds 30 seconds and the feed to the Hammermill Shredder System continued during the event, the Permittee shall notify the Illinois EPA within 3 hours of the start of the event, with this notification made by email to the Manager of the Compliance Section in the Illinois EPA, Bureau of Air. For all other events, the Permittee shall submit to the Illinois EPA, Bureau of Air, Compliance Section Manager, within seven (7) calendar days of such event, a report for detailing the following information for each event when feed to the shredder was interlocked due to the LEL system: ~~,~~ % of LEL detected, duration of the event, and VOM emissions with supporting documentation.

25a. The Permittee shall submit a quarterly report containing the following information for each month of the quarter:

i. Type and amount material received by the facility;

ii. Type and amount material processed by Hammermill Shredder System;

iii. Throughput for the Ferrous Material Separation Process, Non-Ferrous Material Process, and Fines Processing Building;

iv. PM, PM_{10}, and HAPs emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations~~,~~;

v. A summary of all bypass events that occur during the quarter and for each event, this summary shall include the date, time, duration, description, likely explanation and estimated additional VOM emissions due to the event.

vi. VOM emissions from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation

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System with supporting calculations; and

vii. Amount of non-metallic materials (fluff) shipped offsite.

b. The Permittee shall submit this quarterly report to the Illinois EPA, Bureau of Air, Compliance Section Manager within thirty (30) calendar days of the end of a calendar quarter.

26a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and an electronic copy of test protocols and test results to epa.boa.smu@illinois.gov

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If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

   a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

   b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

   c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

   d. to obtain and remove samples of any discharge or emission of pollutants, and

   e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

   a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

   b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

   c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

   d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/785-1705

CONSTRUCTION PERMIT

PERMITTEE

General III, LLC
Attn: Jim Kallas
11600 South Burley Avenue
Chicago, Illinois 60617

Application No.: 19090021 I.D. No.: 031600SFX
Applicant's Designation: Date Received: September 25, 2019
Subject: Scrap Metal Recycling Facility
Date Issued:
Location: 11600 South Burley Avenue, Chicago, Cook County, 60617

This permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of:

Hammermill Shredder System:
One (1) Hammermill Shredder with Integral Water Injection System equipped with capture hood and Cyclone, and controlled by a Roll-Media Filter, 15.0 mmBtu/hour Natural Gas-Fired Regenerative Thermal Oxidizer (RTO), and Quench/Packed Tower Scrubber with feed and takeaway conveyors;
One (1) Vibratory Conveyor; and
One (1) Shredder Infeed Conveyor;

Ferrous Material Separation System:
One (1) Poker Picker with Gravity Chutes;
Seven (7) Magnetic Separators;
Two (2) Z-Box Separators with Cyclones;
Seventy (70) conveyor transfer points;
Two (2) Ferrous Metal Stacking Conveyors;
One (1) Auto Shredder Residue (ASR) Stacking Conveyor
Ferrous Material Barge Loading;
Ferrous Material Rail Car Loading; and
Ferrous Material Truck Loading

Non-Ferrous Material Separation System:
One (1) ASR Feed Hopper with Vibratory Batch Feeder;
Eight (8) Magnetic Separators;
Three (3) Screens;
Seven (7) Eddy Current Separators (ECS) located in Enclosures;
Four (4) Wind Sifters (Air Classifiers) with Cyclones;
Five (5) Polishers (Air Classifiers) with Cyclone;
One (1) Air Vibe (Air Classifier) with Cyclone;
One (1) Low Speed Shredder for Size Reduction of Clean Non-Ferrous Material;
Ninety nine (99) Material Transfer Points; and
Fines Processing Building – with All Equipment in Building Controlled by Dust Collector DC-01

pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1a. This permit is issued based on the emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System being less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result, this permit is issued based on the emissions of all HAPs from the above-listed equipment not triggering the requirements of Section 112(g) of the Clean Air Act.

b. This permit is issued based on the construction of the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 40 CFR 52.21 (Prevention of Significant Deterioration (PSD)). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Lead (Pb) from the above-listed equipment below the levels that would trigger the applicability of these rules.

c. This permit is issued based on the construction of the Hammermill Shredder System not constituting a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203 (Major Stationary Sources Construction and Modification). The source has requested that the Illinois EPA establish emission limitations and other appropriate terms and conditions in this permit that limit the emissions of Volatile Organic Material (VOM) from the above-listed equipment below the levels that would trigger the applicability of these rules.

d. This permit is issued based on the analysis of the data from the dispersion modeling of the source's Lead (Pb) emissions, that relate to the expected emissions from the project to the maximum off-site ambient air impacts not to exceed the primary and secondary National Ambient Air Quality Standards (NAAQS) for Lead, specifically 40 CFR 50.16. Furthermore, this permit is also issued based on the analysis of the data from the dispersion modeling of emissions of Manganese (Mn) and other metal HAPs, that relate the expected emissions from the project to corresponding maximum off-site ambient air impacts not to exceed the Agency for Toxic Substances and Disease Registry (ATSDR) Minimal Risk Levels, hazardous air contaminant air quality standards in the Wisconsin Department of Natural Resources air toxics rule (Wisconsin Administrative Code, Chapter NR 445 – Control of Hazardous Pollutants), and an inhalation risk greater than 1 in 1,000,000 for carcinogenic metals with a unit risk factor established by the United States Environmental Protection Agency (USEPA) or the California Air Resources Board (CARB).

e. For purposes of this permit, General III, LLC is considered a single source with South Chicago Property Management, Ltd. (I.D. No. 031600GYI, located at 11600 South Burley Ave).

f. Operation of the equipment listed above is allowed under this construction permit for a period of twelve (12) months from the date that raw material is first processed through the Hammermill Shredder.

g. The operation of the emission units under this Construction Permit shall not begin until construction of the associated air pollution control equipment is complete and reasonable measures short of actual operation have been taken to verify proper operation of the air pollution control equipment.

2a. Pursuant to 40 CFR 50.16(a), the national primary and secondary ambient air quality standards for Lead (Pb) and its compounds are 0.15 micrograms per cubic meter, arithmetic mean concentration over a 3-month period, measured in the ambient air as Pb either by:

i. A reference method based on Appendix G of 40 CFR Part 50 and designated in accordance with 40 CFR Part 53;

ii. An equivalent method designated in accordance with 40 CFR Part 53.

b. Pursuant to 40 CFR 50.16(b), the national primary and secondary ambient air quality standards for Pb are met when the maximum arithmetic 3-month mean concentration for a 3-year period, as determined in accordance with Appendix R of 40 CFR Part 50, is less than or equal to 0.15 micrograms per cubic meter.

3a. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart B (Visible Emissions). Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. This source is subject to 35 Ill. Adm. Code Part 212 Subpart K (Fugitive Particulate Matter). Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

d. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code Part 212 Subpart L (Particulate Matter Emissions from Process Emission Units). Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).

e. Pursuant to 35 Ill. Adm. Code 212.321(b), interpolated and extrapolated values of the data in 35 Ill. Adm. Code 212.321(c) shall be determined by using the equation:

$$E = A(P)^B$$

where:

P = Process weight rate; and
E = Allowable emission rate; and,

i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	1.214	2.54
B	0.534	0.534

ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lbs/hr
A	11.42	24.8
B	0.16	0.16

f. Pursuant to 35 Ill. Adm. Code 212.321(c), Limits for Process Emission Units for Which Construction or Modification Commenced on or After April 14, 1972:

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.20	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40

Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lbs/hr
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.	3.9	10.00	8.70
13.	4.8	15.00	10.80
18.	5.7	20.00	12.50
23.	6.5	25.00	14.00
27.	7.1	30.00	15.60
32.	7.7	35.00	17.00
36.	8.2	40.00	18.20
41.	8.8	45.00	19.20
45.	9.3	50.00	20.50
90.	13.4	100.00	29.50
140.	17.0	150.00	37.00
180.	19.4	200.00	43.00
230.	22.	250.00	48.50
270.	24.	300.00	53.00
320.	26.	350.00	58.00
360.	28.	400.00	62.00
408.	30.1	450.00	66.00
454.	30.4	500.00	67.00

where:

P = Process weight rate in metric or T/hr, and
E = Allowable emission rate in kg/hr or lbs/hr.

g. The Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System are subject to 35 Ill. Adm. Code 212.324 (Process Emission Units in Certain Areas). Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM_{10} from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.

h. This source is subject to 35 Ill. Adm. Code Part 212 Subpart U (Additional Control Measures). Pursuant to 35 Ill. Adm. Code 212.700(a), 35 Ill. Adm. Code 212 Subpart U (Additional Control Measures) shall apply to those sources in the areas designated in and subject to 35 Ill. Adm. Code 212.324(a)(1) or 212.423(a) and that have actual annual source-wide emissions of PM_{10} of at least fifteen (15) tons per year.

4. The Regenerative Thermal Oxidizer (RTO) associated with Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 214 Subpart K (Process Emission Sources). Pursuant to 35 Ill. Adm. Code 214.301, except as further provided by 35 Ill. Adm. Code Part 214, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

5a. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218

Subpart G (Use of Organic Material). Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.

b. Pursuant to 35 Ill. Adm. Code 218.302(a), emissions of organic material in excess of those permitted by 35 Ill. Adm. Code 218.301 are allowable if such emissions are controlled by one of the following methods:

Flame, thermal or catalytic incineration so as either to reduce such emissions to 10 ppm equivalent methane (molecular weight 16) or less, or to convert 85 percent of the hydrocarbons to carbon dioxide and water.

c. The Hammermill Shredder System is subject to 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). Pursuant to 35 Ill. Adm. Code 218.980(a):

i. A source is subject to 35 Ill. Adm. Code Part 218 Subpart TT if it contains process emission units not regulated by 35 Ill. Adm. Code Part 218 Subparts B, E, F (excluding 35 Ill. Adm. Code 218.204 (l)), H (excluding 35 Ill. Adm. Code 218.405), Q, R, S, T (excluding 35 Ill. Adm. Code 218.486), V, X, Y, Z or BB of this Part, which as a group both:

A. Have maximum theoretical emissions of 90.7 Mg (100 tons) or more per calendar year of VOM, and

B. Are not limited to less than 90.7 Mg (100 tons) of VOM emissions per calendar year in the absence of air pollution control equipment through production or capacity limitations contained in a federally enforceable permit or a SIP revision.

ii. If a source is subject to 35 Ill. Adm. Code Part 218 Subpart TT as provided in 35 Ill. Adm. Code Part 218 Subpart TT, the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall apply to a source's VOM emission units which are not included within any of the categories specified in 35 Ill. Adm. Code Part 218 Subparts B, E, F, H, Q, R, S, T, V, X, Y, Z, AA, BB, PP, QQ, or RR or which are not exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.

d. Pursuant to 35 Ill. Adm. Code 218.986(a), every owner or operator of an emission unit subject to 35 Ill. Adm. Code 218 Subpart TT shall comply with the requirements of 35 Ill. Adm. Code 218.986(a), (b), (c), (d), or (e) below.

Emission capture and control equipment which achieves an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.

6. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the New Source Performance Standards (NSPS) for Metallic Mineral Processing Plants, 40 CFR 60 Subpart LL because the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System at this source are not used to produce metallic mineral concentrates from ore.

7a. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Off-Site Waste and Recovery Operations, 40 CFR 63 Subpart DD, because the plant site is not a major source of HAP emissions as defined in 40 CFR 63.2.

b. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Primary Nonferrous Metals Area Sources—Zinc, Cadmium, and Beryllium, 40 CFR 63 Subpart GGGGGG, because the source will not be engaged in primary zinc production or primary beryllium production.

c. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Secondary Nonferrous Metals Processing Area Sources, 40 CFR 63 Subpart TTTTTT, because the source will not be engaged in secondary nonferrous metals processing as defined in 40 CFR 63.11472.

d. This permit is issued based on the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System at this source not being subject to the NESHAP for Nine Metal Fabrication and Finishing Source Categories, 40 CFR 63 Subpart XXXXXX, because the source will not be primarily engaged in the operations in one of the nine source categories listed in 40 CFR 63.11514(a)(1) through (9).

8a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of 35 Ill. Adm. Code 212.314 shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to 35 Ill. Adm. Code 212.314 is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

9a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324(f) shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:

i. Visual inspections of air pollution control equipment;

ii. Maintenance of an adequate inventory of spare parts; and

iii. Expeditious repairs, unless the emission unit is shutdown.

b. Pursuant to 35 Ill. Adm. Code 212.701(a), those sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall prepare contingency measure plans reflecting the PM_{10} emission reductions set forth in 35 Ill. Adm. Code 212.703. These plans shall become federally enforceable permit conditions. Such plans shall be submitted to the Illinois EPA by November 15, 1994. Notwithstanding the foregoing, sources that become subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U after July 1, 1994, shall submit a contingency measure plan to the Illinois EPA for review and approval within ninety (90) days after the date such source or sources became subject to the provisions of 35 Ill. Adm. Code Part 212 Subpart U or by November 15, 1994, whichever is later. The Illinois EPA shall notify those sources requiring contingency measure plans, based on the Illinois EPA's current information; however, the Illinois EPA's failure to notify any source of its requirement to submit contingency measure plans shall not be a defense to a violation of 35 Ill. Adm. Code Part 212 Subpart U and shall not relieve the source of its obligation to timely submit a contingency measure plan.

c. Pursuant to 35 Ill. Adm. Code 212.703(a), all sources subject to 35 Ill. Adm. Code Part 212 Subpart U shall submit a contingency measure plan. The contingency measure plan shall contain two levels of control measures:

i. Level I measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.

ii. Level II measures are measures that will reduce total actual annual source-wide fugitive emissions of PM_{10} subject to control under 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.

d. Pursuant to 35 Ill. Adm. Code 212.703(b), a source may comply with 35 Ill. Adm. Code Part 212 Subpart U through an alternative compliance plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions as required at 35 Ill. Adm. Code 212.703(a) and which has been approved by the Illinois EPA and USEPA as federally enforceable permit conditions. If a source elects to include controls on process emission units, fuel combustion emission units, or other fugitive emissions of PM_{10} not subject to 35 Ill. Adm. Code 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 at the source in its alternative control plan, the plan must include a reasonable schedule for implementation of such controls, not to exceed two (2) years. This implementation schedule is subject to Illinois EPA review and approval.

e. Pursuant to 35 Ill. Adm. Code 212.704(b), if there is a violation of the ambient air quality standard for PM_{10} as determined in accordance with 40 CFR Part 50, Appendix K, the Illinois EPA shall notify the source or sources the Illinois EPA has identified as likely to be causing or contributing to one or more of the exceedances leading to such violation, and such source or sources shall implement Level I or Level II measures, as determined pursuant to 35 Ill. Adm. Code 212.704(e). The source or sources so identified shall implement such measures corresponding to fugitive emissions within ninety (90) days after receipt of a notification and shall implement such measures corresponding to any nonfugitive emissions according to the approved schedule set forth in such source's alternative control plan. Any source identified as causing or contributing to a violation of the ambient air quality standard for PM_{10} may appeal any finding of culpability by the Illinois EPA to the Illinois Pollution Control Board pursuant to 35 Ill. Adm. Code 106 Subpart J.

f. Pursuant to 35 Ill. Adm. Code 212.704(e), the Illinois EPA shall require that sources comply with the Level I or Level II measures of their contingency measure plans, pursuant 35 Ill. Adm. Code 212.704(b), as follows:

   i. Level I measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, is less than or equal to 170 ug/m^3.

   ii. Level II measures shall be required when the design value of a violation of the 24-hour ambient air quality standard, as computed pursuant to 40 CFR 50, Appendix K, exceeds 170 ug/m^3.

10a. All storage piles of materials which are located within the source's property shall be sprayed with a surfactant solution or water, or treated by an equivalent method, in accordance with the operating program required by Condition 10(e).

b. All normal traffic pattern access areas surrounding storage piles and all normal traffic pattern roads and parking facilities which are

located on the source's property shall be paved or unpaved areas shall be treated with water, oils or chemical dust suppressants in accordance with the operating program required by Condition 10(e). All paved areas shall be cleaned as needed, in accordance with the operating program required by Condition 10(e). All areas treated with water, oils or chemical dust suppressants shall have the treatment applied, as needed, in accordance with the operating program required by Condition 10(e).

c. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods in accordance with the operating program required by Condition 10(e).

d. The crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and product truck and railcar loading operations associated with the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation System, Non-Ferrous Material Separation System, and Fines Processing System shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with the operating program required by Condition 10(e).

e. The emission units described in Conditions 10(a) through (d) shall be operated under the provisions of an operating program, consistent with the requirements set forth in set forth in Condition 10(f) and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to limit fugitive particulate matter emissions to ensure compliance with applicable limits and standards.

f. As a minimum the operating program shall include the following:

   i. The name and address of the source;

   ii. The name and address of the owner or operator responsible for execution of the operating program;

   iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;

   iv. Location of unloading and transporting operations with pollution control equipment;

   v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212.301, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

vi. Estimated frequency of application of dust suppressants by location of materials; and

vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.

g. The operating program shall include provisions for a visual inspection of the Hammermill Shredder enclosure. Inspection(s) shall be completed at a frequency pursuant to the operating program for this facility when the Hammermill Metal Shredder and associated RTO and Quench/Packed Tower Scrubber is in operation, and identify if any additional dust suppression measures are required. This inspection, and any corrective actions taken, will be recorded in accordance with the operating program required by Condition 10(e).

h. The Fugitive Particulate Operating Program, as submitted by the Permittee pursuant to Condition 10(e) dated December 11, 2019, is incorporated herein by reference. The source shall be operated under and shall comply with the provisions of this Fugitive Particulate Operating Program and any amendments to the Fugitive Particulate Operating Program submitted pursuant to Condition 10(e).

i. The Fugitive Particulate Operating Program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with Condition No. 10(e) and (f) and shall be submitted to the Illinois EPA within thirty (30) days of such amendment. Any future revision to the Fugitive Particulate Operating Program made by the Permittee during the permit term is automatically incorporated by reference. In the event that the Illinois EPA notifies the Permittee that further information regarding the revision to the Fugitive Particulate Operating Program is needed, the Permittee shall respond to the notice within thirty (30) days of receipt of notification.

11a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in material or installation of controls, in order to eliminate the odor nuisance.

b. The Roll-media Filter, Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System; and Dust Collectors (DC-01 through DC-04) associated with the Fines Processing System such that the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) are kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The Regenerative Thermal Oxidizer (RTO) combustion chambers shall be preheated to at least the manufacturer's recommended temperature but no less than the temperature at which compliance was demonstrated in the most recent compliance test or 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the Metal Shredder System and calculated as a three hour block average.

e. The Regenerative Thermal Oxidizer (RTO) shall only be operated with natural gas as the fuel. The use of any other fuel in the RTO may require that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

f. The Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredder System shall be equipped with a temperature monitoring device that is installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications and 35 Ill. Adm. Code 218.105(d)(2).

g. The Quench/Packed Tower Scrubber associated with the Hammermill Shredder System shall be equipped with a monitoring device for pressure differential, scrubbant liquid flow rate, and pH of the scrubbant liquid. These monitoring devices shall be installed, calibrated, operated and maintained, in accordance with vendor/manufacturer specifications.

h. Within 30 days of the startup of the Regenerative Thermal Oxidizer (RTO) and the Quench/Packed Tower Scrubber associated with the Hammermill Shredder System, the Permittee shall submit for Illinois EPA approval a Metal Shredder System operation and maintenance plan that details specific operation and maintenance practices for the equipment identified in this Permit, including frequencies of such specific activities and actions, individuals responsible for such activities and actions, and associated recordkeeping procedures.

12a. Operation of the source's emission units and activities shall not exceed the following limits:

i. Hours of operation:

Site Operation	Monday to Friday		Saturday	
Ferrous System Operation (includes Hammermill Shredder RTO/Scrubber Stack)	7:00 AM – 7:00 PM	12 hrs/day	7:00 AM - 5:00 PM	10 hrs/day
Barge Loading	7:00 AM – 3:00 PM	8 hrs/day	7:00 AM - 3:00 PM	8 hrs/day
Non-Ferrous System Operation	5:00 AM – 11:00 PM	18 hrs/day	5:00 AM - 11:00 PM	18 hrs/day
Roadway Fugitive Emissions (Facility Vehicle Traffic)*	5:00 AM – 7:00 PM	14 hrs/day	5:00 AM - 5:00 PM	12 hrs/day

* The roadway fugitive emissions (Facility Vehicle Traffic) operation limitations in the table above is only intended to reflect haul truck traffic (semi-trailers) on specified road segments accompanying deliveries of metal scrap and removal of waste material.

ii. The limitations on hours of operation for the source are based upon the meteorological hours modeled for each operation as specified on Table 1 of the modeling analysis and page 1 of supplement No. 1 to the Air Dispersion Modeling Report, dated January 24, 2020, for assessment of metal emission impacts.

b. Emissions from and operation of the Hammermill Shredder System shall not exceed the following limits:

i. VOM emissions:

Emission Unit	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Uncontrolled Emission Factor (lb/Ton)	VOM Emission (Tons/Mo)	VOM Emission (Tons/Yr)
Hammermill Shredder RTO/Scrubber Stack	100,000	1,000,000	0.5119	0.51	5.12

These limits are based on maximum shredder material throughput, an uncontrolled emission factor derived from a stack test at the inlet of the RTO in November 2019 at GII, LLC (I.D. # 031600BTB), and 98% removal efficiency by the RTO/Scrubber. All measured total hydrocarbon (THC) emissions are assumed to be VOM.

ii. HAP emissions:

Emission Unit	Lead (Pb) (T/Mo)	Lead (Pb) (T/Yr)	Manganese (Mn) (T/Mo)	Manganese (Mn) (T/Yr)	Hydrochloric Acid (HCl) (T/Mo)	Hydrochloric Acid (HCl) (T/Yr)	Combined HAPs[1] (T/Mo)	Combined HAPs[1] (T/Yr)
Metal Shredder RTO/Scrubber Stack	0.000138	0.00138	0.000199	0.00199	0.08	0.77	0.13	1.33

[1] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Hammermill Shredder System.

These limits are based on the maximum shredder material throughput in Condition 12(b)(i) above and measured emission rates from the November 2019 stack test at GII, LLC (I.D. # 031600BTB) adjusted by safety factor of 2.0.

iii. PM, PM_{10}, and $PM_{2.5}$ emissions:

	Process Rate	Emission Factor	PM, PM_{10}, and $PM_{2.5}$ Emissions

Emission Unit	(Tons/Mo)	(Tons/Yr)	(lb/Ton)	(Tons/Mo)	(Tons/Yr)
Metal Shredder RTO/Scrubber Stack	100,000	1,000,000	0.0047	0.47	4.70

These limits are based on maximum shredder material throughput in Condition 12(b)(i) above, emission factors derived from the May/June 2018 stack test at GII, LLC (I.D. # 031600BTB) adjusted by a safety factor of 2.0, and all measured filterable PM assumed to be PM_{10} and $PM_{2.5}$.

c. Emissions from fuel combustion in the Regenerative Thermal Oxidizer (RTO) associated with the Hammermill Shredding System shall not exceed the following limits:

i. Natural gas Usage: 6.57 mmscf/month, 51.47 mmscf/year

ii. Emissions from the combustion of natural gas:

Pollutant	Emission Factor (lbs/mmscf)	Emissions (Tons/Mo)	(Tons/Yr)
Carbon Monoxide (CO)	583.55	1.50	15.02
Nitrogen Oxides (NO_x)	100.0	0.26	2.57
Particulate Matter (PM, PM_{10}, and $PM_{2.5}$)	7.6	0.02	0.20
Sulfur Dioxide (SO_2)	0.6	0.01	0.09
Volatile Organic Material (VOM)	5.5	0.02	0.14

These limits are based on the maximum firing rate of the RTO burner (15.0 mmBtu/hour), maximum natural gas usage, 12.86 tons/year of CO emissions and 0.05 tons/year of SO_2 emissions based on data from the November 2019 stack test at GII, LLC (I.D. # 031600BTB), and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

d. Emissions from and operation of the Ferrous Material Separation Process shall not exceed the following limits:

i. Material process rates and Particulate Matter (PM) Emissions:

Emission Unit	Process Rate (Tons/Mo)	(Tons/Yr)	Emission Factor (lb/Ton)	PM Emissions (Tons/Mo)	(Tons/Yr)
70 Conveyor Transfer Points	1,444,050	14,440,500	0.00014	0.10	0.96
3 Truck & Barge Loading Points	137,600	1,376,000	0.000204	0.01	0.14
7 Stockpile Loading Points	300,000	3,000,000	0.00122	0.18	1.83
				Total:	2.93

ii. PM_{10} and $PM_{2.5}$ Emissions:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emissions (Tons/Mo)	$PM_{2.5}$ Emissions (Tons/Yr)
70 Conveyor Transfer Points	0.000046	0.03	0.31	0.000013	0.01	0.09
3 Truck & Barge Loading Points	0.00010	0.01	0.07	0.000015	0.01	0.01
7 Stockpile Loading Points	0.00058	0.09	0.87	0.000087	0.01	0.13
		Totals:	1.25			0.23

iii. HAP emissions:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[2] (Tons/Mo)	Combined HAP Emissions[2] (Tons/Yr)
Ferrous Material Separation Process	0.0007	0.0069	0.0004	0.0042	0.0015	0.0143

[2] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Ferrous Material Separation Process.

iv. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points and Truck/Barge Loading, stockpile loadings emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and K=0.053 ($PM_{2.5}$); U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile, 5.4% applied to raw scrap metal handling, 10% applied to ASR stockpile loading. The above limits for HAP emissions limits are based upon total metal HAPs being 0.49% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Ferrous Material Processing.

e. Emissions from and operation of the Non-Ferrous Material Separation Process and Fines Processing System shall not exceed the following limits:

i. PM, PM_{10}, and $PM_{2.5}$ emissions for Fines Separation System emission units and activities inside a building controlled by Dust Collector DC-01 shall not exceed 0.15 tons/month and 1.44 tons/year. This limit is based on PM, PM_{10}, and $PM_{2.5}$ emissions being calculated by using the stack flow rate (12,000 cfm) and grain loading of 0.005 gr/dscf and hours of operation.

ii. Emissions from and operation of other Non-Ferrous Separation System emission units shall not exceed the following limits:

A. Material process rates and Particulate Matter (PM) Emissions:

Emission Units	Process Rate (Tons/Mo)	Process Rate (Tons/Yr)	Emission Factor (lb/Ton)	PM Emission (Tons/Mo)	PM Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	333,876	3,338,757	0.00300	0.43	4.34
11 Conveyor Transfer Points (Controlled)	57,210	572,103	0.00014	0.01	0.04
13 Screening Points (Uncontrolled)	13,670	136,702	0.02500	0.17	1.71
12 Screening Points (Controlled)	42,209	422,085	0.00220	0.04	0.41
2 Truck Loading Points	45,847	458,466	0.00020	0.01	0.05
13 Stockpile Loading Points	23,338	233,378	0.00737	0.09	0.86
				Total:	7.40

B. PM_{10} and $PM_{2.5}$ emissions from outdoor emission units:

Emission Units	PM_{10} Emission Factor (lb/Ton)	PM_{10} Emissions (Tons/Mo)	PM_{10} Emissions (Tons/Yr)	$PM_{2.5}$ Emission Factor (lb/Ton)	$PM_{2.5}$ Emission (Tons/Mo)	$PM_{2.5}$ Emission (Tons/Yr)
88 Conveyor Transfer Points (Uncontrolled)	0.0011	0.16	1.59	0.000167	0.02	0.24
11 Conveyor Transfer Points (Controlled)	0.000046	0.01	0.01	0.000013	0.01	0.01
13 Screening Points (Uncontrolled)	0.0087	0.06	0.59	0.001317	0.01	0.09
12 Screening Points (Controlled)	0.00074	0.01	0.14	0.00005	0.01	0.01
2 Truck Loading Points	0.0001	0.01	0.02	0.000015	0.01	0.01
13 Stockpile Loading Points	0.00351	0.04	0.41	0.00051	0.01	0.06
		Totals:	2.76			0.41

C. The above limits for PM, PM_{10}, and $PM_{2.5}$ are based on the maximum material throughput, Standard emission factors from AP-42 (Table 11.19.2-2, Fifth Edition, Volume I, Update 2004, August 2004) for conveyors transfer points screening and Truck Loading, stockpile loading emission factor derived using AP-42, Section 13.2.4.3 (Table 13.2.4, AP-42, Fifth Edition, Volume I, November 2006) using coefficients of K=0.74 (PM), K=0.35 (PM_{10}), and $PM_{2.5}$ U (mean windspeed) = 9.0 mph, and M (minimum moisture content) = 1.5% applied to light material stockpile loading.

iii. HAP emissions from Non-Ferrous Material Separation Process shall not exceed the following limits:

Emission Unit	Lead (Pb) Emissions (Tons/Mo)	Lead (Pb) Emissions (Tons/Yr)	Manganese (Mn) Emissions (Tons/Mo)	Manganese (Mn) Emissions (Tons/Yr)	Combined HAP Emissions[3] (Tons/Mo)	Combined HAP Emissions[3] (Tons/Yr)
Non-Ferrous Material Separation Process	0.0042	0.0417	0.0016	0.0156	0.01	0.07

[3] Combined HAPs means the total of all individual HAPs (as defined in Section 112(b) of the Clean Air Act) that are emitted from the Non-Ferrous Material Separation Process.

These limits are based on total metal HAPs being 0.83% of the estimated total PM emissions based on metal HAP analyses performed on a site-specific sample of material at GII representing anticipated characteristics of Non-Ferrous Material Processing.

f. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).

13a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as

may be necessary.

b. Testing required by Conditions 14, 15, and 16 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

14a. Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.

b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.

d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.

e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for opacity or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.

15. Pursuant to 35 Ill. Adm. Code 218.988(a), when in the opinion of the Illinois EPA it is necessary to conduct testing to demonstrate compliance with 35 Ill. Adm. Code 218.986, the owner or operator of a VOM emission unit subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart TT shall, at his own expense, conduct such tests in accordance with the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105.

16a. Within sixty (60) days after the date raw material is first processed through the Hammermill Shredder, the PM, PM_{10}, $PM_{2.5}$, SO_2, CO, VOM, HCl, Pb and Mn emissions from the Hammermill Shredder System, and the PM, PM_{10}, $PM_{2.5}$, Pb and Mn emissions from the Non-Ferrous Material Separation System (DC-01) shall be measured and the VOM removal efficiency of the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be determined during conditions which are representative of maximum emissions in order to demonstrate compliance with 35 Ill. Adm. Code 212.321, 35 Ill. Adm. Code 218.986(a), and Condition 12 of this permit.

b. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 51, Appendix M and 40 CFR 60, Appendix A for USEPA test methods.

Sample and Velocity Traverses for Stationary Sources	USEPA Method 1
Sample and Velocity Traverses for Stationary Sources With Small Stacks or Ducts	USEPA Method 1A
Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube)	USEPA Method 2
Direct Measurement of Gas Volume Through Pipes and Small Ducts	USEPA Method 2A
Determination of Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube)	USEPA Method 2C
Measurement of Gas Volume Flow Rates in Small Pipes and Ducts	USEPA Method 2D
Gas Analysis for the Determination of Dry Molecular Weight	USEPA Method 3
Determination of Moisture Content in Stack Gases	USEPA Method 4
Determination of Particulate Matter from Stationary Sources	USEPA Method 5
Determination of Sulfur Dioxide from Stationary Sources	USEPA Method 6
Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure)	USEPA Method 6C
Visual Determination of the Opacity of Emissions from Stationary Sources	USEPA Method 9
Determination of Carbon Monoxide from Stationary Sources	USEPA Method 10
Determination of Inorganic Lead Emissions from Stationary Sources	USEPA Method 12
Visual Determination of Fugitive Emissions From Material Sources	USEPA Method 22
Determination of Total Gaseous Nonmethane Organic Emissions as Carbon	USEPA Method 25
Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer	USEPA Method 25A*
Determination of Hydrogen Chloride Emissions From Stationary Sources	USEPA Method 26
Determination of Hydrogen Halide and Halogen Emissions from Stationary Sources—Isokinetic Method	USEPA Method 26A
Determination of Metals Emissions from Stationary Sources	USEPA Method 29**

Determination of PM_{10} and $PM_{2.5}$ Emissions from Stationary Sources (Constant Sampling Rate Procedure)	USEPA Method 201A
Dry Impinger Method for Determining Condensable Particulate Emissions from Stationary Sources	USEPA Method 202

* USEPA Method 25A may only be used if outlet VOM concentration is less than 50 ppm as carbon (non-methane).

** USEPA Method 29 may be used as an alternate to USEPA Method 12 for lead emissions.

c. At least thirty (30) days prior to the actual date of testing, the Permittee shall submit a written test plan to the Illinois EPA, Bureau of Air, Compliance Section Manager. This plan shall include at a minimum:

i. The name (or other identification) of the emission unit(s) to be tested and the name and address of the facility at which they are located;

ii. The name and address of the independent testing service(s) performing the tests, with the names of the individuals who may be performing sampling and analysis and their experience with similar tests;

iii. The specific determinations of emissions and/or performance which are intended to be made, including the site(s) in the ductwork or stack at which sampling will occur;

iv. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum emissions, maximum operating rate, minimum control performance, the levels of operating parameters for the emission unit, including associated control equipment, at or within which compliance is intended to be shown, and the means by which the operating parameters will be determined;

v. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods. The specific sampling, analytical and quality control procedures which will be used, with an identification of the standard methods upon which they are based;

vi. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification;

vii. Any proposed use of an alternative test method, with detailed justification; and

viii. The format and content of the Source Test Report.

d. The Permittee shall provide the Illinois EPA with written notification of testing at least thirty (30) days prior to testing and again five

(5) days prior to the testing to enable the Illinois EPA to have an observer present. This notification shall include the name of emission unit(s) to be tested, scheduled date and time, and contact person with telephone number.

e. If testing is delayed, the Permittee shall promptly notify the Illinois EPA by e-mail or facsimile, at least five (5) days prior to the scheduled date of testing or immediately, if the delay occurs in the five (5) days prior to the scheduled date. This notification shall also include the new date and time for testing, if set, or a separate notification shall be sent with this information when it is set.

f. The Permittee shall submit the Final Source Test Report(s) for these tests accompanied by a cover letter stating whether or not compliance was shown, to the Illinois EPA, Bureau of Air, Compliance Section Manager without delay, within thirty (30) days after the test results are compiled, but no later than sixty (60) days after the date of testing or sampling. The Final Source Test Report shall include as a minimum:

i. General information describing the test, including the name and identification of the emission source, which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any;

ii. A summary of results;

iii. Description of test procedures and method(s), including description and map of emission units and sampling points, sampling train, testing and analysis equipment, and test schedule;

iv. Detailed description of test conditions, including:

A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information (i.e., mode(s) of operation, process rate or throughput, fuel or raw material consumption rate, and heat content of the fuels);

B. Control equipment information (i.e., equipment condition and operating parameters) during testing; and

C. A discussion of any preparatory actions taken (i.e., inspections, maintenance and repair).

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards and permit conditions that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards and permit conditions, and a statement whether the test(s) demonstrated

compliance with the applicable standards and permit conditions;

vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data;

vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data; and

viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.

g. Satisfactory completion of this test so as to demonstrate compliance with applicable emission standards and permit conditions is a prerequisite to issuance of an operating permit, pursuant to 35 Ill. Adm. Code 201.160(b).

17a. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator: That uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor the following parameters:

For each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator: Must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5° C, whichever is greater.

18. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA

and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

19a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

b. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).

ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.

iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.

20a. Pursuant to 35 Ill. Adm. Code 218.991(a)(2), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject VOM source shall collect and record all of the following information each day and maintain the information at the source for a period of three years:

i. Control device monitoring data.

ii. A log of operating time for the capture system, control device, monitoring equipment and the associated emission source.

iii. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

21a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber associated with the Hammermill Shredder System and Dust Collectors (DC-01 through DC-04) associated with Non-Ferrous Material Separation System:

A. Records for periodic inspection of the Regenerative Thermal Oxidizer (RTO), Quench/Packed Tower Scrubber, and Dust Collectors (DC-01 through DC-04) with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. The Permittee shall keep a copy of the Fugitive Particulate Operating Program, any amendments or revisions to the Fugitive Particulate Operating Program, and the Permittee shall also keep a record of activities completed according to the Fugitive Particulate Operating Program.

iii. Daily records demonstrating the temperature for the RTO and pressure differential across inlet and outlet of the Quench/Packed Tower Scrubber, liquid flow rate, and pH of the scrubbant liquid;

iv. Records of daily visual inspections of the Hammermill Shredder operations containing the date, time, individual performing the observation, observation details including operation of associated control systems, and any corrective actions taken;

v. Natural gas usage for RTO (mmscf/month and mmscf/year);

vi. Hours of operation for RTO and Quench/Packed Tower Scrubber (hours/month and hours/year);

vii. Material throughput (tons/month and tons/year) for the Raw Material Receiving and Handling System, Hammermill Shredder System, Ferrous Material Separation Process, Non-Ferrous Material

Process, and Fines Processing System;

viii. Hours of operation for Dust Collector DC-01 (hours/month and hours/year);

ix. Monthly and annual emissions of PM, PM_{10}, CO, NOx, SO_2, VOM, and HAPs from the Hammermill Shredder System, Ferrous Material Separation System, and Non-Ferrous Material Separation System with supporting calculations (tons/month and tons/year).

b. All records and logs required by Condition 21(a) of this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

22a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.

b. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

23a. Pursuant to 35 Ill. Adm. Code 218.991(a), any owner or operator of a VOM emission unit which is subject to the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT and complying by the use of emission capture and control equipment shall comply with the following:

i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new emission unit, the owner or operator of the subject VOM emission unit shall demonstrate to the Illinois EPA that the subject emission unit will be in compliance on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date by submitting to the Illinois EPA all calculations and other supporting data, including descriptions and results of any tests the owner or operator may have performed.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject VOM emission source shall

notify the Illinois EPA:

A. Of any violation of the requirements of 35 Ill. Adm. Code Part 218 Subpart PP, QQ, RR or TT by sending a copy of any record showing a violation to the Illinois EPA within 30 days following the occurrence of the violation;

B. At least 30 calendar days before changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a)(1). Upon changing the method of compliance with 35 Ill. Adm. Code Part 218 Subpart PP or TT from the use of capture systems and control devices to the use of complying coatings, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.991(a).

24. The Permittee shall notify the Illinois EPA, Bureau of Air, Compliance Section Manager of the initial receipt of material to be processed in the Hammermill Shredder and the date of the initial startup of the Hammermill Shredder within one week after each event has occurred.

25a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit or otherwise, the Permittee shall submit a report to the Illinois EPA's Bureau of Air Compliance Section in Springfield, Illinois within thirty (30) days after the exceedance or deviation. The report shall identify the duration and the emissions impact of the exceedance or deviation, a copy of the relevant records and information to resolve the exceedance or deviation, and a description of the efforts to reduce emissions from, and the duration of exceedance or deviation, and to prevent future occurrences of any such exceedance or deviation.

b. One (1) copy of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions on this permit, please call German Barria at 217/785-1705.

Raymond E. Pilapil
Manager, Permit Section
Bureau of Air

REP:GB:tan

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P. O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 1, 1985

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.

2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act, and Regulations adopted by the Illinois Pollution Control Board.

3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Agency and a supplemental written permit issued.

4. The Permittee shall allow any duly authorized agent of the Agency upon the presentation of credentials, at reasonable times:

    a. to enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,

    b. to have access to and copy any records required to be kept under the terms and conditions of this permit,

    c. to inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,

    d. to obtain and remove samples of any discharge or emission of pollutants, and

    e. to enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:

    a. shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,

    b. does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities,

    c. does not release the Permittee from compliance with the other applicable statues and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations,

    d. does not take into consideration or attest to the structural stability of any units or parts of the project, and

e. in no manner implies or suggests that the Agency (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.

6. a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Agency before the equipment covered by this permit is placed into operation.

b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.

7. The Agency may file a complaint with the Board for modification, suspension or revocation of a permit:

a. upon discovery that the permit application contained misrepresentations, misinformation or false statements or that all relevant facts were not disclosed, or

b. upon finding that any standard or special conditions have been violated, or

c. upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.