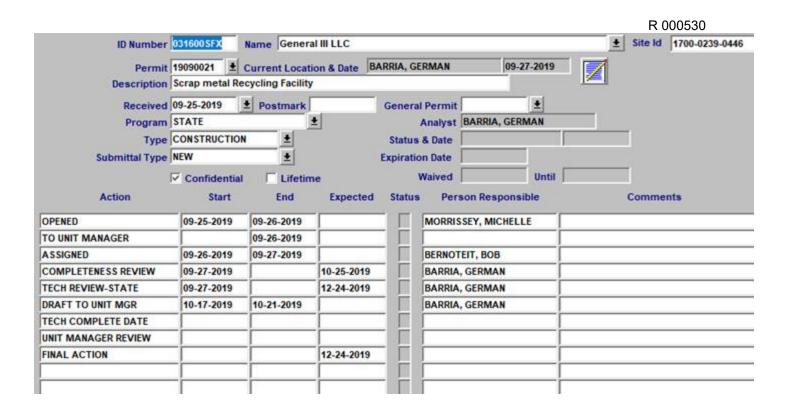
From: Pilapil, Ray Sent: Wednesday, November 20, 2019 2:53 PM To: Bernoteit, Bob **Subject:** RE: Date Thanks for confirming. Ray From: Bernoteit, Bob Sent: Wednesday, November 20, 2019 2:43 PM To: Pilapil, Ray <Ray.Pilapil@Illinois.gov> Subject: RE: Date You are correct. 12/24 appears to be the 90th day. **Bob Bernoteit** FESOP/State Permits Unit Manager, Illinois EPA, Bureau of Air - Permit Section From: Pilapil, Ray Sent: Wednesday, November 20, 2019 2:24 PM To: Bernoteit, Bob < Bob. Bernoteit@Illinois.gov > Subject: Date Per our earlier conversation, please let me know if you disagree with the 12/24/19 due date ASAP, as Rob is about to call. Thanks. Ray



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From: John Pinion <jpinion@rka-inc.com>
Sent: Tuesday, December 17, 2019 12:43 PM

To: Bernoteit, Bob

Cc: 'Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com)'; GII, LLC; Kallas, Jim

(jimkallas@general-iron.com)

Subject: [External] Waiver of Statutory Review Time for Construction permit 19090021 - General

III, LLC - Site ID 031600SFX



Bob,

On behalf of General III, LLC (Site ID No.: 031600SFX) please accept this waiver of the statutory 90-day permit application review time for Construction Permit Application 19090021, submitted to IEPA dated September 24, 2019.

Based on IEPA's request, General III waives the statutory review time and extends the review time for Construction Permit Application 19090021 to March 24, 2020.

Thank you and we appreciate your attention to 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

Confidentiality Notice

From: Frost, Brad

Sent: Wednesday, March 18, 2020 2:36 PM **To:** Pressnall, Chris; Layman, Robb

Subject: Outreach plan

Language to send to John below. Please provide comment/revisions.

35 IAC 166 is not prescriptive to the venue for a hearing and nothing in the rule suggests that hearings must be inperson. That said, OCR believes that webex provides the capabilities needed to effectively conduct a public hearing. In the case of General III, OCR and OEJ recommend that an informational public hearing conducted in accordance with 35 IAC 166 subpart A be held and that the hearing itself be conducted via webex. Below is a proposed timeline for such a hearing. The timeline adheres to the traditional timeline of 166. Once a decision has been made, Chris, Robb and I would then inform the company and requestors of the plan and move to implement.

Monday, March 23, 2020: Publish notice of public hearing

Thursday, May 7, 2020: Webex public hearing – 2 sessions, one starting at 1 pm and one starting at 6:30 pm

Saturday, June 6, 2020: End of written comment period

Tuesday, June 30, 2020: Decision deadline (seek waiver until this date)

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From: Pressnall, Chris

Sent: Thursday, March 19, 2020 11:35 AM

To: Kim, John J.

Cc: Armitage, Julie; Layman, Robb; Frost, Brad

Subject: General III hearing

Attachments: [External] General III Public Participation Request

John -

Here are some thoughts put together by Brad:

35 IAC 166 is not prescriptive to the venue for a hearing and nothing in the rule suggests that hearings must be inperson. That said, OCR believes that webex provides the capabilities needed to effectively conduct a public hearing. In the case of General III, OCR and OEJ recommend that an informational public hearing conducted in accordance with 35 IAC 166 subpart A be held and that the hearing itself be conducted via webex. Below is a proposed timeline for such a hearing. The timeline adheres to the traditional timeline of 166. Once a decision has been made, Chris, Robb and I would then inform the company and requestors of the plan and move to implement.

Monday, March 23, 2020: Publish notice of public hearing

Thursday, May 7, 2020: Webex public hearing – 2 sessions, one starting at 1 pm and one starting at 6:30 pm

Saturday, June 6, 2020: End of written comment period

Tuesday, June 30, 2020: Decision deadline (seek waiver until this date)

Importantly, attached is an email from Keith sent concerning this topic that was received shortly after our conversation on Tuesday so we did not have the benefit of adding his thoughts into the equation.

Chris Pressnall

Environmental Justice Coordinator Illinois EPA

(217) 524-1284 (217) 785-8346 (fax)

chris.pressnall@illinois.gov

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From: EXT Harley, Keith

Sent:Tuesday, March 17, 2020 3:34 PMTo:Pressnall, Chris; Frost, BradCc:Geertsma, Meleah; Nancy Loeb

Subject: [External] General III Public Participation Request

Hi -

As you know, several organizations including SETF requested a public hearing and a written comment period related to the General III construction permit. On behalf of these organizations, I'm writing to inquire what effect coronavirus state/city policies will have on IL EPA's plans for the requested public hearing and a subsequent written comment period. I've spoken to SETF, NRDC and the Ban Petcoke Coalition members who still want an in-person public hearing and see no substitute for this as a venue for local residents to participate in this permitting process. At the same time, they see no alternative to delaying this until the current public health crisis is resolved and public gatherings are again safe for the community and IL EPA.

Thanks,

Keith Harley, Attorney for Southeast Environmental Task Force Chicago Legal Clinic (312) 726-2938

From: John Pinion <jpinion@rka-inc.com>
Sent: Friday, March 20, 2020 4:41 PM
To: Bernoteit, Bob; Layman, Robb

Cc: Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com); GII, LLC; Labkon, Adam

(adamlabkon@general-iron.com)

Subject: [External] Waiver of Review Time for Construction Permit 19090021 - General III, LLC.



Bob,

On behalf of General III, LLC (Site ID No.: 031600SFX) please accept this 14 day waiver of the current review period for Construction Permit Application 19090021.

The permit application was submitted to IEPA dated September 24, 2019.

On December 17, 2019, at IEPA's request, General III, LLC provided a 90 day waiver to IEPA that extended the application review period through March 24, 2020.

Based on the above, General III, LLC waives the current review period for Construction Permit Application 19090021 and agrees to extend the review time by 14 days through April 7, 2020.

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

Confidentiality Notice

From: Kim, John J.

Sent: Friday, March 20, 2020 5:25 PM

To: Pilapil, Ray; Bernoteit, Bob; Layman, Robb

Cc: Gunnarson, Charles W.

Subject: FW: Waiver of Review Time for Construction Permit 19090021 - General III, LLC.

See extension and Ann's request for a call below. If possible, try to schedule something on Monday or as soon afterwards as possible.

From: Zwick, Ann M. <azwick@freeborn.com>

Sent: Friday, March 20, 2020 5:18 PM **To:** Kim, John J. < John.J.Kim@Illinois.gov>

Subject: [External] FW: Waiver of Review Time for Construction Permit 19090021 - General III, LLC.

John -

My client has agreed to a 14-day extension to allow time for IEPA to work out the public outreach. I think it would be helpful to have a call with my client early next week to discuss this matter.

Thanks.

Ann

ANN M. ZWICK

Attorney at Law (312) 360-6254 office (312) 952-1651 mobile azwick@freeborn.com

From: John Pinion [mailto:jpinion@rka-inc.com]

Sent: Friday, March 20, 2020 4:41 PM

To: 'IEPA Bernoteit, Bob (bob.bernoteit@illinois.gov)'; IEPA Layman, Robb (robb.layman@illinois.gov)

Cc: Zwick, Ann M.; GII, LLC; Labkon, Adam (adamlabkon@general-iron.com)

Subject: Waiver of Review Time for Construction Permit 19090021 - General III, LLC.



Bob,

On behalf of General III, LLC (Site ID No.: 031600SFX) please accept this 14 day waiver of the current review period for Construction Permit Application 19090021.

The permit application was submitted to IEPA dated September 24, 2019.

R 000537

On December 17, 2019, at IEPA's request, General III, LLC provided a 90 day waiver to IEPA that extended the application review period through March 24, 2020.

Based on the above, General III, LLC waives the current review period for Construction Permit Application 19090021 and agrees to extend the review time by 14 days through April 7, 2020.

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: John Pinion <jpinion@rka-inc.com>
Sent: Thursday, March 26, 2020 11:42 AM

To: Pilapil, Ray

Cc: Armitage, Julie; Layman, Robb; Bernoteit, Bob; Freeborn & Peters LLP; Zwick, Ann

(azwick@freeborn.com)

Subject: [External] Waiver of Construction Permit Review Time - General III, LLC - Site ID

031600SFX - CP App 19090021



Mr. Pilapil

On behalf of General III, LLC (Site ID No.: 031600SFX) please accept this 79 day waiver of the current review period for Construction Permit Application 19090021.

The permit application was submitted to IEPA dated September 24, 2019.

On December 17, 2019, at IEPA's request, General III, LLC provided a 90 day waiver to IEPA that extended the application review period through March 24, 2020.

On March 20, 2020, General III provided a 14 day waiver that extended the application review period through April 7, 2020.

As per our conversation today, the IEPA has requested an additional waiver in order to allow 90 days from the date the notice of public hearing is published to complete the hearing process and issue a final construction permit. The public hearing notification is expected to be published by Friday March 27, 2020. General III is, therefore, providing an additional extension of 79 days to June 25, 2020, which should provide ample time for the IEPA to complete its permitting process.

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

Confidentiality Notice

From: John Pinion <jpinion@rka-inc.com>
Sent: Friday, August 16, 2019 5:26 PM

To: Bernoteit, Bob

Cc: 'General Iron; Kallas, Jim (jim@general-iron.com)'

Subject: [External] Meeting to Discuss General Iron Construction Permit Application for Proposed

S Burley Avenue Facility



Bob.

It is anticipated that IEPA will receive a construction permit application for the above referenced facility on August 26th.

General Iron would like to schedule a meeting to go over the application with representatives of IEPA to answer any questions and receive any initial comments or feedback IEPA may have.

In addition to yourself, I thought identified Chris Romaine, German Barria and Chris Pressnall should also attend. Is there anybody else from the Agency you would recommend attend this meeting? After you let me know I will send out an e-mail to all recommended attendees to find a date when everyone is available.

Can you let me know your availability on August 28 or 29 for a meeting, or if necessary early the week of September 3rd?

Thank you.

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: John Pinion < jpinion@rka-inc.com> Sent: Monday, October 14, 2019 12:13 PM

To: Bernoteit, Bob

Subject: [External] Request for Meeting with IEPA to discuss General III, LLC construction permit

application



Bob.

As you are aware, General III, LLC (GIII) has submitted an application for a construction permit for a proposed scrap metal recycling facility to be located at 11600 South Burley Avenue in Chicago, Illinois.

GIII is requesting a meeting with you and other members of your permitting staff and other IEPA representatives you may recommend, to discuss the permit application and to identify and address any concerns the Agency may have at this point. As we have previously discussed, and with your concurrence, we will also invite Chris Pressnall and Brad Frost to participate in this meeting. We would like to schedule this meeting at IEPA's offices in Springfield for the week of October 21, 2019.

Can you please let me know your availability for the proposed meeting and your recommendations of who should participate so that we can make necessary arrangements.

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

Confidentiality Notice

From: John Pinion <jpinion@rka-inc.com>
Sent: Wednesday, October 16, 2019 2:26 PM

To: Bernoteit, Bob

Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com); 'Freeborn & Peters LLP; Zwick, Ann

(azwick@freeborn.com)'

Subject: [External] Meeting regarding the GIII Construction Permit Application - Wednesday

October 23, 2019 at 10 AM at IEPA in Springfield



Bob,

Thank you for getting back to me regarding our request for a meeting to discuss IEPA comments on General III, LLC's Construction Permit Application for a proposed metal recycling facility to be located at 11600 South Burley Avenue in Chicago.

Scheduling our meeting for Wednesday October 23, 2019 at 10 AM in your offices works for General III participants (Jim Kallas – GIII Environmental Manager, Ann Zwick of Freeborn & Peters who is GIII's Environmental Attorney, and me).

I assume you will take care of scheduling for IEPA attendees (you, German Barria, Brad Frost, Chris Pressnall, Eric Jones and a representative from IEPA's legal team).

In our discussion earlier this morning you identified four questions that you had compiled thus far about the GIII construction permit. With regard to the analysis of off site impacts from shredder metal emissions at GII, the modeling study performed and the comparison to WDNR's NR-445 ambient standards is included in Section 5 of the GII shredder emission test report included in Appendix B (starting on Page B-28) of the GIII construction permit application.

We will address the other items you identified during our meeting.

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

Confidentiality Notice

From: Bernoteit, Bob

Sent: Thursday, October 17, 2019 9:18 AM

To: Pilapil, Ray

Subject: FW: Meeting regarding the GIII Construction Permit Application - Wednesday October

23, 2019 at 10 AM at IEPA in Springfield

FYI.

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

From: John Pinion jpinion@rka-inc.com> **Sent:** Wednesday, October 16, 2019 2:26 PM **To:** Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>

Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com) < jimkallas@general-iron.com>; 'Freeborn & Peters LLP; Zwick, Ann

(azwick@freeborn.com)' <azwick@freeborn.com>

Subject: [External] Meeting regarding the GIII Construction Permit Application - Wednesday October 23, 2019 at 10 AM

at IEPA in Springfield



Bob,

Thank you for getting back to me regarding our request for a meeting to discuss IEPA comments on General III, LLC's Construction Permit Application for a proposed metal recycling facility to be located at 11600 South Burley Avenue in Chicago.

Scheduling our meeting for Wednesday October 23, 2019 at 10 AM in your offices works for General III participants (Jim Kallas – GIII Environmental Manager, Ann Zwick of Freeborn & Peters who is GIII's Environmental Attorney, and me).

I assume you will take care of scheduling for IEPA attendees (you, German Barria, Brad Frost, Chris Pressnall, Eric Jones and a representative from IEPA's legal team).

In our discussion earlier this morning you identified four questions that you had compiled thus far about the GIII construction permit. With regard to the analysis of off site impacts from shredder metal emissions at GII, the modeling study performed and the comparison to WDNR's NR-445 ambient standards is included in Section 5 of the GII shredder emission test report included in Appendix B (starting on Page B-28) of the GIII construction permit application.

We will address the other items you identified during our meeting.

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

Regards,

John Pinion

R 000543

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

Confidentiality Notice





SIGN-IN SHEET

Illinois Environmental Protection Agency
DATE: 10/23/19 TIME TIME:

LOCATION: Springfiel
SUBJECT: 6III - Penntting and Compliance discumions

NAME (Please: Print Name)	NAME (Please: Sign your Name)	n your Name) ORGANIZATION		EMAIL	
Debb Cayman	Par Jagan	TEPA / Legal	217-524-9137	-524-9137 robb. layoun distress, gov	
Bob Bernoteit	Motot Bentit	IEPA/BOA/Pernit	217-524-0865		
Chis Pressull		FERA/ADO/ET	217-524-1284	this present allhourgov	
Brad Frost	Tolay Jus	IEPA/ADO/OCR	217-782-7027	brad firest ('Ilinois gov	
JEFFREY SPRAGUE	Jeffy Sprague	JETA/AGIS/Modeling	217-524-4692	jeff. Sprague Dillinois.gov	
Eric Jones	En E. fr	TEPA / Permits			
German Barria	· Seng Banin	IEPA/Armils	217/785-0767	German. Buria Dillinois.gov	
JIM KALLAS	Affle	GENERALIRON	847-508-9170	jimkallas@general-iron com	
Ann Zuirg	Ja2m	Freebornt 8 drs	312-360-625	y azwicketrieborn,	
JOHN PINION	Athin			SPINIONE RXA-INC. COM	
	/				

Subject: FW: Meeting with GII

Location: EPA.Air.BOA.3South.ConferenceRoom3110N

Start: Wed 10/23/2019 10:00 AM **End:** Wed 10/23/2019 12:00 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bernoteit, Bob

-----Original Appointment-----

From: Bernoteit, Bob

Sent: Wednesday, October 16, 2019 10:16 AM

To: Bernoteit, Bob; Barria, German; Jones, Eric E.; Pressnall, Chris; Frost, Brad; Pilapil, Ray

Cc: Layman, Robb

Subject: Meeting with GII

When: Wednesday, October 23, 2019 10:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).

Where: EPA.Air.BOA.3South.ConferenceRoom3110N

Subject: FW: Meeting with GII

Location: EPA.Air.BOA.3South.ConferenceRoom3110N

Start: Wed 10/23/2019 10:00 AM **End:** Wed 10/23/2019 12:00 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bernoteit, Bob

-----Original Appointment-----

From: Bernoteit, Bob

Sent: Wednesday, October 16, 2019 10:16 AM

To: Bernoteit, Bob; Barria, German; Jones, Eric E.; Pressnall, Chris; Frost, Brad; Pilapil, Ray

Cc: Layman, Robb

Subject: Meeting with GII

When: Wednesday, October 23, 2019 10:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).

Where: EPA.Air.BOA.3South.ConferenceRoom3110N

From: John Pinion <jpinion@rka-inc.com> Friday, November 1, 2019 2:03 PM Sent:

To: Bernoteit, Bob

Subject: [External] incorrect pass code



Pass code is 1044063

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

Confidentiality Notice

Subject: [External] GIII Draft Construction Permit

Location: RKA Conference Line No.: 866-210-1669 Participant Passcode: 1044603

 Start:
 Fri 11/1/2019 2:00 PM

 End:
 Fri 11/1/2019 3:00 PM

Show Time As: Tentative

Recurrence: (none)

Organizer: John Pinion

Call to discuss draft GIII construction permit

From: Bernoteit, Bob

Sent: Monday, November 4, 2019 3:09 PM **To:** John Pinion; Barria, German; Layman, Robb

Subject: RE: GIII Meeting - Wed Morning

John,

Yes, I am available on Wednesday morning. I don't know about Robb or German.

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

From: John Pinion < jpinion@rka-inc.com> Sent: Monday, November 4, 2019 3:07 PM

To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; Layman, Robb

<Robb.Layman@Illinois.gov>

Subject: [External] GIII Meeting - Wed Morning



Can we meet Wednesday morning instead of tomorrow?

My notes indicated Bob was available Wednesday morning but not Wednesday afternoon.

I can be at your office as early as 8 AM. Let me know what time works best for you.

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: John Pinion <jpinion@rka-inc.com>
Sent: Tuesday, November 5, 2019 9:03 AM

To: Bernoteit, Bob; Layman, Robb

Cc: Barria, German; 'Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com)'

Subject: [External] RE: GIII Meeting - Wed Morning



That works for me. I will see you at your office at 9 AM tomorrow.

Thank you.

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: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>

Sent: Tuesday, November 5, 2019 9:02 AM

To: Layman, Robb <Robb.Layman@Illinois.gov>; John Pinion <jpinion@rka-inc.com>

Cc: Barria, German < German.Barria@Illinois.gov>

Subject: RE: GIII Meeting - Wed Morning

John,

9 AM tomorrow morning would probably work best for us.

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

From: Layman, Robb

Sent: Tuesday, November 5, 2019 8:41 AM **To:** John Pinion < <u>ipinion@rka-inc.com</u>>

Cc: Bernoteit, Bob < Bob.Bernoteit@Illinois.gov >; Barria, German < German.Barria@Illinois.gov >

Subject: RE: GIII Meeting - Wed Morning

I am currently available...

From: John Pinion < <u>ipinion@rka-inc.com</u>>
Sent: Monday, November 4, 2019 3:07 PM

To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German <German.Barria@Illinois.gov>; Layman, Robb

<Robb.Layman@Illinois.gov>

Subject: [External] GIII Meeting - Wed Morning



Can we meet Wednesday morning instead of tomorrow?

My notes indicated Bob was available Wednesday morning but not Wednesday afternoon.

I can be at your office as early as 8 AM. Let me know what time works best for you.

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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R 000553

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Subject: GIII

Location: EPA.Air.BOA.3North.ConferenceRoom3120N

Start: Wed 11/6/2019 9:00 AM **End:** Wed 11/6/2019 10:30 AM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bernoteit, Bob

Required Attendees: Robeen, Ron; Barria, German

I have reserved the 3 North Conference Room for tomorrow morning.

-Bob

From: John Pinion <jpinion@rka-inc.com>
Sent: Friday, January 3, 2020 12:17 PM

To: Layman, Robb **Subject:** [External] Availability



Hello Rob,

Hope you had an enjoyable holiday.

I wanted to know if you were available for a short call this afternoon or first thing Monday regarding 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

Confidentiality Notice

Subject: FW: GIII Permitting

Location: RKA Conference Call 866-210-1669 - Passcode: 1044063#

Start: Mon 1/6/2020 1:00 PM **End:** Mon 1/6/2020 2:00 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: John Pinion

-----Original Appointment-----

From: John Pinion <jpinion@rka-inc.com> Sent: Monday, January 6, 2020 11:00 AM

To: John Pinion; Layman, Robb; Bernoteit, Bob; Sprague, Jeff; 'Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com)'; Suresh Relwani; GII, LLC; Kallas, Jim (jimkallas@general-iron.com)

Subject: [External] GIII Permitting

When: Monday, January 6, 2020 1:00 PM-2:00 PM (UTC-06:00) Central Time (US & Canada).

Where: RKA Conference Call 866-210-1669 - Passcode: 1044063#

Please call is by dialing 866-210-1669 and use Passcode 1044063#

Any questions, please call John Pinion at 630-393-9000

From: Bernoteit, Bob

Sent: Monday, January 6, 2020 10:02 AM

To: John Pinion

Cc: Barria, German; Layman, Robb

Subject: RE: Are you available for a 1 PM conference call this afternoon regarding GIII

John,

I am available at 1 PM today, but German is not. Is it possible to reschedule the call until tomorrow?

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

From: John Pinion <jpinion@rka-inc.com> **Sent:** Monday, January 6, 2020 9:57 AM

To: Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>

Subject: [External] Are you available for a 1 PM conference call this afternoon regarding GIII



Bob,

Are you available for a 1 PM conference call this afternoon regarding GIII? Let me know and I will send out an invitation.

Thank you.

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: Bernoteit, Bob

Sent: Tuesday, May 5, 2020 4:20 PM

To: Pilapil, Ray; Barria, German; Jones, Eric E.; Layman, Robb; Frost, Brad; Pressnall, Chris

Subject: USEPA Region 5 discussion about Draft G III Construction Permit

David Ogulei of USEPA Region 5 wants to have a conference call to discuss his comments on the draft construction permit for G III. Please let me know your availability for this call, which David wants to have on May 18, 19, or 20th. Thank you.

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

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From: Damico, Genevieve <damico.genevieve@epa.gov>

Sent: Thursday, May 7, 2020 9:17 AM

To: Bernoteit, Bob

Subject: [External] Accepted: G III, LLC Draft Construction Permit Discussion

Subject: FW: GIII Fugitive Dust Plan Discussion

Location: Conf Call

 Start:
 Fri 6/19/2020 3:00 PM

 End:
 Fri 6/19/2020 3:30 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: jpinion@rka-inc.com

-----Original Appointment-----

From: Jones, Eric E. On Behalf Of jpinion@rka-inc.com

Sent: Friday, June 19, 2020 11:29 AM

To: Armitage, Julie

Subject: Fwd: GIII Fugitive Dust Plan Discussion

When: Friday, June 19, 2020 3:00 PM-3:30 PM (UTC-06:00) Central Time (US & Canada).

Where: Conf Call

Get Outlook for iOS

From: John Pinion < jpinion@rka-inc.com>
Sent: Friday, June 19, 2020 1:28:08 PM

To: Jones, Eric E. <<u>Eric.E.Jones@Illinois.gov</u>>; GII, LLC; Labkon, Adam (<u>adamlabkon@general-iron.com</u>) <<u>AdamLabkon@General-Iron.com</u>>; Reserve Management Group; Tolin, Hal (<u>haltolin@reserve-group.com</u>) <<u>haltolin@reserve-group.com</u>>; Steve Joseph <<u>SteveJoseph@reserve-group.com</u>>; GII, LLC; Kallas, Jim (jimkallas@general-iron.com) <<u>jimkallas@general-iron.com</u>>

Subject: [External] GIII Fugitive Dust Plan Discussion

When: Friday, June 19, 2020 3:00 PM-3:30 PM.

Where: Conf Call

Please dial in at 866-210-1669

Use Participant code 1044063

Subject: FW: Conference call with IEPA and General II, LLC

Location: Webex (Please call in)

Start: Tue 6/23/2020 11:00 AM **End:** Tue 6/23/2020 12:00 PM

Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Bernoteit, Bob

FYI. In case you want to participate.

-----Original Appointment-----

From: Bernoteit, Bob

Sent: Tuesday, June 23, 2020 9:47 AM

To: Jones, Eric E.; Mattison, Kevin; John Pinion; GII, LLC; Kallas, Jim (jimkallas@general-iron.com)

Subject: Conference call with IEPA and General II, LLC

When: Tuesday, June 23, 2020 11:00 AM-12:00 PM (UTC-06:00) Central Time (US & Canada).

Where: Webex (Please call in)

-- Do not delete or change any of the following text. --

When it's time, join your Webex meeting here.

Meeting number (access code): 133 754 1906

Meeting password: jnBwPNMj386

Join meeting

Join by phone

Tap to call in from a mobile device (attendees only)

+1-312-535-8110 United States Toll (Chicago)

+1-415-655-0002 US Toll

Global call-in numbers

Join from a video system or application

Dial 1337541906@illinois.webex.com

You can also	dial 173 243	3 2 68 and	enter vou	meetina	number
i uu can alsu	ulai 1/3.24	J.∠.00 anu	CITICI YOU	IIICCUIIQ	HUHHDEL.

Join using Microsoft Lync or Microsoft Skype for Business

Dial 1337541906.illinois@lync.webex.com

If you are a host, click here to view host information.

Need help? Go to http://help.webex.com

From: John Pinion <jpinion@rka-inc.com>

Sent: Wednesday, September 25, 2019 11:47 AM

To: Bernoteit, Bob

Cc: 'General Iron; Kallas, Jim (jim@general-iron.com)'

Subject: [External] Construction Permit Application for General III, LLC Metal Recycling Facility at

South Burley Avenue in Chicago



Bob,

I just wanted to let you know a construction permit application for General III, LLC proposed metal recycling facility at 11600 South Burley Avenue in Chicago. The Agency should have received the permit application earlier this morning.

We are available at your convenience to address any questions or provide any additional information you may need and would like to schedule a meeting with you and your staff (including Brad Frost and Chris Pressnall) for the week of October 14, 2019, to discuss any comments you may have. Please let me know your availability for meeting the week of October 14th and I will coordinate with Brad Frost and Chris Pressnall.

Thank you.

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

Confidentiality Notice

Bernoteit, Bob

From: John Pinion <jpinion@rka-inc.com>

Sent: Thursday, October 24, 2019 1:23 PM

To: Bernoteit, Bob; Layman, Robb

Cc: 'Freeborn & Peters LLP; Zwick, Ann (azwick@freeborn.com)'; 'Mr. kallas Jim'

Subject: [External] RKA comments on UIC PM2.5 Study Conducted near General Iron

Attachments: 2019-10-24 RKA comments on UIC PM2_5 Study.pdf



As per our meeting on Wednesday, October 23, 2019, attached is a copy of RKA's technical comments on the UIC PM2.5 study that we discussed. I have included a copy of Dr. Morita's letter and the UIC presentation slides in the attached file for completeness.

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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October 24, 2019 Via e-mail

R17421-6

Mr. Bob Bernoteit Illinois Environmental Protection Agency Bureau of Air – Compliance Section (#40) 1021 N. Grand Avenue East Springfield, Illinois 62794 Mr. Robb Layman Illinois Environmental Protection Agency Division of Legal Council 1021 N. Grand Avenue East Springfield, Illinois 62794

RK & Associates Comments on University of Illinois Chicago's Ambient Particulate Study General Iron – 1909 Clifton Avenue - Chicago, Illinois

At your request, please find below RK & Associates, Inc. (RKA) technical comments on the October 2017 Ambient PM_{2.5} study conducted by University of Illinois Chicago (UIC) in the area near General Iron (1909 Clifton Avenue, Chicago, Illinois) and a July 30, 2018 article written by WTTW's Alex Ruppenthal entitled, "We Don't Want Your Trash': Residents Protest General Iron's Move to Southeast Side."

For your convenience, I have also attached a copy of UIC's study presentation slides as presented at a May 15, 2018 citizen's meeting and a May 10, 2018 letter from Dr. Julie Morita, Commissioner, Chicago Department of Public Health to Mr. Warren Baker of Baker Companies, which was written in response to a May 4, 2018, presentation of the UIC study to select representatives of the City of Chicago. A link to Mr. Ruppenthal's article is provided above.

The July 30, 2018 article by Alex Ruppenthal characterized the results of the UIC study as follows:

"Last year, Hopkins relayed results from University of Illinois at Chicago researchers who found dangerous levels of lung-damaging particulate matter near the facility."

The term 'dangerous levels' has no context or definition in this statement and is very reckless as used in his article.

The UIC samples were collected in October and November of 2017. Although it is not clear when the results were first provided to local citizens and Alderman Hopkins, we understand that the first public presentation of these results was made on May 15, 2018, at a local citizen's meeting hosted by Mr. Warren Baker of Baker Companies. I attended this meeting.

Despite what was stated in Ruppenthal's article, the UIC representative stated at the May 15^{th} presentation that the measured concentrations of $PM_{2.5}$ did not exceed the EPA's National Ambient Air Quality Standard. The study was only able to compare results measured near General Iron to same day results from two IEPA operated ambient air monitoring stations (Mayfield and Springfield water pumping stations) several miles from General Iron. Their results showed that the concentration of $PM_{2.5}$ measured near General Iron were higher than the values measured at the pumping stations, which resulted in their

October 24, 2019
Mr. Bob Bernoteit - Illinois Environmental Protection Agency
Mr. Robb Layman – Illinois Environmental Protection Agency
RKA Comments on UIC PM2.5 Study at General Iron
Page 2



unsubstantiated conclusion that General Iron was causing local air quality to be worse than the air quality at the IEPA monitoring stations.

This is unsubstantiated because there was no allowance made for the level of activity-related emissions near General Iron and the two pumping stations. General Iron is located in an industrial area adjacent to large tracts of vacant unvegetated land and heavy traffic; whereas, the pumping stations are located in a more residential setting further away from major traffic routes. This level of background activity must be accounted for before making a conclusion as to the reasons the PM_{2.5} concentrations near General Iron differed from those at IEPA ambient air monitors.

On May 4th, Warren Baker presented the results of the UIC study to select City of Chicago representatives (including a representative from the Chicago Department of Public Health). We do not know the content of the statements made by Mr. Baker in that meeting; however, his statements prompted Dr. Julie Morita (Commissioner - CDPH) to issue a letter to Mr. Baker in which she stated (emphasis mine):

I am writing in response to your communication from May 4, 2018. It is inaccurate and inappropriate for you to assert that there is a risk to health for residents living near General Iron based on the preliminary conclusions of Dr. Erdal's pilot study.

First, none of the levels of particulate matter (PM2.5) detected in the study exceed the U.S. Environmental Protection Agency's (EPA) National Ambient Air Quality Standard. This standard defines the levels for which pollutants are considered harmful to public health and the environment.

Second, although the study indicated the presence of some metals in the air, as the study's author has indicated, the metals data were incomplete and were not measured in a way that could be compared to national standards. Therefore, it is inappropriate to draw conclusions until a full study has been completed.

Despite the statement by Dr. Morita, the UIC representative stated in the May 15th citizen's meeting that although the measured PM_{2.5} concentrations did not exceed current USEPA National Ambient Air Quality Standards, the USEPA's position is that no amount of fine respirable particulate is safe. UIC's representative then talked about how the primary and secondary 24-hour PM_{2.5} standard was set at 65 ug/m³ in 1997 and then lowered to 35 ug/m³ in 2006 and was evaluated again in 2012 but was not changed.

The UIC representative then confirmed that the analytical method used in the study to measure metals was not comparable to the analytical method used by USEPA to establish and demonstrate compliance with the National Ambient Air Quality Standards (NAAQS), so no direct comparisons could be made between the UIC study results and the NAAQS.

October 24, 2019

Mr. Bob Bernoteit - Illinois Environmental Protection Agency Mr. Robb Layman – Illinois Environmental Protection Agency RKA Comments on UIC PM2.5 Study at General Iron Page 3



If you have any questions, or require any additional information please do not hesitate to contact me at 630-393-9000 (jpinion@rka-inc.com).

Yours very truly,

RK & Associates, Inc.

John G. Pinion Principal Engineer

cc: Mr. Jim Kallas – Environmental Manager – General Iron – Chicago, Illinois – via e-mail Ms. Ann Zwick – Freeborn Peters – Chicago, Illinois – via e-mail



DEPARTMENT OF PUBLIC HEALTH CITY OF CHICAGO

Warren Baker |Baker Companies 2222 N. Elston Avenue, Suite 100 Chicago, Illinois 60614

May 10, 2018

Mr. Baker,

I am writing in response to your communication from May 4, 2018. It is inaccurate and inappropriate for you to assert that there is a risk to health for residents living near General Iron based on the preliminary conclusions of Dr. Erdal's pilot study.

First, none of the levels of particulate matter (PM2.5) detected in the study exceed the U.S. Environmental Protection Agency's (EPA) National Ambient Air Quality Standard. This standard defines the levels for which pollutants are considered harmful to public health and the environment.

Second, although the study indicated the presence of some metals in the air, as the study's author has indicated, the metals data were incomplete and were not measured in a way that could be compared to national standards. Therefore, it is inappropriate to draw conclusions until a full study has been completed.

As the Chicago Department of Public Health Commissioner and a physician, my actions and the actions of my department are based on scientific evidence and facts, not on political pressures or influences. My staff and I are committed to protecting the health and well-being of all Chicago residents. As a result, we have routinely and will continue to inspect General Iron to assure their operations follow federal, state and city regulations. We will also work closely with the U.S. EPA to evaluate the results of the air monitoring General Iron will be conducting, and will use that data to make informed decisions regarding the enforcement of city rules and regulations intended to safeguard the health of our communities.

I hope you will exercise the same rigor when interpreting data and not draw unwarranted conclusions.

Julie Morita, MD

Commissioner

Chicago Department of Public Health

Neighborhood PM2.5 Sampling Results and Analysis October-November, 2016

Serap Erdal, Ph.D.¹, Victoria Persky, M.D.², Frank Pagone, M.Sc.¹

University of Illinois at Chicago, School of Public Health

¹Division of Environmental and Occupational Health Sciences

²Division of Epidemiology and Biostatistics

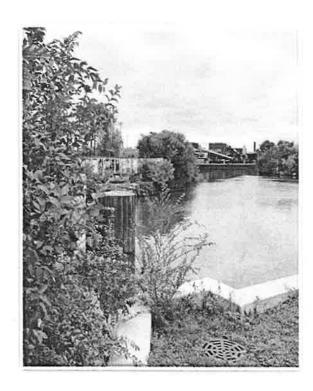
TABLE 1. SUMMARY OF 24-HOUR AVERAGE PM2.5 CONCENTRATIONS MEASURED AT THREE NEIGHBORHOOD LOCATIONS AND COMPARISON OF NEIGHBORHOOD PM2.5 CONCENTRATION DATA TO THOSE MEASURED BY THE EPA AT TWO CLOSEST AIR MONITORING LOCATIONS

Sampling Date	Measured 24-h Average PM2.5 Conc. at Station L (μg/m³)	Measured 24-h Average PM2.5 Conc. at Station M (μg/m³)	Conc. At Station O	144	PRODUCE AND THE PROPERTY OF	Measured 24-h Average PM2.5 FRM Conc. at EPA's Springfield Pump Station (μg/m³)	PM2.5 Conc. At	Measured 24-h Average PM2.5 FRM Conc. at	% Change in 24- h Average PM2.5 Conc. at Station L as compared to that at the EPA's Mayfair Pump Station
10/9/16	12.7	8.8	9.9	44.9	28.3	9.0	41	8.6	48
10/12/16	14.1	14.1	15.4	0.4	-7.9			11.3	25
10/15/16	10.0	10.6	10.6	-6.4	-6.4	9.3	7	10.1	-1
10/18/16	14.3	12.1	12.9	18.3	11.2			9.1	57
10/21/16	4.7	3.5	3.5	36.0	32.3	3.8	23	AN	AN
10/24/16	5.9	4.9	3.4	21.1	74.2			AN	AN
10/27/16	7.5	5.6	5.8	33.9	30.3	3.7	103	4.1	83
10/30/16	2.6	2.0	2.2	29.1	17.3			2.2	18
11/2/16	19.9	18.8	19.0	5.8	4.9	19.9		17.9	11
11/5/16	14.9	13.2	13.1	13.6	14.3			11.5	30

Notes:

- 1) "AN" indicates not available data from the EPA PM2.5 FRM monitor due to instrument malfunction.
- 2) All the positive numbers in % change columns indicate an increase in PM2.5 concentration at station L as compared to the other stations.
- 3) All the negative numbers (shown in red -- in four instances) in % change columns indicate a decrease in PM2.5 concentration at station L as compared to the other stations.
- 4) Neighborhood air monitoring site, L, is closest to the General Iron facility. Station L is approximately 650 feet east of the facility.
- 5) In the above table, percent change calculations were performed for the closest site to the facility, Station L, in comparison to a) the other neighborhood stations (yellow and green highlighted columns) and b) EPA stations (blue and orange highlighted columns).
- 6) EPA's Springfield Pump Station site is the closest EPA air monitoring station to the General Iron facility and the three neighborhood air monitoring stations (L, M and O). EPA performs air monitoring at this station on once-every-six day schedule. We also examined the data collected at EPA's Mayfair Pump Station air monitoring site because the PM2.5 sampling at this site is performed on more frequent basis, i.e., once in every three days.
- 7) Sampling dates are as follows: 10/9/16 Sunday; 10/12/16 Wednesday; 10/15/16 Saturday; 10/18/16 Tuesday; 10/21/16 Friday; 10/24/16 Monday; 10/27/16 Thursday; 10/30/16 Sunday; 11/2/16 Wednesday; 11/5/16 Saturday.
- 8) The USEPA's 24-hour Average National Ambient Air Quality Standard (NAAQS) for PM2.5 is 35 µg/m³.
- 9) Frank Pagone, a doctoral student of Prof. Erdal, performed the air sampling at the three neighborhood sites with guidance and supervision from Dr. Erdal.

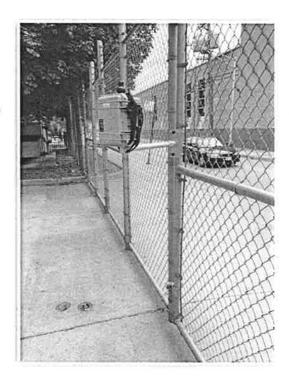
Neighborhood Sampling Sites



Location M 1765 N. Elston Ave., Chicago, IL 60642

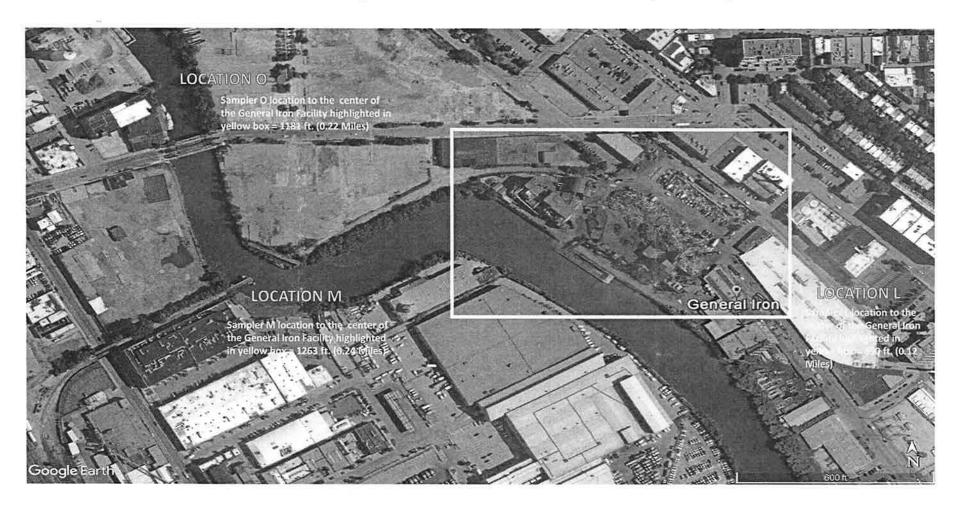


Location O1363 W. Cortland St., Chicago, IL 60614



Location L 1930 N. Clybourn Ave., Chicago, IL 60614

Map of Neighborhood Sampling Sites



EPA and Neighborhood Site Locations



From: Zwick, Ann M.

To: <u>Layman, Robb</u>; <u>Bernoteit, Bob</u>

Cc: "John Pinion"; Pressnall, Chris; Frost, Brad

Subject: [External] General III, LLC - ID #031600SFX - European-Style Endosure

Date: Tuesday, October 29, 2019 3:07:44 PM

Attachments: <u>image001,jpg</u>

Robb and Bob -

As requested at our meeting on October 23, 2019, the following is a description of the "European-style" shredder enclosure:

The shredder at the General III facility will be surrounded by a partial enclosure constructed of solid wall panels and a vented metal roof, which will be designed to effectively control noise and debris generated during the shredding process. The enclosure panels and associated hardware will be manufactured by one of the Europe-based companies that specializes in the custom design of industrial sound abatement systems. These companies have extensive experience with designing state-of-the-art enclosure systems for shredding facilities throughout Europe. Any previous reference to a "European-style" enclosure was referring to the use of solid wall panels for noise abatement, which is the current practice in Europe and is globally regarded as industry best practice.

Please let me know if you have any questions.

Ann

ANN M. ZWICK

Attorney at Law



(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

Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Friday, January 17, 2020 2:41 PM
To: Bernoteit, Bob; Barria, German

Cc:Zwick, Ann M.; GII, LLC; Kallas, Jim (jimkallas@general-iron.com)Subject:[External] GII, LLC - RTO Test Report - Site ID No. 031600BTBAttachments:2020-01-16 IEPA GII RTO-Scrub Emis Test Rpt - no appendices.pdf



Bob.

The following is a link to the GII, LLC RTO/Scrubber emissions test report performed pursuant to Construction Permit 18110021.

GII, LLC RTO Test Report with appendices - January 16, 2020

I have attached an electronic copy of the GII, LLC test report to this e-mail. The attached file does not include the appendices due to the large file size; however, the entire report is available through the link above.

A hard copy of the GII test report (without appendices) has been sent to your attention, which includes a CD with an electronic copy of the entire test report including all appendices. The file on the CD is the same document available through the link provided above. The hard copy was sent via overnight mail for delivery on Monday January 20th by 10:30 AM; however, since January 20th is a state holiday, you will not receive the hard copy until January 21st.

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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January 16, 2020

R17421-3

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

Emissions Test Report – Shredder Controlled by RTO and Scrubber GII, LLC – 1909 N. Clifton Avenue – Chicago, Illinois 60614 Construction Permit No.: 18110021; Site ID No.: 031600BTB

To Whom This May Concern:

On behalf of GII, LLC (GII), formerly General Iron Industries, Inc., please find attached an emissions test report for the existing metal shredder controlled by a Regenerative Thermal Oxidizer (RTO) and Packed Tower Scrubber. Testing was performed pursuant to Condition 8 of the above referenced construction permit and as described in the test protocol dated May 24, 2019 and amended on October 10, 2019.

Testing was performed for Total Hydrocarbons (THC) at the RTO inlet and scrubber outlet to determine volatile organic matter (VOM) removal efficiency. Please note that for the purposes of this report THC is equivalent to VOM. Testing was also performed at the scrubber outlet for total filterable and condensable Particulate Matter (PM), metals, Hydrochloric Acid (HCl), Hydrofluoric Acid (HF), Carbon Monoxide (CO),Sulfur Dioxide (SO₂), and opacity.

Testing was successfully performed on November 14, 15 and November 18, 2019, by Mostardi Platt. Test results demonstrate that the RTO/Scrubber emissions comply with the applicable state requirements identified in Conditions 2.a., 2.c., 3., 4.a., 4.c., and 6.a. of the above referenced construction permit.

Pollutant emission factors and emission rates identified in the attached test report will be incorporated into the facility operating permit.

If you have any questions, or require any additional information please do not hesitate to contact Mr. Jim Kallas, Environmental Manager for GII at 847-508-9170 (jimkallas@general-iron.com) or me at 630-393-9000 (jpinion@rka-inc.com).

Yours very truly,

RK & Associates, Inc.

John G. Pinion Principal Engineer

cc: Jim Kallas – Environmental Manager – GII, LLC – Chicago, Illinois – via e-mail

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Emissions Test Report Shredder Controlled by RTO and Scrubber

GII, LLC – Chicago, Illinois Construction Permit 18110021; Site ID No.: 031600BTB January 16, 2020

R17421-3

Prepared for: GII, LLC 1909 N. Clifton, Avenue Chicago, Illinois 60614

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



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APPENDICES

- Appendix A Mostardi Platt Test Report
- Appendix B RTO/Scrubber Operating Parameters
- Appendix C Test Plan
- Appendix D Construction Permit 18110021 RTO/Scrubber



1.0 INTRODUCTION

GII, LLC (GII), formerly General Iron Industries, Inc., is an existing scrap metal recycling facility located at 1909 N. Clifton Avenue, Chicago, Illinois (see Figure 1). GII receives, and shreds mixed recyclable metal in various forms to produce uniform grades of ferrous and non-ferrous metals. Existing scrap handling and processing activities include receiving, sorting, shredding, metal separation and recovery of ferrous and nonferrous metals.

GII currently operates under an Illinois Environmental Protection Agency (IEPA) Lifetime Operating Permit (Application No. 81050001; Site ID No. 031600BTB) dated September 1, 2004.

On February 11, 2019, GII received Construction Permit No. 18110021 (RTO Construction Permit) authorizing the construction of a natural gas-fired Regenerative Thermal Oxidizer (RTO) and Packed Tower Scrubber to control emissions from an existing hammermill metal shredder system. As part of the permit, GII is required to conduct emissions testing to determine the emission limits for total hydrocarbons (VOM is equivalent to THC), particulate matter (total filterable and condensable) carbon monoxide (CO), sulfur dioxide (SO₂), hydrogen chloride (HCl), hydrogen fluoride (HF), metals, and opacity.

Emissions testing was performed in accordance with the requirements specified in Conditions 8b through 8d of the above referenced RTO Construction Permit. An emissions test protocol was submitted to IEPA on May 24, 2019 and amended on October 10, 2019 to change the location of the RTO inlet test port (no other changes to methods or procedures were included in this amendment) (Test Plan). Testing was performed by Mostardi Platt. Testing for metals, CO, SO₂, HCl, and HF was performed on November 14, 2019. Testing for THC (VOM) and PM was performed on November 18, 2019. Testing for opacity was performed on November 15, 2019 (Run 1) and on November 18, 2019 (Runs 2 and 3).

It should be noted that Run 1 of VOM testing was performed on November 15, 2019. However, operational issues with the shredder/RTO prevented further testing. A USEPA representative present for testing expressed a preference that all VOM test runs be performed on the same day. Therefore, Run 1 of the VOM testing was not used and three test runs (Runs 2, 3 and 4) were completed on November 18, 2019. Run 3 on November 18, 2019 was not started until 4:40 PM and lowlight conditions prevented performing the third test run for opacity. Therefore, the Run 1 opacity results from November 15, 2019 were combined with opacity results from Runs 2 and 3 performed on November 18, 2019.

The testing described herein successfully demonstrates that the Shredder controlled by an RTO/Scrubber met the following requirements identified in Construction Permit 18110021.

Condition 2.a. 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.



- Condition 2.c. 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)
- Condition 3. 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.
- Condition 4.a. Pursuant to 35 III. 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 III. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 III. Adm. Code Part 218 Subpart G shall only apply to photochemically reactive material.
- Condition 4.c. 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). Emission capture and control equipment shall achieve an overall reduction in uncontrolled VOM emissions of at least 81 percent from each emission unit.
- Condition 6.a. The Regenerative Thermal Oxidizer (RTO) and Quench/Packed Tower Scrubber shall be designed, operated, and maintained in a manner that ensures the minimum destruction efficiency for VOM emissions from the Existing Metal Shredder is 98%.

1.1 Facility Location

GII is located at 1909 N. Clifton Avenue in Chicago (Cook County) Illinois as shown in Figure 1. A Facility Layout Map is presented in Figure 2. Facility contact information is provided in Section 1.2 below.



1.2 Project Contact Information

Business Name: GII, LLC

Source Location: 1909 N. Clifton Avenue – Chicago, Illinois 60614

Cook County Illinois

<u>Latitude/Longitude</u> 41.915823° N / -87.658231" W —

Intersection of N Clifton Ave. and N Kingsbury Street - Front Gate

Office/Mailing Address: 1909 N. Clifton Avenue – Chicago, Illinois 60614

GII Contact: Mr. Jim Kallas - Environmental Manager

847-508-9170 – <u>jimkallas@general-iron.com</u>

IEPA Site ID No.: 031600BTB

SIC Code: 5093 – Scrap and Waste Materials

NAICS Code: 423930 – Recyclable Material Merchant Wholesalers

Emissions Testing Rich Sollars - Mostardi Platt

<u>Contractor</u> 888 Industrial Drive – Elmhurst, Illinois 60126

630-993-2671

<u>RKA Contact for</u> John Pinion - Principal Engineer

Emissions Testing 2S631 Route 59, Suite B - Warrenville, Illinois 60555

630-393-9000

jpinion@rka-inc.com

1.3 Required Elements of Emissions Test Report

Condition 8.h. of Construction Permit 1811021 (see Appendix D) identifies the following elements to be included in an emissions test report.

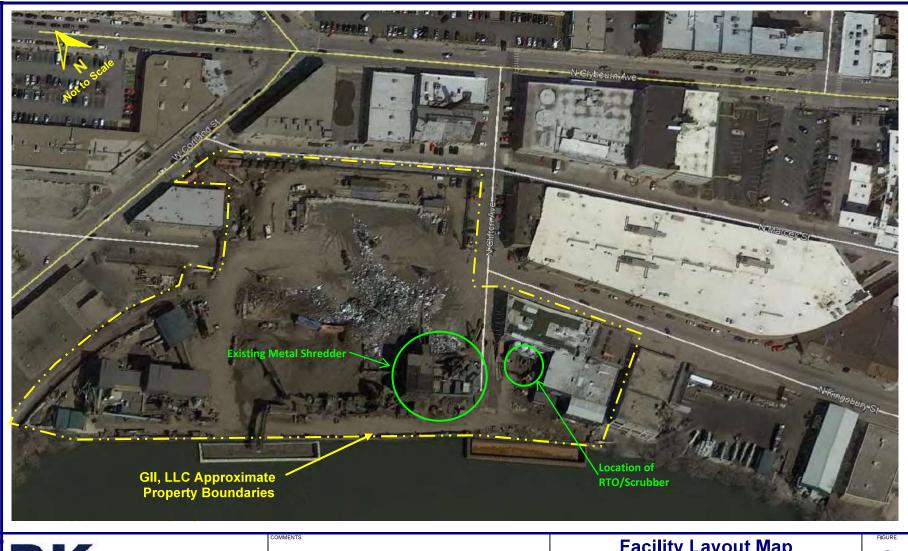
Required Test Report Element	Comment
i. General information describing the test, including the name and identification of the emission source which was tested, date of testing, names of personnel performing the tests, and Illinois EPA observers, if any.	See Section 1.0 of this test report. Scott Connolly of USEPA was on site to observe testing on November 14 and 15, 2019. There were no IEPA observers present.
ii. Summary of Test Results.	See Section 2.0 and Appendix A of this report.
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.	All testing was completed in accordance with the test plan dated May 24, 2019 and amended on October 10, 2019. See Appendix C of this report.





	Required Test Report Element	Comment
iv. A	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 of the metal shredder), and a description of material processed in the metal shredder.	This information is provided in the test plan provided in Appendix C of this report.
iv. E	B. Control equipment information (i.e., equipment condition and operating parameters (i.e. RTO temperature, RTO fuel feed rate, scrubbant flow rate, scrubbant PH, and differential pressure of the scrubber) during testing; and	See Section 2.1 and Appendix B of this report.
(C. A discussion of any preparatory actions taken (i.e., equipment inspections, shredder feed material separation, shredder/RTO/Scrubber equipment maintenance and repair).	The RTO and Shredder completed initial startup activities prior to testing, which included resolution of operability issues normal to initial startup. There was no non-routine maintenance performed on the shredder or roll media filter prior to testing.
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.	See Mostardi Platt test report in Appendix A of this report.
vi.	An explanation of any discrepancies among individual tests, failed tests or anomalous data.	Run 1 of VOM testing was performed on November 15, 2019. However, operational issues with the shredder/RTO prevented further testing. A USEPA representative present for testing expressed a preference that all VOM test runs be performed on the same day. Therefore, Run 1 of the VOM testing was not used and three test runs (Runs 2, 3 and 4) were completed on November 18, 2019. Therefore, Run 1 from November 15, 2019, was not used in the calculation of average emission results. Runs 2, 3 and 4 were successfully completed on November 18, 2019. See Section 1.0 for additional information.
vii.	The results and discussion of all quality control evaluation data, including a copy of all quality control data.	See Mostardi Platt test report in Appendix A of this report.
viii.	The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.	See Section 2.1 and Appendix B of this report.

Pottery Barn Kids & PBTeen





2S631 ROUTE 59, SUITE B WARRENVILLE, IL 60555 630-393-9000/630-393-9111 **RTO-Shredder Emissions Test Report**

Facility Layout Map GII, LLC 1909 N Clifton Avenue - Chicago, Illinois

01-2020

DRAWN BY:

APPROVED BY:

PROJECT NUMBER: R17421-3

REVISED DATE:

JGP

2.0 SUMMARY OF TEST RESULTS

All testing performed was successfully completed on November 14, 15 and 18, 2019.

The results of pollutant specific emissions tests are summarized in the following sections and detailed results are presented in the Mostardi Platt test report included in Appendix A of this report.

The RTO-Shredder operating data for RTO combustion chamber temperature, scrubber pH, scrubber differential pressure, and scrubber water flow rate are summarized in the following section and detailed data are included in Appendix B of this report.

The test methods and procedures for this test were performed in accordance with the Test Plan dated May 24, 2019, as amended on October 10, 2019 (see Appendix C). There were no deviations from the test methods and procedures identified.

2.1 RTO-Scrubber Process Operating Parameters

The following tables summarize the RTO-Scrubber operating data recorded during the identified test runs.

2.1.1 Shredder Feed Rate

Table 2-1 presents a summary of shredder feed rate.

Table 2-1 Summary of Shredder Feed Rates
GII, LLC - Chicago, Illinois

Scrubber Outlet Testing for Metals, CO, SO₂, HCl, and HF

Date	Run	Average Shredder Feed Rate (tph)	End of Life \ ELVs (tph)	/ehicles (ELVs) Shredder Feed
11/14/19	1	370	115	31.0%
11/14/19	2	408	139	34.0%
11/14/19	3	378	110	29.0%
Average		385	121	31.3%

RTO Inlet and Scrubber Outlet Testing for THC and Scrubber Outlet Testing for PM and Opacity.

Date	Run	Average Shredder Feed Rate (tph)	End of Life \ ELVs (tph)	/ehicles (ELVs) Shredder Feed
11/15/2019 ^a	1	407	274	67.3%
11/18/19	2	459	222	48.4%
11/18/19	3	443	232	52.4%
11/18/19	4	430	223	51.9%
Average		444	226	50.9%

a. With the exception of opacity, the results from Run 1 are not included in three run test average. Opacity testing is comprised of Runs 1 on November 15 and Runs 2 and 3 on November 18, 2019 as described in Section 1 of this report.

The shredder capacity (tons per hour) is highly dependent on the type of scrap being fed. Historically (2012 thru 2017), the shredder feed rate averaged 313 tph with approximately 20% of the total feed comprised of End of Life Vehicles (ELVs). For the purposes of this test, the target shredder feed rate during VOM testing was 400 to 450 tph with 50% ELVs in order to maximize VOM loading at the inlet for the RTO to simulate worst-case, short-term conditions.



The target shredder feed rate during non-VOM testing was 350 to 400 tph with 30% ELVs, which represents an approximate 20% increase in total shredder feed rate and a 50% increase in ELV feed rates compared to long-term average values. Data presented in Table 2-1 demonstrates that the target total shredder feed rates and ELV feed rates were achieved.

Ferrous production is electronically monitored in the control room from a totalizer on a calibrated belt scale. The value from the totalizer was manually recorded at the start and end of each test to identify the total mass of ferrous scrap produced. This value was multiplied by a factor of 1.33 to estimate the gross shredder feed rate. During testing, the number of cars fed to the shredder was manually recorded. The total number of cars fed were multiplied by the average ELV weight to calculate the total tons per hour of ELVs fed during each test run.

ELVs were stockpiled for these tests. The gross weight and number of ELVs in each incoming load of ELVs placed in the stockpile was recorded. The combined weight of delivered ELVs was divided by the total number of ELVs using data from the facility truck scale. The average weight of ELVs processed during testing performed on November 14 and November 18, 2019 was 1.66 and 1.57 tons per ELV respectively. The average weight of ELVs processed during the one run performed on November 15, 2019 was 1.66 tons per ELV.

2.1.2 Shredder Motor Power

The kW of the electric motor that powers the shredder is electronically recorded. Motor power is a function of the type and rate of material fed to the shredder. As shown in Tables 2-2 and 2-3, the documented motor power indicates that the type and rate of material fed to the shredder was consistent during the November 14 and November 18, 2019 tests.



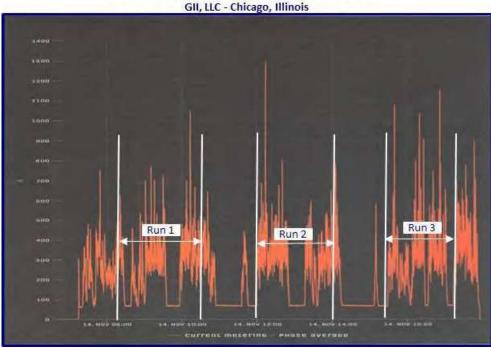
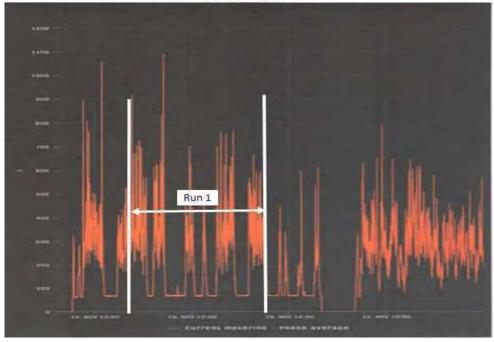
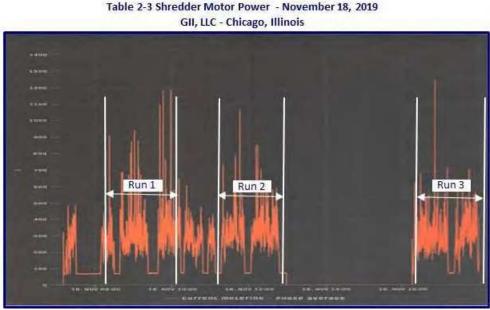


Table 2-2 Shredder Motor Power - November 14, 2019









2.1.3 RTO Combustion Chamber Temperature (°F)

The RTO combustion chamber temperature was monitored by a thermocouple located in the combustion chamber. Operating temperatures (°F) during each test run were recorded at 10-second intervals and stored electronically. The data downloaded from the RTO/Scrubber data recorder was exported to a spreadsheet to identify the minimum, maximum, and average values for each test run. Table 2-4 presents a summary of the RTO combustion chamber temperature from the November 14 and November 18, 2019 testing.

Table 2-4 Summary of RTO Combustion Chamber Temperatures GII, LLC - Chicago, Illinois

Shredder Outlet Testing for				
Metals, CO, SO2, HCI/HF, Opacity Testing				

		10 Second D	ata Intervals	
Run #	Run 1	Run 2	Run 3	Average
Date	11/14/18	11/14/18	11/14/18	
Start	8:45	12:00	15:30	
Stop	10:43	14:14	17:37	
	°F	°F	°F	°F
Minimum	1,726	1,731	1,681	1,713
Maximum	1,839	1,840	1,823	1,834
Average	1,785	1,786	1,778	1,783

RTO Inlet and Scrubber Outlet Testing for THC and Scrubber Outlet Testing for PM and Opacity.

10 Second Data Intervals					
	Run 1	Run 2	Run 3	Run 4	Average
	11/15/19	11/18/19	11/18/19	11/18/19	
	10:33	8:51	11:22	16:40	
	13:18	10:11	12:45	17:55	
	°F°	°F	°F	°F	°F
	1,621	1,739	1,737	1,733	1,736
	1,827	1,801	1,805	1,808	1,805
	1,752	1,768	1,769	1,767	1,768

a. Values from Run 1 are not used in calculation of test averages for November 18, 2019.

The raw RTO combustion chamber temperatures from each 10-second interval are presented in Appendix В.



2.1.4 Scrubber pH

The scrubber pH was monitored by a pH probe located in the scrubber water recirculation line. The signal from the pH probe is used to drive a chemical feed pump to add caustic to the scrubber water to maintain the desired pH. The scrubber water pH values during each test run were recorded at 10-second intervals and stored electronically. The data downloaded from the RTO/Scrubber data recorder were exported to a spreadsheet to identify the minimum, maximum, and average values for each test run. Table 2-5 presents a summary of the Scrubber pH from the November 14 and November 18, 2019 testing.

Table 2-5 Summary of Scrubber pH GII, LLC - Chicago, Illinois

Shredder Outlet Testing for Metals, CO, SO2, HCI/HF, Opacity Testing

RTO Inlet and Scrubber Outlet Testing for THC and Scrubber Outlet Testing for PM and Opacity.

		10 Second D	ata Intervals	
Run#	Run 1	Run 2	Run 3	Average
Date	11/14/18	11/14/18	11/14/18	
Start	8:45	12:00	15:30	
Stop	10:43	14:14	17:37	
	рН	рН	рΗ	рН
Minimum	6.4	6.3	6.6	6.4
Maximum	7.7	7.5	7.4	7.5
Average	7.0	7.1	7.1	7.0

	10 Second Data Intervals									
Run 1	Run 2	Run 3	Run 4	Average						
11/15/19	11/18/19	11/18/19	11/18/19							
10:33	8:51	11:22	16:40							
13:18	10:11	12:45	17:55							
pΗ ^a	рН	рН	рН	рН						
6.6	6.7	4.4	4.6	5.2						
7.4	7.9	5.9	6.4	6.7						
7.1	7.3	5.0	5.6	5.9						

a. Values from Run 1 are not used in calculation of test averages for November 18, 2019.

The raw Scrubber pH from each 10-second interval is presented in Appendix B.

2.1.5 Scrubber Water Flow Rate

The scrubber water flow rate was monitored by a liquid flow meter located downstream of the scrubber water recirculation pump. Scrubber water flow rates (gpm) during each test run were recorded at 10-second intervals and stored electronically. The data downloaded from the RTO/Scrubber data recorder was exported to a spreadsheet to identify the minimum, maximum, and average values for each test run. Table 2-6 presents a summary of the scrubber water flow rates from the November 14 and November 18, 2019 testing.



Table 2-6 Summary of Scrubber Water Flow Rate GII, LLC - Chicago, Illinois

Shredder Outlet Testing for Metals, CO, SO2, HCI/HF, Opacity Testing

RTO Inlet and Scrubber Outlet Testing for THC and Scrubber Outlet Testing for PM and Opacity.

	10 Second Data Intervals								
Run#	Run 1	Run 2	Run 3	Average					
Date	11/14/18	11/14/18	11/14/18						
Start	8:45	12:00	15:30						
Stop	10:43	14:14	17:37						
	gpm	gpm	gpm	gpm					
Minimum	743	754	591	696					
Maximum	765	760	762	762					
Average	758	757	755	757					

	10 Second Data Intervals									
Run 1	Run 2	Run 3	Run 4	Average						
11/15/19	11/18/19	11/18/19	11/18/19							
10:33	8:51	11:22	16:40							
13:18	10:11	12:45	17:55							
gpm ^a	gpm	gpm	gpm	gpm						
405	756	755	756	756						
763	762	762	763	762						
673	759	759	759	759						

a. Values from Run 1 are not used in calculation of test averages for November 18, 2019.

The scrubber water flow rates from each 10-second interval are presented in Appendix B.

2.1.6 Scrubber Differential Pressure

The scrubber differential pressure (inches of water column) was monitored by two pressure sensors located at the top of the demister section and at the bottom of the packing section of the scrubber. The differential pressure (difference between the pressure at the bottom of the packing section and the pressure at the top of the demister) was recorded at 10-second intervals and stored electronically. The data from the RTO/scrubber data recorder was exported to a spreadsheet to identify the minimum, maximum, and average values for each test run. Table 2-7 presents a summary of the scrubber differential pressure from the November 14, 15 and November 18, 2019 testing.

Table 2-7 Summary of Scrubber Differential Pressure GII, LLC - Chicago, Illinois

Shredder Outlet Testing for Metals, CO, SO2, HCI/HF, Opacity Testing

		10 Second Data Intervals						
Run #	Run 1	Run 2	Run 3	Average				
Date	11/14/18	11/14/18	11/14/18					
Start	8:45	12:00	15:30					
Stop	10:43	14:14	17:37					
	in WC	in WC	in WC	in WC				
Minimum	NA^a	NA	NA					
Maximum	NA	NA	NA					
Average	NA	NA	NA					

a. Scrubber differential pressure was not recorded during the November 14 testing due to programing error.

RTO Inlet and Scrubber Outlet Testing for THC and Scrubber Outlet Testing for PM and Opacity.

	10 Second Data Intervals							
Run 1	Run 2	Run 3	Run 4	Average				
11/15/19	11/18/19	11/18/19	11/18/19					
10:33	8:51	11:22	16:40					
13:18	10:11	12:45	17:55					
in WC ^a	in WC	in WC	in WC	in WC				
0.0	3.9	3.8	3.1	3.6				
10.2	6.2	6.6	6.3	6.4				
4.8	4.5	4.3	4.4	4.4				

a. Scrubber pH values are unreliable due to intermittent failures of pH probe due to excessive corrosion. Scrubber pH probes were replaced for testing on November 18, 2019. Values from Run 1 are not used in calculation of test averages for November 18, 2019.

The Scrubber Differential pressure from each 10-second interval is presented in Appendix B.



2.1.7 Shredder Emissions Capture

Shredder emissions capture efficiency was not a required parameter for this test.

An emissions capture hood is suspended over the top of the shredder. The hood is equipped with rubber curtains that extend downward to the top of the shredder to minimize the open area. The only opening to atmosphere is at the shredder feed chute, which is mostly blocked by the feed rolls and incoming material. The placement of the hood and the air flow is maintained to minimize the amount of steam escaping the hood.

It is not possible to directly, or indirectly, measure the capture efficiency of the hood. Based on visual observations of the emissions capture hood during testing, GII estimated that the hood appeared to provide > 90% capture of steam created in the shredder.

2.2 Volatile Organic Matter (VOM)

Volatile Organic Matter (VOM) emissions testing was performed by Mostardi Platt on November 15 and 18, 2019 pursuant to USEPA Method 25a. Detailed information from sample collection and analyses is presented in Mostardi Platt's report presented in Appendix A of this document.

It should be noted that Run 1 of VOM testing was performed on November 15, 2019. However, operational issues with the shredder/RTO prevented further testing. A USEPA representative present for testing expressed a preference that all VOM test runs be performed on the same day. Therefore, Run 1 of the VOM testing was not used and three test runs (Runs 2, 3 and 4) were completed on November 18, 2019.

Table 2-8 below presents a summary of VOM emissions testing results.



Table 2-8 Summary of Shredder RTO/Scrubber VOM Emission Testing GII, LLC - Chicago, Illinois

Test Averages do not include November 15, 2019 test values.

	I	rest Average	3 do not madae	140 (2111521 15, 2	019 test values. Average
Parameter	Run 1	Run 2	Run 3	Run 4	Runs 2 - 4
Date:	11/15/19	11/18/19	11/18/19	11/18/19	
Start Time:	10:33	8:51	11:22	16:40	
Finish Time:	13:17	10:11	12:45	17:55	
Shredder Feed Rate, tph:	407	459	443	430	444
% End of Life Vehicles:	67.3%	48.4%	52.4%	51.9%	50.9%
Scrubber Outlet Gas Temperature, degrees F:	100.7	100.6	103.3	104.1	102.7
Scrubber Outlet Gas Moisture (% by Volume):	6.7%	6.7%	7.2%	5.4%	6.4%
Scrubber Outlet Average Flue Gas Pressure, in Hg:	29.69	29.18	29.18	29.18	29.18
Gas Sample Volume, dscf:	44.464	35.358	35.553	36.253	35.721
Average Scrubber Stack Gas Velocity, ft/sec:	39.707	34.414	34.827	35.423	34.888
RTO Inlet Flow Rate, scfm:	66,309	56,334	56,422	56,677	56,478
Scrubber Outlet Flow Rate, scfm:	66,498	56,660	57,063	57,958	57,227
Average Scrubber Outlet CO ₂ by volume (%), dry basis:	0.4%	0.5%	0.3%	0.4%	0.4%
Average Scrubber Outlet O ₂ by volume (%), dry basis:	20.2%	20.2%	20.2%	20.4%	20.3%
Isokinetic Variance:	108.2	100.9	101.3	99.8	100.7
RTO Inlet					
Volatile Organic Matter (VOM) ^a ppm as Propane (C₃H ₈) (wet)	497.2	599.1	523.8	642.4	588.4
Methane (CH ₄) ppm as Propane (wet)	1.2	1.2	1.2	1.4	1.3
Ethane (C₂H₀) ppm as Propane (wet)	0.0	0.0	0.0	0.0	0.0
Volatile Organic Matter (VOM) ppm as Propane (wet)	496.0	597.9	522.6	641.0	587.2
Volatile Organic Matter (VOM) ^a , lb/hr:	225.4	230.8	202.0	248.9	227.3
Scrubber Stack					
Volatile Organic Matter (VOM) ^a ppm as Propane (C₃H ₈) (wet)	7.90	5.80	5.50	6.80	6.00
Methane (CH ₄) ppm as Propane (wet)	0.40	0.80	0.04	0.04	0.05
Ethane (C ₂ H ₆) ppm as Propane (wet)	0.00	0.00	0.00	0.00	0.00
Volatile Organic Matter (VOM) ppm as Propane (wet)	7.50	5.00	5.10	6.40	5.60
Volatile Organic Matter (VOM) ^a , lb/hr:	3.40	1.90	2.00	2.60	2.20
VOM Destruction Efficiency, %:	98.5%	99.2%	99.0%	99.0%	99.0%
VOM lb/ton	0.0084	0.0041	0.0045	0.0060	0.0049

a. Measured and reported as Total Hydrocarbons (THC) pursuant to the test method. THC is equivalent to VOM.

The VOM emission factor is calculated by dividing the average hourly emission rate by the average hourly shredder gross feed rate. The VOM emissions at the RTO inlet and scrubber outlet were adjusted to subtract methane and ethane pursuant to Method 25a.

The demonstrated average VOM destruction efficiency was 99.0%.

The shredder feed rate and process operating data for VOM testing is summarized in Section 2.1 and presented in detail in Appendix B.

2.2.1 Errors During Testing

There were no sampling method errors reported during VOM emissions testing.



2.2.2 Deviation from Reference Test Method

There were no deviations from the reference test method reported.

2.3 Total Particulate Matter (Filterable and Condensable Particulate)

Particulate emissions testing was performed by Mostardi Platt on November 15 and 18, 2019 pursuant to USEPA Methods 1 through 4, Method 5 (filterable particulate matter - FPM) and Method 202 (condensable particulate matter - CPM). Detailed information from sample collection and analyses is presented in Mostardi Platt's report presented in Appendix A of this document.

Table 2-9 below presents a summary of FPM and CPM emissions from the scrubber outlet.

FPM and CPM emission factors were calculated by dividing the average hourly FPM and CPM emission rate by the average hourly shredder gross feed rate.

Total FPM was measured at 1.44 lb/hr. This is significantly below the corresponding allowable particulate matter pursuant to the process weight rate rule at 35 IAC 212.321, which identifies an allowable particulate emission rate of approximately 64.5 lb/hr.

For the purposes of the emissions testing, all filterable PM at the scrubber outlet is conservatively assumed to be PM₁₀.



Table 2-9 Summary of Shredder RTO/Scrubber Particulate Emission Testing GII, LLC - Chicago, Illinois

Test Averages do not include November 15, 2019 test values.

				e November 15, 2	Average
Parameter	Run 1	Run 2	Run 3	Run 4	Runs 2 - 4
Date:	11/15/19	11/18/19	11/18/19	11/18/19	
Start Time:	10:33	8:51	11:22	16:40	
Finish Time:	13:18	10:12	12:46	17:56	
Shredder Feed Rate, tph:	407	459	443	430	444
% End of Life Vehicles:	67.3%	48.4%	52.4%	51.9%	50.9%
Stack Gas Temperature, degrees F:	100.7	100.6	103.3	104.1	102.7
Flue Gas Moisture (% by Volume):	6.7%	6.7%	7.2%	5.4%	6.4%
Average Flue Gas Pressure, in Hg:	29.69	29.18	29.18	29.18	29.18
Gas Sample Volume, dscf:	44.464	35.358	35.553	36.253	35.721
Average Stack Gas Velocity, ft/sec:	39.707	34.414	34.827	35.423	34.888
Stack Gas Flow Rate, acfm:	71,164	61,678	62,417	63,485	62,257
Stack Gas Flow Rate, dscfm:	62,043	52,864	52,959	54,837	53,553
Stack Gas Flow Rate, scfm:	66,498	56,660	57,063	57,958	57,227
Average % CO ₂ by volume, dry basis:	0.4%	0.5%	0.3%	0.4%	0.4%
Average % O ₂ by volume, dry basis:	20.2%	20.2%	20.2%	20.4%	20.3%
Isokinetic Variance:	108.2	100.9	101.3	99.8	100.7
Filterable Particulate Matter (Method 5)					
grams collected	0.00223	0.00308	0.01141	0.00732	0.00727
grains/acf	0.0007	0.0012	0.0042	0.0027	0.0027
grains/dscf	0.0008	0.0013	0.0050	0.0031	0.0031
lb/hr	0.412	0.609	2.248	1.464	1.440
lb/ton shredder feed	0.0010	0.0013	0.0051	0.0034	0.0032
Condensable Particulate Matter (Method	202)				
grams collected	0.00659	0.00462	0.00676	0.00480	0.00539
grains/acf	0.0020	0.0017	0.0025	0.0018	0.0020
grains/dscf	0.0023	0.0020	0.0029	0.0020	0.0023
lb/hr	1.216	0.914	1.332	0.960	1.069
Ib/ton shredder feed	0.0030	0.0020	0.0030	0.0022	0.0024
Total Particulate (Method 5/202)	0.0030	0.0020	0.0030	0.0022	0.0024
grams collected	0.00882	0.00770	0.01817	0.01212	0.01266
grains corrected grains/acf	0.0027	0.0029	0.0067	0.0045	0.0047
grains/def	0.0027	0.0023	0.0079	0.0043	0.0054
lb/hr	1.628	1.523	3.580	2.424	2.509
lb/ton shredder feed	0.0040	0.0033	0.0081	0.0056	0.0057

The shredder feed rate and process operating data during PM testing is summarized in Section 2.1 and presented in detail in Appendix B.

2.3.1 Errors During Testing

There were no sampling method errors reported during PM (both Filterable and Condensable) emissions testing.



2.3.2 Deviation from Reference Test Methods

There were no deviations from the reference test methods reported.

2.4 Metals

Metals emissions testing was performed by Mostardi Platt on November 14, 2019 pursuant to USEPA Method 29. Detailed information from sample collection and analyses is presented in the Mostardi Platt test report presented in Appendix A of this document.

Table 2-10 below presents a summary of metal emission rates measured at the scrubber outlet.

Emission factors for each metal were calculated by dividing the average hourly metal emission rate by the average hourly gross shredder feed rate.

The shredder feed rate and process operating data during metals testing is summarized in Section 2.1 and presented in detail in Appendix B.

2.4.1 Errors During Testing

There were no sampling method errors reported during metals emissions testing.

2.4.2 Deviation of Reference Test Methods

There were no deviations from the reference test method reported.

2.4.3 Metal Audit Samples

Metal audit samples were submitted to ERA for analysis pursuant to the requirements of USEPA's Stationary Source Audit Sample (SSAS) Program. The audit report is included in the Mostardi Platt test report presented in Appendix A of this document.

ERA reported that:

- There were no values reported with < where the assigned value was greater than 0.
- There were no "Not Acceptable" evaluations for this study.



Table 2-10 Summary of Shredder RTO/Scrubber Metal Emission Testing GII, LLC - Chicago, Illinois

							Ave	erage Runs
Parameter		Run 1		Run 2		Run 3	:	1,2 and 3
Date:		11/14/19		1/14/19	1	1/14/19		
Start Time:		8:45		12:00		15:30		
Finish Time:		10:43		14:11		17:37		
Shredder Feed Rate (tph):		370		408		378		385
% End of Life Vehicles:		31.0%		34.0%		29.0%		31.3%
Stack Gas Temperature, degrees F:		101.6		100.1		100.3		100.7
Flue Gas Moisture (% by Volume):		6.90%		6.50%		6.60%		6.7%
Average Flue Gas Pressure, in Hg:		29.58		29.58		29.58		29.58
Gas Sample Volume, dscf:		59.740		58.537		66.119		61.465
Average Stack Gas Velocity, ft/sec:		36.540		36.862		40.576		37.993
Stack Gas Flow Rate, acfm:		65,448		66,065		72,720		68,091
Stack Gas Flow Rate, dscfm:		56,670		57 <i>,</i> 575		63,280		59,175
Stack Gas Flow Rate, scfm:		60,870		61,577		67,751		63,399
Average % CO ₂ by volume, dry basis	:	0.4%		0.4%		0.4%		0.4%
Average % O ₂ by volume, dry basis:		20.1%		20.5%		20.3%		20.3%
Isokinetic Variance:		102.8		99.1		101.8		101.2
Metals								
Antimony (Sb)								
ug of sample collected	<u><</u>	3.40	≤	3.4	<u><</u>	3.4	<u><</u>	1.2
ppb	<	0.40	<	0.4	<	0.4	<	0.2
ug/dscm	<	2.01	<u> <</u>	2.1	<u><</u>	1.8	<	0.7
lb/hr	<	4.27E-04	<	4.42E-04	<	4.30E-04	<	4.33E-04
Ib/ton of Shredder Feed	<	1.15E-06	<	1.08E-06	<	1.14E-06	<	1.12E-06
Arsenic (As)					_			
ug of sample collected	<	1.20	<	1.20	<u> </u>	1.20	<	1.20
ppb	<	0.23	<	0.23	<	0.21	<	0.22
ug/dscm	<	0.71	<	0.72	<	0.64	<	0.69
lb/hr	<	1.51E-04	<	1.56E-04	<	1.52E-04	<	1.53E-04
lb/ton of Shredder Feed	<	4.08E-07	<	3.82E-07	<	4.02E-07	<	3.97E-07
Barium (Ba)								
ug of sample collected		21.61	<	7.57	<	5.81	<u><</u>	11.66
ppb		2.24	<	0.80	<	0.54	<u><</u>	1.19
ug/dscm		12.77	<u> </u>	4.57	<	3.10	<u><</u>	6.81
lb/hr		2.71E-03	<u> </u>	9.85E-04	<u><</u>	7.36E-04	<u> </u>	1.48E-03
lb/ton of Shredder Feed		7.32E-06	<	2.41E-06	<	1.95E-06	<	3.84E-06
Beryllium (Be)								
ug of sample collected	<u><</u>	0.27	<u> </u>	0.27	<u> </u>	0.27	<u><</u>	0.27
ppb	<u><</u>	0.43	<u> </u>	0.44	<u><</u>	0.39	<	0.42
ug/dscm	<	0.16	<u><</u>	0.16	<	0.14	<u><</u>	0.15
lb/hr	<u><</u>	3.40E-05	<u><</u>	3.50E-05	<u><</u>	3.50E-05	<u><</u>	3.43E-05
lb/ton of Shredder Feed	<	9.19E-08	<u><</u>	8.58E-08	<u><</u>	9.26E-08	<	8.90E-08



Table 2-10 Summary of Shredder RTO/Scrubber Metal Emission Testing GII, LLC - Chicago, Illinois

				Average Runs
Parameter	Run 1	Run 2	Run 3	1,2 and 3
Cadmium (Cd)				
ug of sample collected	2.87	0.61	< 0.41	<u><</u> 1.30
ppb	0.36	0.01	<u>≤</u> 0.05	<u>≤</u> 0.16
ug/dscm	1.70	0.37	<u>≤</u> 0.22	<u>≤</u> 0.76
lb/hr	3.60E-04	8.00E-05	<u>≤</u> 4.20E-05	<u>≤</u> 1.64E-04
lb/ton of Shredder Feed	9.73E-07	1.96E-07	<u>≤</u> 1.11E-07	<u>≤</u> 4.26E-07
Chromium (Cr)				
ug of sample collected	11.30	<u>≤</u> 4.90	<u>≤</u> 15.70	<u>≤</u> 10.63
ppb	3.09	<u>≤</u> 1.37	<u>≤</u> 3.88	<u><</u> 2.78
ug/dscm	6.68	<u>≤</u> 2.96	<u>≤</u> 8.39	<u>≤</u> 6.01
lb/hr	1.40E-03	<u>≤</u> 6.00E-04	≤ 2.00E-03	<u>≤</u> 1.33E-03
lb/ton of Shredder Feed	3.78E-06	<u>≤</u> 1.47E-06	≤ 5.29E-06	<u>≤</u> 3.45E-06
Cobalt (Co)				
ug of sample collected	0.37	<u>≤</u> 0.27	≤ 0.33	<u>≤</u> 0.32
ppb	0.09	<u>≤</u> 0.07	<u>≤</u> 0.07	<u>≤</u> 0.08
ug/dscm	0.22	<u>≤</u> 0.16	<u>≤</u> 0.18	<u>≤</u> 0.19
lb/hr	4.60E-05	≤ 3.50E-05	≤ 4.20E-05	≤ 4.10E-05
lb/ton of Shredder Feed	1.24E-07	≤ 8.58E-08	≤ 1.11E-07	<u>≤</u> 1.06E-07
Copper (Cu)				
ug of sample collected	17.90	7.54	10.17	11.87
ppb	4.00	1.72	2.05	2.59
ug/dscm	10.58	4.55	5.43	6.85
lb/hr	2.20E-03	1.00E-03	1.30E-03	1.50E-03
lb/ton of Shredder Feed	5.95E-06	2.45E-06	3.44E-06	3.89E-06
Lead (Pb)				
ug of sample collected	6.32	3.60	2.63	4.18
ppb	0.43	0.25	0.16	0.28
ug/dscm	3.74	2.17	1.40	2.44
lb/hr	8.00E-04	5.00E-04	3.00E-04	5.33E-04
lb/ton of Shredder Feed	2.16E-06	1.23E-06	7.94E-07	1.38E-06
Manganese (Mn)			•	
ug of sample collected	8.65	3.96	5.78	6.13
ppb	2.24	1.05	1.35	1.54
ug/dscm	5.11	2.39	3.09	3.53
lb/hr	1.10E-03	5.00E-04	7.00E-04	7.67E-04
lb/ton of Shredder Feed	2.97E-06	1.23E-06	1.85E-06	1.99E-06
Mercury (Hg)				
ug of sample collected	≤ 49.79	≤ 29.31	<u>≤</u> 327.63	<u>≤</u> 135.57
ppb	< 12.88	<u><</u> 7.73	<u>≤</u> 76.55	<u>≤</u> 32.39
ug/dscm	<u>≤</u> 29.43	<u>≤</u> 17.68	<u>≤</u> 174.99	<u><</u> 74.03
lb/hr	≤ 6.20E-03	<u>≤</u> 3.80E-03	≤ 4.15E-02	≤ 1.72E-02
lb/ton of Shredder Feed	≤ 1.68E-05	≤ 9.31E-06	≤ 1.10E-04	<u>≤</u> 4.46E-05



Table 2-10 Summary of Shredder RTO/Scrubber Metal Emission Testing GII, LLC - Chicago, Illinois

							Av	erage Runs
Parameter		Run 1		Run 2		Run 3		1,2 and 3
Nickel (Ni)								
ug of sample collected		11.40		6.09		12.98		10.48
ppb		2.67		1.51		2.84		2.34
ug/dscm		6.53		3.67		6.93		5.71
lb/hr		1.40E-03		8.00E-04		1.60E-03		1.27E-03
lb/ton of Shredder Feed		3.78E-06		1.96E-06		4.23E-06		3.30E-06
Phosphorus (P)								
ug of sample collected	<u><</u>	380.00	<u><</u>	363.00	<u><</u>	359.00	<u><</u>	367.33
ppb	<u><</u>	174.33	<u><</u>	169.95	<	148.81	<u><</u>	164.36
ug/dscm	<u><</u>	224.63	≤	218.99	<u> </u>	191.74	<u> </u>	211.79
lb/hr	<u><</u>	4.77E-02	≤	4.72E-02	<u> </u>	4.54E-02	<u><</u>	4.68E-02
lb/ton of Shredder Feed	<u><</u>	1.29E-04	≤	1.16E-04	≤	1.20E-04	_ ≤	1.21E-04
Selenium (Se)								
ug of sample collected	<u><</u>	2.30	<u><</u>	2.10	<	50.70	<	18.37
ppb	<	0.41	<	0.39	<	8.24	<	3.01
ug/dscm	<	1.36	<	1.27	<	27.08	<	9.90
lb/hr	<	3.00E-04	<	3.00E-04	<	6.40E-03	<	2.33E-03
lb/ton of Shredder Feed	<	8.11E-07	<	7.35E-07	<	1.69E-05	<	6.05E-06
Silver (Ag)								
ug of sample collected	<u><</u>	0.36	<u> </u>	0.36	<u> </u>	8.41	<u> </u>	3.04
ppb	<u><</u>	0.05	<u> </u>	0.05	<u> </u>	1.00	<u> </u>	0.37
ug/dscm	<u><</u>	0.21	<u><</u>	0.22	<u> </u>	4.49	<u><</u>	1.64
lb/hr	<u><</u>	4.50E-05	≤	4.70E-05	≤	1.07E-03	≤	3.86E-04
lb/ton of Shredder Feed	<u><</u>	1.22E-07	≤	1.15E-07	≤	2.83E-06	<u> </u>	1.00E-06
Thallium (TI)								
ug of sample collected	<u><</u>	0.36	<u><</u>	0.36	<u><</u>	0.04	<u><</u>	0.04
ppb	<u><</u>	0.03	<u> </u>	0.03	≤	0.02	<u> <</u>	0.02
ug/dscm	<u><</u>	0.21	<u> </u>	0.22	≤	0.19	≤	0.21
lb/hr	<	4.50E-05	<u><</u>	4.70E-05	<	4.60E-05	<	4.60E-05
lb/ton of Shredder Feed	<	1.22E-07	<u> </u>	1.15E-07	<	1.22E-07	<	1.19E-07
Zinc (Zn)								
ug of sample collected	<	118.90	<	57.50	<	66.60	<	81.00
ppb	<	25.84	<	12.75	<	13.08	<	17.22
ug/dscm	<	70.29	<	34.69	<	35.57	<	46.85
lb/hr	<u> </u>	1.49E-02	<u> </u>	7.48E-03	<u> </u>	8.43E-03	<u> </u>	1.03E-02
lb/ton of Shredder Feed	<u><</u>	4.03E-05	<u> </u>	1.83E-05	<u><</u>	2.23E-05	<u><</u>	2.67E-05



2.5 Carbon Monoxide (CO)and Sulfur Dioxide (SO₂)

Carbon monoxide (CO) and sulfur dioxide (SO₂) emissions testing was performed by Mostardi Platt on November 14, 2019 pursuant to USEPA Methods 10 and 6C, respectively. Detailed information from sample collection and analyses is presented in the Mostardi Platt test report presented in Appendix A of this document.

Table 2-11 presents a summary of CO and SO₂ emissions measured at the scrubber outlet.

Table 2-11 Summary of Shredder RTO/Scrubber Carbon Monoxide and Sulfur Dioxide Emission Testing

GII, LLC - Chicago, Illinois

				Average		
Parameter	Run 1	Run 2	Run 3	Runs 1 - 3		
Date:	11/14/19	11/14/19	11/14/19			
Start Time:	8:45	12:00	15:30			
Finish Time:	10:42	14:10	17:36			
Shredder Feed Rate, tph:	370	408	378	385		
% End of Life Vehicles:	31.0%	34.0%	29.0%	31.3%		
Scrubber Stack Gas Temperature, degrees F:	101.6	100.1	100.3	100.7		
Flue Gas Moisture (% by Volume):	6.9%	6.5%	6.6%	6.7%		
Average Flue Gas Pressure, in Hg:	29.58	29.58	29.58	29.58		
Gas Sample Volume, dscf:	59.74	58.537	66.119	61.465		
Average Stack Gas Velocity, ft/sec:	36.540	36.862	40.576	37.993		
Stack Gas Flow Rate, acfm:	65,448	66,065	72,720	68,078		
Stack Gas Flow Rate, dscfm:	56,670	57,575	63,280	59,175		
Stack Gas Flow Rate, scfm:	60 <i>,</i> 870	61,577	67,751	63,399		
Average % CO ₂ by volume, dry basis:	0.4%	0.4%	0.4%	0.4%		
Average % O ₂ by volume, dry basis:	20.1%	20.5%	20.3%	20.3%		
Carbon Monoxide (Method 10)						
Carbon Monoxide (CO), ppmvd:	19.1	18.6	19.7	19.1		
Carbon Monoxide (CO), lb/hr:	4.72	4.67	5.43	4.94		
lb/ton shredder feed	0.0128	0.0114	0.0144	0.0129		
Sulfur Dioxide (Method 6c)						
Sulfur Dioxide (SO₂), ppmvd:	0.00	0.00	0.10	0.03		
Sulfur Dioxide (SO ₂), lb/hr:	0.00	0.00	0.06	0.02		
lb/ton shredder feed	0.0000	0.0000	0.0002	0.0001		

CO and SO₂ emission factors were calculated by dividing the average hourly emission rate by the average hourly gross shredder feed rate.

The shredder feed rate and process operating data for CO and SO₂ testing is summarized in Section 2.1 and presented in detail in Appendix B.



2.5.1 Errors During Testing

There were no sampling method errors reported during CO/SO₂ emissions testing.

2.5.2 Deviation of Reference Test Methods

There were no deviations from the reference test methods reported.

2.6 Hydrogen Chloride (HCI) and Hydrogen Fluoride (HF)

Hydrogen Chloride (HCl) and Hydrogen Fluoride (HF) emissions testing was performed by Mostardi Platt on November 14, 2019 pursuant to USEPA Method 26. Detailed information from sample collection and analyses is presented in the Mostardi Platt test report presented in Appendix A of this document.

Table 2-12 presents a summary of HCl and HF emissions measured at the scrubber outlet.

Table 2-12 Summary of Shredder RTO/Scrubber HCl and HF Emission Testing GII, LLC - Chicago, Illinois

				Average	
Parameter	Run 1	Run 2	Run 3	Runs 1 - 3	
Date:	11/14/19	11/14/19	11/14/19		
Start Time:	9:02	12:13	15:45		
Finish Time:	10:35	13:50	17:20		
Shredder Feed Rate, tph:	370	408	378	385	
% End of Life Vehicles:	31.0%	34.0%	29.0%	31.3%	
Scrubber Stack Gas Temperature, degrees F:	101.6	100.1	100.3	100.7	
Flue Gas Moisture (% by Volume):	6.9%	6.5%	6.6%	6.7%	
Average Flue Gas Pressure, in Hg:	29.58	29.58	29.58	29.58	
Gas Sample Volume, dscf:	59.74	58.537	66.119	61.465	
Average Stack Gas Velocity, ft/sec:	36.540	36.862	40.576	37.993	
Stack Gas Flow Rate, acfm:	65,448	66,065	72,720	68,078	
Stack Gas Flow Rate, dscfm:	56,670	57,575	63,280	59,175	
Stack Gas Flow Rate, scfm:	60,870	61,577	67,751	63,399	
Average % CO ₂ by volume, dry basis:	0.4%	0.4%	0.4%	0.4%	
Average % O ₂ by volume, dry basis:	20.1%	20.5%	20.3%	20.3%	
Hydrogen Chloride (Method 26)					
Hydrogen Chloride (HCl) Concentration, ppmvd:	1.36	0.67	0.51	0.85	
Hydrogen Chloride (HCl) Emission Rate, lb/hr:	0.438	0.203	0.240	0.294	
lb/ton shredder feed	0.0012	0.0005	0.0006	0.0008	
Hydrogen Fluoride (Method 26)					
Hydrogen Fluoride (HF) Concentration, ppmvd:	1.05	0.49	0.45	0.67	
Hydrogen Fluoride (HF) Emission Rate, lb/hr:	0.186	0.088	0.089	0.121	
lb/ton shredder feed	0.0005	0.0002	0.0002	0.0003	



HCl and HF emission factors were calculated by dividing the average hourly emission rate by the average hourly gross shredder feed rate.

The shredder feed rate and process operating data for HCl/HF testing is summarized in Section 2.1 and presented in detail in Appendix B.

2.6.1 Errors During Testing - HCI/HF

There were no sampling method errors reported during HCl/HF emissions testing.

2,6,2 Deviation of Reference Test Methods – HCI/HF

There were no deviations from the reference test method reported.

2.6.3 HCI Audit Testing

HCl audit samples were submitted to ERA for analysis pursuant to the requirements of USEPA's Stationary Source Audit Sample (SSAS) Program. The audit report is included in the Mostardi Platt test report presented in Appendix A of this document.

ERA reported that:

- There were no values reported with < where the assigned value was greater than 0.
- There were no "Not Acceptable" evaluations for this study.

2.7 Opacity Testing

Opacity testing was performed by Mostardi Platt on November 15, 2019 (Run 1) and November 18, 2019 (Runs 2 and 3) pursuant to USEPA Method 9. Detailed information from sample collection and analyses is presented in the Mostardi Platt test report presented in Appendix A of this document.

Table 2-13 presents a summary of opacity test results. There was no opacity observed at the scrubber outlet during testing.



Table 2-13 Summary of Shredder RTO/Scrubber Opacity Testing GII, LLC - Chicago, Illinois

				Average		
Parameter	Run 1	Run 2	Run 3	Runs 1 - 3		
Date:	11/15/19	11/18/19	11/18/19			
Start Time:	11:18	8:51	11:22			
Finish Time:	13:22	11:12	12:46			
Shredder Feed Rate, tph:	407	459	443	436		
% End of Life Vehicles:	67.3%	48.4%	52.4%	56.0%		
Opacity (Method 9)						
Average Opacity, %:	0	0	0	0		
Maximum Six Minute Increment, %:	0	0	0	0		

The shredder feed rate and process operating data for opacity testing is summarized in Section 2.1 and presented in detail in Appendix B.

2.7.1 Errors During Testing - Opacity

There were no sampling method errors reported during opacity testing.

2.7.2 Deviation of Reference Test Methods - Opacity

There were no deviations from the reference test method reported.



3.0 RTO/SCRUBBER OPERATING PARAMETERS AND EMISSIONS LIMITS

3.1 Proposed RTO/Scrubber Operating Parameters

RTO and scrubber operating data recorded during these tests will be used to identify proposed permit limits based on the average observed values.

Table 3-1 presents a summary of the minimum, maximum, and average values for RTO combustion chamber temperature (°F), scrubber pH, scrubber water flow rate (gpm), and scrubber differential pressure (inches of water column).

The minimum and maximum values identify one-hour average values that describe the demonstrated range of each operating parameter during successful test runs.

The reported average value represents the average of the three test runs. The average value is proposed to establish a three-hour rolling average limit.

Table 3-1 Proposed Minimum, Maximum and Average Values for RTO/Scrubber Operating Parameters

GII, LLC - Chicago, Illinois

Test Date	Sampled Pollutant	Parameter	Units	Min 1 Hour Average	Max 1 Hour Average	Rolling 3 Hour Average
11/18/2019	THC	RTO Temp	°F	1,733	1,808	1,768
11/14/2019	HCI/HF	Scrubber pH	Unitless	6.3	7.7	7.0
11/18/2019	THC ^a	Scrubber DP	in WC	3.1	6.6	4.4
11/14/2019	HCI/HF	Demister Flow	gpm	591	765	757

a. Scrubber differential pressure data was not recorded during testing performed on November 14, 2019.



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Layman, Robb

From: Bernoteit, Bob

Sent: Wednesday, September 2, 2020 10:59 AM

To: Layman, Robb

Subject: FW: John Pinion shared "2020-01-16 IEPA GII RTO-Scrub Emis Test Rpt" with you.

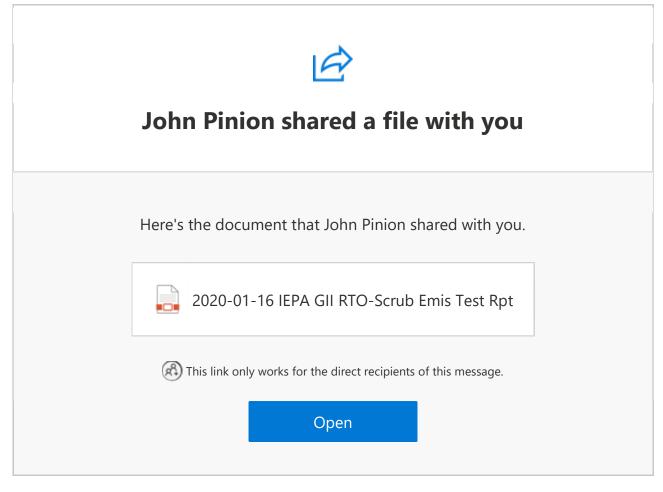
Bob Bernoteit
FESOP/State Permits Unit Manager,
Illinois EPA, Bureau of Air - Permit Section

From: John Pinion <jpinion@rka-inc.com> Sent: Friday, January 17, 2020 4:36 PM

To: Zwick, Ann M. <azwick@freeborn.com>; Bernoteit, Bob <Bob.Bernoteit@Illinois.gov>; Barria, German

<German.Barria@Illinois.gov>; jimkallas@general-iron.com

Subject: [External] John Pinion shared "2020-01-16 IEPA GII RTO-Scrub Emis Test Rpt" with you.





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R 000610

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Layman, Robb

From: John Pinion <jpinion@rka-inc.com>
Sent: Friday, March 6, 2020 11:30 AM

To: Barria, German; 'General Iron; Kallas, Jim (jim@general-iron.com)'

Cc: Bernoteit, Bob

Subject: [External] RE: General III, LLC - ID #031600SFX



Will do. Thank you.

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: Barria, German < German. Barria@Illinois.gov>

Sent: Friday, March 6, 2020 11:27 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>
Subject: RE: General III, LLC - ID #031600SFX

John,

My apology, but we can't provided that, you might refer to the January 27, 2020 version of your submittal, if that can help.

Thank you.



IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

Phone: 217-785-0767



From: John Pinion < jpinion@rka-inc.com > Sent: Friday, March 6, 2020 11:17 AM

To: Barria, German < German.Barria@Illinois.gov >

Cc: GII, LLC; Kallas, Jim (jimkallas@general-iron.com) < jimkallas@general-iron.com>

Subject: [External] RE: General III, LLC - ID #031600SFX



Thank you German.

Can you provide a track changes copy to identify the changes that have been made?

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: Barria, German < German.Barria@Illinois.gov>

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

Environmental Protection Specialist, IEPA, Bureau of Air, Permit Section, FESOP/LOP Unit

Phone: 217-785-0767



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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

NOTICE OF ADDITIONAL CONSTRUCTION PERMIT APPLICATION FEES

March 30, 2020

General III, LLC Attn: Jim Kallas

11600 South Burley Avenue Chicago, Illinois 60617

<u>Application No.:</u> 19090021 <u>I. D. No.:</u> 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 $\underline{30}$ days to remit the assessed fee and revised Form 197-FEE to the Illinois $\overline{\text{EPA}}$. Please submit payment to the Illinois $\overline{\text{EPA}}$ at the following address. Make either a check or money order payable to: "Illinois $\overline{\text{Environmental Protection Agency"}}$ and reference both the application and I.D. numbers assigned above. The Illinois $\overline{\text{EPA}}$ 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

Page 2

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