Exhibit F

KCBX TERMINALS COMPANY

September 08, 2008

Via Certified Mail

Mr. John Blazis
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Blazis,

Please find attached a revised copy of our Fugitive Particulate Operating Program. This revision corrects the number of fixed water cannons at the facility. There are no other changes to the plan.

If you have any questions or would like additional information please do not hesitate to contact me.

Respectfully Submitted,
KCBX TERMINALS / CHICAGO

Jim Simmons
Terminal Manager

K : 28378

Consolidated
Fugitive Particulate Operating Program and
Contingency Measures Plan

KCBX TERMINALS COMPANY

Facility Physical Address:	3259 East 100th Street Chicago, IL 60617
Facility Mailing Address:	3259 East 100th Street Chicago, IL 60617
Facility ID No.:	031600AHI
Facility Telephone:	(773) 375-3700
Responsible Persons:	Site EHS Coordinator (primary for Operating Program) Terminal Operations Manager (primary for Contingency Measures)
Prepared: Current Revision:	November 18, 1999 #8 – September 4, 2008
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk materials, which are transported via truck, train, barge, and/or vessel. KCBX can transfer material from one transportation mode to another either with or without stockpiling. To significantly reduce fugitive particulate matter emissions from these activities, KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308.

A. Stockpiles. Bulk materials are stockpiled on-site to satisfy customer needs throughout the year. Even though uncontrolled emissions from stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles located in areas that may not receive 100 percent coverage from the pole-mounted water spray system are watered by portable water cannon[1]. Watering also reduces fugitive emissions from bulk material transfers because of the moisture carry-over in the product.

[1] "Portable Water Cannons" are either free standing (2) or mounted on the water truck (1).

The permanent, fixed-pole water spray system consists of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade providing a throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by two, redundant feeder pumps designed to deliver up to 1200 gallons per minute (gpm) through 6000 feet of buried 8-inch diameter pipeline. KCBX normally operates only a single pump, which supplies two cannons simultaneously.

TABLE 1. Specifications for Fixed-Pole Water Spray System or equivalent substitutions (per 35 IAC 212.310(e))

Description	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, Rated at 500 gpm @ 100 psi, 260' radius, 34' Height, 34MM bore, including ring nozzle, 4" FNPT Gun Connection Flange.	Nelson	SR150-24 Deg
Pipe - Schedule 40 - Galvanized (3 - lengths)		
Pipe Coupling Threaded- 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection.		
Pipe 45 degree elbow - 4" class 150 - threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed Control, Flanged Design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. for mating to 6" roll seal valve.		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB -B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. 2 flanges for mating to 4" ball valve, 1 flange to mate to under ground feed pipe.		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

The fixed-pole water spray system is operated to apply small quantities of water over extended periods of time so that the exteriors of stockpiles, which are exposed to the eroding forces of wind and the mechanical agitation of equipment, are kept wet. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the surface/outer few inches of the pile is all that is required. Additionally, over-application of water results in increased controls associated with runoff management. Product stockpiles are visually inspected and frequency of duration of watering are adjusted based on observed conditions, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. precipitation,
2. freezing conditions (i.e., stockpiles have a frozen crust on the outside surface)[2], or
3. other conditions are present such as snow cover, or winds exceeding 25 mph.

Inactive stockpiles[3] are encrusted with a surfactant approximately every 60 days, weather permitting. Written logs of the operation of the water spray system are maintained.

Bulk materials stored on barges berthed at KCBX are visually monitored for fugitive emissions. As with land-side stockpiles, bulk materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. Fugitive emissions that appear to arise from bulk material stored on barges are controlled by portable water cannon using river water on the material.

B. Bulk material unloading. BMP to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket, portable box hopper, and portable conveyor. In accordance with 35 IAC 212.308, choke-feeding and application of water spray from a portable water cannon, as conditions warrant, are used to control fugitive particulate emissions at the hopper and along the conveyor. Choke-feeding narrows the opening from the donating equipment to the receiving equipment so that the vertical drop distance is reduced by maintaining a volume of the material above the drop point. Water spray is also applied at the barge as warranted. Barges may also be unloaded directly to stockpiles where pole-mounted water cannons control fugitive particulate emissions.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure with multiple spray bar headers at strategic locations in accordance with 35 IAC 212.308.

[2] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. The portable water cannons are available during this period to provide spot application of water, as needed.

[3] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

3. Trucks are unloaded directly to stockpiles where mobile equipment may further place the bulk products. The moisture content of unloaded product typically exceeds 10 percent and does not typically generate fugitive particulate emissions due to the high moisture content. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Transfer points. Several material transfer points are utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At fixed transfer points, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may also used to supplement water sprays as needed.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon(s) may also be applied to control fugitive particulate emissions.

Water from spray bars is utilized as necessary at fixed conveyor loading operations to stockpiles (i.e., stacker transfer to stockpiles) to control fugitive particulate emissions in accordance with 35 IAC 212.305. Where spray bars are not present, watering is provided from the pole-mounted water spray system or the mobile truck-mounted water spray system.[4]

D. Bulk material loading. In addition to the controls described below, the carryover from controls described in Sections A through C, also minimize fugitive particulate emissions during loading and within the receiving vehicle (i.e., barge, vessel or truck). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop height and feed rate are monitored and adjusted.

2. For vessel to barge transfer, a boom is used and, when conditions warrant, water spray from the boom is applied to control the fugitive particulate emissions at the barge.

[4] The requirement in 35 IAC 212.305 applies only to systems associated with stockpiles that have "uncontrolled emissions of fugitive particulate matter in excess of…50 T/yr which are located within a source whose potential particulate emissions from all emission units exceed…100 T/yr." KCBX is not such a source.

3. For truck loading, front-end loaders transfer bulk material from stockpiles to the trucks. During non-freezing conditions, water from the pole-mounted water cannons control fugitive particulate emissions from the truck loading. Loaded trucks are tarped in accordance with 35 IAC 212.315. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk material may be sized in a screening process to satisfy customer product specifications. When conditions warrant, water spray is applied from a portable water cannon(s) to the stockpile and/or the target hopper to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 35 IAC 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk materials. This equipment frequently traverses the storage pad and plant roadways. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions generated by this heavy equipment traffic. Water spray from a truck-mounted spray bar and a portable water cannon(s) is applied on days when equipment traffic is present or as otherwise needed to control fugitive particulate emissions from unpaved plant roadways. In addition, a mechanical sweeper is used during normal business days, except days with precipitation, to remove particulates from paved plant roads, parking areas and adjacent city streets. Trucks leaving the stockpile area and entering the "back road" are required to pass through a wheel-wash system prior to leaving. The wheel-wash operates daily except during freezing conditions. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 35 IAC 212.316(c).

Unpaved and paved roads are visually inspected each day that heavy equipment is operated and water is applied according to need, unless precipitation, freezing conditions, snow cover, winds in excess of 25 mph, or other mitigating conditions are present. Sweeping is also performed on days when heavy equipment is operated unless the above listed conditions are present. Written logs of water truck and sweeper use are maintained.

The watering program also covers the west perimeter access road that runs between 100th street to the north and Muskegon Avenue to the south. Although this access road is neither owned nor leased by the company, KCBX voluntarily implements fugitive dust control measures as part of our community outreach efforts. Fugitive dust control measures will be continued as long as the road is safe to traverse and it does not become a public thoroughfare.

G. Program. Each day, fugitive particulate sources and current weather conditions are monitored and, when conditions warrant, the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions. Forecasts of future weather conditions (e.g., wind and precipitation) are also monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for weather forecasts or assigning this responsibility. Weather tracking is accomplished using local and national public domain forecasting services.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speeds exceed 25 mph. Similarly, when wind speeds exceed 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, on occasions where the exceptions outlined in Section 212.314 may apply, KCBX will evaluate wind conditions and make every effort to continue operation of water spray and mechanical sweeping programs unless deemed inappropriate. Current and future wind and precipitation conditions are monitored and the water spray program is adjusted accordingly.

There is currently no pollution control equipment in operation subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 35 IAC 212.307.

A plot plan depicting the following elements is included per 35 IAC 212.310(c) as an aide to implementing the consolidated plan.

A. approximate locations of storage piles
B. fixed conveyor locations
C. areas where portable conveyors may be operated
D. normal traffic patterns
E. approximate locations of bulk material loading and unloading
F. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. Contingency Measure Plan

A. Plan Elements. This Contingency Measure Plan is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this Contingency Measure Plan are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 15%. These reductions are achieved by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 25%. These reductions are achieved by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 35 IAC 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase in frequency and volume of pole-mounted and mobile water sprays from Level I	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the Contingency Measure Plan should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as federally enforceable permit conditions. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan: Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised Contingency Measure Plan per 35 IAC 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. Episode Action Plan

Episode Action Plans, as required by 35 IAC 244 Subpart C are not required because the fuel combustion emission sources burning fuel oil do not exceed 10 mmbtu/hr (see 35 IAC 244.142(c)).

3. Revisions Log

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G", vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J. and clarified scope of sweeper services to Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.

Consolidated
Fugitive Particulate Operating Program and
Contingency Measures Plan

KCBX TERMINALS COMPANY

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Prepared: Current Revision:	November 18, 1999 #9 – November 10, 2008
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk materials, which are transported via truck, train, barge, and/or vessel. KCBX can transfer material from one transportation mode to another either with or without stockpiling. To significantly reduce fugitive particulate matter emissions from these activities, KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308.

A. Stockpiles. Bulk materials are stockpiled on-site to satisfy customer needs throughout the year. Even though uncontrolled emissions from stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles located in areas that may not receive 100 percent coverage from the pole-mounted water spray system are watered by portable water cannon[1]. Watering also reduces fugitive emissions from bulk material transfers because of the moisture carry-over in the product.

[1] "Portable Water Cannon" is mounted on the water truck (1).

The permanent, fixed-pole water spray system consists of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade providing a throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by two, redundant feeder pumps designed to deliver up to 1200 gallons per minute (gpm) through approximately 6000 feet of buried 8-inch diameter pipeline. KCBX normally operates only a single pump, which supplies two cannons simultaneously.

TABLE 1. Specifications for Fixed-Pole Water Spray System or equivalent substitutions (per 35 IAC 212.310(e))

Description	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, Rated at 500 gpm @ 100 psi, 260' radius, 34' Height, 34MM bore, including ring nozzle, 4" FNPT Gun Connection Flange.	Nelson	SR150-24 Deg
Pipe - Schedule 40 - Galvanized (3 - lengths)		
Pipe Coupling Threaded- 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection.		
Pipe 45 degree elbow - 4" class 150 - threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed Control, Flanged Design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. for mating to 6" roll seal valve.		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB -B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. 2 flanges for mating to 4" ball valve, 1 flange to mate to under ground feed pipe.		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

The fixed-pole water spray system is operated to apply small quantities of water during each cycle, with cycles extending over pre-set periods of time, wetting the exteriors of stockpiles which are exposed to the eroding forces of wind and the mechanical displacement of equipment. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the outer portion of the pile is all that is required. Additionally, over-application of water results in increased controls associated with runoff management. The frequency and duration of watering are adjusted based on conditions observed from visual inspections, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. precipitation,
2. freezing conditions (i.e., stockpiles have a frozen crust on the outer surface)[2], or
3. other conditions are present such as rainfall in the previous two days exceeding 0.25 inches, snow cover, or winds exceeding 25 mph.

Inactive stockpiles[3] are encrusted with a surfactant approximately every 60 days, weather permitting. Operating logs of the water spray system are maintained.

Bulk materials stored on barges berthed at KCBX are visually monitored for fugitive emissions. As with stockpiles on the storage pad, bulk materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. Visible fugitive emissions from bulk material stored on barges are controlled by applying river water via portable water cannon on the material.

B. Bulk material unloading. BMP to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket. Bulk materials may be unloaded directly to a storage pile or to a portable box hopper that transfers the material to a conveying system. In accordance with 35 IAC 212.308, choke-feeding and application of water spray from a portable water cannon are used, as conditions warrant, to control fugitive particulate emissions at the hopper and along the conveying system. Choke-feeding narrows the opening from the donating equipment to the receiving equipment so that the vertical drop distance is reduced by maintaining a volume of the material above the drop point. Water spray is also applied at the barge as warranted. Fugitive emissions from barges unloaded directly to stockpiles are controlled by the pole-mounted water cannons.

[2] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. The portable water cannon is available during this period to provide spot application of water, as needed.

[3] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure with multiple spray bar headers at strategic locations in accordance with 35 IAC 212.308.

3. Trucks are unloaded directly to stockpiles where mobile equipment may further place the bulk products. Unloaded product typically has a moisture content exceeding 10 percent which typically minimizes the generation of fugitive particulate emissions. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Material Transfers. Several material transfers may be utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At fixed transfer points, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may also be used to supplement water sprays as needed.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon may also be used for spot or supplemental control of fugitive particulate emissions.

3. Water from spray bars is utilized as necessary at fixed conveyor transfers to stockpiles (i.e., stacker transfer to stockpiles) to control fugitive particulate emissions in accordance with 35 IAC 212.305. Where spray bars are not present, watering may be provided by ~~from a~~ portable water cannon as needed.[4]

D. Bulk material loading. In addition to the controls described below, the carryover from controls described in Sections A through C also minimize fugitive particulate emissions during loading of the receiving vehicle (i.e., barge, vessel or truck). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop height and feed rate are monitored and adjusted.

2. For vessel to barge transfer, a boom is used and, when conditions warrant, water spray from the boom is applied to control the fugitive particulate emissions.

[4] The requirement in 35 IAC 212.305 applies only to systems associated with stockpiles that have "uncontrolled emissions of fugitive particulate matter in excess of...50 T/yr which are located within a source whose potential particulate emissions from all emission units exceed...100 T/yr." KCBX is not such a source.

3. For truck loading, front-end loaders transfer bulk material from stockpiles to the trucks. During non-freezing conditions, water from the pole-mounted water cannons control fugitive particulate emissions from the truck loading. Loaded trucks are tarped in accordance with 35 IAC 212.315. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk material may be sized in a screening process to remove foreign material and/or to satisfy customer product specifications. When conditions warrant, water spray is applied from a portable water cannon to the stockpile and/or the target hopper to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 35 IAC 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk materials. This equipment frequently traverses the storage pad and plant roadways. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions generated by this heavy equipment traffic. Water spray from a truck-mounted spray bar and/or portable water cannon is applied on days when equipment traffic is present or as otherwise needed to control fugitive particulate emissions from unpaved plant roadways. In addition, a mechanical sweeper is used during normal business days, except days with precipitation or freezing conditions, to remove particulates from paved plant roads, parking areas and adjacent city streets. Trucks leaving the stockpile area and entering the "back road" are required to pass through a wheel-wash system prior to leaving. The wheel-wash operates daily except during freezing conditions. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 35 IAC 212.316(c).

Unpaved and paved roads are visually inspected each day that heavy equipment is operated and water is applied according to need, unless precipitation, freezing conditions, snow cover, winds in excess of 25 mph, or other mitigating conditions are present, such as rainfall exceeding 0.25 inches in the preceding two days. Sweeping is also performed on days when heavy equipment is operated unless the above listed conditions are present. Written records of water truck and sweeper use are maintained.

The watering program also covers the west perimeter access road that runs between 100th street to the north and Muskegon Avenue to the south. Although this access road is neither owned nor leased by the company, KCBX voluntarily implements fugitive dust control measures as part of our community outreach efforts. Fugitive dust control measures will be continued as long as the road is safe to traverse and it does not become a public thoroughfare.

G. Program. Each day, fugitive particulate sources and current weather conditions are monitored and the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions when conditions warrant. Forecasts of future weather conditions (e.g., wind and precipitation) are monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for weather forecasts or assigning this responsibility. Weather tracking is accomplished using local and national public domain forecasting services. Current and future wind and precipitation conditions are monitored and the water spray program is adjusted accordingly.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speed exceeds 25 mph. Similarly, when wind speed exceeds 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, on occasions where the exceptions outlined in Section 212.314 may apply, KCBX will evaluate conditions and make every effort to continue operation of water spray and mechanical sweeping programs unless deemed inappropriate.

There is currently no pollution control equipment in operation subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 35 IAC 212.307.

A plot plan depicting the following elements is included per 35 IAC 212.310(c) as an aide to implementing the consolidated plan.

1. approximate locations of storage piles
2. fixed conveyor locations
3. areas where portable conveyors may be operated
4. normal traffic patterns
5. approximate locations of bulk material loading and unloading
6. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. **Contingency Measure Plan**

A. Plan Elements. This Contingency Measure Plan is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this Contingency Measure Plan are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 15%. These reductions are achieved by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 25%. These reductions are achieved by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 35 IAC 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase in frequency and volume of pole-mounted and mobile water sprays from Level I and abeyance or rescheduling of non-critical operations	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the Contingency Measure Plan should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

Assessment of operations as non-critical will be accomplished on as as-needed basis. Options may include, but are not limited to, cessation of certain activities such as screening and stockpile compaction and may involve rescheduling certain activities such as material deliveries or shipments to periods when less wind is forecast.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as a federally enforceable permit condition. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan: Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised Contingency Measure Plan per 35 IAC 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. **Episode Action Plan**
   Episode Action Plans, as required by 35 IAC 244 Subpart C are not required because the fuel combustion emission sources burning fuel oil do not exceed 10 mmbtu/hr (see 35 IAC 244.142(c)).

4. **Revision Log**

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G", vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J and clarified scope of sweeper services to Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.
Rev 9 11/06/08	Edited: (1) footnote 1 regarding portable water cannons; (2) s. 1.A regarding 3 conditions related to running water system; (3) s. 1.F for conditions regarding reasons for sweeper not being run; (4) s. 1.A through 1.G for wording clarification; (5) s. 2.A adding abeyance and rescheduling as options.

COMPLIANCE DOCUMENT QUALITY ASSURANCE REVIEW FORM

1

Document Name: Update Fugitive Particulate Operating Plan

Document Level: ☐ A ☒ B ☐ C

Reason for Submittal: Updates required to be submitted to IEPA per 35 IAC 212.312

Due Date: ASAP

2

Responsible Official: _____

R.O. Authorized: ☒ Yes ☐ No By: Pat Baldwin Date: 6/20/2005

3

Document Preparer: Christopher Bailey

Document Owner: Jim Simmons

Qualified Reviewers (check all that apply):

☐	Legal (A)	Name:		Sign:		Date:	
☐	Compliance Director (A)	Name:		Sign:		Date:	
☒	Compliance Manager (A, B)	Name:	Terry Steinert	Sign:		Date:	11/11/2008
☐	Other Employee (C)	Name:		Sign:		Date:	
☐	Third Party	Name:		Sign:		Date:	
☒	VP / Business Leader	Name:	Jim Simmons	Sign:		Date:	

4

Non-compliance, reportable or anomaly: ☐ Yes ☒ No If no, then skip to Section 5

Agency Notified: ☐ Yes ☒ No Agency: _____

Describe: _____

LYNX Tracking No. _____

5

Document, supporting information and QA Form filed to:

Facility Files: ☒ Yes ☐ No

Stellent: ☒ Yes ☐ No

Retention Code: EHS91

6

Remarks: minor edits to FPOP.cm to correct grammar

See edits to cover letter in electronic file 11-11-2008

KCBX TERMINALS COMPANY

May 4, 2010

Via Certified Mail

Mr. George Kennedy
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Kennedy,

Please find enclosed a revised copy of the combined Fugitive Particulate Operating Program – Contingency Measures Plan (the "Plan") for KCBX Terminals Company ("KCBX") in Chicago, IL. This revision addresses minor inconsistencies in the Plan and further clarifies descriptions of emission control systems. KCBX will continue to review the Plan for completeness and effectiveness as conditions and circumstances change at the facility.

If you have any questions or would like additional information please do not hesitate to contact me at 773.978.8518

Respectfully Submitted,
KCBX TERMINALS - CHICAGO

Christopher Bailey
EHS Manager

enclosure

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

OPERATING PROGRAM FOR FUGITIVE PARTICULATE CONTROL	KCBX TERMINALS COMPANY

1. THIS FORM IS USED TO APPLY FOR A FUGITIVE DUST OPERATING PROGRAM AS REQUIRED BY 35 IAC 212.309. COMPLETE THE FORM, KEEP ONE COPY FOR YOUR RECORDS, AND RETURN TWO COPIES TO THE ATTENTION OF BUREAU OF AIR PERMIT SECTION MANAGER AT THE ADDRESS LISTED ABOVE.

2a. NAME OF OWNER:		3a. NAME OF OPERATOR:	
KCBX Terminals Co.		KCBX Terminals Co.	
2b. STREET ADDRESS OF OWNER:		3b. STREET ADDRESS OF OPERATOR:	
3259 East 100th Street		3259 East 100th Street	
2c. CITY OF OWNER:		3c. CITY OF OPERATOR:	
Chicago		Chicago	
2d. STATE OF OWNER:	2e. ZIP CODE:	3d. STATE OF OPERATOR:	3e. ZIP CODE:
IL	60617	IL	60617

4a. NAME OF CORPORATE DIVISION OR PLANT:		4b. STREET ADDRESS OF EMISSION SOURCE:		
KCBX Terminals Co.		3259 East 100th Street		
4c. CITY OF EMISSION SOURCE:	4d. LOCATED WITHIN CITY LIMITS: ☒ YES ☐ NO	4e. TOWNSHIP:	4f. COUNTY:	4g. ZIP CODE:
Chicago			COOK	60617

5. SUBMIT A SCALE MAP SHOWING ALL STORAGE PILES, CONVEYOR LOADING OPERATIONS, STORAGE PILE ACCESS ROADS, NORMAL TRAFFIC ROADS, PARKING FACILITIES, LOCATION OF UNLOADING AND TRANSPORTING OPERATIONS WITH POLLUTION CONTROL EQUIPMENT.

6a. DO STORAGE PILES CONTAIN A TOTAL OF MORE THAN 260,000 TONS OF MATERIAL IN A CALENDER YEAR? ☒ YES ☐ NO

6b. IF THE ANSWER TO 6a WAS YES, PLEASE SUBMIT THE FOLLOWING INFORMATION.

TOTAL AMOUNT OF MATERIAL IN THE STORAGE PILES: TONS/YEAR: **800,000**

AND SUBMIT AN ATTACHED SHEET DESCRIBING:

I) DETAILED OPERATING PROCEDURES AND CONTROL METHODS BY WHICH FUGITIVE PARTICULATES FROM THESE STORAGE PILES WILL BE MINIMIZED DURING LOADING, UNLOADING, PILE MAINTENANCE, AND WIND EROSION. HOW OFTEN WILL THESE PILES BE TREATED WITH SURFACTING AGENT? NAME THE TYPE AND CONCENTRATION OF SURFACTANT THAT WILL BE USED.

II) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM CONVEYOR LOADING OPERATIONS AND NORMAL TRAFFIC PATTERN ROADS SERVING THESE STORAGE PILES. IF SURFACTING AGENT IS USED STATE TYPE AND CONCENTRATION OF SURFACTING AGENT AND FREQUENCY OF ITS USE.

III) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM ALL PAVED OR UNPAVED PARKING LOTS AND NORMAL TRAFFIC PATTERN ROADS AT THIS FACILITY. IF ROADS ARE PAVED INDICATE FOOTAGE OF ROADS THAT WILL BE PAVED AND HOW FREQUENTLY THESE ROADS WILL BE CLEANED.

7. DOES THIS FACILITY HAVE ANY OF THE FOLLOWING SOURCES?	
a.) CRUSHERS	☐ YES ☒ NO
b.) GRINDING MILLS	☐ YES ☒ NO
c.) SCREENING OPERATIONS	☒ YES ☐ NO
d.) BUCKET ELEVATORS	☐ YES ☒ NO
e.) CONVEYORS	☒ YES ☐ NO
f.) CONVEYOR TRANSFER POINTS	☒ YES ☐ NO
g.) BAGGING OPERATIONS	☐ YES ☒ NO
h.) STORAGE BINS	☐ YES ☒ NO
i.) FINE PRODUCT TRUCK AND TRAILER LOADING OPERATIONS	☐ YES ☒ NO
j.) UNLOADING AND TRANSPORTING OPERATIONS OF MATERIAL COLLECTED BY POLLUTION CONTROL EQUIPMENT	☐ YES ☒ NO
k.) UNPAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
l.) PAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
m.) UNPAVED PARKING LOTS	☐ YES ☒ NO
n.) PAVED PARKING LOTS	☒ YES ☐ NO
7b. FOR EACH SOURCE MARKED YES, ATTACH AN ADDITIONAL SHEET DESCRIBING THE TYPE OF CONTROL METHODS THAT WILL BE USED TO CONTROL FUGITIVE PARTICULATE EMISSIONS. IF SURFACTANT IS USED, STATE THE TYPE AND CONCENTRATION OF SURFACTANT AND FREQUENCY OF ITS APPLICATION. IF THE ROADS AND PARKING LOTS ARE PAVED, STATE THE FREQUENCY OF CLEANING.	

8. VEHICULAR MILES TRAVEL INFORMATION:
THIS INFORMATION IS TO BE DETERMINED BY THE NUMBER OF CARS MULTIPLIED BY THE DISTANCE TRAVELED FOR THE FOLLOWING ROADS.

I) TRAFFIC ON UNPAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 11000 Miles Per Year

II) TRAFFIC ON PAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 4200 Miles Per Year

III) TRAFFIC ON UNPAVED PARKING LOTS IN MILES PER YEAR 0 Miles Per Year

IV) TRAFFIC ON PAVED PARKING LOTS IN MILES PER YEAR 10 Miles Per Year

9. IS THIS FUGITIVE PARTICULATE CONTROL PROGRAM IMPLEMENTED AT THE PRESENT? ☒ YES ☐ NO

10.
AUTHORIZED SIGNATURE (S): (D)

BY _____ 5-7-10 BY _____
SIGNATURE DATE SIGNATURE DATE

Jim Simmons
TYPED OR PRINTED NAME OF SIGNER

TYPED OR PRINTED NAME OF SIGNER

Terminal Manager
TITLE OF SIGNER

TITLE OF SIGNER

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Facility ID No.:	031600AHI
Facility Telephone:	(773) 375-3700
Responsible Persons:	Site EHS Manager (primary for Operating Program) Terminal Operations Manager (primary for Contingency Measures)
Prepared: Current Revision:	November 18, 1999 #11 – May 4, 2010
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk solid materials, primarily coal and petroleum coke, which are transported via truck, train, barge, and vessel. KCBX can transfer material either directly from one transportation mode to another or indirectly using intermediate stockpiling. KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308 to control fugitive particulate matter emissions from these activities.

A. Stockpiles. Bulk solid materials are stockpiled on-site to satisfy customer needs throughout the year. Even though uncontrolled emissions from stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles that may not receive 100 percent coverage from the pole-mounted water spray system due to meteorological conditions or stockpile configurations are watered by portable water cannon mounted on the facility water truck. Watering also reduces fugitive emissions from bulk solid material transfers because of the moisture carry-over in the product.

The permanent, fixed-pole water spray system consists of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade providing a design throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by two, redundant feeder pumps designed to deliver up to 1200 gallons per minute (gpm) through approximately 6000 feet of buried 8-inch diameter pipe. KCBX normally operates only a single pump, which typically supplies two cannons simultaneously.

TABLE 1. Specifications for Fixed-Pole Water Spray System or equivalent substitutions (per 35 IAC 212.310(e))

Description	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, Rated at 500 gpm @ 100 psi, 260' radius, 34' Height, 34MM bore, including ring nozzle, 4" FNPT Gun Connection Flange.	Nelson	SR150-24 Deg
Pipe - Schedule 40 - Galvanized (3 - lengths)		
Pipe Coupling Threaded- 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection.		
Pipe 45 degree elbow - 4" class 150 – threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed Control, Flanged Design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. for mating to 6" roll seal valve.		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB -B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. 2 flanges for mating to 4" ball valve, 1 flange to mate to under ground feed pipe.		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

The fixed-pole water spray system is operated to apply water as conditions warrant, wetting the exteriors of stockpiles which are exposed to the eroding forces of wind and the mechanical displacement of operating equipment. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the outer portion of the pile is all that is required. This prevents over-application of water which would result in increased controls associated with runoff management. The frequency and duration of watering are adjusted based on existing conditions, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. precipitation,
2. freezing conditions (i.e., stockpiles have a frozen crust on the outer surface)[1], or
3. other mitigating conditions such as rainfall in the previous two days exceeding 0.25 inches, snow cover, or winds exceeding 25 mph.

Inactive stockpiles[2] are encrusted with a surfactant approximately every 60 days, weather permitting. Operating logs of the water spray system and surfactant application are maintained.

Control of fugitive particulate emissions from bulk solid materials stored on barges berthed at KCBX is similar to controls for land-based stockpiles. As with stockpiles on the storage pad, bulk solid materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. Visible fugitive emissions from bulk solid material stored on barges are controlled by applying river water from the portable water cannon attached to the water truck as conditions warrant.

B. Bulk solid material unloading. BMP to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket either to a storage pile or to a portable box hopper that transfers the material to a conveying system. In accordance with 35 IAC 212.308, choke-feeding and application of water spray from a portable water cannon attached to the water truck are used, as conditions warrant, to control fugitive particulate emissions at the hopper and along the conveying system. Choke-feeding narrows the opening from the donating equipment to the receiving equipment so that the vertical drop distance is reduced by maintaining a volume of the material above the drop point. Water spray is also applied at the barge as warranted. Fugitive emissions from barges unloaded directly to stockpiles are controlled by the pole-mounted water cannons.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure and with multiple spray bar headers operated as conditions warrant located near the top of the receiving hoppers in accordance with 35 IAC 212.308.

[1] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. The portable water cannon attached to the water truck is available during this period to provide spot application of water, as needed.

[2] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

3. Trucks are unloaded directly to stockpiles where mobile equipment may further place the bulk solid materials. Unloaded bulk solid materials typically have moisture contents exceeding 10 percent which minimizes the generation of fugitive particulate emissions. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Material Transfers. Several material transfers may be utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At multiple fixed transfer points throughout the conveyance systems, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may be added to supplement water sprays as needed.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon attached to the water truck may also be used for spot or supplemental control of fugitive particulate emissions.

3. As stated in 1.A, uncontrolled emissions from stockpiles should not exceed 50 tpy and therefore, dedicated spray systems and telescopic chutes for conveyor loading operations to storage piles are not required by 35 IAC 212.305. However, water from the pole-mounted water cannons or the portable water cannon attached to the water truck is available for control at these transfer points as needed and telescopic chutes for pile creation are used as additional controls.

D. Bulk solid material loading. In addition to the controls described below, carryover moisture from controls described in Sections A through C also minimizes fugitive particulate emissions during loading of receiving vehicles (i.e., barges, vessels, trucks or railcars). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop height and feed rate are monitored and adjusted.

2. For vessel to barge transfer, a boom is used and, when conditions warrant, water spray from the boom is applied to control the fugitive particulate emissions.

3. For truck loading, front-end loaders transfer bulk solid material from stockpiles to the trucks. During non-freezing conditions, water from the pole-mounted water cannons is applied to control fugitive particulate emissions from the truck loading. Loaded trucks are tarped in accordance with 35 IAC 212.315. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk solid material may be sized in a screening process to remove foreign material and/or to satisfy customer product specifications. When conditions warrant, water spray is applied from a portable water cannon attached to the water truck to the stockpile and/or the target hopper to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 35 IAC 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk solid materials. This equipment frequently traverses the storage pad and interior plant roadways. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions generated by this heavy equipment traffic. Water from a truck-mounted spray bar and/or portable water cannon attached to the water truck is applied on days when heavy equipment traffic is present or as otherwise needed to control fugitive particulate emissions from interior plant roadways and parking areas. In addition, a mechanical sweeper is used during normal business days, except days with precipitation or freezing conditions, to remove particulates from paved interior plant roads, parking areas and adjacent streets. Trucks leaving the storage pad and entering the west access road that runs between 100th Street to the north and Muskegon Avenue to the south (the "Back Road") are required to pass through a wheel-wash prior to leaving. The wheel-wash operates each day that truck traffic is present except during freezing conditions. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 35 IAC 212.316(c).

Water is applied to interior plant roads each day that heavy equipment is operated, unless precipitation, freezing conditions, snow cover, winds in excess of 25 mph, or other mitigating conditions are present, such as rainfall exceeding 0.25 inches in the preceding two days. Sweeping is also performed on days when heavy equipment is operated unless the above listed conditions are present. Written records of water truck and sweeper use are maintained.

The watering program also covers the Back Road although this access road is neither owned nor leased by the company. KCBX voluntarily implements fugitive dust control measures on the Back Road as a community outreach effort and will continue this practice as long as the road is safe to traverse and it does not become a public thoroughfare.

G. Program. Each day, fugitive particulate sources and current weather conditions are monitored and the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions when conditions warrant. Forecasts of expected weather conditions, including wind and precipitation, are monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for monitoring weather forecasts or assigning this responsibility. Forecasts are available through local and national public domain services.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speed exceeds 25 mph. Similarly, when wind speed exceeds 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, on occasions where the exceptions outlined in Section 212.314 may apply, KCBX will evaluate conditions and make every effort to continue operation of water spray and mechanical sweeping programs unless deemed inappropriate.

There is currently no pollution control equipment in operation at the facility subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 35 IAC 212.307.

A plot plan depicting the following elements is included per 35 IAC 212.310(c) as an aid to implementing the consolidated plan:

1. approximate locations of storage piles
2. fixed conveyor locations
3. areas where portable conveyors may be operated
4. normal traffic patterns
5. approximate locations of bulk solid material loading and unloading
6. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. Contingency Measure Plan

A. Plan Elements. This Contingency Measure Plan is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this Contingency Measure Plan are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 15%. These reductions are achieved by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 25%. These reductions are achieved by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk solid material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 35 IAC 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase in frequency and volume of pole-mounted and mobile water sprays from Level I and abeyance or rescheduling of non-critical operations	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the Contingency Measure Plan should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

Assessment of operations as non-critical will be accomplished on as as-needed basis. Options may include, but are not limited to, cessation of certain activities such as screening and stockpile compaction and may involve rescheduling certain activities such as material deliveries or shipments to periods when less wind is forecast.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as a federally enforceable permit condition. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan: Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised Contingency Measure Plan per 35 IAC 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

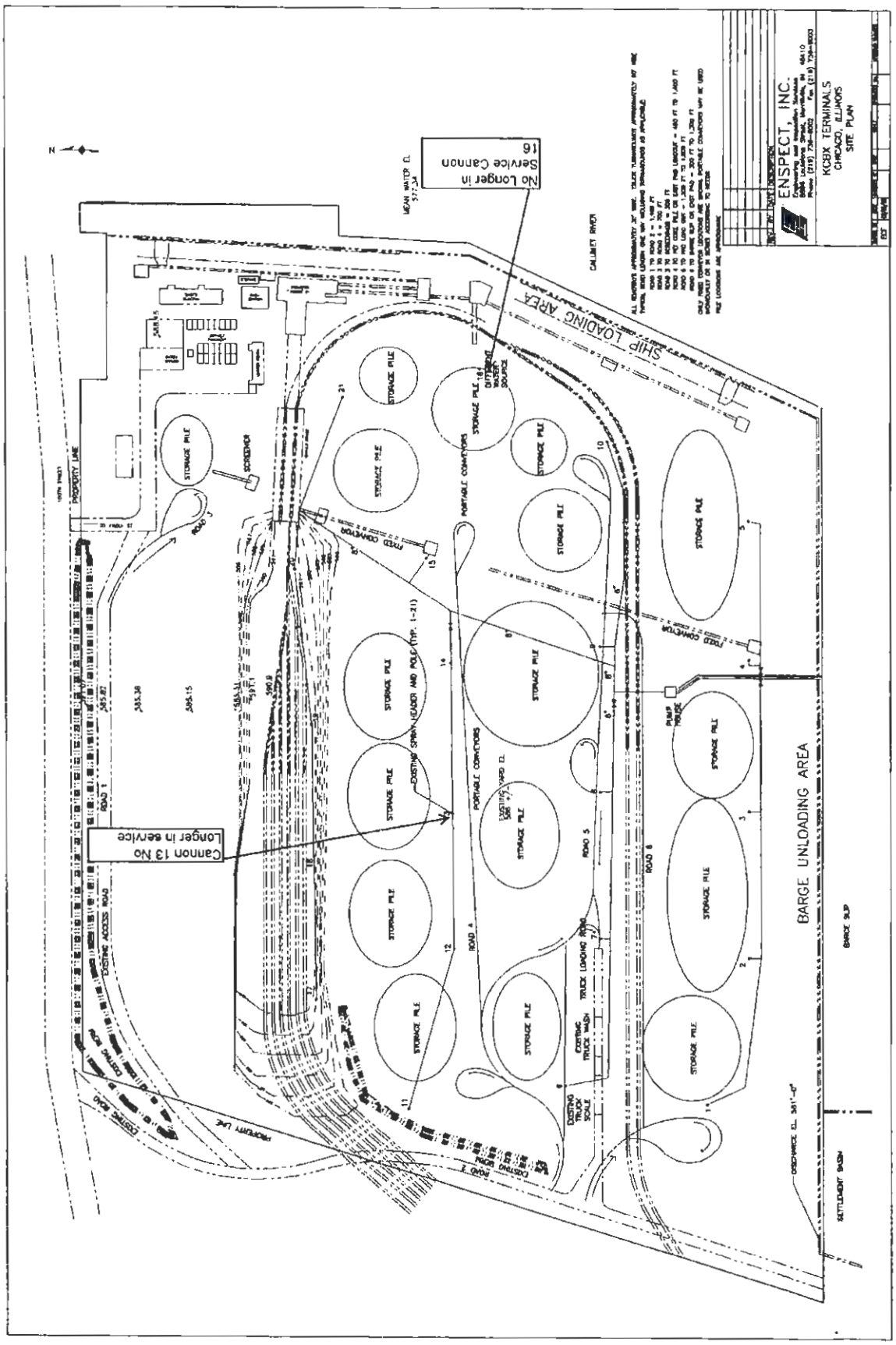
2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. Episode Action Plan

Episode Action Plans under 35 IAC 244 Subpart C are not required because the emission sources combusting fuel oil at the facility do not exceed 10 mmbtu/hr (see 35 IAC 244.142(c)).

4. Revision Log

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G", vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J and clarified scope of sweeper services to Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.
Rev 9 11/06/08	Edited: (1) footnote 1 regarding portable water cannons; (2) s. 1.A regarding 3 conditions related to running water system; (3) s. 1.F for conditions regarding reasons for sweeper not being run; (4) s. 1.A through 1.G for wording clarification; (5) s. 2.A adding abeyance and rescheduling as options.
Rev 10 06/23/09	(1) Clarified "portable water cannon" throughout the plan. (2) Made administrative edits for consistency in plan implementation.
Rev 11 05/04/10	(1) Made administrative edits for consistency in plan implementation. (2) Added language around the anemometer attached to cannon system.


No Longer In Service Cannon 16
Cannon 13 No Longer In service
SHIP LOADING AREA
BARGE UNLOADING AREA
STORAGE PILE
PORTABLE CONVEYORS
EXISTING ACCESS ROAD
EXISTING TRUCK LOADING ROAD
EXISTING TRUCK SCALE
SETTLEMENT BASIN
BARGE SLIP
PUMP HOUSE
SCREENER
PROPERTY LINE
ENSPECT, INC.
KCBX TERMINALS
CHICAGO, ILLINOIS
SITE PLAN

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- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. George Kennedy
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

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KCBX TERMINALS CO.

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Illinois Environmental Protection Agency ☑ Agent ☐ Addressee
1021 North Grand Avenue East

B. Received (Printed Name) Date of Delivery
Springfield, IL 62794-9276

MAY 12 2014

D. Is delivery address different from item 1? ☐ Yes
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Street, Apt. No., or PO Box No.: Bureau of Air
City, State, ZIP+4: Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

PS Form 3800, August 2006 See Reverse for Instructions

7006 0100 0006 9747 0638

COMPLIANCE DOCUMENT QUALITY ASSURANCE REVIEW FORM

1

Document Name: Update Fugitive Particulate Operating Plan

Document Level: ☐ A ☒ B ☐ C

Reason for Submittal: Updates required to be submitted to IEPA per 35 IAC 212.312

Due Date: ASAP Submitted: ☐ Electronically ☒ Hardcopy/Paper

2

Responsible Official: Jim Simmons

R.O. Authorized: ☒ Yes ☐ No By: Pat Baldwin Date: 2010-06-20

3

Document Preparer: Chris Bailey Sign: Date: 5-5-10

Document Owner: Jim Simmons Sign: Date: 5-7-10

(Owner signs if different from Preparer)

Qualified Reviewers (check all that apply):

☐ Legal (A)	Name:	Sign:	Date:	
☐ Compliance Director (A)	Name:	Sign:	Date:	
☒ Compliance Manager (A, B)	Name: Terry Steinert	Sign:	Date:	2010-05-04
☐ Other Employee (C)	Name:	Sign:	Date:	
☐ Third Party	Name:	Sign:	Date:	
☐ VP / Business Leader	Name:	Sign:	Date:	

4

Non-compliance, reportable condition or anomaly: ☐ Yes ☒ No If no, then skip to Section 5

Agency Notified: ☐ Yes ☐ No Agency:

Describe:

LYNX Tracking No.

5

Document, supporting information and QA Form filed to:

Facility Files: ☐ Yes ☒ No

Stellent: ☒ Yes ☐ No Retention Code: EHS91

6

Remarks:

COMPLIANCE DOCUMENT QUALITY ASSURANCE REVIEW FORM

1

Document Name: Fugitive Particulate Operating Program

Affected Agency: IEPA Document Level: ☐ A ☒ B ☐ C

Reason for Submittal: Updated changes require re-submittal to the state of Illinois

Due Date: 05-15-2011 Submitted: ☐ Electronically ☒ Hardcopy/Paper ☐ N/A

2

Responsible Official: Jim Simmons 5-17-11

R.O. Authorized: ☒ Yes ☐ No By: Pat Baktwin Date: 2005-06-20

3

Document Preparer: Brandon Walker Sign: Brandon Walker Date: 5/13/2011

Document Owner: Brandon Walker Sign: Brandon Walker Date: 5/13/2011
(Owner signs if different from Preparer)

Qualified Reviewers (check all that apply):

☐ Legal (A)	Name:	Sign:	Date:
☐ Compliance Director (A)	Name:	Sign:	Date:
☒ Compliance Manager (A, B)	Name: Tracy Snowden	Sign:	Date: 5/13/2011
☐ Other Employee (C)	Name:	Sign:	Date:
☐ Third Party	Name:	Sign:	Date:
☐ VP / Business Leader	Name:	Sign:	Date:

4

Non-compliance, reportable condition or anomaly: ☐ Yes ☒ No If no, then skip to Section 5

Agency Notified: ☐ Yes ☐ No Agency:

Describe:

LYNX Tracking No.

5

Document, supporting information and QA Form filed to:

Facility Files: ☒ Yes ☐ No

Stellent: ☒ Yes ☐ No Retention Code: EHS91

6

Remarks:

KCBX TERMINALS COMPANY

May 16, 2011

Via Certified Mail

Mr. Joseph Kotas
Bureau of Air
Illinois Environmental Protection Agency
9511 West Harrison Street 3rd Floor
Des Plaines, IL 60016

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Kotas,

Please find enclosed a revised copy of the combined Fugitive Particulate Operating Program – Contingency Measures Plan (the "Plan") for KCBX Terminals Company ("KCBX") in Chicago, IL. This revision addresses minor inconsistencies in the Plan and further clarifies descriptions of emission control systems. KCBX will continue to review the Plan for completeness and effectiveness as conditions and circumstances change at the facility.

If you have any questions or would like additional information please do not hesitate to contact me at 773.978.8518

Respectfully Submitted,
KCBX TERMINALS - CHICAGO

Brandon Walker

Brandon Walker
EHS Manager

enclosure

KCBX TERMINALS COMPANY

May 16, 2011

Via Certified Mail

Mr. George Kennedy
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Kennedy,

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If you have any questions or would like additional information please do not hesitate to contact me at 773.978.8518

Respectfully Submitted,
KCBX TERMINALS - CHICAGO

Brandon Walker

Brandon Walker
EHS Manager

enclosure

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

OPERATING PROGRAM FOR FUGITIVE PARTICULATE CONTROL	KCBX TERMINALS COMPANY

1. THIS FORM IS USED TO APPLY FOR A FUGITIVE DUST OPERATING PROGRAM AS REQUIRED BY 35 IAC 212.309. COMPLETE THE FORM, KEEP ONE COPY FOR YOUR RECORDS, AND RETURN TWO COPIES TO THE ATTENTION OF BUREAU OF AIR PERMIT SECTION MANAGER AT THE ADDRESS LISTED ABOVE.

2a. NAME OF OWNER:		3a. NAME OF OPERATOR:	
KCBX Terminals Co.		KCBX Terminals Co.	
2b. STREET ADDRESS OF OWNER:		3b. STREET ADDRESS OF OPERATOR:	
3259 East 100th Street		3259 East 100th Street	
2c. CITY OF OWNER:		3c. CITY OF OPERATOR:	
Chicago		Chicago	
2d. STATE OF OWNER:	2e. ZIP CODE:	3d. STATE OF OPERATOR:	3e. ZIP CODE:
IL	60617	IL	60617

4a. NAME OF CORPORATE DIVISION OR PLANT:		4b. STREET ADDRESS OF EMISSION SOURCE:		
KCBX Terminals Co.		3259 East 100th Street		
4c. CITY OF EMISSION SOURCE:	4d. LOCATED WITHIN CITY LIMITS: ☒ YES ☐ NO	4e. TOWNSHIP:	4f. COUNTY:	4g. ZIP CODE:
Chicago			COOK	60617

5. SUBMIT A SCALE MAP SHOWING ALL STORAGE PILES, CONVEYOR LOADING OPERATIONS, STORAGE PILE ACCESS ROADS, NORMAL TRAFFIC ROADS, PARKING FACILITIES, LOCATION OF UNLOADING AND TRANSPORTING OPERATIONS WITH POLLUTION CONTROL EQUIPMENT.

6a. DO STORAGE PILES CONTAIN A TOTAL OF MORE THAN 260,000 TONS OF MATERIAL IN A CALENDER YEAR? ☒ YES ☐ NO

6b. IF THE ANSWER TO 6a WAS YES, PLEASE SUBMIT THE FOLLOWING INFORMATION.

TOTAL AMOUNT OF MATERIAL IN THE STORAGE PILES: TONS/YEAR: **800,000**

AND SUBMIT AN ATTACHED SHEET DESCRIBING:

I) DETAILED OPERATING PROCEDURES AND CONTROL METHODS BY WHICH FUGITIVE PARTICULATES FROM THESE STORAGE PILES WILL BE MINIMIZED DURING LOADING, UNLOADING, PILE MAINTENANCE, AND WIND EROSION. HOW OFTEN WILL THESE PILES BE TREATED WITH SURFACTING AGENT? NAME THE TYPE AND CONCENTRATION OF SURFACTANT THAT WILL BE USED.

II) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM CONVEYOR LOADING OPERATIONS AND NORMAL TRAFFIC PATTERN ROADS SERVING THESE STORAGE PILES. IF SURFACTING AGENT IS USED STATE TYPE AND CONCENTRATION OF SURFACTING AGENT AND FREQUENCY OF ITS USE.

III) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM ALL PAVED OR UNPAVED PARKING LOTS AND NORMAL TRAFFIC PATTERN ROADS AT THIS FACILITY. IF ROADS ARE PAVED INDICATE FOOTAGE OF ROADS THAT WILL BE PAVED AND HOW FREQUENTLY THESE ROADS WILL BE CLEANED.

7. DOES THIS FACILITY HAVE ANY OF THE FOLLOWING SOURCES?	
a.) CRUSHERS	☐ YES ☒ NO
b.) GRINDING MILLS	☐ YES ☒ NO
c.) SCREENING OPERATIONS	☒ YES ☐ NO
d.) BUCKET ELEVATORS	☐ YES ☒ NO
e.) CONVEYORS	☒ YES ☐ NO
f.) CONVEYOR TRANSFER POINTS	☒ YES ☐ NO
g.) BAGGING OPERATIONS	☐ YES ☒ NO
h.) STORAGE BINS	☐ YES ☒ NO
i.) FINE PRODUCT TRUCK AND TRAILER LOADING OPERATIONS	☐ YES ☒ NO
j.) UNLOADING AND TRANSPORTING OPERATIONS OF MATERIAL COLLECTED BY POLLUTION CONTROL EQUIPMENT	☒ YES ☐ NO
k.) UNPAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
l.) PAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
m.) UNPAVED PARKING LOTS	☐ YES ☒ NO
n.) PAVED PARKING LOTS	☒ YES ☐ NO
7b. FOR EACH SOURCE MARKED YES, ATTACH AN ADDITIONAL SHEET DESCRIBING THE TYPE OF CONTROL METHODS THAT WILL BE USED TO CONTROL FUGITIVE PARTICULATE EMISSIONS. IF SURFACTANT IS USED, STATE THE TYPE AND CONCENTRATION OF SURFACTANT AND FREQUENCY OF ITS APPLICATION. IF THE ROADS AND PARKING LOTS ARE PAVED, STATE THE FREQUENCY OF CLEANING.	

8. VEHICULAR MILES TRAVEL INFORMATION:
THIS INFORMATION IS TO BE DETERMINED BY THE NUMBER OF CARS MULTIPLIED BY THE DISTANCE TRAVELED FOR THE FOLLOWING ROADS.

I) TRAFFIC ON UNPAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 11,000 Miles Per Year

II) TRAFFIC ON PAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 4,200 Miles Per Year

III) TRAFFIC ON UNPAVED PARKING LOTS IN MILES PER YEAR 0 Miles Per Year

IV) TRAFFIC ON PAVED PARKING LOTS IN MILES PER YEAR 10 Miles Per Year

9. IS THIS FUGITIVE PARTICULATE CONTROL PROGRAM IMPLEMENTED AT THE PRESENT? ☒ YES ☐ NO

10.
AUTHORIZED SIGNATURE (S): (D)

BY _____ _____
SIGNATURE DATE

Jim Simmons
TYPED OR PRINTED NAME OF SIGNER

Terminal Manager
TITLE OF SIGNER

BY _____ _____
SIGNATURE DATE

_____
TYPED OR PRINTED NAME OF SIGNER

_____
TITLE OF SIGNER

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Facility ID No.:	031600AHI
Facility Telephone:	(773) 375-3700
Responsible Persons:	Site EHS Manager (primary for Operating Program) Terminal Operations Manager (primary for Contingency Measures)
Prepared: Current Revision:	November 18, 1999 #11 – May 4, 2010
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk solid materials, primarily coal and petroleum coke, which are transported via truck, train, barge, and vessel. KCBX can transfer material either directly from one transportation mode to another or indirectly using intermediate stockpiling. KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308 to control fugitive particulate matter emissions from these activities.

A. Stockpiles. Bulk solid materials are stockpiled on-site to satisfy customer needs throughout the year. Even though uncontrolled emissions from stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles may not consistently receive 100 percent coverage from the pole-mounted water spray system due to meteorological conditions or stockpile configurations. The portable water cannon mounted on the facility water truck is utilized in an attempt to water areas not covered by the pole-mounted water spray system. The facility water truck may also be used for supplemental water addition as needed during windy conditions. Watering also reduces fugitive emissions from bulk solid material transfers because of the moisture carry-over in the product.

The permanent, fixed-pole water spray system consists of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade providing a design throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications). Spare parts are readily attainable from local suppliers per 35 IAC 212.324(g)(3). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by one feeder pump designed to deliver up to 600 gallons per minute (gpm) through approximately 6000 feet of buried 8-inch diameter pipe. KCBX may supply water to the system using a backup 600 gpm pump if necessary. KCBX operates only a single pump, which typically supplies two cannons simultaneously.

TABLE 1. Specifications for Fixed-Pole Water Spray System or equivalent substitutions (per 35 IAC 212.310(e))

Description	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, Rated at 500 gpm @ 100 psi, 260' radius, 34' Height, 34MM bore, including ring nozzle, 4" FNPT Gun Connection Flange	Nelson	SR150-24 Deg
Pipe - Schedule 40 - Galvanized (3 - lengths)		
Pipe Coupling Threaded- 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection.		
Pipe 45 degree elbow - 4" class 150 – threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed Control, Flanged Design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. for mating to 6" roll seal valve.		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB -B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. 2 flanges for mating to 4" ball valve, 1 flange to mate to under ground feed pipe.		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

The fixed-pole water spray system is operated to apply water as conditions warrant, wetting the exteriors of stockpiles which are exposed to the eroding forces of wind and the mechanical displacement of operating equipment. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the outer portion of the pile is all that is required. This prevents over-application of water which would result in increased controls associated with runoff management. The frequency and duration of watering are adjusted based on existing conditions, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. freezing conditions[1], or
2. other mitigating conditions such as rainfall in the previous two days exceeding 0.25 inches, or snow cover.

Inactive stockpiles[2] are treated with a surfactant approximately every 60 days, weather permitting. Operating logs of the water spray system and surfactant application are maintained.

Control of fugitive particulate emissions from bulk solid materials stored on barges berthed at KCBX is similar to controls for land-based stockpiles. As with stockpiles on the storage pad, bulk solid materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. When present, visible fugitive emissions from bulk solid material stored on barges are controlled by applying river water from the portable water cannon attached to the water truck as conditions warrant.

B. Bulk solid material unloading. BMP to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket either to a storage pile or to a portable box hopper that transfers the material to a conveying system. In accordance with 35 IAC 212.308, application of water spray from the pole-mounted water cannons are used, as conditions warrant, to control fugitive particulate emissions at the hopper and along the conveying system. Fugitive emissions from barges unloaded directly to stockpiles are controlled by the pole-mounted water cannons.

[1] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. The portable water cannon attached to the water truck is available during this period to provide spot application of water, as needed.
[2] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure and with multiple spray bar headers operated as conditions warrant located near the top of the receiving hoppers in accordance with 35 IAC 212.308.

3. Trucks are unloaded directly to stockpiles. Unloaded bulk solid materials typically have moisture contents adequate to minimize the generation of fugitive particulate emissions. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Material Transfers. Several material transfers may be utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At multiple fixed transfer points throughout the conveyance systems, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may also be added if requested by customers.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon attached to the water truck may also be used for spot or supplemental control of fugitive particulate emissions.

3. As stated in 1.A, uncontrolled emissions from stockpiles should not exceed 50 tpy and therefore, dedicated spray systems and telescopic chutes for conveyor loading operations to storage piles are not required by 35 IAC 212.305. However, water from the pole-mounted water cannons or the portable water cannon attached to the water truck is available for control at these transfer points as needed and conveyor drop heights are minimized as an additional control for pile creation are used as additional controls.

D. Bulk solid material loading. In addition to the controls described below, carryover moisture from controls described in Sections A through C also minimizes fugitive particulate emissions during loading of receiving vehicles (i.e., barges, vessels, trucks or railcars). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop height is minimized and feed rate is monitored and adjusted as needed.

2. For vessel to barge transfer, a boom is used and, when conditions warrant, water spray from the boom is applied to control the fugitive particulate emissions.

3. For truck loading, front-end loaders transfer bulk solid material from stockpiles to the trucks. During non-freezing conditions, water applied from the pole-mounted water cannons to control fugitive particulate emissions also provides wetting that minimizes emissions from the truck loading. Loaded trucks are tarped in accordance with 35 IAC 212.315. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk solid material may be sized in a screening process to remove foreign material and/or to satisfy customer product specifications. When conditions warrant, water spray is applied from a portable water cannon attached to the water truck to the stockpile and/or the target hopper to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 35 IAC 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk solid materials. This equipment frequently traverses the storage pad and interior plant roadways. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions generated by this heavy equipment traffic. Water from a truck-mounted spray bar and/or portable water cannon attached to the water truck is applied on days when heavy equipment traffic is present or as otherwise needed to control fugitive particulate emissions from interior plant roadways and parking areas. In addition, a mechanical sweeper is used during normal business days, except days with precipitation or freezing conditions, to remove particulates from paved interior plant roads, parking areas and adjacent streets. Trucks leaving the storage pad and entering the west access road that runs between 100th Street to the north and Muskegon Avenue to the south (the "Back Road") are required to pass through a wheel-wash prior to leaving. The wheel-wash operates each day that truck traffic is present except during freezing conditions. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 35 IAC 212.316(c).

Water is applied to interior plant roads each day that trucks are loaded or unloaded, unless precipitation, freezing conditions, snow cover, winds in excess of 25 mph, or other mitigating conditions are present, such as rainfall exceeding 0.25 inches in the preceding two days. Sweeping is also performed on days when trucks are loaded or unloaded unless the above listed conditions are present. Sweeping is accomplished using a wet vacuum system that moistens the particles and prevents their migration when the sweeper is unloaded. Written records of water truck and sweeper use are maintained.

The watering program also covers the Back Road although this access road is neither owned nor leased by the company. KCBX voluntarily implements fugitive dust control measures on the Back Road as a community outreach effort and will continue this practice as long as the road is safe to traverse and it does not become a public thoroughfare.

G. Program. Each day, fugitive particulate sources and current weather conditions are monitored and the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions when conditions warrant. Forecasts of expected weather conditions, including wind and precipitation, are monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for monitoring weather forecasts or assigning this responsibility. Forecasts are available through local and national public domain services.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speed exceeds 25 mph. Similarly, when wind speed exceeds 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, on occasions where the exceptions outlined in Section 212.314 may apply, KCBX will evaluate conditions and make every effort to continue operation of water spray and mechanical sweeping programs unless deemed inappropriate.

There is currently no pollution control equipment in operation at the facility subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 35 IAC 212.307.

A plot plan depicting the following elements is included per 35 IAC 212.310(c) as an aid to implementing the consolidated plan:

1. approximate locations of storage piles
2. fixed conveyor locations
3. areas where portable conveyors may be operated
4. normal traffic patterns
5. approximate locations of bulk solid material loading and unloading
6. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. **Contingency Measure Plan**

A. Plan Elements. This Contingency Measure Plan is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this Contingency Measure Plan are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 15%. These reductions are achieved by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures reduce total actual annual source-wide fugitive emissions of PM_{10} by at least 25%. These reductions are achieved by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk solid material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 35 IAC 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase in frequency and volume of pole-mounted and mobile water sprays from Level I and abeyance or rescheduling of non-critical operations	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the Contingency Measure Plan should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

Assessment of operations as non-critical will be accomplished on as as-needed basis. Options may include, but are not limited to, cessation of certain activities such as screening and stockpile compaction and may involve rescheduling certain activities such as material deliveries or shipments to periods when less wind is forecast.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as a federally enforceable permit condition. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan: Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised Contingency Measure Plan per 35 IAC 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. **Episode Action Plan**
   Episode Action Plans under 35 IAC 244 Subpart C are not required because the emission sources combusting fuel oil at the facility do not exceed 10 mmbtu/hr (see 35 IAC 244.142(c)).

4. Revision Log

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G", vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J and clarified scope of sweeper services to Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.
Rev 9 11/06/08	Edited: (1) footnote 1 regarding portable water cannons; (2) s. 1.A regarding 3 conditions related to running water system; (3) s. 1.F for conditions regarding reasons for sweeper not being run; (4) s. 1.A through 1.G for wording clarification; (5) s. 2.A adding abeyance and rescheduling as options.
Rev 10 06/23/09	(1) Clarified "portable water cannon" throughout the plan. (2) Made administrative edits for consistency in plan implementation.
Rev 11 05/04/10	(1) Made administrative edits for consistency in plan implementation. (2) Added language around the anemometer attached to cannon system.
Rev 12 05/16/11	Administrative changes to Sections 1.A, 1.B.3, 1.C.1, 1.D.1, 1.D.3,1.F and Table 1 title

KCBX TERMINALS COMPANY

February 24, 2012

Via Certified Mail

Mr. Joseph Kotas
Bureau of Air
Illinois Environmental Protection Agency
9511 West Harrison Street 3rd Floor
Des Plaines, IL 60016

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Kotas,

Please find enclosed a revised copy of the combined Fugitive Particulate Operating Program – Contingency Measures Plan (the "Plan") for KCBX Terminals Company ("KCBX") in Chicago, IL. This revision addresses clarifications and minor administrative edits in the Plan. KCBX will continue to review the Plan for completeness and effectiveness as conditions and circumstances change at the facility.

If you have any questions or would like additional information please do not hesitate to contact me at 773.978.8518

Respectfully Submitted,
KCBX TERMINALS - CHICAGO

Brandon Walker
EHS Manager

enclosure

KCBX TERMINALS COMPANY

February 24, 2012

Via Certified Mail

Mr. Bob Bernoteit
Bureau of Air
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Springfield, IL 62702

RE: Revision to KCBX Terminals Fugitive Particulate Operating Program

Dear Mr. Kennedy,

Please find enclosed a revised copy of the combined Fugitive Particulate Operating Program – Contingency Measures Plan (the "Plan") for KCBX Terminals Company ("KCBX") in Chicago, IL. This revision addresses clarifications and minor administrative edits in the Plan. KCBX will continue to review the Plan for completeness and effectiveness as conditions and circumstances change at the facility.

If you have any questions or would like additional information please do not hesitate to contact me at 773.978.8518

Respectfully Submitted,
KCBX TERMINALS CHICAGO

Brandon Walker
EHS Manager

enclosure

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

OPERATING PROGRAM FOR FUGITIVE PARTICULATE CONTROL	KCBX TERMINALS COMPANY

1. THIS FORM IS USED TO APPLY FOR A FUGITIVE DUST OPERATING PROGRAM AS REQUIRED BY 35 IAC 212.309. COMPLETE THE FORM, KEEP ONE COPY FOR YOUR RECORDS, AND RETURN TWO COPIES TO THE ATTENTION OF BUREAU OF AIR PERMIT SECTION MANAGER AT THE ADDRESS LISTED ABOVE.

2a. NAME OF OWNER: KCBX Terminals Co.		3a. NAME OF OPERATOR: KCBX Terminals Co.	
2b. STREET ADDRESS OF OWNER: 3259 East 100th Street		3b. STREET ADDRESS OF OPERATOR: 3259 East 100th Street	
2c. CITY OF OWNER: Chicago		3c. CITY OF OPERATOR: Chicago	
2d. STATE OF OWNER: IL	2e. ZIP CODE: 60617	3d. STATE OF OPERATOR: IL	3e. ZIP CODE: 60617

4a. NAME OF CORPORATE DIVISION OR PLANT: KCBX Terminals Co.		4b. STREET ADDRESS OF EMISSION SOURCE: 3259 East 100th Street		
4c. CITY OF EMISSION SOURCE: Chicago	4d. LOCATED WITHIN CITY LIMITS: ☒ YES ☐ NO	4e. TOWNSHIP:	4f. COUNTY: COOK	4g. ZIP CODE: 60617

5. SUBMIT A SCALE MAP SHOWING ALL STORAGE PILES, CONVEYOR LOADING OPERATIONS, STORAGE PILE ACCESS ROADS, NORMAL TRAFFIC ROADS, PARKING FACILITIES, LOCATION OF UNLOADING AND TRANSPORTING OPERATIONS WITH POLLUTION CONTROL EQUIPMENT.

6a. DO STORAGE PILES CONTAIN A TOTAL OF MORE THAN 260,000 TONS OF MATERIAL IN A CALENDER YEAR? ☒ YES ☐ NO

6b. IF THE ANSWER TO 6a WAS YES, PLEASE SUBMIT THE FOLLOWING INFORMATION.

TOTAL AMOUNT OF MATERIAL IN THE STORAGE PILES: 800,000 tons TONS/YEAR: typical is 2.5MM – 5.0 MM tpy
Permit allows 13MM tpy

AND SUBMIT AN ATTACHED SHEET DESCRIBING:

I) DETAILED OPERATING PROCEDURES AND CONTROL METHODS BY WHICH FUGITIVE PARTICULATES FROM THESE STORAGE PILES WILL BE MINIMIZED DURING LOADING, UNLOADING, PILE MAINTENANCE, AND WIND EROSION. HOW OFTEN WILL THESE PILES BE TREATED WITH SURFACTING AGENT? NAME THE TYPE AND CONCENTRATION OF SURFACTANT THAT WILL BE USED.

II) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM CONVEYOR LOADING OPERATIONS AND NORMAL TRAFFIC PATTERN ROADS SERVING THESE STORAGE PILES. IF SURFACTING AGENT IS USED STATE TYPE AND CONCENTRATION OF SURFACTING AGENT AND FREQUENCY OF ITS USE.

III) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM ALL PAVED OR UNPAVED PARKING LOTS AND NORMAL TRAFFIC PATTERN ROADS AT THIS FACILITY. IF ROADS ARE PAVED INDICATE FOOTAGE OF ROADS THAT WILL BE PAVED AND HOW FREQUENTLY THESE ROADS WILL BE CLEANED.

7. DOES THIS FACILITY HAVE ANY OF THE FOLLOWING SOURCES?	
a.) CRUSHERS	☐ YES ☒ NO
b.) GRINDING MILLS	☐ YES ☒ NO
c.) SCREENING OPERATIONS	☒ YES ☐ NO
d.) BUCKET ELEVATORS	☐ YES ☒ NO
e.) CONVEYORS	☒ YES ☐ NO
f.) CONVEYOR TRANSFER POINTS	☒ YES ☐ NO
g.) BAGGING OPERATIONS	☐ YES ☒ NO
h.) STORAGE BINS	☐ YES ☒ NO
i.) FINE PRODUCT TRUCK AND TRAILER LOADING OPERATIONS	☐ YES ☒ NO
j.) UNLOADING AND TRANSPORTING OPERATIONS OF MATERIAL COLLECTED BY POLLUTION CONTROL EQUIPMENT	☒ YES ☐ NO
k.) UNPAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
l.) PAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
m.) UNPAVED PARKING LOTS	☐ YES ☒ NO
n.) PAVED PARKING LOTS	☒ YES ☐ NO
7b. FOR EACH SOURCE MARKED YES, ATTACH AN ADDITIONAL SHEET DESCRIBING THE TYPE OF CONTROL METHODS THAT WILL BE USED TO CONTROL FUGITIVE PARTICULATE EMISSIONS. IF SURFACTANT IS USED, STATE THE TYPE AND CONCENTRATION OF SURFACTANT AND FREQUENCY OF ITS APPLICATION. IF THE ROADS AND PARKING LOTS ARE PAVED, STATE THE FREQUENCY OF CLEANING.	

8. VEHICULAR MILES TRAVEL INFORMATION: THIS INFORMATION IS TO BE DETERMINED BY THE NUMBER OF CARS MULTIPLIED BY THE DISTANCE TRAVELED FOR THE FOLLOWING ROADS.
I) TRAFFIC ON UNPAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 11,000 Miles Per Year
II) TRAFFIC ON PAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 4,200 Miles Per Year
III) TRAFFIC ON UNPAVED PARKING LOTS IN MILES PER YEAR 0 Miles Per Year
IV) TRAFFIC ON PAVED PARKING LOTS IN MILES PER YEAR 10 Miles Per Year

9. IS THIS FUGITIVE PARTICULATE CONTROL PROGRAM IMPLEMENTED AT THE PRESENT? ☒ YES ☐ NO

10. AUTHORIZED SIGNATURE (S): (D)

BY _____ SIGNATURE _____ DATE	BY _____ SIGNATURE _____ DATE
Jim Simmons TYPED OR PRINTED NAME OF SIGNER	MICHAEL ESTADT for Jim Simmons TYPED OR PRINTED NAME OF SIGNER
Terminal Manager TITLE OF SIGNER	RELIABILITY MANAGER TITLE OF SIGNER

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Facility ID No.:	031600AHI
Facility Telephone:	(773) 375-3700
Responsible Persons:	Site EHS Manager (primary for Operating Program) Terminal Operations Manager (primary for Contingency Measures)
Prepared: Current Revision:	November 18, 1999 #13 – February 24, 2012
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk solid materials, primarily coal and petroleum coke, which are transported via truck, train, barge, and vessel. KCBX can transfer material either directly from one transportation mode to another or indirectly using intermediate stockpiling. KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308 to control fugitive particulate matter emissions from these activities.

A. Stockpiles. Bulk solid materials are stockpiled on-site to satisfy customer needs throughout the year. Notwithstanding 212.316(d), visible emissions from stockpiles, defined as emission units in 35 IAC 211.1950, are subject to a general 30 percent opacity limit in 212.123 because stockpiles were in existence prior to April 14, 1972. Certain coals may initiate combustion when exposed to atmospheric conditions. This combustion typically begins as a "hot spot" characterized by wispy, white smoke. These conditions are neither planned nor predictable and are not directly regulated in the Federally Enforceable State Operating Permit (FESOP) issued to KCBX. KCBX extinguishes hot spots by active stockpile maintenance. Operations may be altered to reduce smoke from hot spot sources.

Even though uncontrolled emissions from stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles may not consistently receive 100 percent coverage from the pole-mounted water spray system due to meteorological conditions or stockpile configurations. The portable water cannon mounted on the facility water truck is utilized in an attempt to water areas not covered by the pole-mounted water spray system. The facility water truck may also be used for supplemental water addition as needed during windy conditions.

The permanent, fixed-pole water spray system consists of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade providing a design throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications). Spare parts are readily attainable from local suppliers per 35 IAC 212.324(g)(3). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by one feeder pump designed to deliver up to 600 gallons per minute (gpm) through approximately 6000 feet of buried 8-inch diameter pipe. KCBX may supply water to the system using a backup 600 gpm pump if necessary. Only one pump, typically supplying two cannons, operates at any given time.

TABLE 1. Specifications for Fixed-Pole Water Spray System or equivalent substitutions (per 35 IAC 212.310(e))

Description	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, Rated at 500 gpm @ 100 psi, 260' radius, 34' Height, 34MM bore, including ring nozzle, 4" FNPT Gun Connection Flange	Nelson	SR150-24 Deg
Pipe - Schedule 40 - Galvanized (3 - lengths)		
Pipe Coupling Threaded- 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection.		
Pipe 45 degree elbow - 4" class 150 – threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed Control, Flanged Design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. for mating to 6" roll seal valve.		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB -B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# Galv. 2 flanges for mating to 4" ball valve, 1 flange to mate to under ground feed pipe.		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

The fixed-pole water spray system is operated to apply water as conditions warrant, wetting the exteriors of stockpiles which are exposed to the eroding forces of wind and the mechanical displacement of operating equipment. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the outer portion of the pile is all that is required. This prevents over-application of water which would result in increased controls associated with runoff management. The frequency and duration of watering are adjusted based on existing conditions, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. freezing conditions[1], or
2. other mitigating conditions such as rainfall in the previous two days exceeding 0.25 inches, or snow cover.

Inactive stockpiles[2] are treated with a surfactant approximately every 60 days, weather permitting. Operating logs of the water spray system and surfactant application are maintained.

Control of fugitive particulate emissions from bulk solid materials stored on barges berthed at KCBX is similar to controls for land-based stockpiles. As with stockpiles on the storage pad, bulk solid materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. When present, visible fugitive emissions from bulk solid material stored on barges are controlled by applying river water from the portable water cannon attached to the water truck as conditions warrant.

B. Bulk solid material unloading. Best Management Practices (BMP) to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket either to a storage pile or to a portable box hopper that transfers the material to a conveying system. In accordance with 35 IAC 212.308, application of water spray from the pole-mounted water cannons are used, as conditions warrant, to control fugitive particulate emissions at the hopper and along the conveying system. Fugitive emissions from barges unloaded directly to stockpiles are controlled by the pole-mounted water cannons.

[1] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. The portable water cannon attached to the water truck is available during this period to provide spot application of water, as needed.

[2] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure and with multiple spray bar headers operated as conditions warrant located near the top of the receiving hoppers in accordance with 35 IAC 212.308.

3. Trucks are unloaded directly to stockpiles. Unloaded bulk solid materials typically have moisture contents adequate to minimize the generation of fugitive particulate emissions. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Material Transfers. Several material transfers may be utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At multiple fixed transfer points throughout the conveyance systems, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may also be added if requested by customers.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon attached to the water truck may also be used for spot or supplemental control of fugitive particulate emissions.

3. As stated in 1.A, uncontrolled emissions from stockpiles should not exceed 50 tpy and therefore, dedicated spray systems and telescopic chutes for conveyor loading operations to storage piles are not required by 35 IAC 212.305. However, water from the pole-mounted water cannons or the portable water cannon attached to the water truck is available for control at these transfer points as needed and conveyor drop distances are minimized as an additional control.

D. Bulk solid material loading. In addition to the controls described below, carryover moisture from controls described in Sections A through C also minimizes fugitive particulate emissions during loading of receiving vehicles (i.e., barges, vessels, trucks or railcars). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop distance is minimized and feed rate is monitored and adjusted as needed.

2. For vessel to barge transfer, a boom is used and, when conditions warrant, water spray from the boom is applied to control the fugitive particulate emissions.

3. For truck loading, front-end loaders transfer bulk solid material from stockpiles to the trucks. During non-freezing conditions, water applied from the pole-mounted water cannons to control fugitive particulate emissions also provides wetting that minimizes emissions from the truck loading. Loaded trucks are tarped in accordance with 35 IAC 212.315. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk solid material may be sized in a screening process to remove foreign material and/or to satisfy customer product specifications. When conditions warrant, water spray is applied from a portable water cannon attached to the water truck to the stockpile and/or the target hopper to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 35 IAC 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk solid materials. This equipment frequently traverses the storage pad and interior plant roadways. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions generated by this heavy equipment traffic. Water from a truck-mounted spray bar and/or portable water cannon attached to the water truck is applied on days when heavy equipment traffic is present or as otherwise needed to control fugitive particulate emissions from interior plant roadways and parking areas. In addition, a mechanical sweeper is used during normal business days, except days with precipitation or freezing conditions, to remove particulates from paved interior plant roads, parking areas and adjacent streets. Trucks leaving the storage pad and entering the west access road that runs between 100th Street to the north and Muskegon Avenue to the south (the "Back Road") are required to pass through a wheel-wash prior to leaving. The wheel-wash operates each day that truck traffic is present except during freezing conditions. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 35 IAC 212.316(c).

Water is applied to interior plant roads each day that trucks are loaded or unloaded, unless precipitation, freezing conditions, snow cover, winds in excess of 25 mph, or other mitigating conditions are present, such as rainfall exceeding 0.25 inches in the preceding two days. Sweeping is also performed on days when trucks are loaded or unloaded unless the above listed conditions are present. Sweeping is accomplished using a wet vacuum system that moistens the particles and prevents their migration when the sweeper is unloaded. Written records of water truck and sweeper use are maintained.

The watering program also covers the Back Road although this access road is neither owned nor leased by the company. KCBX voluntarily implements fugitive dust control measures on the Back Road as a community outreach effort and will continue this practice as long as the road is safe to traverse and it does not become a public thoroughfare.

G. Program. Each day, fugitive particulate sources and current weather conditions are monitored and the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions when conditions warrant. Forecasts of expected weather conditions, including wind and precipitation, are monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for monitoring weather forecasts or assigning this responsibility. Forecasts are available through local and national public domain services.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speed exceeds 25 mph. Similarly, when wind speed exceeds 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, on occasions where the exceptions outlined in Section 212.314 may apply, KCBX will evaluate conditions and make every effort to continue operation of water spray and mechanical sweeping programs unless deemed inappropriate.

There is currently no pollution control equipment in operation at the facility subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 35 IAC 212.307.

A plot plan depicting the following elements is included per 35 IAC 212.310(c) as an aid to implementing the consolidated plan:

1. approximate locations of storage piles
2. fixed conveyor locations
3. areas where portable conveyors may be operated
4. normal traffic patterns
5. approximate locations of bulk solid material loading and unloading
6. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. **Contingency Measure Plan**

A. Plan Elements. This Contingency Measure Plan (CMP) is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this CMP are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures are designed to reduce total actual annual source-wide fugitive emissions of PM_{10} at least 15% by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures are designed to reduce total actual annual source-wide fugitive emissions of PM_{10} at least 25% by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk solid material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 35 IAC 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase frequency and volume of pole-mounted and mobile water sprays from Level I and defer or reschedule non-critical operations	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the CMP should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

Assessment of operations as non-critical will be accomplished on as as-needed basis. Options may include, but are not limited to, cessation of certain activities such as screening and stockpile compaction and may involve rescheduling certain activities such as material deliveries or shipments to periods when less wind is forecast.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as a federally enforceable permit condition. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan (CMP): Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised CMP per 35 IAC 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. **Episode Action Plan**
   Episode Action Plans under 35 IAC 244 Subpart C are not required because the emission sources combusting fuel oil at the facility do not exceed 10 mmbtu/hr (see 35 IAC 244.142(c)).

4. Revision Log

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G," vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J and clarified scope of sweeper services in Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.
Rev 9 11/06/08	Edited: (1) footnote 1 regarding portable water cannons; (2) s. 1.A regarding 3 conditions related to running water system; (3) s. 1.F for conditions regarding reasons for sweeper not being run; (4) s. 1.A through 1.G for wording clarification; (5) s. 2.A adding abeyance and rescheduling as options.
Rev 10 06/23/09	(1) Clarified "portable water cannon" throughout the plan. (2) Made administrative edits for consistency in plan implementation.
Rev 11 05/04/10	(1) Made administrative edits for consistency in plan implementation. (2) Added language around the anemometer attached to cannon system.
Rev 12 05/16/11	Administrative changes to Sections 1.A, 1.B.3, 1.C.1, 1.D.1, 1.D.3,1.F and Table 1 title
Rev 13 02/02/12	Revised tonnages on Form 6.b, added management of hot spots to Section 1.A, administrative changes to Sections 1.A, 1.B, 1.C, 1.D, 2.A, 2.C

COMPLIANCE DOCUMENT QUALITY ASSURANCE REVIEW FORM

1

Document Name: Fugitive Particulate Operating Program

Affected Agency: IEPA Document Level: ☐ A ☒ B ☐ C

Reason for Submittal: Updated changes require re-submittal to the state of Illinois

Due Date: 2/24/2012 Submitted: ☒ Electronically ☒ Hardcopy/Paper ☐ N/A

2

Responsible Official: Jim Simmons FOR JIM SIMMONS

R.O. Authorized: ☒ Yes ☐ No By: Pat Baldwin Date: 2005-06-20

3

Document Preparer: Brandon Walker Sign: Date: 2/23/12

Document Owner: Brandon Walker Sign: Date: 2/23/12
(Owner signs if different from Preparer)

Qualified Reviewers (check all that apply):

☐ Legal (A)	Name:	Sign:	Date:
☐ Compliance Director (A)	Name:	Sign:	Date:
☒ Compliance Manager (A, B)	Name: Terry Steinert	Sign:	Date: 2-23-2012
☐ Other Employee (C)	Name:	Sign:	Date:
☐ Third Party	Name:	Sign:	Date:
☐ VP / Business Leader	Name:	Sign:	Date:

4

Non-compliance, reportable condition or anomaly: ☐ Yes ☒ No If no, then skip to Section 5

Agency Notified: ☐ Yes ☐ No Agency:

Describe:

LYNX Tracking No.

5

Document, supporting information and QA Form filed to:

Facility Files: ☒ Yes ☐ No

Carbon Share File: ☒ Yes ☐ No Retention Code: EHS 91

6

Remarks:

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February 27,2012

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Delivery Date: February 27, 2012

Delivery Time: 10:34 AM

Shipping Information:

Tracking No:	876704483101	Ship Date:	February 24, 2012
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STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
1021 NORTH GRAND AVENUE, EAST
SPRINGFIELD, ILLINOIS 62702

OPERATING PROGRAM FOR FUGITIVE PARTICULATE CONTROL	KCBX TERMINALS COMPANY

1. THIS FORM IS USED TO APPLY FOR A FUGITIVE DUST OPERATING PROGRAM AS REQUIRED BY 35 IAC 212.309. COMPLETE THE FORM, KEEP ONE COPY FOR YOUR RECORDS, AND RETURN TWO COPIES TO THE ATTENTION OF BUREAU OF AIR PERMIT SECTION MANAGER AT THE ADDRESS LISTED ABOVE.

2a. NAME OF OWNER: KCBX Terminals Co.		3a. NAME OF OPERATOR: KCBX Terminals Co.	
2b. STREET ADDRESS OF OWNER: 3259 East 100th Street		3b. STREET ADDRESS OF OPERATOR: 3259 East 100th Street	
2c. CITY OF OWNER: Chicago		3c. CITY OF OPERATOR: Chicago	
2d. STATE OF OWNER: IL	2e. ZIP CODE: 60617	3d. STATE OF OPERATOR: IL	3e. ZIP CODE: 60617

4a. NAME OF CORPORATE DIVISION OR PLANT: KCBX Terminals Co.		4b. STREET ADDRESS OF EMISSION SOURCE: 3259 East 100th Street		
4c. CITY OF EMISSION SOURCE: Chicago	4d. LOCATED WITHIN CITY LIMITS: ☒ YES ☐ NO	4e. TOWNSHIP:	4f. COUNTY: COOK	4g. ZIP CODE: 60617

5. SUBMIT A SCALE MAP SHOWING ALL STORAGE PILES, CONVEYOR LOADING OPERATIONS, STORAGE PILE ACCESS ROADS, NORMAL TRAFFIC ROADS, PARKING FACILITIES, LOCATION OF UNLOADING AND TRANSPORTING OPERATIONS WITH POLLUTION CONTROL EQUIPMENT.

6a. DO STORAGE PILES CONTAIN A TOTAL OF MORE THAN 260,000 TONS OF MATERIAL IN A CALENDER YEAR? ☒ YES ☐ NO

6b. IF THE ANSWER TO 6a WAS YES, PLEASE SUBMIT THE FOLLOWING INFORMATION.

TOTAL AMOUNT OF MATERIAL IN THE STORAGE PILES: 800,000 tons typical TONS/YEAR: 2.5MM – 5.0 MM tpy typical
Permit allows 13MM tpy throughput

AND SUBMIT AN ATTACHED SHEET DESCRIBING:

I) DETAILED OPERATING PROCEDURES AND CONTROL METHODS BY WHICH FUGITIVE PARTICULATES FROM THESE STORAGE PILES WILL BE MINIMIZED DURING LOADING, UNLOADING, PILE MAINTENANCE, AND WIND EROSION. HOW OFTEN WILL THESE PILES BE TREATED WITH SURFACTING AGENT? NAME THE TYPE AND CONCENTRATION OF SURFACTANT THAT WILL BE USED.

II) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM CONVEYOR LOADING OPERATIONS AND NORMAL TRAFFIC PATTERN ROADS SERVING THESE STORAGE PILES. IF SURFACTING AGENT IS USED STATE TYPE AND CONCENTRATION OF SURFACTING AGENT AND FREQUENCY OF ITS USE.

III) TYPE OF CONTROL METHODS USED FOR FUGITIVE PARTICULATE EMISSIONS FROM ALL PAVED OR UNPAVED PARKING LOTS AND NORMAL TRAFFIC PATTERN ROADS AT THIS FACILITY. IF ROADS ARE PAVED INDICATE FOOTAGE OF ROADS THAT WILL BE PAVED AND HOW FREQUENTLY THESE ROADS WILL BE CLEANED.

7. DOES THIS FACILITY HAVE ANY OF THE FOLLOWING SOURCES?	
a.) CRUSHERS	☐ YES ☒ NO
b.) GRINDING MILLS	☐ YES ☒ NO
c.) SCREENING OPERATIONS	☒ YES ☐ NO
d.) BUCKET ELEVATORS	☐ YES ☒ NO
e.) CONVEYORS	☒ YES ☐ NO
f.) CONVEYOR TRANSFER POINTS	☒ YES ☐ NO
g.) BAGGING OPERATIONS	☐ YES ☒ NO
h.) STORAGE BINS	☐ YES ☒ NO
i.) FINE PRODUCT TRUCK AND TRAILER LOADING OPERATIONS	☐ YES ☒ NO
j.) UNLOADING AND TRANSPORTING OPERATIONS OF MATERIAL COLLECTED BY POLLUTION CONTROL EQUIPMENT	☒ YES ☐ NO
k.) UNPAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
l.) PAVED NORMAL TRAFFIC ROADS	☒ YES ☐ NO
m.) UNPAVED PARKING LOTS	☐ YES ☒ NO
n.) PAVED PARKING LOTS	☒ YES ☐ NO
7b. FOR EACH SOURCE MARKED YES, ATTACH AN ADDITIONAL SHEET DESCRIBING THE TYPE OF CONTROL METHODS THAT WILL BE USED TO CONTROL FUGITIVE PARTICULATE EMISSIONS. IF SURFACTANT IS USED, STATE THE TYPE AND CONCENTRATION OF SURFACTANT AND FREQUENCY OF ITS APPLICATION. IF THE ROADS AND PARKING LOTS ARE PAVED, STATE THE FREQUENCY OF CLEANING.	

8. VEHICULAR MILES TRAVEL INFORMATION:
THIS INFORMATION IS TO BE DETERMINED BY THE NUMBER OF CARS MULTIPLIED BY THE DISTANCE TRAVELED FOR THE FOLLOWING ROADS.

I) TRAFFIC ON UNPAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 15,000 Miles Per Year

II) TRAFFIC ON PAVED NORMAL TRAFFIC ROADS IN MILES PER YEAR 5,000 Miles Per Year

III) TRAFFIC ON UNPAVED PARKING LOTS IN MILES PER YEAR 0 Miles Per Year

IV) TRAFFIC ON PAVED PARKING LOTS IN MILES PER YEAR 10 Miles Per Year

9. IS THIS FUGITIVE PARTICULATE CONTROL PROGRAM IMPLEMENTED AT THE PRESENT? ☒ YES ☐ NO

10.
AUTHORIZED SIGNATURE (S): (D)

BY _____ _____ BY _____ _____
SIGNATURE DATE SIGNATURE DATE

Jim Simmons
TYPED OR PRINTED NAME OF SIGNER

TYPED OR PRINTED NAME OF SIGNER

Terminal Manager
TITLE OF SIGNER

TITLE OF SIGNER

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1039. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

Facility ID No.:	031600AHI
Facility Telephone:	(773) 375-3700
Responsible Persons:	Site EHS Manager (primary for Operating Program) Operations Manager (primary for Contingency Measures)
Prepared: Current Revision:	November 18, 1999 #14 – May 29, 2013
Regulatory Driver:	35 IAC 212.309 through 212.312 (operating program) 35 IAC 212.700 through 212.705 (contingency measures)

1. Fugitive Particulate Operating Program

KCBX Terminals Company ("KCBX") handles bulk solid materials, primarily coal and petroleum coke, which are transported via truck, train, barge, and vessel. KCBX can transfer material either directly from one transportation mode to another or indirectly using intermediate stockpiling. KCBX has identified and implemented the requirements of 35 IAC 212.304 through 212.308 to control fugitive particulate matter emissions from these activities.

A. Stockpiles. Bulk solid materials are stockpiled on-site to satisfy customer needs throughout the year. Stockpiles, defined as emission units in 35 IAC 211.1950, have existed prior to April 14, 1972 and normally would be subject to the 30 percent opacity limit of 212.123. However, such stockpiles are subject to the 10 percent opacity limit in 212.316(d) because they are located in an area defined by 212.324(a)(1) per 212.316(a).

Certain coals can have a tendency to develop a "hot spot" characterized by wispy, white smoke. These conditions develop spontaneously and are neither planned nor predictable and are not directly regulated in the Federally Enforceable State Operating Permit (FESOP) issued to KCBX. KCBX extinguishes hot spots by active stockpile maintenance. Operations may be altered to reduce smoke from hot spot sources.

Even though uncontrolled emissions from individual stockpiles should not exceed 50 tons/year (tpy), water is applied from permanent, pole-mounted water cannons to control fugitive particulate emissions in conformance with 35 IAC 212.301 (prohibiting visible emissions of fugitive particulates beyond the property line), 212.304 (requiring watering or other controls), and 212.316(d) (limiting fugitive particulate emissions from stockpiles to 10 percent opacity). Stockpiles may not consistently receive 100 percent coverage from the pole-mounted water spray system due to meteorological conditions or stockpile configurations. The portable water cannon mounted on the facility water truck is utilized in an attempt to water areas not covered by the pole-mounted water spray system. The facility water truck may also be used for supplemental water addition as needed during windy conditions.

Figure 1 shows the permanent, fixed-pole water spray system consisting of 19 water cannons, set on 4-inch diameter risers mounted on poles approximately 65 feet above grade, providing a design throw radius of 260-foot for each cannon at 100 psi and 500 gpm (see Table 1 for engineering specifications per 35 IAC 212.310(e)). Spare parts are readily attainable from local suppliers per 35 IAC 212.324(g)(3). Automated controls allow programmed sequencing of the cannons, regulating the duration of time the cannons are used and the timing of cycle initiation. Water for the system is supplied by one pump designed to deliver up to 600 gallons per minute (gpm) through approximately 6000 feet of buried 8-inch diameter pipe. KCBX has a backup 600 gpm pump that can be installed if necessary. Only one pump, typically supplying two cannons, operates at any given time. Operators are instructed to be aware of system operating performance and report any anomalies, such as low pressure or plugged/malfunctioning cannons. In addition, the system is inspected twice per month with no more than 21 days between inspections.

The fixed-pole water spray system is operated to apply water as conditions warrant, wetting the exteriors of stockpiles which are exposed to the eroding forces of wind and the mechanical displacement of operating equipment. Stockpiles are not kept saturated because only the surface is exposed to wind erosion and therefore, wetting the outer portion of the pile is all that is required. This prevents over-application of water which would result in increased controls associated with runoff management. The frequency and duration of watering are adjusted based on existing conditions, prevailing or forecasted weather, or as directed by the Illinois Environmental Protection Agency (IEPA) as discussed in Part 2. Watering is completed daily (7 days per week), unless any of the following are present:

1. freezing conditions[1], or
2. mitigating conditions such as carryover moisture from previous precipitation or water application.

Inactive stockpiles[2] are treated with a surfactant approximately every two months, weather permitting, starting in April and ending with the onset of freezing conditions. Operating logs of the water spray system and surfactant application are maintained.

[1] The permanent, fixed water spray system is typically drained and shut down from November 1 through March 31 to protect against freeze damage. Expect during hard freezing conditions, the portable water cannon attached to the water truck is available to provide spot application of water, as needed.

[2] Inactive stockpiles are those piles that are not receiving or having material removed during the period of surfactant application, including the "backside" of piles that have a working face.

TABLE 1. Specifications for Fixed-Pole Water Spray System

Description (may use equivalent substitutions)	Supplier/ MFR	MFR. Part No.
Nelson Big Gun (part circle) Model SR150-24 Deg, rated at 500 gpm @ 100 psi, 260' radius, 34' height, 34MM bore, including ring nozzle, 4" FNPT gun connection flange	Nelson	SR150-24 Deg
Pipe - Schedule 40 - galvanized (3 - lengths)		
Pipe Coupling Threaded - 4" class 150		
Hose 4" Dia. - Flex Hose to connect underground piping to piping on spray pole	Black Industrial	AZN4 RoyalFlex
Hose clamps for 4" hose - install 2 clamps each hose end		
Combination (Hose to MNPT) nipple - Serrated shank for hose connection and NPT Male threads for piping connection		
Pipe 45 degree elbow - 4" class 150, threaded		
CLA-VAL, 6" Roll Seal - Solenoid Control Valve - Model 736-01, 24 VDC Pilot Solenoid w/speed control, flanged design	CLA-VAL, Roll Seal	Model 736-01
6" x 4" FNPT Threaded Raised Face Flange, ANSI 150# galvanized for mating to 6" roll seal valve		
4" Ball Valve - Conbraco/Apollo 88A14A01-150# raised face, standard port, carbon steel ball valve with WCB-B 16-34 body and 316 SS ball	Conbraco	88A14A01
4" FNPT Threaded Raised Face Flange, ANSI 150# galvanized, 2 flanges for mating to 4" ball valve, 1 flange to mate to underground feed pipe		
Gaskets 4" pipe flange (ball valve & feed pipe)		
Gaskets 6" pipe flange (control valve)		
Control Valve Enclosure - 24x24x16, NEMA 12	Rittal / Electromate	E242416
Control Valve Enclosure Bracket		

Control of fugitive particulate emissions from bulk solid materials stored on barges berthed at KCBX is similar to controls for land-based stockpiles. As with stockpiles on the storage pad, bulk solid materials on barges typically develop a crust that is resistant to wind erosion unless the material is mechanically disturbed. When present, visible fugitive emissions from bulk solid material stored on barges are controlled by applying river water from portable water pumps as conditions warrant.

B. Bulk solid material unloading. Best Management Practices (BMP) to control fugitive particulate emissions in conformance with the opacity limits of 35 IAC 212.316(d) and (f) are achieved as follows:

1. Barges are unloaded using a clamshell bucket either to a storage pile or to a portable box hopper that transfers the material to a conveying system. In accordance with 35 IAC 212.308, water from the pole-mounted water cannons is used, as conditions warrant, to control fugitive particulate emissions at the hopper and along the conveying system. Fugitive emissions from barges unloaded directly to stockpiles are controlled by the pole-mounted water cannons.

2. Rail cars are unloaded via a bottom dump receiving system. Fugitive particulate emissions are controlled by choke-feeding inside a partial enclosure and multiple spray bar headers are operated as conditions warrant in accordance with 35 IAC 212.308. Spray bars are inspected twice per month with no more than 21 days between inspections.

3. Trucks are unloaded directly to stockpiles. Unloaded bulk solid materials typically have moisture contents adequate to minimize the generation of fugitive particulate emissions. When conditions warrant, water sprays from the pole-mounted water cannons or the water truck are applied to control fugitive particulate emissions during truck unloading in accordance with 35 IAC 212.304 and 212.306.

C. Material Transfers. Material transfers may be utilized to move product to and from barges, vessels, rail cars, and stockpiles.

1. At multiple fixed transfer points throughout the main conveyance systems, water from full-width spray bars is applied to control fugitive particulate emissions when conditions warrant. Dust suppressants may also be added if requested by customers. Spray bars are inspected twice per month with no more than 21 days between inspections.

2. At portable and mobile transfer points, front-end loaders, bulldozers, box hoppers, conveyors, and stacking equipment are generally utilized. When conditions warrant, water sprays from the pole-mounted water cannons are applied to control fugitive particulate emissions and water sprays from a portable water cannon attached to the water truck may also be used for spot or supplemental control of fugitive particulate emissions.

3. As stated in 1.A, uncontrolled emissions from stockpiles should not exceed 50 tpy and therefore, dedicated spray systems and telescopic chutes for conveyor loading operations to storage piles are not required by 35 IAC 212.305. However, water from the pole-mounted water cannons or the portable water cannon attached to the water truck is available for control at these transfer points as needed and drop distances are minimized as an additional control

D. Bulk solid material loading. In addition to the controls described below, carryover moisture from controls described in Sections A through C also minimizes fugitive particulate emissions during loading of receiving vehicles (i.e., barges, vessels, trucks or railcars). Choke-feeding, in accordance with 35 IAC 212.308 is utilized where possible given the physical configuration of equipment.

1. For barge and vessel loading, material drop distance is minimized, feed rate is monitored and adjusted as needed, and spray bars are used on the fixed conveyances as warranted. Spray bars are inspected twice per month with no more than 21 days between inspections.

2. For vessel to barge transfer, vessels that are equipped with water sprays on the discharge conveyor may activate this control as conditions warrant or as requested by KCBX. If a vessel does not have the ability to apply water, KCBX will stop the transfer if warranted by the conditions present.

3. For truck loading, front-end loaders transfer bulk solid material from stockpiles to the trucks. During non-freezing conditions, water applied from the pole-mounted water cannons to control fugitive particulate emissions also provides wetting that minimizes emissions from the truck loading. Truck drivers are trained to tarp their loads in accordance with 35 IAC 212.315 prior to leaving the site. During non-freezing conditions, the trucks pass through a wheel-wash prior to leaving the site.

E. Screening. Bulk solid material may be sized in a screening process to remove foreign material (trash) and/or to satisfy customer product specifications. When conditions warrant, water is applied to the unscreened stockpile or the target hopper from the water truck to control fugitive particulate emissions to achieve an opacity of 10 percent or less in accordance with 35 IAC 212.316(b). Choke-feeding, in accordance with 212.308, is employed where possible given the physical configuration of equipment.

F. Plant roads and parking areas. KCBX utilizes large, heavy mobile equipment to transfer bulk solid materials. This equipment frequently traverses the storage pad and roads shown on Figure 1. Water spray from pole-mounted water cannons is applied to control fugitive particulate emissions on interior plant roads generated by this heavy equipment traffic. Water from a truck-mounted spray bar and/or portable water cannon attached to the water truck is applied as needed to control fugitive particulate emissions from interior plant roads on days when heavy equipment traffic is present and as otherwise needed to control fugitive particulate emissions from parking areas. In addition, a mechanical sweeper is used during normal business days, except days with precipitation or freezing conditions, to remove particulates from paved interior plant roads, parking areas, the south lanes of 100th Street from Road 1 to Road 3, and Road 1 from 100th Street to the Retention Basin. Trucks leaving the storage pad and entering Road 1are required to pass through a wheel-wash prior to leaving. The wheel-wash operates each day that truck traffic is present except during freezing conditions. The wheel wash is inspected twice

per month with no more than 21 days between inspections. These best management practices are implemented in accordance with the requirements of 35 IAC 212.306 and are designed to meet the 10 percent opacity limit of 212.316(c).

Each day that trucks are loaded or unloaded, the roads on Figure 1 are swept as described above and watered unless precipitation, freezing conditions, snow cover, or other mitigating conditions are present, such as carryover moisture from previous day(s). Sweeping is accomplished using a wet vacuum system that moistens the particles and prevents their migration when the sweeper is unloaded. Written records of water truck use are maintained. Contractor tickets are used as documentations of sweeper operations.

The watering program also covers Road 1 from 100th Street to the Retention Basin although this private road is neither owned nor leased by the company. KCBX voluntarily implements fugitive dust control measures on Road 1 as a community betterment effort and will continue this practice as long as Road 1 is safe to traverse and it does not become a public thoroughfare.

H. Program. Each day, fugitive particulate sources and current weather conditions are monitored and the Best Management Practices (BMP) listed in Sections A through F are implemented to control fugitive particulate emissions when conditions warrant. Forecasts of expected weather conditions, including wind and precipitation, are monitored and the pole-mounted water spray program is adjusted accordingly. The responsible persons listed on page 1 have accountability for monitoring weather forecasts or assigning this responsibility. Forecasts are available through local and national public domain services.

35 IAC 212.314 provides an exception from the requirement of Section 212.301 to prevent visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line when wind speed exceeds 25 mph. Similarly, when wind speed exceeds 25 mph, spray systems and sweeping equipment are not required under Sections 212.304 through 212.310 and Section 212.212. However, 212.316(a) does not recognize the exceptions outlined in Section 212.314 for screening (212.316(b)), roads and parking areas (212.316(c)), and storage piles (212.316(d)) and the 10 percent opacity limit remains for these emission units and areas. KCBX will continue applying controls to screening operations, interior plant roads, parking areas, and storage piles unless deemed unsafe or environmentally detrimental.

There is currently no pollution control equipment in operation at the facility subject to the emission limits of 35 IAC 212.313 that collects residual materials subject to the requirements of 212.307.

Figure 1 depicting the following elements is included per 35 IAC 212.310(c) as an aid to implementing the consolidated plan:

1. approximate locations of storage piles
2. fixed conveyor locations
3. areas where portable conveyors may be operated
4. roads
5. approximate locations of bulk solid material loading and unloading
6. locations of fixed pollution control systems

This Fugitive Particulate Operating Program is reviewed periodically by KCBX and revised to reflect current knowledge and practice. Any revisions made are consistent with 35 IAC Subpart K and submitted to IEPA in accordance with 35 IAC 212.312.

2. Contingency Measure Plan

A. Plan Elements. This Contingency Measure Plan (CMP) is designed to achieve reductions in actual annual PM_{10} emissions. Terms of this CMP are federally enforceable per 35 IAC 212.702. There are two levels of control measures identified in Section 212.703:

1. Level I measures are designed to reduce total actual annual source-wide fugitive emissions of PM_{10} at least 15% by increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

2. Level II measures are designed to reduce total actual annual source-wide fugitive emissions of PM_{10} at least 25% by further increasing both the frequency and the volume of water in the application cycles, thereby increasing the moisture of the stockpiles and the effectiveness of the fugitive emissions controls (see Table).

The BMP for meeting the contingency measure reductions specified in 35 IAC 212.703(a) follow those listed in Sections A through F of the Fugitive Particulate Operating Program in Part 1 of this consolidated plan. Because any control measure applied at any stage of the receiving or transferring aspect of bulk solid material handling tends to carry over to storage in stockpiles, the controls for these activities also constitute BMP that enable KCBX to meet the requirements of 212.304.

Scenario	Reduction Using Water Sprays [%]	Actual Annual PM_{10} Emission Reductions [%]
Base condition	80	N/A
Level I: Increase frequency and volume of pole-mounted and mobile water sprays from base condition	85	≥ 15
Level II: Increase frequency and volume of pole-mounted and mobile water sprays from Level I and defer or reschedule non-critical operations	90	≥ 25

In accordance with 35 IAC 212.704(b) and (c), KCBX will implement Level I controls within 90 days and Level II controls within 60 days of receiving notice from the IEPA that the CMP should be implemented. KCBX will make every effort to implement the measure as soon as possible, but in no case will delay implementation beyond the applicable 60 or 90 day period.

Assessment of operations as non-critical will be accomplished on as as-needed basis. Options may include, but are not limited to, cessation of certain activities such as screening and stockpile compaction and may involve rescheduling certain activities such as material deliveries or shipments to periods when less wind is forecast.

B. Alternative Compliance Plan: KCBX has the option of complying with 35 IAC 212.703 through an Alternative Compliance Plan that provides for reductions in emissions equal to the level of reduction of fugitive emissions sought by Level I and Level II control measures. An Alternative Compliance Plan must be approved by IEPA and USEPA as a federally enforceable permit condition. If source controls are included on process emission units or other fugitive emissions of PM_{10} not subject to 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424, or 212.464 in an Alternative Control Plan, the Plan must include a reasonable schedule of implementation for the controls, not to exceed two (2) years. The implementation schedule is subject to IEPA review and approval.

C. Revisions to the Contingency Measure Plan (CMP): Operational changes subject to 35 IAC 212.304, 212.305, 212.306, 212.308, 212.316 (a) through (e), 212.424, or 212.464 that require a new or revised permit must, within 30 days after making such changes, be submitted to IEPA with a request for permit modification to include the new or revised CMP per 212.701(c).

D. Alternative Strategies Considered for Reduction of PM_{10} Emissions: The following alternative strategies were considered and rejected as possible strategies to reduce PM_{10} emissions from the KCBX operation:

1. KCBX considered the option of reducing the fines in the coal it handles by altering the crushing, screening or other mining techniques at the coal mine supply site. After due consideration, it was determined that KCBX does not have the decision rights to make this change. KCBX provides coal to its customers, sized to their specification. KCBX can not alter those specifications.

   The petroleum coke shipped to KCBX is a refinery product. The sizing of the petroleum coke is dictated by the processing system at the refinery. KCBX has contractual obligations to accept the entire petroleum coke product stream from the refinery. Only the refinery can modify the coking equipment or alter the sizing specification of the petroleum coke.

2. KCBX evaluated the use of tarpaulins to cover the stockpiles, thereby reducing particulate emissions. This approach is not possible due to the way that stockpiles are utilized at KCBX. There may be up to 20 stockpiles present on the dock at any given time with active operations (i.e., loader or conveyor activity) at multiple stockpiles. Since stockpile locations and usage patterns are constantly changing, it is not feasible to use tarpaulins.

3. Episode Action Plan

Episode Action Plans under 35 IAC 244 Subpart C are not required because the emission sources combusting fuel oil at the facility do not exceed 10 mmbtu/hr (see 244.142(c)).

4. Revision Log

Rev 1 01/21/01	Plant Manager changed to Gary Hosack from Ed Koerperich and changed PVC to Pipeline.
Rev 2 08/27/02	Added: (1) an estimated frequency for the application of water as a dust suppressant by the sprinklers, water truck and sweeper, and (2) inclusion of the truck wash as a method of fugitive dust control.
Rev 3 01/21/03	Changed responsible party from Gary Hosack to Duane Pecci and changed number of fixed water cannons from (22) to (21) in Paragraph K
Rev 4 02/21/05	Deleted old paragraphs "I" Crushing Process and "B" Vessel Unloading which are no longer performed. Added new paragraph "G," vessel to barge transfer loading. Added new spray bars for rail unloading to paragraph "B"
Rev 5 07/07/05	Added surfactant application note to Paragraph J and clarified scope of sweeper services in Paragraph K.
Rev 6 10/23/06	Combined Fugitive Particulate Operating Program with Contingency Measure Plan, added regulatory drivers, changed Responsible Persons, clarified controls around box hopper in Sections H and I, and reformatted the document.
Rev 7 08/07/07	Minor edits to s. 1.A. to note spray cannon on high line and surfactant application to inactive piles is "approximately" every 60 days and s. 1.B. noting that product unloaded from trucks may be further reworked by mobile equipment. Added s. 3 rationale for no Episode Action Plan.
Rev 8 08/29/08	Corrected the number of fixed pole water cannons operating on-site from 21 to 19.
Rev 9 11/06/08	Edited: (1) footnote 1 regarding portable water cannons; (2) s. 1.A regarding 3 conditions related to running water system; (3) s. 1.F for conditions regarding reasons for sweeper not being run; (4) s. 1.A through 1.G for wording clarification; (5) s. 2.A adding abeyance and rescheduling as options.
Rev 10 06/23/09	(1) Clarified "portable water cannon" throughout the plan. (2) Made administrative edits for consistency in plan implementation.
Rev 11 05/04/10	(1) Made administrative edits for consistency in plan implementation. (2) Added language around the anemometer attached to cannon system.
Rev 12 05/16/11	Administrative changes to Sections 1.A, 1.B.3, 1.C.1, 1.D.1, 1.D.3,1.F and Table 1 title
Rev 13 02/02/12	Revised tonnages on Form 6.b, added management of hot spots to Section 1.A, administrative changes to Sections 1.A, 1.B, 1.C, 1.D, 2.A, 2.C
Rev 14 05/29/13	Revised 1.A to clarify opacity limit for stockpiles and reference inspections of controls, 1.B to reference inspections of controls, 1.C to add stacker water spray and reference inspections of controls, 1.D to reference inspections of controls, 1.F to define roads, 1.H to clarify when exceptions for excess wind are not applicable, and made editorial changes throughout.

Exhibit G

Jennifer R. Sheley

From: Matthew C. Read
Sent: Monday, April 28, 2014 1:39 AM
To: Jennifer R. Sheley
Subject: FW: People v. KCBX Terminals Company

From: Pamenter, Kathryn [mailto:KPamenter@atg.state.il.us]
Sent: Tuesday, November 05, 2013 11:10 AM
To: Katherine D. Hodge
Cc: chris.pressnall@illinois.gov
Subject: People v. KCBX Terminals Company

Kathy – Reference is made to KCBX Terminals Company's Operating Program for Fugitive Particulate Control submitted on October 3, 2013. Please see Illinois EPA's comments below. We are separately reviewing the Operating Program for Fugitive Particulate Control – Revision 1 that KCBX Terminals Company submitted on November 1, 2013. If you have any questions, please contact me.

Sincerely,
Katie Pamenter

Kathy –

Set forth below are Illinois EPA's comments on the fugitive particulate operating program ("FPOP") that KCBX Terminals Company ("KCBX") submitted to the Illinois EPA on October 3, 2013. While some of the comments are specific in nature, overall the Illinois EPA believes that the FPOP will require significant revisions and the Illinois EPA has attempted to address larger themes/concepts. Two issues that run throughout the FPOP are lack of specificity and justification for control measures.

The FPOP must be practicably enforceable, and statements such as "as needed", "as conditions warrant", etc. provide no basis for KCBX or Illinois EPA to determine whether KCBX is adhering to its program and whether the measures are sufficient to suppress emissions. The FPOP must delineate ways to evaluate control measures. For example, KCBX must be able to determine whether the amount of water should be increased, frequencies of application increased, etc. Examples of evaluation tools are visible emission ("VE") readings by certified opacity readers, installation of cameras that monitor the piles and equipment with recording capability, and additional recordkeeping and reporting. Records could/should include VE readings from piles, drop points, loading and unloading; maximum wind speed and direction (determined by a wind gauge installed at the site); precipitation amounts; lowest daily temperature; amount of water used and pressure in various control equipment; and chemical application (where applied, amount, purpose, concentration and identify). Also, the FPOP should indicate a person or persons in a managerial position who is responsible for ensuring that fugitive particulates are adequately controlled rather than workers operating various pieces of equipment at the site.

Related to the issues of specificity and justification for control measures, Illinois EPA requires more accurate and detailed information concerning the types and amounts of materials received and shipped offsite by KCBX. At a minimum, the information should be provided in monthly increments. Also, KCBX should provide information concerning inactive piles (how many, criteria for designating pile "inactive" and what leads to that designation, how long are piles typically inactive, etc.). Additionally, KCBX must provide supporting calculations to the information in current sections 6.b and 8 of the FPOP.

Further, the FPOP must include a section addressing fugitive controls during off-hours and, importantly, cold weather months. If operations are truly shutdown, then the FPOP should indicate that no material will be moved. If material is moved onsite, shipped offsite or received, the plan must detail fugitive controls. Similarly, the FPOP should address fugitive controls that would be implemented if warmer or windy days occur during typical winter months.

We are available to meet with you to further discuss the foregoing, upon your request.

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Exhibit H

KCBX meeting December 5, 2013

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Dave Seiler	Koch Minerals	316-828-7399
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Tara Sastry	Koch Cos Public Sector	316-828-6728
Dave Severson	KCBX	" " 3847
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