

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- REVISED

PERMITTEE

KCBX Terminals Co.
Attn: Michael Gibson
3259 East 100th Street
Chicago, Illinois 60617

<u>Application No.:</u> 95050167	<u>I.D. No.:</u> 031600AHI
<u>Applicant's Designation:</u> REV02/10/04	<u>Date Received:</u> November 4, 2002
<u>Subject:</u> Bulk Materials Terminal	
<u>Date Issued:</u> April 8, 2004	<u>Expiration Date:</u> June 22, 2005
<u>Location:</u> 3259 East 100th Street, Chicago, 60617	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a bulk materials terminal, three diesel generators and fuel combustion units pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀), 100 tons/year for nitrogen oxides (NO_x), and 100 tons/year for sulfur dioxide (SO₂)). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.
- 2a. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
 - b. Pursuant to 35 Ill. Adm. Code 212.304(a), all storage piles of materials with uncontrolled emissions of fugitive particulate matter in excess of 50 tons/year shall be protected by a cover or sprayed with a surfactant solution or water on a regular basis, as needed, or treated by an equivalent method, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.

- c. Pursuant to 35 Ill. Adm. Code 212.305, all conveyor loading operations to storage piles specified in 35 Ill. Adm. Code 212.304 shall utilize spray systems, telescopic chutes, stone ladders or equivalent methods in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.
- d. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310, and 212.312.
- e. Pursuant to 35 Ill. Adm. Code 212.307, all unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- f. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, storage bins and fine product truck and railcar loading operations shall be sprayed with water or a surfactant solution, utilize choke-feeding or be treated by an equivalent method in accordance with an operating program.
 - i. Conveyor loadout to trucks and railcars shall be conducted with sleeves extending to at least 6 inches below the sides and the receiving vehicle, except for topping off.
 - ii. Conveyor loadout sleeves shall be inspected for proper operation while such loadout to trucks or railcars is occurring, at least once each week when such loadout to trucks or railcars is performed.
- g. If particulate collection equipment is operated to control bucket elevators, conveyor transfer points, conveyors, storage bins and fine product truck and railcar loading operations, emissions from such equipment shall not exceed 0.03 gr/dscf, pursuant to 35 Ill. Adm. Code 212.313.
- h. No person shall cause or allow fugitive particulate matter emissions generated from crushing, screening, roadways, parking areas or storage piles to exceed an opacity of 10 percent, pursuant to 35 Ill. Adm. Code 212.316(b), (c), and (d).
- i. No person shall cause or allow fugitive particulate matter emissions from any other emission unit to exceed an opacity of 20 percent, pursuant to 35 Ill. Adm. Code 212.316(f).

3. Pursuant to 35 Ill. Adm. Code 212.324(b), emissions of particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀) from any process emission unit shall not exceed 0.03 gr/scf during any one hour period.
4. Pursuant to 35 Ill Adm. Code 212.324(f), the Permittee shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards shall be met at all times. Proper maintenance shall include the following minimum requirements:
 - a. Visual inspections of air pollution control equipment;
 - b. Maintenance of an adequate inventory of spare parts; and
 - c. Expeditious repairs, unless the source is shutdown.
5. Pursuant to 35 Ill Adm. Code 212.324(g), the Permittee shall maintain recordkeeping of maintenance and repair that includes the following minimum requirements:
 - a. Written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill Adm. Code 212.324(f).
 - b. The Permittee shall document any period during which any process emission source was in operation when the air pollution control equipment was not in operation or was malfunctioning, so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of the causes for pollution control equipment not operating or malfunctioning, and shall state what corrective actions were taken and what repairs were made.
 - c. Copies of all records required by this Permit shall be submitted to the Illinois EPA within ten (10) working days of a written request by the Illinois EPA.
 - d. The records required under this Section shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
 - e. Upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emissions source was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.

- 6a. The Permittee shall maintain contingency measure plans reflecting the PM₁₀ emission reductions set forth in 35 Ill. Adm. Code 212.703. Updates to the PM₁₀ contingency plans shall be submitted to the Illinois EPA, as necessary.
 - b. Sources having operational changes subject to 35 Ill. Adm. Codes 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 which require either a new permit or a revision to an existing permit shall, within 30 days after such changes, submit a request to modify its permit in order to include a new, appropriate contingency measure plan. Such new plan shall be subject to the requirements of 35 Ill. Adm. Code 212, Subpart U.
7. The contingency measure plan shall contain two levels of control measures:
 - a. Level I measures are measures that will reduce total source-wide fugitive emissions of PM-10 subject to control under 35 Ill. Adm. Codes 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 15%.
 - b. Level II measures are measures that will reduce total source-wide fugitive emissions of PM-10 subject to control under 35 Ill. Adm. Codes 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464 by at least 25%.
8. If the review of monitoring data reveals an exceedance of the 24-hour ambient air quality standard for PM-10 found at 35 Ill. Adm. Code 243.120, the Illinois EPA may take whatever steps are necessary to determine which source or sources are culpable for the exceedance, including, but not limited to reviewing operating records of the source or sources identified to determine whether any source or sources experienced a malfunction or breakdown or violated any term or condition of its operating permit which contributed to the exceedance.
- 9a. The Permittee shall implement Level I or Level II measures within ninety (90) days after receipt of a notification from the Illinois EPA that the Permittee has been identified as a source that may likely to be causing or contributing to a PM₁₀ exceedance detected by monitoring.
 - b. The Permittee shall implement Level I or Level II measures corresponding to fugitive emissions within ninety (90) days, and shall implement such measures corresponding to any non-fugitive emissions according to the approved schedule set forth in the Permittee's alternative control plan, after receipt of a notification from the Illinois EPA that the Permittee is identified of likely to be causing or contributing to one or more of the exceedances leading to a violation of the ambient air quality standard for PM₁₀.
 - c. Upon the finding of a failure to attain the PM₁₀ standard by the Administrator of USEPA, the Permittee shall, within sixty (60) days after receipt of such notification, implement any Level II measures

corresponding to fugitive emissions subject to control under 35 Ill. Adm. Codes 212.304, 212.305, 212.306, 212.308, 212.316(a) through (e), 212.424 or 212.464.

- 10a. Operation and emissions of particulate matter (PM) from the following activities shall not exceed the following limits:

Annual Throughput (Tons/Year)	Particulate Matter Emissions	
	(Tons/Mo)	(Tons/Yr)
13,000,000	9.52	95.2

- b. i. The monthly throughput and number of drop points for each operating scenario shall be recorded each month. Particulate matter emissions shall be calculated by multiplying the monthly actual throughput times the number of drop points times the emission factor for that operating scenario. Such calculations shall follow the example spreadsheet provided in the permit application.
 - ii. The average moisture content of all inbound material shall not be lower than 7.5% on a weighted basis.
 - iii. Permittee shall determine compliance with the average moisture content limit on a monthly basis using a block monthly averaging period and industry standard test methods.
 - c. The monthly emissions shall be totaled from all operating scenarios that month. This shall include the diesel generators.
 - d. Each month the annual limits shall be determined from a running total of the previous 12 months of data.
 - e. These limits are based upon the maximum annual throughput of material, the minimum efficiencies of air pollution control equipment, and standard emission factors.
 - f. Note that there is a "nested" limit on the emissions of PM₁₀ as a result of the limit on PM emissions. PM₁₀ emitted is of a lesser quantity than PM, and therefore limiting PM emissions also limits PM₁₀ emissions.
- 11a. The sulfur content of the diesel fuel for the generators shall not exceed 2.0%.
- b. Emissions of nitrogen oxides shall not exceed 99.0 tons per year.
 - c. Emissions of sulfur dioxides shall not exceed 66.8 tons per year.
 - d. Emissions of PM₁₀ from the generators shall not exceed 5.0 tons per year.

- e. Each month these limits shall be determined from the operating hours of the generators:

H1 = Total hours of operation for the two 760-HP generators
H2 = Hours of operation of the 505-HP generator

NO_x Emissions = $((16.8 \times H1) + (12.4 \times H2))/2000$
 SO_2 Emissions = $((11.34 \times H1) + (0.82 \times H2))/2000$
 PM_{10} Emissions = $((0.49 \times H1) + (0.88 \times H2))/2000$

These limits are based on standard emission factors (AP-42). Compliance with the annual limits shall be determined on a monthly basis from the preceding 12 months of data.

- f. Emissions of other fuel combustion units shall be added to determine compliance with these limits.
- 12a. Within 90 days of a written request from the Illinois EPA, pursuant to 35 Ill. Adm. Code 201.282, the emissions from any emission unit(s) shall be measured by an approved testing service, during conditions which are representative of the maximum performance. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- b. i. The following methods and procedures shall be used for testing of emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Flue Gas Weight	USEPA Method 3
Moisture	USEPA Method 4
Particulate Matter	USEPA Method 5
Opacity	USEPA Method 9

- ii. A test shall consist of three separate runs each at least 60 minutes in duration. Compliance shall be determined from the average of the runs provided that the Illinois EPA may accept the arithmetic mean of the two runs in circumstances described in 40 CFR 60.8(f).
- c. Testing shall be performed by a qualified independent testing service.
 - d. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Illinois EPA for review and approval. A copy shall also be submitted to the USEPA. The plan shall describe the specific procedures for testing, including:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

- ii. The conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum operating rate, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the processes and any control equipment will be determined.
 - e. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of the tests.
- 13a. The Final Report(s) for all tests shall be submitted within 180 days after the date of the test. The Final Report shall include as a minimum:
- i. General information describing the test, including the name and identification of the emission source which was tested, date of test, name of personnel performing the tests, and Illinois EPA observers, if any;
 - ii. A summary of results;
 - iii. Description of test procedures, including description of test equipment, and test schedule;
 - iv. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
- b. Submittals of information shall be made as follows:
- i. Notices of Test - one copy to the Compliance Section and one copy to the Regional Office.
 - ii. Final Report - one copy to the Compliance Section, one copy to the Regional Office, and one copy to the Permit Section.

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

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

- 14a. The Permittee shall maintain records of the following items for the source:
- i. Total amount of materials processed in each operating scenario, tons/month and tons/year (running total);
 - ii. Operating hours of each generator, hours/month and hours/year (running total);
 - iii. Records for the inspections required by Condition 2(f)(ii), with date, time and observations;
 - iv. Moisture content of all inbound materials and monthly average moisture content; and
 - v. Emissions of PM, NO_x and SO₂ (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
15. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or violation and efforts to reduce emissions and future occurrences.
16. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

- 17a. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
- i. Total amount of materials processed in each operating scenario, tons/year; and
 - ii. Operating hours of each generator, hour/year.
- b. If there have been no exceedances during the prior calendar year, the Annual Emission Report shall include a statement to that effect.

Please note that this permit is revised to correct the maximum horsepower rating in Condition 11(e), and the moisture content in Conditions 10(b) and 14(a).

If you have any questions on this permit, please call John Blazis at 217/782-2113.

Donald E. Sutton, P. E.
Manager, Permit Section
Division of Air Pollution Control

DES:JPB:jar

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from the source. The resulting maximum emissions are well below the levels, (e.g., 100 tons/year for particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (PM₁₀) and particulate matter (PM)) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that control measures are more effective than required in this permit.

1a. Emissions of particulate matter (PM):

Annual Throughput (Tons/Year)	Particulate Matter Emissions	
	(Tons/Mo)	(Tons/Yr)
13,000,000	9.52	95.2

- b. Note that there is a "nested" limit on the emissions of PM₁₀ as a result of the limit on PM emissions. PM₁₀ emitted is of a lesser quantity of PM, and therefore limiting PM emissions also limits PM₁₀ emissions.
2. Emissions of nitrogen oxides shall not exceed 99.0 tons per year.
3. Emissions of sulfur dioxides shall not exceed 66.8 tons per year.
4. Emissions of PM₁₀ from the generators and other fuel combustion units shall not exceed 5.0 tons per year (Included in 1a).

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