217/785-1705

CONSTRUCTION PERMIT
NSPS SOURCE – NESHAP SOURCE

PERMITTEE

Fairmount Santrol
Attn: Mr. Robert Larson
3448 East 2153rd Road
Wedron, Illinois 60557

Application No.: 14080009 I.D. No.: 099804AAB
Applicant's Designation: Wedron 7 Date Received: August 7, 2014
Subject: New Sand Processing Line and Coating Operation
Date Issued: October 2, 2014
Location: 3448 East 2153rd Road, Wedron

This permit is hereby granted to the above designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new sand processing line and a new sand coating operation, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s).

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

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Acting Manager, Permit Section
Division of Air Pollution Control

REP:JMS:jws

cc: Region 2
CES

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SECTION 1: GENERAL CONDITIONS THAT APPLY TO THE PROJECT

1.1 Introduction

a. This permit authorizes an expansion of the industrial sand processing plant including:

i. The installation of a new sand processing line. The processing line will consist of two natural gas-fired rotary sand dryers, screens, belt conveyors, bucket elevators, storage units and rail loadout stations and associated control devices.

ii. For the purposes of this permit, the various new emission units at the sand processing plant are “affected units,” except that the dryers are “affected dryers.”

b. This permit also authorizes construction of a new sand coating operation including:

i. Equipment to process and transfer sand to a new coating operation, such as conveyors, bucket elevators, silos and sand heaters.

ii. A coating operation, including sand pre-heater, two mixers to apply coating, an indirectly heated fluidized bed dryer to dry the coating, and a thermal oil heater to supply heat for the dryer.

iii. Equipment to handle coated sand from the operation, including transfer equipment, screens, coolers, silos, and rail loadout operations.

iv. For the purposes of this permit, the various new emission units are “affected units,” except that the thermal oil heater and sand heaters are “affected heaters.”

c. This permit does not authorize additional utilization or modification of existing sand processing equipment at the source.

1.2 Generally Applicable Emission Standards

a. Each affected unit, heater and dryer is subject to:

i. 35 IAC 212.123(a), which provides that the emission of smoke or other particulate matter from an emission unit shall not have an opacity greater than 30 percent, 6-minute average, except as provided by 35 IAC 212.123(b) or Part 201 Subpart I.

ii. 35 IAC 212.301 and 212.314, which provide that no person shall cause or allow the emission of fugitive particulate

matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour).

b. Each affected unit, affected dryer, and space heater is subject to 35 IAC 212.321(a), which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar new process emission units, at a source or premises, exceeds the allowable emission rates specified in 35 IAC 212.321(c).

c. The affected dryer is subject to 35 IAC 214.301, which provides that no person shall cause or allow the emission of SO_2 into the atmosphere from any process emission unit to exceed 2000 ppm.

1.3 Non-applicability Provisions

This permit is issued based on this project not being a major modification of the existing minor source for purposes of the federal rules for Prevention of Significant Deterioration of Air Quality (PSD), 40 CFR 52.21. This is because the project emissions will be less 250 tons per year of regulated NSR pollutants other than greenhouse gases (GHG). However, as a result of this project, the source will be classified as a major source for purposes of PSD after completion of this project.

1.4 General Work Practice Requirements

a. All affected conveyors shall be covered.

b. At all times the Permittee shall maintain and operate the affected units, heaters and dryers, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

c. As part of good air pollution control practice, the Permittee shall perform regular maintenance on the affected units, heaters and dryers, including associated control devices, in accordance with written procedures developed and maintained by the Permittee, which procedures may include the manufacturer(s) and/or vendor(s) recommendations.

1.5 Control Program for Fugitive Emissions

a. The Permittee shall carry out control of emissions of fugitive particulate matter from the new sand processing facility and coating facility, in accordance with a written program describing the measures being implemented to demonstrate compliance with

Conditions 1.2(a), 1.4 and 2.2.5(c). This program shall be kept current.

b. At a minimum, the program shall include the following control measures for emissions of fugitive particulate matter:

i. Material Transfer Points

The drop distance shall be maintained at a height to reduce emissions.

ii. Loadout

A. Loading shall be conducted using procedures that reduce spillage of material.

B. Spilled material shall be collected, flushed or otherwise managed to reduce the potential for emissions from this material.

iii. Dust Collectors

Material collected by dust collectors shall be handled by methods that prevent potential emissions from such material.

iv. General

A. Plant equipment and enclosures shall be inspected on a regular basis to verify they are in good condition for control of emissions. Any defects in equipment or enclosures that result in additional emissions shall be repaired as soon as practicable.

B. As related to control of particulate emissions, equipment shall be serviced according to the manufacturer’s recommendation or other written procedures developed by the Permittee.

c. i. This program is subject to revision.

ii. A revised program shall be submitted to the Illinois EPA within 90 days of a request from the Illinois EPA for revision to address observed deficiencies in control of fugitive emissions.

d. The Permittee shall keep records for the implementation of this program, including:

i. Records for inspections, with observations.

ii. Records for repairs.

iii. Records for maintenance.

1.6 Emissions of Wet Sand Handling Operations

This permit is issued based on negligible emissions of particulate matter (PM) from wet sand handling equipment. For this purpose, wet sand handling equipment means equipment that handles sand with sufficient surface moisture such that particulate matter emissions are not generated from processing of the material through screening operations, bucket elevators and belt conveyors. Material that is wetted solely by wet suppression systems is not considered to be "saturated." For this purpose, emissions from all such equipment shall not exceed 0.1 lbs/hour and 0.4 tons/year, in total.

Note: Emission limits for other operations are included in Section 2 and summarized in Attachment 1.

1.7 Annual Limits

Compliance with the annual limits in this permit shall be determined from a running total of 12 months of data.

1.8 General Requirements for Performance Testing

For the performance tests required by Conditions 2.1.8, 2.2.6, 2.4.8-1 and 2.4.8-2, the Permittee shall fulfill the following requirements:

a. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:

i. The person(s) who will be performing sampling and analysis and their experience with similar tests.

ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the emission unit and any control equipment will be determined.

iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.

iv. The test method(s), which will be used, with the specific analysis method, if the method can be used with different analysis methods.

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

vi. The format and content of the Final Report for testing.

b. The Illinois EPA shall be notified prior to the testing to enable the Illinois EPA to observe the testing. Notification of the expected date of testing shall be submitted to a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of testing. The Illinois EPA may, at its discretion, accept notification with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.

c. Copies of the Final Report(s) for testing shall be expeditiously submitted to the Illinois EPA, in all case within 60 days after the date of the test. The Final Report shall include as a minimum:

i. A summary of results.

ii. General information.

iii. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.

iv. Detailed description of test conditions, including:

A. Process information, i.e., mode(s) of operation and process rates; and

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

v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.

1.9 General Requirement for Records

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

1.10 General Requirement for Reporting

If there is a deviation from the requirements of this permit that is not otherwise address by compliance reporting pursuant to the federal New Source Performance Standards (NSPS) or National Emissions Standards for Hazardous Air Pollutants (NESHAP), the Permittee shall submit a report to the Illinois EPA within 30 days. The report shall include a description of the deviation, the probable cause of the deviation, the corrective actions that were taken, and measures taken to prevent similar occurrences in the future.

1.11 General Requirements for Reports and Notifications

Two copies of required reports and notifications shall be sent to the Illinois EPA, Division of Air Pollution Control, Compliance Section in Springfield; and

One copy of required reports and notifications shall be sent to the Illinois EPA, Air Regional office in Peoria; and

One copy of required submissions relating to performance testing shall be sent to the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Source Monitoring Unit
9511 Harrison Street
Des Plaines, Illinois 60016

1.12 Authorization to Operate

The Permittee is allowed to operate the affected units, dryers and heaters under this permit until final action is taken on the CAAPP application for the source, provided that the Permittee performs the required performance tests as required by Conditions 2.1.8, 2.2.6, 2.4.8-1 and 2.4.8-2. This condition supersedes Standard Condition 6.

SECTION 2: UNIT-SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

2.1 Sand Dryers

2.1.1 Description

Wet sand from the mining operation will be dried in rotary dryers (the "affected dryers"). The affected dryers will be fired with natural gas. Each affected dryer will be equipped with a dust collector (baghouse) for control of particulate emissions.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Rotary Dryer	Natural gas-fired rotary dryer; 300 tons/hour capacity.	Baghouse DC7-1000
Rotary Dryer	Natural gas-fired rotary dryer; 300 tons/hour capacity.	Baghouse DC7-1100

2.1.3 Applicable Federal Emission Standards

The affected dryers are subject to the federal New Source Performance Standards (NSPS) for Calciners and Dryers in Mineral Industries, 40 CFR 60 Subpart UUU and applicable requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.

a. Pursuant to the NSPS, 40 CFR 60.732, emissions from each affected dryer shall not contain particulate matter in excess of 0.057 grams/dscm (0.025 grains/dscf).

b. Pursuant to the NSPS, 40 CFR 60.732, emissions from each affected dryer shall not exhibit greater than 10 percent opacity.

2.1.4 Non-applicability Provisions

This permit is issued based on continuous opacity monitoring not being required for the affected dryers pursuant to the NSPS, 40 CFR 60.734(a), as these dryers are "industrial sand rotary dryers" that are exempt from such monitoring by 40 CFR 60.734(c).

2.1.5 Good Air Pollution Control Practices

At all times, the Permittee shall maintain and operate the affected dryers and associated baghouses in a manner consistent with good air pollution control practice for minimizing emissions pursuant to 40 CFR 60.11(d).

2.1.6 Control Requirements

a. At a minimum, the good air pollution control practices for the baghouses shall include maintenance and operation in accordance with written operating procedures that specify:

i. The acceptable ranges of key baghouse operating parameters.

ii. The procedures for periodic inspection of the baghouse.

iii. The procedures for regular preventative maintenance of the baghouse.

2.1.7 Operational and Emission Limits

a. i. Natural gas shall be the only fuel fired in the affected dryers.

ii. The rated heat input capacity of each affected dryer shall not exceed 104.0 mmBtu/hour.

iii. A. The production rate for each affected dryer shall not exceed 300 tons of dried sand produced per hour, monthly average.

B. The total amount of dried sand produced by the affected dryers, in total, shall not exceed 5,256,000 tons/year.

b. i. Emissions from the affected dryers shall not exceed the following limits.

Pollutant	Limits	
	Lbs/Hour (each)	Tons/Year (combined)
Nitrogen Oxides (NO_x)	10.14	88.8
Carbon Monoxide (CO)	8.52	74.6
Volatile Organic Material (VOM)	0.56	4.9
PM (filterable and condensable)	1.56	13.6

ii. This permit is issued based on minimal emissions of sulfur dioxide (SO_2) from the affected dryers. For this purpose, emissions shall not exceed 0.25 pounds/hour, each and 1.1 tons/year, in total.

2.1.8 Emission Testing Requirements

a. Within 60 days after achieving the maximum production rate at which each affected dryer will be operated, but not later than 180 days after initial startup, the Permittee shall conduct performance tests for:

i. Particulate matter for the affected dryers in accordance with the requirements of 40 CFR 60.8 and 60.736. (NSPS Testing)

ii. Condensable particulate matter from each affected dryer and for PM_{10} (filterable), NO_x and CO from one of the affected dryers.

b. These tests shall be conducted during conditions which are representative of maximum emissions.

b. The following methods and procedures shall be used for testing of emissions, unless use of another method developed or supported by USEPA is approved by the Illinois EPA as part of the approval of the test plan. 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
Nitrogen Oxides	USEPA Method 7
Opacity	USEPA Method 9
Carbon Monoxide	USEPA Method 10
PM_{10} (filterable)	USEPA Method 201A
Condensable Particulate	USEPA Method 202

c. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.8. In addition, for the testing required by the NSPS, the Permittee shall fulfill applicable notification and reporting requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.

2.1.9 Operational Monitoring Requirements

a. For each baghouse, the Permittee shall install, operate and maintain instrumentation to measure and record pressure drop across each baghouse. If data is not automatically recorded, the Permittee shall record the pressure drop measured by this device at least once during each operating day.

b. As an alternative to monitoring in accordance with Condition 2.1.9(a), the Permittee may install, operate and maintain a bag leak detector system on the baghouse.

2.1.10 Recordkeeping Requirements

a. The Permittee shall maintain the following operating records for the affected dryers:

i. Amount of dried sand produced, in total (tons/month and tons/year).

ii. Fuel consumption (mmscf/month and mmscf/year).

b. The Permittee shall maintain the following logs or other similar records for the affected dryers and associated control devices:

i. An operating log that at a minimum shall contain the following information the identification of each incident during which emission unit(s) operated without the associated control device or when the associated control devices was not operating properly, with detailed description, including duration, a discussion of the likely cause(s) of the event, the corrective actions that were taken, and any preventive measures that were be taken to reduce future incidents, and an estimate of excess emissions during the incident, if any.

ii. A maintenance and repair log that at a minimum describes all routine and non-routine maintenance and repair performed including dates and description.

c. The Permittee shall keep the following records related to the emissions of PM and $PM_{10}/PM_{2.5}$ from the affected dryers:

i. A file containing the design specifications for the baghouses (type of unit, maximum design exhaust flow (acfm and dscfm), filter area, type of filter cleaning), the performance guarantee for particulate exhaust loading in gr/dscf) and the manufacturer's recommended operating and maintenance procedures for this baghouse.

ii. A file containing calculations for the maximum PM and PM_{10} emission rates of the baghouses (lbs/hour and lbs/tons), with supporting documentation and calculation.

iii. The emissions of PM and $PM_{10}/PM_{2.5}$ (tons/month and tons/year), with supporting calculations.

d. The Permittee shall keep the following records related to emissions of NO_x, CO and VOM from the affected dryers:

i. A file containing documentation for the rated heat input capacity of each dryer and calculations for the maximum emission rates of each pollutant, in pounds/hour and pounds/mmBtu, with supporting documentation.

ii. NO_x, CO and VOM emissions (tons/month and tons/year) with supporting calculations.

2.2 Dry Sand Handling Units

2.2.1 Description

For the new sand processing line, various dry sand handling equipment will be installed to process and transfer sand from the sand dryers that will either be coated in the new coating operation or loaded out as finished, uncoated sand. For the new sand coating operation, various dry sand handling equipment will be installed to process and transfer sand to a new coating operation and then to storage and loadout. For the purposes of this permit, the various dry handling equipment is referred to as “affected units.” All affected units are controlled by baghouses.

Note: this section does not address similar emission units located at the new sand coating facility that are controlled by a scrubber. Those units are addressed in Section 2.4 of this permit.

2.2.2 List of Emission Units and Air Pollution Control Equipment

The list of emissions units and associated control equipment is provided in Attachment 2 of this permit.

2.2.3 Non-applicability Provisions

This permit is issued based on the affected units not being subject to the NSPS for Nonmetallic Mineral Processing Plant, 40 CFR 60 Subpart OOO. This is because the affected facility and the source at which it is located do not crush or grind sand so that they do not constitute a nonmetallic mineral processing plant, as defined by 40 CFR 60.671.

2.2.4 Control Requirements

a. Affected units shall only be operated when their associated baghouse are operating.

b. At all times, the Permittee shall, to the extent practicable, maintain and operate each baghouse in accordance with good air pollution control practice for minimizing emissions. At a minimum, these practices shall include maintenance and operation in accordance with written operating procedures that specify:

   i. The acceptable ranges of key baghouse operating parameters.

   ii. The procedures for periodic inspection of each baghouse.

   iii. The procedures for regular preventative maintenance of each baghouse.

2.2.5 Operational and Emission Limits

a. The amount of sand processed by the new sand processing line shall not exceed 525,600 tons per month and 5,256,000 tons per year.

b. Each baghouse shall be designed to emit no more than 0.005 gr/scf for filterable particulate matter.

c. Emissions from affected units shall not exceed the following limits.

Operation*	Control Device	PM/PM_{10} Emissions	
		Pounds/Hour	Tons/Year
Dry Sand Transfer	DC7-2000	0.13	0.6
Dry Sand Storage	DC7-2100	0.75	3.3
Sand Screening (North Tower)	DC7-3000	1.50	6.6
Sand Screening (South Tower)	DC7-4000	1.50	6.6
Sand Transfer to Coating	DC7-5000	1.29	5.6
Coated Sand Transfer/Storage	DC7-5100	1.29	5.6
Sand Loadout Process	DC7-6000	1.16	5.1
		Total:	33.4

* Emission units are identified by the associated control device. The detailed list of emissions affected units and their associated control equipment is provided in Attachment 2 of this permit.

2.2.6 Performance Testing

a. Within one year of initial startup of the affected units, the Permittee shall have performance tests conducted for emissions of filterable PM and PM_{10}* from the baghouse controlling either the North Tower or the South Tower. These tests shall be conducted by a qualified testing service during conditions that are representative of the maximum emissions.

* If the Permittee considers all PM emissions to be emissions of filterable PM_{10}, testing for emissions of filterable PM_{10} need not be performed unless specifically requested by the Illinois EPA.

b. The following USEPA methods and procedures shall be used for testing of emissions unless use of another USEPA method is approved by the Illinois EPA as part of its review of the test plan. Refer to 40 CFR 60, Appendix A, for USEPA test methods.

PM	USEPA Method 5
PM_{10} (filterable)	USEPA Method 201A

c. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.8.

2.2.7 Operational Monitoring Requirements

For each baghouse, the Permittee shall install, operate and maintain instrumentation to measure pressure drop across the baghouse. If data is not automatically recorded, the Permittee shall record the pressure drop measured by this device at least once during each operating day.

2.2.8 Recordkeeping Requirements

a. The Permittee shall keep the records for the amount of sand processed by the affected facility (tons/month and tons/year).

b. The Permittee shall keep the following records related to the emissions of PM and PM_{10} of the affected units controlled by the baghouses:

i. A file containing the design specifications for the baghouses (type of unit, maximum design exhaust flow (acfm and dscfm), filter area, type of filter cleaning), the performance guarantee for particulate exhaust loading in gr/dscf) and the manufacturer's recommended operating and maintenance procedures for this baghouse.

ii. A file containing calculations for the maximum PM and PM_{10} emission rates of the baghouses (lbs/hour), with supporting documentation and calculation.

iii. The emissions of PM and PM_{10} (tons/month and tons/year), with supporting calculations.

c. The Permittee shall maintain the following logs or other similar records for the affected units and associated control devices:

i. An operating log that at a minimum shall contain the following information the identification of each incident during which emission unit(s) operated without the associated control device or when the associated control devices was not operating properly, with detailed description, including duration, a discussion of the likely cause(s) of the event, the corrective actions that were taken, and any preventive measures that were be taken to reduce future incidents, and an estimate of excess emissions during the incident, if any.

ii. A maintenance and repair log that at a minimum describes all routine and non-routine maintenance and repair performed including dates and description.

2.3 Pre-heater and Space Heaters

2.3.1 Description

For the new sand processing line, dry sand that goes to the coating operation will be heated indirectly in a vertical sand heater using a natural gas-fired thermal oil heater (the "affected pre-heater") before going into the coating process.

The natural gas-fired space heaters (the "affected space heaters") will be direct-fired heaters used to provide comfort heating for buildings.

2.3.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description
Pre-heater	Natural gas-fired thermal oil heater; 9.8 mmBtu/hour capacity.
Space Heaters	Natural gas-fired heaters will be used to provide comfort heating for buildings; eight heaters each with a maximum capacity of 2.5 mmBtu/hour.

2.3.3 Applicable Emission Standards

The affected pre-heater is subject to the NESHAP for Major Source for Industrial, Commercial and Institutional Boilers, 40 CFR 63 Subpart DDDDD and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A.

a. At all times, the Permittee shall operate and maintain the affected pre-heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the USEPA or the Illinois EPA that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]

b. The Permittee shall conduct a tune-up of the affected pre-heater every two years as specified in 40 CFR 63.7540. [40 CFR 63.7500 and Table 3]

Note: The Permittee also had to conduct a one-time energy assessment performed for the source by a qualified energy assessor. [40 CFR 63.7500 and Table 3]

2.3.4 Non-applicability Provisions

a. This permit is issued based on the affected space heaters not being subject to the NESHAP for Major Source for Industrial,

Commercial and Institutional Boilers, 40 CFR 63 Subpart DDDDD. This is because space heaters are not considered process heaters as defined by 40 CFR 63.7575.

b. This permit is issued based on the affected pre-heater and space heaters not being subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc. This is because the maximum design heat input capacity of each unit is less than 10 mmBtu/hour.

c. This permit is issued based on the affected pre-heater and space heaters not being subject to 35 IAC 216.121. This is because the actual heat input of each unit is less than or equal to 10 mmBtu/hour.

2.3.5 Operational and Emission Limits

a. i. The rated heat input capacity of the affected pre-heater shall not exceed 9.8 mmBtu/hour.

ii. The rated heat input capacity of the affected space heaters shall not exceed 2.5 mmBtu/hour each and the total rated heat input capacity for all affected space heaters shall not exceed 20.0 mmBtu/hour.

iii. Natural gas shall be the only fuel fired in the affected pre-heater and space heaters.

b. i. Emission from the affected pre-heater and space heaters shall not exceed the following limits:

Pollutant	Limits		
	Pre-Heater	Space Heaters	Pre-Heater and Space Heaters
	Pounds/Hour	Pounds/Hour (each)	Tons/Year (total)
NO_x	0.96	0.25	12.8
CO	0.81	0.21	10.7

ii. A. This permit is issued based on negligible emissions of $PM/PM_{10}/PM_{2.5}$, VOM and SO_2 from the affected pre-heater. For this purpose, emissions of each pollutant shall not exceed nominal emission rates of 0.1 lb/hour and 0.4 tons/year.

B. This permit is issued based on minimal emissions of $PM/PM_{10}/PM_{2.5}$ and VOM emissions from the affected space heaters, in total. For this purpose, emissions of each pollutant from all affected space heaters, in total, shall not exceed 0.25 lb/hour and 1.1 tons/year.

C. This permit is issued based on negligible emissions of SO_2 emissions from the affected space heaters, in total. For this purpose, emissions of SO_2 shall not exceed a nominal emission rate of 0.1 lb/hour and 0.4 tons/year.

2.3.6 Recordkeeping Requirements

a. The Permittee shall comply with the applicable recordkeeping requirements in 40 CFR 63.7555 for the affected pre-heater.

b. The Permittee shall maintain records of the following items for the affected pre-heater and space heaters:

i. A file containing documentation for the rated heat input capacity of each heater (mmBtu/hour) and calculations for the maximum emission rates of each pollutant, in pounds/hour and pounds/mmBtu, with supporting documentation.

ii. The quantity of fuel burned for the affected pre-heater and space heaters, in total (mmscf/month and mmscf/year).

iii. NO_x and CO emissions from the affected pre-heater and space heaters, in total (tons/month and tons/year) with supporting documentation and calculations.

2.3.7 Reporting Requirement

For the affected pre-heater, the Permittee shall comply with the applicable notification and reporting requirements in 40 CFR 63.7545 and 63.7550, respectively.

2.4 Sand Coating Operation

2.4.1 Description

A mixture of polymer, petroleum distillate and water will be introduced to the heated sand in mixers. The petroleum distillate and water will act as a carrier to distribute the coating (the polymer) evenly over the sand. After mixing, the coated material is transferred to the fluidized bed dryer.

A fluidized bed dryer will dry the coated sand, with heat supplied from a separate thermal oil heater (the "affected heater"). The coating and drying process would be designed to operate as a closed loop system. A condenser would remove the water and petroleum distillate from the gas stream, which would then be recycled to the front of the dryer with only a small stream of purge gas normally venting from the dryer. This purge stream would be controlled by a wet scrubber. The condensed material would be processed to remove water and the petroleum distillate would then either be sent off-site as a byproduct from the coating process or, if it would meet applicable legal requirements, used as a fuel in the separate heater for the dryer (See Condition 2.4.6(b)(ii)). The design of the dryer, with only a small purge stream going to the scrubber, will act to control emissions of PM and VOM from the coating operation.

Coated sand would be transferred from the dryer to coolers via conveyors and an elevator. A bucket elevator would transfer the cooled, coated sand to product storage silos.

The mixers and dryer and associated downstream conveyors, coolers and bucket elevator would be controlled by a wet scrubber for control of particulate matter and volatile organic material. If the emission levels are low enough to comply without the scrubber, the scrubber would be considered a voluntary control device.

2.4.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Affected Coating Operation	Two mixers are used to apply the coating to sand. The coating would be dried in an indirectly heated fluidized bed dryer.	Wet Scrubber WS7-5000
Affected Conveyors	Conveyors transfer the coated sand to coolers.	
Affected Coolers	Coolers apply cool air to the coated sand to prevent the coated sand particles from sticking together.	
Affected Bucket Elevator	A bucket elevator transfers the cooled, finished sand to storage.	
Affected Heater	Natural gas-fired thermal oil heater; 24.0 mmBtu/hr capacity.	None

2.4.3 Applicable Federal Emission Standards

a. i. The affected heater is subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc and applicable requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.

ii. Pursuant to the NSPS, 40 CFR 60.11(d), the Permittee shall at all times, maintain and operate the affected heater in a manner consistent with good air pollution control practice for minimizing emissions.

iii. The affected heater is subject to 40 CFR 60.42c(d), which provides that no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. Pursuant to 40 CFR 60.42c(h), this limit may be determined based on a certification from the fuel supplier, as described under 40 CFR 60.48c(f).

b. The affected heater is subject to the NESHAP for Major Source for Industrial, Commercial and Institutional Boilers, 40 CFR 63 Subpart DDDDD and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A.

Note: The affected heater is considered to be a unit in the "unit designed to burn liquid subcategory" beginning on the date that liquid fuel is first burned in the affected heater.

i. As a unit designed to burn liquid, at all times, except for periods that meet the definitions of startup and shutdown in 40 CFR 63.7575, the emissions from this heater shall not exceed the following limits pursuant to the NESHAP, 40 CFR 63.7500(a)(1), on and after the date the applicable performance test required to be conducted under 40 CFR 63.7 is or should be completed. Compliance with these limits shall be demonstrated in accordance with the applicable provisions of this NESHAP, including 40 CFR 63.7500, 63.7505, 63.7510 and 63.7540.

A. Particulate HAP

1. Combustion of distillate oil, either:

PM (filterable): 0.0011 lb/mmBtu; or alternatively
Total Selected Metals: 0.000029 lb/mmBtu

2. Combustion of recovered petroleum distillate, either:

PM (filterable): 0.013 lb/mmBtu; or
alternatively
Total Selected Metals: 0.000075 lb/mmBtu.

B. CO: 130 ppmv, dry, corrected to 3% oxygen, 3-run average

C. Hydrogen chloride (HCl): 0.00044 lb/mmBtu

D. Mercury: 0.00000048 lb/mmBtu

ii. Pursuant to 40 CFR 63.7500(a)(1) and Table 3 of 40 CFR 63 Subpart DDDDD, the Permittee shall comply with applicable work practice standard of this NESHAP, including:

A. Unless the Permittee operates a continuous oxygen trim system on the affected heater, completing periodic tune-ups of the heater at least annually or every 5 years, as applicable, in accordance with 40 CFR 63.7540(a)(10), (12) and (13).

B. Operating all continuous monitoring systems required by this NESHAP at all times the affected heater is in operation, including during startup of the heater.

C. Use natural gas or other clean fuel for startup of the affected heater.

iii. Pursuant to 40 CFR 63.7500(a)(3), at all times the Permittee must operate and maintain the affected heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions

2.4.4 Applicable State Emission Standards

a. For the affected heater:

i. When liquid fuel exclusively is burned in the affected dryer, the affected dryer is subject to 35 IAC 212.206, which provides that no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period to exceed 0.10 lbs/mmBtu of actual heat input.

ii. When liquid fuel exclusively is burned in the affected dryer, the affected dryer is subject to 35 IAC 214.122(b)(2), which provides that no person shall cause or allow the emission of SO_2 into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 250 mmBtu/hr, burning

liquid fuel exclusively to exceed 0.3 lbs of SO_2 per mmBtu of actual heat input when distillate fuel oil is burned.

iii. The affected heater is subject to 35 IAC 216.121, which provides that no person shall cause or allow the emission of CO into the atmosphere from any fuel combustion emission source with actual heat input greater than 10 mmBtu/hr to exceed 200 ppm, corrected to 50 percent excess air.

b. The coating operation with dryer is subject to 35 IAC 215.301, which provides that no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except that if no odor nuisance exists this limitation shall apply only to photochemical reactive material as defined in 35 IAC 211.4690.

2.4.5 Non-applicability Provisions

a. This permit is issued based on the affected heater not being an incinerator because petroleum distillate recovered from the dryer would only be used as a fuel in this heater if this material does not qualify as a waste under federal and state laws and rules.

b. The affected heater is not subject to standards of the NSPS, 40 CFR 60 Subpart Dc for PM and opacity because the rated heat input capacity of the affected heater is less than 30 mmBtu/hour. [40 CFR 60.43c(c)]

c. This permit is issued based on the affected heater not being subject to the NESHAP, 40 CFR 63 Subpart DDDDD, limit for particulate HAP for a unit firing light liquid when petroleum distillate recovered from the dryer is burned. This is because this recovered material does not meet the definition of “distillate oil,” so does not qualify as “light liquid,” and the heater would be a “unit designed to burn heavy liquid,” with all these terms as defined by 40 CFR 63.7575.

2.4.6 Operational Limits

a. i. The amount of coated sand produced by the new sand coating operation shall not exceed 87,600 tons per month and 876,000 tons per year.

ii. The heat input capacity of the affected heater shall not exceed 24 mmBtu/hour.

b. i. Natural gas and distillate fuel oil may be used as fuels in the affected heater.

ii. A. Petroleum distillate material recovered from the affected dryer shall only be used in the affected heater if it is determined that this material when

fired in the affected heater would not be a waste under both applicable federal laws and rules and applicable Illinois laws and rules.

B. Prior to initially using petroleum distillate material recovered from the affected dryer as fuel in the affected heater, the Permittee shall submit the following to the Illinois EPA, Bureau of Air. Thereafter, the use of this material in the affected heater shall be consistent with any qualifications and conditions expressed in the determinations or certification submitted to the Illinois EPA.

1. With respect to federal laws and rules, either a copy of a determination by USEPA that this material would not be considered a waste under applicable federal laws and rules when fired in the affected heater or a copy of a certification by the Permittee, with supporting documentation, that relevant provisions of federal rules (e.g., 40 CFR 241.3(b) and (d)) will be met so that the material would not be considered a waste; and

2. With respect to Illinois laws and rules, a copy of a determination made by either the Illinois EPA, Bureau of Land, or Illinois' Pollution Control Board that this material would not be considered a waste under applicable state laws and rules when fired in the affected heater or a copy of a certification by the Permittee, with supporting documentation that the relevant provisions of state rules will be met so the material would not be considered a waste.

c. Pursuant to 40 CFR 63.7500 and Tables 4 and 7 of 40 CFR 63 Subpart DDDDD, beginning on the date that the affected heater first operates as a unit designed to burn liquid, the Permittee shall, as applicable, operate the affected heater to comply with the applicable operating limits established pursuant to this NESHAP, including the following:

i. If the Permittee elects to demonstrate compliance with the applicable limit of this NESHAP for mercury, total selected metals and/or hydrogen chloride by fuel analysis, the Permittee shall maintain the fuel type or fuel mixture such that the applicable emission rate(s) calculated according to 40 CFR 63.7530(c)(1), (2) and/or (3), respectively, as applicable, are less than the applicable emission limit(s).

ii. If the Permittee elects to demonstrate compliance with an applicable limit of this NESHAP by performance testing, the

operating load of the affected heater, as monitored in accordance with Table 8 of this NESHAP, shall not exceed 110 percent of the highest hourly average operating load recorded during the most recent performance test.

iii. If the Permittee elects to demonstrate compliance with the CO emission limit with an O_2 analyzer system, as provided for by 40 CFR 63.7525(a), the 30-day rolling average oxygen content shall be maintained at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test, as monitored in accordance with Table 8 of this NESHAP, provided, however, that this requirement will not apply if an oxygen trim system is installed and operated in accordance with 40 CFR 63.7525(a).

2.4.7 Emission Limits

a. Emissions of $PM/PM_{10}/PM_{2.5}$ from the affected coating operation, conveyors, coolers and bucket elevator shall not exceed 2.2 lbs/hour and 9.0 tons/year, in total.

b. i. Emissions from the affected heater shall not exceed the following limits.

Pollutant	Limit	
	Pounds/Hour	Tons/Year
NO_x	4.14	18.2
CO	2.00	8.7
$PM/PM_{10}/PM_{2.5}$	0.40	1.8

ii. This permit is issued based on minimal emissions of VOM from the affected heater. For this purpose, emissions shall not exceed 0.25 lbs/hour and 1.1 tons/year.

iii. This permit is issued based on negligible emissions of SO_2 from the affected heater. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lbs/hour and 0.4 tons/year.

c. This permit is issued based on minimal emissions of VOM from the affected mixers and fluidized bed dryer, combined. For this purpose, emissions of VOM shall not exceed 0.25 pounds/hour and 1.1 tons/year.

2.4.8-1 Performance Testing for the Affected Heater

a. Pursuant to the NSPS, 40 CFR 60 Subpart Dc, the Permittee shall conduct an initial performance test related to the SO_2 emissions of the affected heater pursuant to 40 CFR 60.44c(g) (fuel

sampling and analysis) or 40 CFR 60.44c(h) (fuel supplier certification), as applicable.

b. Pursuant to the NESHAP, 40 CFR 63 Subpart DDDDD, the Permittee shall conduct performance tests for the CO emissions of the affected heater, including initial tests pursuant to 40 CFR 63.7510(c) and periodic tests pursuant to 40 CFR 63.7515, with such tests conducted in accordance with applicable requirements of 40 CFR 63.7520, including development of a site-specific stack test plant according to 40 CFR 63.7520(a).

Note: This condition does not address stack testing under the NESHAP for emissions of mercury, hydrogen chloride or particulate HAP. This because it is expected that the Permittee will elect to comply with the NESHAP limits for these pollutants by fuel analysis, as addressed in Condition 2.4.9.

c. If the affected heater burns recovered petroleum distillate from the dryer, the Permittee shall also have performance tests conducted, as follows, by a qualified testing service for the affected heater during conditions that are representative of the maximum emissions.

i. Within one year of first burning recovered petroleum distillate in the heater, the Permittee shall have performance tests conducted for emissions of filterable PM*, condensable PM, filterable PM_{10}**, NO_x and CO while burning such material.

* If testing for emissions of filterable PM is conducted pursuant to the NESHAP, separate testing for PM emissions is not required pursuant to this condition.

** If the Permittee considers the results of testing for filterable PM emissions to also represent emissions of filterable PM_{10}, testing for emissions of filterable PM_{10} need not be conducted unless specifically requested by the Illinois EPA.

ii. Additional emission testing shall be conducted for the heater within 90 days of a written request by the Illinois EPA for fuel(s) and pollutants as specified by the request.

d. i. Within one year of initial startup of the affected heater, the Permittee shall have performance tests conducted for emissions of NO_x and CO from the affected heater. These tests shall be conducted by a qualified testing service during conditions that are representative of the maximum emissions.

ii. The following USEPA methods and procedures shall be used for testing of emissions unless use of another USEPA method is approved by the Illinois EPA as part of its review of the test plan. Refer to 40 CFR 60, Appendix A, for USEPA test methods.

NO_x	USEPA Method 7
CO	USEPA Method 10

e. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.8. In addition, for the testing required by the NSPS and the NESHAP, the Permittee shall fulfill applicable notification and reporting requirements of the General Provisions of the NSPS and NESHAP, 40 CFR 60 Subpart A and 40 CFR 63 Subpart A, respectively.

2.4.8-2 Performance Testing for the Scrubber

a. Within one year of initial startup of the affected coating operation, the Permittee shall have performance tests conducted for emissions of VOM and PM (filterable and condensable) from the affected coating operation to address compliance with Conditions 2.4.7(a) and (c). For this purpose, the Permittee shall conduct measurements for the controlled emissions of the coating operation, i.e., exhaust from the scrubber, unless measurements for uncontrolled emissions, prior to the scrubber show compliance. These tests shall be conducted by a qualified testing service during conditions that are representative of the maximum emissions.

b. The following USEPA methods and procedures shall be used for testing of emissions unless use of another USEPA method is approved by the Illinois EPA as part of its review of the test plan. Refer to 40 CFR 60, Appendix A, for USEPA test methods.

PM (filterable)	USEPA Method 5
PM (condensable)	USEPA Method 202
VOM	USEPA Method 25/25A

c. For this testing, the Permittee shall submit reports and notifications in accordance with Condition 1.8.

2.4.9 Fuel Analysis Requirements

a. If for the liquid fuel burned in the affected heater, the Permittee elects to comply with the applicable limits of 40 CFR 63 Subpart DDDDD for mercury, hydrogen chloride or total selected metals through fuel analysis, as provided for by 40 CFR 63.7505(c), the Permittee shall comply with the applicable requirements of this NESHAP for initial and periodic fuel analysis, including 40 CFR 63.7510(b), 63.7515(e) and 63.7521 and Tables 6 and 8 to this NESHAP, with sampling conducted in

accordance with a site-specific fuel monitoring plan developed according to 40 CFR 63.7521(b).

b. For distillate oil fuel burned in the affected heater, if the Permittee does not demonstrate compliance with the requirement of Condition 2.4.3(a)(iii) by supplier certification in accordance with 40 CFR 60.48c(f), the Permittee shall also conduct sampling and analysis of this fuel in accordance with 40 CFR 60.46c(d).

c. The Permittee shall conduct sampling and analysis of the recovered petroleum distillate burned in the affected heater for its sulfur content in accordance with 40 CFR 60.46c(d).

2.4.10 Monitoring Requirements

a. Pursuant to 40 CFR 63.7540 and Table 8 of 40 CFR 63 Subpart DDDDD, beginning on the date that the affected heater first operates as a unit designed to burn liquid, the Permittee shall comply with applicable monitoring requirements of 40 CFR 63 Subpart DDDDD. In particular, as the affected heater is subject to operating parameter limits pursuant to this NESHAP (see Condition 2.4.6(c)), for the affected heater, the Permittee shall:

i. Develop a site-specific monitoring plan in accordance with 40 CFR 63.7505(d).

ii. Pursuant to 40 CFR 63.7535, conduct monitoring according to the site-specific monitoring plan for the parameters for which there are operating parameter limits.

b. For the affected scrubber, the Permittee shall install operate and maintain instrumentation to measure either the temperature of the flue gas downstream of the condenser or the temperature of the recovered condensate.

c. If the testing required by Condition 2.4.8-2 is conducted for the exhaust from the scrubber, the Permittee shall install, calibrate, maintain and operate:

i. A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within 5 percent of water column gauge pressure at the level of operation and must be calibrated on an annual basis in accordance with manufacturer’s instructions.

ii. A device for the continuous measurement of the scrubbing liquid flow rate to the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ±5 percent of design scrubbing liquid flow rate and must be

calibrated on an annual basis in accordance with manufacturer's instructions.

2.4.11 Recordkeeping Requirements

a. For the affected heater, the Permittee shall comply with applicable recordkeeping requirements of the NSPS, 40 CFR 60 Subparts A and Dc, including keeping the following records:

i. The records specified by 40 CFR 60.7(b).

ii. The records related to the sulfur content of liquid fuel specified by 60.48c(e) and (f).

iii. The records for the amount of fuel burned specified by 60.48c(g).

b. For the affected heater, the Permittee shall comply with applicable recordkeeping requirements of the NESHAP, 40 CFR 63 Subparts A and DDDDD, including keeping the following records, with all required records kept in accordance with 40 CFR 63.7560:

i. The records specified by 40 CFR 63.7540(a)(2), (3), (5) and (17) for the fuels burned in the affected heater.

ii. The applicable records specified by 40 CFR 63.7555.

c. The Permittee shall keep a file containing the rated heat input capacity of the affected heater (mmBtu/hour), with supporting documentation.

d. The Permittee shall keep records of the following information related to the operation of the affected heater and its emissions of NO_x, CO, PM and PM_{10}.

i. A file containing the following information, with supporting documentation.

A. Calculations for the maximum hourly emission rates of each pollutants (lbs/mmBtu and lbs/hour);

B. The heat content of each fuel that is burned (Btu/scf for natural gas and Btu/gallon for liquid fuel).

ii. The usage of each fuel (mmscf/month and mmscf/year for natural gas and gallons/month and gallons/year for distillate fuel oil and recovered petroleum distillate).

iii. The emissions of each pollutant (tons/month and tons/year), with supporting calculations.

2.4.12 Reporting Requirement

a. For the affected heater, the Permittee shall comply with applicable reporting requirements of the NSPS, 40 CFR 60 Subparts A and Dc, including submittal of the following notification and reports to the Illinois EPA:

i. The notifications specified by 40 CFR 60.7(a) and 60.48c(a).

ii. Submittal of data of performance test for SO2 emissions and other information related to the sulfur content of liquid fuel as specified by accordance with 40 CFR 60.48c(b), (d) and (e).

b. For the affected heater, the Permittee shall comply with applicable reporting requirements of the NESHAP, 40 CFR 63 Subparts A and DDDDD, including the following notification and reports to the Illinois EPA:

i. Initial notification, as provided for by 40 CFR 63.9(b)(5).

ii. Submittal of periodic compliance reports, as provided for by 40 CFR 63.7550 and Table 9 to 40 CFR 63 Subpart DDDDD.

SECTION 3: ATTACHMENTS

Attachment 1: Project Emissions Increases Summary (Tons/Year)

	Emissions				
Operation	NO_x	CO	VOM	SO_2	$PM/PM_{10}/PM_{2.5}$
Wet Sand Handling Units	---	---	---	---	0.4
Dry Sand Transfer (DC7-2000)	---	---	---	---	0.6
Dry Sand Storage (DC7-2100)	---	---	---	---	3.3
Sand Screening North Tower (DC7-3000)	---	---	---	---	6.6
Sand Screening South Tower (DC7-4000)	---	---	---	---	6.6
Sand Transfer to Coating (DC7-5000)	---	---	---	---	5.6
Coated Sand Transfer/Storage (DC7-5100)	---	---	---	---	5.6
Sand Loadout Process (DC7-6000)	---	---	---	---	5.1
Rotary Sand Dryers (DC7-1000/DC7-1100)	88.8	74.6	4.9	1.1	13.6
Pre-Heater and Space Heaters	12.8	10.7	1.5	0.8	1.5
Sand Coating Operation	---	---	1.1	---	9.0
Affected Heater (for Coating Line Dryer)	18.2	8.7	1.1	0.4	1.8
TOTAL:	119.8	94.0	8.6	2.3	59.7
Significance Threshold:	250	250	250	250	250
Greater Than Significant?	No	No	No	No	No

Attachment 2: List of Dry Sand Handling Units and Associated Control Equipment

Operation	Emission Unit	Description	Emission Control Equipment
Dry Sand Transfer	Conveyors	Transfer dry sand from dryers to the dry sand storage tank.	Baghouse DC7-2000
Dry Sand Storage	Conveyors	Stores dry sand and transfers dry sand from the storage tank to screening.	Baghouse DC7-2100
	Storage Silo/Tank		
Sand Screening – North Screening Tower	Conveyors	Transfer dry sand to North Screen Tower and South Screen Tower for screening, sizing and storage.	North Screen Tower Baghouse DC7-3000
	Weigh Belts	Transfer sand from storage silos to screens.	
	Bucket Elevators	Transfer sand from storage silos to screens.	
	Scalping Screens	Eliminate off-spec or oversized material.	
	Screens	Properly sizes finished dry sand.	
	Storage Silo/Tank (dry sand)	Stores dry sand prior to screening.	
	Storage Silo/Tank (screened sand)	Stores certain sizes of finished dry sand.	
Sand Screening – South Screening Tower	Conveyors	Transfer dry sand to the North Screen Tower and South Screen Tower for screening, sizing and storage.	South Screen Tower Baghouse DC7-4000
	Weigh Belts	Transfer sand from storage silos to screens.	
	Bucket Elevators	Transfer sand from storage silos to screens.	
	Scalping Screens	Eliminates off-spec or oversized material.	
	Screens	Properly sizes finished dry sand.	
	Storage Silo/Tank (dry sand)	Stores dry sand prior to screening.	
	Storage Silo/Tank (screened sand)	Stores certain sizes of finished dry sand.	
Sand Transfer to Coating	Conveyors	Transfer material from Screen Towers to coating process and within the coating process.	Baghouse DC7-5000
	Weigh Belt Feeder	Transfer material within coating process	
	Bucket Elevators	Transfer material within coating process.	
	Storage Silo/Tank	Storage of material prior to pre-heating and coating.	
Coated Sand Transfer and Storage	Bucket Elevator	Transfer cooled, finished sand product to storage.	Baghouse DC7-5100
	Conveyors	Transfer product within coating process and to loadout process.	

Operation	Emission Unit	Description	Emission Control Equipment
	Scalping Screens	Coated product sizing.	
	Blend Bin	Coated product blending.	
	Storage Silo/Tanks	Storage of cooled, finished sand product.	
Sand Loadout Process	Conveyors	Transfers final material from either the North/South Screen Towers or the Coating Operation to Loadout Spouts.	Baghouse DC7-6000
	Storage Bins	Storage area prior to loadout.	
	Loadout Spouts	Final material is loaded into railcars.	

Attachment 3: Standard Permit Conditions

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

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

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

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

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

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

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

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

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

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

   d. To obtain and remove samples of any discharge or emissions of pollutants, and

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

5. The issuance of this permit:

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

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

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

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

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

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

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

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

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

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

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