

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

American Colloid Company
Attn: Van Coats, Plant Manager
1500 West Shure Drive
Arlington Heights, Illinois 60004

<u>Application No.:</u> 75060111	<u>I.D. No.:</u> 119040AAT
<u>Applicant's Designation:</u>	<u>Date Received:</u> March 15, 2007
<u>Subject:</u> Sand, Bentonite, and Pulgite Processing	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 1601 Walnut Street, Granite City, Madison County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of sand, bentonite, and pulgite processing with receiving, enclosed internal transfer, sand dryer and cooler, sand, bentonite, and pulgite storage tanks, screens, aspirators, bagging lines, jug lines, sand load out, particulate load out, cyclones and baghouses 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., PM₁₀ to less than 100 tons per year and 10 tons/year for a single HAP and 25 tons/year of any combination of such HAPs). As a result the source is excluded from the requirement 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 permits issued for this location.
- 2a. Pursuant to 35 Ill. Adm. Code 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122.

- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity that is visible by an observer looking generally toward the Zenith (that is, looking at the sky directly overhead) from a point beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301, except as exempted by 35 Ill. Adm. Code 212.314.
- d. 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 other equivalent methods 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 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.
- f. 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.
- g. Pursuant to 35 Ill. Adm. Code 212.308, crushers, grinding mills, screening operations, bucket elevators, conveyor transfer points, conveyors, bagging operations, 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.
- h. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for

its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.

- i. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
 - vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- j. Pursuant to 35 Ill. Adm. Code 212.313, if particulate collection equipment is operated pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 212.312, emissions from such equipment shall not exceed 68 mg/dscm (0.03 gr/dscf).
- k. Pursuant to 35 Ill. Adm. Code 212.316(b), no person shall cause or allow fugitive particulate matter emissions generated by the crushing or screening of slag, stone, coke or coal to exceed an opacity of 10 percent.
- l. Pursuant to 35 Ill. Adm. Code 212.316(c), no person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent.
- m. Pursuant to 35 Ill. Adm. Code 212.316(e)(1), no person shall cause or allow fugitive particulate matter emissions from any roadway or parking area located at a slag processing facility or integrated iron and steel manufacturing plant to exceed an opacity of 5 percent.
- n. Pursuant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has been assigned a particulate matter, PM_{10} , or fugitive particulate matter

emissions limitation elsewhere in 35 Ill. Adm. Code 212.316 or in 35 Ill. Adm. Code 212 Subparts R or S, no person shall cause or allow fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.

- o. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- p. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM₁₀ from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- q. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, this subsection is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).
- 3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in this 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
 - i. Visual inspections of air pollution control equipment;
 - ii. Maintenance of an adequate inventory of spare parts; and
 - iii. Expeditious repairs, unless the emission unit is shutdown.
- b. The Permittee shall follow good operating practices for the cyclones and baghouses, including periodic inspection, routine maintenance and prompt repair of defects.
- c. Natural gas shall be the only fuel fired at the plant. The use of any other fuel in the boilers requires that the Permittee first obtain a construction permit from the Illinois EPA.

5a. Operation and Emissions of particulate matter from sand unloading, drying, screening, cooling, transferring, bagging, and loading shall not exceed the following limits:

- i. The amount of sand received shall not exceed 4,200 tons/month and 42,000 tons per year.
- ii. Emissions of Particulate Matter (PM) shall not exceed the following limits:

<u>Activity</u>	<u>Sand Throughput</u>		<u>Emission</u>	<u>Control</u>	<u>PM Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Ton)</u>	<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
				<u>(%)</u>		
Truck Unloading	4,200	42,000	0.24	80.00	0.10	1.01
Loading Elevator	4,200	42,000	0.24	80.00	0.10	1.01
Elevator to Conveyor Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Conveyor To Dryer Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Rotary Dryer	4,200	42,000	65.00	99.00	1.37	13.65
Dryer To Elevator Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Cooler	4,200	42,000	65.00	99.00	1.37	13.65
Sand Screen	4,200	42,000	0.31	90.00	0.07	0.65
Bulk Bagging Oversize Sand	255	2,545	0.24	80.00	0.01	0.06
Truck Load Out Oversize Sand	255	2,545	0.24	0.00	0.01	0.06
Elevator & Transfer	3,691	36,909	0.06	90.00	0.01	0.11
Transfer To & From Tanks 1, 2, 3 & 4	3,691	36,909	0.06	99.00	0.01	0.01
Packer, Bagging Station(s)	133	1,329	0.30	80.00	0.01	0.04
Sand Load Out (Truck or Rail)	3,558	35,580	0.06	30.00	0.08	0.75
					Total	31.18

- iii. Emissions of Particulate Matter less than 10 microns (PM₁₀) shall not exceed the following limits:

<u>Activity</u>	<u>Sand Throughput</u>		<u>Emission</u>	<u>Control</u>	<u>PM₁₀ Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Ton)</u>	<u>Factor</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
				<u>(%)</u>		
Truck Unloading	4,200	42,000	0.002	0.00	0.01	0.04
Loading Elevator	4,200	42,000	0.06	80.00	0.025	0.25

<u>Activity</u>	<u>Sand Throughput</u>		<u>Emission</u>	<u>Control</u>	<u>PM₁₀ Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Ton)</u>	<u>(%)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Elevator to Conveyor Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Conveyor To Dryer Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Rotary Dryer	4,200	42,000	12.00	99.00	0.25	2.52
<u>Activity</u>	<u>Sand Throughput</u>		<u>Emission</u>	<u>Control</u>	<u>PM₁₀ Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(Lb/Ton)</u>	<u>(%)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Dryer To Elevator Transfer	4,200	42,000	0.06	95.00	0.01	0.06
Cooler	4,200	42,000	0.31	99.00	0.01	0.07
Sand Screen	4,200	42,000	0.31	90.00	0.07	0.65
Bulk Bagging Oversize Sand Truck Load Out	255	2,545	0.06	80.00	0.01	0.02
Oversize Sand	255	2,545	0.06	0.00	0.01	0.08
Elevator & Transfer	3,691	36,909	0.06	90.00	0.01	0.11
Transfer To & From Tanks 1, 2, 3 & 4	3,691	36,909	0.06	99.00	0.01	0.01
Packer, Bagging Station(s)	133	1,329	0.06	80.00	0.01	0.01
Sand Load Out (Truck or Rail)	3,558	35,580	0.06	30.00	0.08	0.75
					Totals	4.69

- iv. These limits are based on the maximum sand throughput of 42,000 tons/year and standard emission factors for metallic mineral processing, low moisture Ore (Table 11-24-2, AP-42, Fifth Edition, Volume I, August 1982 and Section 13.2.4, AP-42, Fifth Edition, Volume I, November 2006). Control efficiency for baghouse controlled equipment is 99%.
- b. Operation and emissions of chromium compound from sand unloading, drying, screening, cooling, transferring, bagging, and loading shall not exceed the following limits:

<u>Emission Unit</u>	<u>Sand Throughput</u>		<u>Emission Factor (Lb/Ton)</u>	<u>Control Factor (%)</u>	<u>Chromium Compound Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>			<u>(T/Mo)</u>	<u>(T/Yr)</u>
Truck Unloading	4,200	42,000	0.0557	80.00	0.02	0.23
Loading Elevator	4,200	42,000	0.0557	80.00	0.02	0.23
Elevator to Conveyor Transfer	4,200	42,000	0.0557	95.00	0.01	0.06
Conveyor To Dryer Transfer	4,200	42,000	0.0557	95.00	0.01	0.06
Rotary Dryer	4,200	42,000	9.1369	99.00	0.19	1.92
Dryer To Elevator Transfer	4,200	42,000	0.0557	95.00	0.01	0.06
Cooler	4,200	42,000	1.0483	99.00	0.02	0.23
Sand Screen	4,200	42,000	1.1131	90.00	0.23	2.34

<u>Emission Unit</u>	<u>Sand Throughput</u>		<u>Emission Factor (Lb/Ton)</u>	<u>Control Factor (%)</u>	<u>Chromium Compound Emissions</u>	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>			<u>(T/Mo)</u>	<u>(T/Yr)</u>
Bulk Bagging						
Oversize Sand	255	2,545	0.0557	80.00	0.01	0.01
Truck Load Out						
Oversize Sand	255	2,545	0.0557	0.00	0.01	0.07
Elevator & Transfer	3,691	36,909	0.0557	90.00	0.01	0.10
Transfer To & From Tanks 1,2,3 & 4	3,691	36,909	0.0557	99.00	0.01	0.01
Packer, Bagging Station	133	1,329	0.0557	80.00	0.01	0.01
Sand Load Out (Truck or Rail)	3,558	35,580	0.0557	30.00	0.07	<u>0.69</u>
					Totals	<u>6.02</u>

These limits are based on the maximum sand throughput of 42,000 tons/year and standard emission factors for metallic mineral processing (Table 11-24-2, AP-42, Fifth Edition, Volume I, August 1982), low moisture Ore, and the percentage of Chromium compound in the sand (46.38% by weight).

- c. Operation and Emissions of particulate matter from bentonite unloading, drying, screening, cooling, transferring, bagging, and loading shall not exceed the following limits:
- i. The amount of bentonite received shall not exceed 8,280 tons/month and 82,800 tons per year.
 - ii. Emissions of Particulate Matter (PM) shall not exceed the following limits:

<u>Activity</u>	<u>Annual Throughput (Tons/Year)</u>	<u>Control Efficiency (%)</u>	<u>Factor (Lbs/Ton)</u>	<u>Emissions (Tons/Yr)</u>
Rail Unloading	82,800	95	0.02	0.04
Transfer to Elevator	82,800	95	0.026	0.05
Transfer to Tank 1	16,560	95	0.026	0.01
Transfer to Tank 2	16,560	95	0.026	0.01
Transfer to Tank 3	16,560	95	0.026	0.01
Transfer to Tank 4	16,560	95	0.026	0.01
Transfer to Tank 5	16,560	95	0.026	0.01
Conveyor to System 1 Elevator from Tanks 1 and 2	33,120	95	0.026	0.02
Conveyor to System 2 Elevator from Tanks 3, 4, and 5	49,680	95	0.026	0.03
<u>Activity</u>	<u>Annual Throughput (Tons/Year)</u>	<u>Control Efficiency (%)</u>	<u>Factor (Lbs/Ton)</u>	<u>Emissions (Tons/Yr)</u>
Hi-Roller Conveyor H2 from System 1 Elevator	33,120	95	0.026	0.02
Hi-Roller Conveyor H1 from System 2 Elevator	49,680	95	0.026	0.03
Screen 1	33,120	95	12.00	9.94
Screen 2	49,680	95	12.00	14.90
Aspirator 1 from Screen 2	24,840	98	12.00	2.98
Aspirator 2 from Screen 1	33,120	98	12.00	3.97
Aspirator 3 from Screen 2	24,840	98	12.00	2.98
Jug Line 1 from Aspirator 1	19,872	98	12.00	2.38
Jug Line 2 from Aspirator 2	33,120	98	12.00	3.97
Jug Line 3 from Aspirator 3	24,840	98	12.00	2.98
Bagging Line 4 from Aspirator 1	4,968	98	12.00	0.60
Particulate Collected Load Out Tank 6	487	95	12.00	0.15
Particulate Collected Load Out Tank 7	278	95	12.00	0.08
				<u>45.17</u>

- d. Operation and Emissions of particulate matter from pulgite unloading, drying, screening, cooling, transferring, bagging, and loading shall not exceed the following limits:
- i. The amount of pulgite received shall not exceed 360 tons/month and 3,600 tons per year.

- ii. Emissions of Particulate Matter (PM) shall not exceed the following limits:

<u>Activity</u>	<u>Annual Throughput (Tons/Year)</u>	<u>Control Efficiency (%)</u>	<u>Factor (Lbs/Ton)</u>	<u>Emissions (Ton/Yr)</u>
Rail Unloading	3,600	95	0.02	0.00
Transfer to Elevator	3,600	95	0.026	0.00
Elevator to Tank 4	3,600	95	0.026	0.00
Conveyor to System 2				
Elevator from Tanks 3, 4, and 5	3,600	95	0.026	0.00
Hi-Roller Conveyor H1 from System 2 Elevator	3,600	95	0.026	0.00
Screen 2	3,600	95	12.00	1.08

<u>Activity</u>	<u>Annual Throughput (Tons/Year)</u>	<u>Control Efficiency (%)</u>	<u>Factor (Lbs/Ton)</u>	<u>Emissions (Ton/Yr)</u>
Aspirator 1 from Screen 2	3,600	98	12.00	0.43
Jug Line 1 from Aspirator 1	3,600	98	12.00	0.43
Particulate Collected Load Out Tank 6	21	95	12.00	0.01
Particulate Collected Load Out Tank 7	12	95	12.00	<u>0.00</u>
			PM	1.95

- e. Emissions and operation of natural gas-fired equipment shall not exceed the following limits.

<u>Activity</u>		<u>(Therms/Yr)</u>	<u>Factor (Lb/Therm)</u>	<u>Emissions (Lb/Yr)</u>	<u>(T/Yr)</u>
Sand Drying	Nitrogen Oxides	307,000	0.010	3,070.0	1.54
	Carbon Monoxide	307,000	0.0084	2,579.0	1.29
	Volatile Organic Material	307,000	0.0006	184.2	0.09
	Particulate Matter	307,000	0.0008	245.6	0.12
	Sulfur Dioxide	307,000	0.000006	1.8	0.001
Space Heaters	Nitrogen Oxides	54,000	0.010	540.0	0.27
	Carbon Monoxide	54,000	0.0084	453.6	0.23
	Volatile Organic Material	54,000	0.0006	32.4	0.02
	Particulate Matter	54,000	0.0008	43.2	0.02
	Sulfur Dioxide	54,000	0.000006	0.3	0.0002

These limits are based on the maximum fuel usage, and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
6. Compliance with the annual limits of material handled by the facility shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 7a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 8 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 8a Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A,

except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301.

- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.
- c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
- d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
- e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
- 9a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- b. i. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall keep written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code 212.316 and shall submit to the Illinois EPA an annual report containing a summary of such information.

- ii. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316(g) shall include at least the following:
 - A. The name and address of the source;
 - B. The name and address of the owner and/or operator of the source;
 - C. A map or diagram showing the location of all emission units controlled, including the location, identification, length, and width of roadways;
 - D. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and
 - E. A log recording incidents when control measures were not used and a statement of explanation.
- iii. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- iv. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316(g) shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- c. i. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
- ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emissions limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what corrective actions were taken and what repairs were made.
- iii. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept and updated.

- iv. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 10a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. The operating pressure drop across each baghouse, excluding bin vent filters, during normal plant operating conditions, at least once a day. The operating pressure drop shall be maintained within the design conditions specified by the manufacturer's specifications.
 - ii. The performance of the dust control systems shall be inspected for proper operation during normal plant operating conditions, at least once each week, with date, time and observations. This inspection shall confirm the proper operation of all enclosure's, dust collection systems, cyclones, and baghouses.
 - iii. Records addressing use of good operating practices for the control equipment associated with the sand processing equipment:
 - A. Records for periodic inspection of the emission sources with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - iv. Total sand received (tons/month and tons/year).
 - v. Total bentonite received (tons/month and tons/year).
 - vi. Total pulgite received (tons/month and tons/year).
 - vii. Percentage of Chromium ore on the sand;
 - viii. Natural gas usage for the plant (therms/month and therms/year); and
 - ix. Monthly and annual emissions of PM, PM₁₀, NO_x, CO, VOM, and HAPS (chromium compounds) with supporting calculations (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 five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours

so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.

11. If there is an exceedance of or deviation from 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/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or deviation and efforts to reduce emissions and future occurrences.
- 12a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA stating the following: the dates any necessary control measures were not implemented, a listing of those control measures, the reasons that the control measures were not implemented, and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions, which shall constitute a defense to the requirements of 35 Ill. Adm. Code 212.316. This report shall be submitted to the Illinois EPA thirty (30) calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.
- c.
 - i. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
 - ii. Pursuant to 35 Ill. Adm. Code 212.324(g)(6), upon written request by the Illinois EPA, a report shall be submitted to the Illinois EPA for any period specified in the request stating the following: the dates during which any process emission unit was in operation when the air pollution control equipment was not in operation or was not operating properly, documentation of causes for pollution control equipment not operating or not operating properly, and a statement of what corrective actions were taken and what repairs were made.
13. Two (2) copies of required reports and notifications 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
2009 Mall Street
Collinsville, Illinois 62234

Please note that this permit incorporates Construction Permit 06080056 to increase sand throughput.

If you have any questions on this, please call German Barria at 217/782-2113.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Issued: _____

ECB:GB:jws

cc: Illinois EPA, FOS Region 3
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from this processing plant 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 such a plant. The resulting maximum emissions are well below the levels, (i.e., 100 tons per year of PM₁₀, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP) 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 less material is handled and control measures are more effective than required in this permit.

<u>Activity</u>	E M I S S I O N S (Tons/Year)						
	PM	PM ₁₀	Chromium	NO _x	CO	VOM	SO ₂
Sand Processing	31.18	4.69	6.02	0.00	0.00	0.00	0.000
Pulgite Processing	1.95	1.95	0.00	0.00	0.00	0.00	0.000
Bentonite Processing	45.79	45.79	0.00	0.00	0.00	0.00	0.000
Natural Gas Usage - Sand Drying	0.12	0.00	0.00	1.54	1.29	0.09	0.001
Natural Gas Usage - Heaters	<u>0.02</u>	<u>0.00</u>	<u>0.00</u>	<u>0.27</u>	<u>0.23</u>	<u>0.02</u>	<u>0.0002</u>
Total:	79.06	52.43	6.02	1.81	1.52	0.11	0.0012

ECB:GB:jws