

217/782-2113

LIFETIME OPERATING PERMIT -- NSPS SOURCE -- REVISED

PERMITTEE

Meyer Material Company
Attn: Rebecca Kazmierski
1819 North Dot Street
McHenry, Illinois 60051

Application No.: 72120593

I.D. No.: 111811AAE

Applicant's Designation:

Date Received: May 16, 2002

Subject: Aggregate Processing Plant

Date Issued:

Expiration Date: See Condition 1.

Location: 1819 North Dot Street, McHenry

Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Aggregate crushing plant comprised of:

- Two primary crushers;
- Four Secondary Crushers;
- Five Screens; and
- Thirty-Five Conveyors and Feeders;

Aggregate washing plant comprised of:

- Five Screens; and
- Twenty conveyors

Concrete recycling (crushing) plant comprised of:

- One primary crusher;
- One secondary crusher;
- One screen; and
- Six conveyors; and

Concrete batch plant

as described in the above-referenced application. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.

2. This permit allows the operation of three conveyors constructed under Construction Permit 02050060 only after successful completion of the performance test.
- 3a. The emission units constructed after August 31, 1983 and which are not replacement equipment as defined in 40 CFR 60.670(d) are subject to New Source Performance Standards (NSPS) for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subparts A and 000. The Illinois EPA is administrating these standards in Illinois on behalf of the United States EPA under a delegation agreement.
- b. Fugitive emissions of particulate matter from the crushers (except from truck dumping) subject to NSPS shall not exceed 15 percent opacity (40 CFR 60.672(c) and (d)).
- c. Fugitive emissions of particulate matter from the screens and transfer points on belt conveyors (except from truck dumping) shall not exceed 10 percent opacity (40 CFR 60.672(b) and (d)).
- e. Wet screening operations and subsequent belt conveyors that process saturated material shall not discharge into the atmosphere any visible emissions (40 CFR 60.672(h)(1)).
- f. At all times the Permittee shall also maintain and operate this equipment, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
4. Operation and emissions of the aggregate crushing plant shall not exceed the following limits:

<u>Emission Unit</u>	<u>Aggregate Throughput (ton/mo)</u>	<u>Throughput (ton/yr)</u>	<u>Emission Factor (Lb/Ton)</u>	<u>PM Emissions (lb/mo)</u>	<u>PM Emissions (ton/yr)</u>
2 Primary Crushers	120,000	1,200,000	0.0007	84	0.4
4 Secondary Crushers	120,000	1,200,000	0.0012	144	0.7
5 Screens	120,000	1,200,000	0.0018	216	1.1
35 Conveyors (total)	8,500,000	85,000,000	0.0001	850	4.3
				<u>Total</u>	<u>6.5</u>

These limits are based on the maximum processing and standard controlled emission factors given by AP-42. Compliance with annual limits shall be determined from a running total of 12 months of data.

5. Operation and emissions of the concrete recycling plant shall not exceed the following limits:

<u>Emission Unit</u>	<u>Aggregate Throughput (ton/mo)</u>	<u>Throughput (ton/yr)</u>	<u>Emission Factor (Lb/Ton)</u>	<u>PM Emissions (lb/mo)</u>	<u>PM Emissions (ton/yr)</u>
Primary Crusher	50,000	150,000	0.0007	35	0.05

Secondary Crusher	50,000	150,000	0.0012	60	0.1
Screen	50,000	150,000	0.0018	90	0.1
6 Conveyors (total)	300,000	700,000	0.0001	30	<u>0.03</u>
					Total 0.3

These limits are based on the maximum processing and standard controlled emission factors given by AP-42. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. The moisture content of the aggregate as crushed on controlled units shall be at least 1.5% by weight so as to reduce emissions of particulate matter. The Permittee shall demonstrate compliance with this requirements as follows:
 - a. The moisture content of a representative sample of the aggregate shall be measured at least once per week using ASTM Procedures (C566-67) for total moisture content of material. Compliance with this requirement may be presumed if moisture content of aggregate as shipped is at least 1.5%; or
 - b.
 - i. Water sprays shall be used at each crusher and on other emission units as necessary, except when weather conditions are below or expected to fall below freezing temperatures, to provide moisture that will reduce emissions of particulate matter; and
 - ii. Inspections of water spray equipment and operation (such as leaking, adequate flow rate, clogging of flow lines, etc.) shall be performed at least once per week when the facility is in operation; or
 - c. Water saturated materials mined below the water table are being processed.
7. This permit is issued based on negligible emissions of particulate matter from the aggregate washing plant. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
8. Emissions and operation of the concrete batch plant shall not exceed the following limits:

Concrete production: 50,000 yd³/mo, 175,000 yd³/yr

<u>Item of Equipment</u>	<u>Emission Factor</u> <u>(lb/yd³)</u>	<u>PM Emissions</u>	
		<u>(ton/mo)</u>	<u>(ton/yr)</u>
Cement Loading	0.0002	--	0.02
Supplement Loading	0.0003	--	0.03
Aggregate Transfer	0.0064	0.2	0.6
Sand Transfer	0.0015	0.04	0.1
Weigh Hopper Loading	0.0079	0.2	0.7
Truck Loading	0.058	1.5	<u>5.1</u>
			Total 6.6

These limits are based on the maximum production rate and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

9. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- 10a. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the Permittee shall conduct opacity testing at its 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.
 - b. USEPA Method 9 referred to in 40 CFR 60, Appendix A shall be used for opacity testing.
 - c. 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 this Section that will be used.
11. The Permittee shall maintain the following records:
 - a. Monthly records of the aggregate processing rate (tons/mo, tons/yr);
 - b. Monthly records of the concrete production (tons/mo, tons/yr);
 - c. Weekly records of the moisture content measurements;
 - d. Written records of the application of control measures as may be needed for compliance with fugitive emission limitations. The records shall include at least the following:
 - i. A map or diagram showing the location of all emission sources controlled including the location, identification, length, and width of roadways;
 - ii. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;

- iii. 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;
 - iv. A log recording incidents when control measures were not used and a statement of explanation.
 - e. The records of all performed tests.
12. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA 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 request for records during the course of a source inspection.
13. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
14. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

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

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016
15. Persons with lifetime operating permit must obtain a revised permit to any of the following changes at the source:
 - a. An increase in emissions above the amount the emission unit or the source is permitted to emit;

- b. A modification;
- c. A change in operation that will result in the source's noncompliance with a condition in the existing permit;
- d. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.

It should be noted that this permit has been revised to include operation of equipment described in Construction Permit 02050060.

If you have any questions on this permit, please contact Valeriy Brodsky at 217/782-2113.

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

DES:VJB:
cc: Region 1

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the aggregate crushing and concrete batching plant operating in compliance with the requirements of this permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. This is a processing of 1,200,000 tons of aggregate and producing of 175,000 cubic yards of concrete per year. 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.

1. Operation and emissions of the aggregate crushing plant:

<u>Emission Unit</u>	<u>Aggregate Throughput (ton/mo)</u>	<u>Throughput (ton/yr)</u>	<u>Emission Factor (Lb/Ton)</u>	<u>PM Emissions (lb/mo)</u>	<u>(ton/yr)</u>
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35 Conveyors (total)	8,500,000	85,000,000	0.0001	850	4.3
				<u>Total 6.5</u>	

2. Operation and emissions of the concrete recycling plant:

<u>Emission Unit</u>	<u>Aggregate Throughput (ton/mo)</u>	<u>Throughput (ton/yr)</u>	<u>Emission Factor (Lb/Ton)</u>	<u>PM Emissions (lb/mo)</u>	<u>(ton/yr)</u>
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3. This permit is issued based on negligible emissions of particulate matter from the aggregate washing plant. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

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VJB: