

217/782-2113

JOINT CONSTRUCTION AND LIFETIME OPERATING PERMIT
FOR PORTABLE EMISSION UNIT

PERMITTEE

Surmeier & Surmeier, Inc.
Attn: Richard A. Surmeier
339 South 6th Street
Mascoutah, Illinois 62258

Application No.: 99010039
Applicant's Designation:
Subject: Portable Crushing Plant

I.D. No.: 163080AAP
Date Received: November 6, 2006
Permit Expiration Date: See Condition 2.

Date Issued: January 24, 2007

Base or Initial Location: 9838 State Route 161, Mascoutah, St. Clair County

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

Portable Aggregate Processing Plant Consisting of One 125 Tons/Hour Crusher, One Screen, and Two Conveyors with Water Spray Bars

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This joint construction and operating permit is for crushing concrete/aggregate material at the site at which the material was generated.
- b. This joint construction and operating permit is issued based on that asbestos-containing material will not be processed by this processing plant.
- c. The crushing of aggregate material included in this permit is not subject to 40 CFR Part 60 Subpart 000 since this is portable equipment with capacity less than 150 tons/hour pursuant to 40 CFR 60.670 (c)(2).
- 2a. This operating permit is effective only if the Permittee has complied with all standard conditions of the construction permit.
- b. Operation of the emission units included in this permit shall not begin until all associated air pollution control equipment has been constructed and is operational.
- c. This operating permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.

- d. This permit shall terminate if it is withdrawn or is superseded by a revised permit.
- 3. The Permittee shall, at all times, 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. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic inspections and maintenance on the equipment covered under this permit such that the equipment is kept in proper working condition and not causes a violation of the Environmental Protection Act or regulations promulgated therein.
- 5a. The Permittee shall operate the source in such a way that the opacity does not exceed the limits specified in 35 Ill. Adm. Code 212.123.
- b. The Permittee shall not cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity that is visible beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- c. The Permittee shall comply with the particulate matter emissions limitations in 35 Ill. Adm. Code 212.321.
- 6a. Operation and emissions of the concrete/aggregate processing plant shall not exceed the following limits:

<u>Equipment</u>	<u>(T/Hr)</u>	<u>Aggregate Throughput</u>		<u>Emission Factor (Lb/Ton)</u>		<u>Emissions (Tons/Year)</u>	
		<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>PM</u>	<u>PM₁₀</u>	<u>PM</u>	<u>PM₁₀</u>
1 Crushers	125	109,500	1,095,000	0.0012	0.00054	0.66	0.29
1 Screen	125	109,500	1,095,000	0.0022	0.00074	1.20	0.40
2 Conveyors	250	219,000	2,190,000	0.00014	0.000046	<u>0.15</u>	<u>0.05</u>
Totals						2.01	0.74

These limits are based on the maximum aggregate throughput for crushed stone processing operations (125 tons/hour) for tertiary crushing (controlled), screening (controlled), and conveyor/transfer point (controlled) as listed in Table 11.19.2-2, AP-42, August 2004, 8760 hours per year, and applicant submitted information. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. The surface moisture content of the material as crushed shall be at least 1.5% by weight. The Permittee shall show compliance with this requirement as follows:

- i. The moisture content of a representative sample of the material shall be measured at least once per week using ASTM Procedures (C566-97) for total moisture content of material. Compliance with this requirement may be presumed if moisture content of material as shipped is at least 1.5%; or
 - ii. A. 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.
B. The water supply to the spray equipment shall be equipped with a metering device used to determine water usage for the control of particulate matter emissions.
C. Inspections of water spray equipment and operation (such as leaking, adequate flow maintain, clogging of flow lines, etc.) shall be performed at least once per week when the facility is in operation.
- 7a. Within 90 days of a written request from the Illinois EPA, pursuant to 35 Ill. Adm. Code 201.282 and Part 212 Subpart A, the opacity and PM from the affected facilities shall be measured during conditions which are representative of the maximum performance. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- b. i. The following methods and procedures shall be used:
USEPA Method 5, PM
USEPA Method 9, Opacity
 - ii. An opacity test shall consist of 30 sets of 24 consecutive observations taken at 15-second intervals.
- c. Opacity measurements shall be performed by a certified observer.
- d. The Illinois EPA shall be notified in writing prior to these measurements to enable the Illinois EPA to observe these measurements. Notification of the expected date of the measurements shall be submitted to a minimum of thirty (30) days prior to the expected date. Notification of the actual date and expected time of measurement shall be submitted a minimum of five (5) working days prior to the actual date of the measurement. 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 the measurements.

- e. Copies of the Final Report(s) for these tests shall be submitted to the Illinois EPA within 60 days after the date of the final day of testing. The Final Report shall include as a minimum:
 - i. A descriptive and table summary of results.
 - ii. General information including but not limited to the name, location and identification of the emission source(s) tested, date(s) of testing, names of personnel and entities performing the tests, and Illinois EPA observers, if any.
 - iii. Description of test procedures and method(s), including description and map of emission sources and sampling points, sampling train, testing and analysis equipment, and test schedule.
 - iv. Detailed description of test conditions, including:
 - A. List and description of the equipment (including serial numbers or other equipment specific identifiers) tested and process information, i.e., mode(s) of operation, process rate/throughput, e.g. fuel or raw material consumption;
 - B. Control equipment information, i.e., equipment condition and operating parameters during testing, and
 - C. A discussion of any preparatory actions taken, i.e., inspections, calibration, maintenance and repair.
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration. Identification of the applicable regulatory standards that the testing was performed to demonstrate compliance with, a comparison of the test results to the applicable regulatory standards, and a statement whether the test(s) demonstrated compliance with the applicable standards.
 - vi. An explanation of any discrepancies among individual tests, failed tests or anomalous data.
 - vii. The results and discussion of all quality control evaluation data, including a copy of all quality control data.
 - viii. The applicable operating parameters of the pollution control device(s) during testing (temperature, pressure drop, scrubbant flow rate, etc.), if any.
- 8. Pursuant to 35 Ill. Adm. Code 201.170(a), an emission unit is portable provided that the emission unit meets the following criteria:
 - a. Emissions from the emission unit are expected to occur for less than one year at this and any other site;

- b. The emission unit of air pollution is subject to the requirements of 35 Ill. Adm. Code 201.169;
 - c. The emission unit or group of emission units that will be changing sites is permitted to emit less than 25 tons per year of any combination of regulated air pollutants;
 - d. The emission unit is mounted on a chassis or skids and is designed to be moveable; and
 - e. The emission unit is not used as a thermal desorption system pursuant to 35 Ill. Adm. Code Part 728 Table F or as an incinerator system.
9. Pursuant to 35 Ill. Adm. Code 201.170(b), an owner or operator of a portable emission unit may change the site of the unit without obtaining a new construction or operating permit pursuant to 35 Ill. Adm. Code 201.142, 201.143, or 201.169, provided that the owner or operator meets the following requirements:
- a. The owner or operator has obtained a construction and operating permit containing special conditions as required by 35 Ill. Adm. Code 201.170(c) for the emission unit, or is exempt pursuant to 35 Ill. Adm. Code 201.170(d).
 - b. If a permit issued pursuant to 35 Ill. Adm. Code 201.170(c) includes more than one emission unit, the owner or operator shall move all emission units covered by the permit to the new site.
 - c. The owner or operator does not locate the emission unit on a site with a source:
 - i. That is subject to the requirements of Section 39.5 of the Act; or
 - ii. That would become subject to the requirements of Section 39.5 of the Act if the emissions of all regulated pollutants from the portable emission unit were included in such source's potential to emit.
 - d. The owner or operator does not modify the operation of the emission unit in such a way so as to:
 - i. Make the emission unit subject to New Source Review (NSR) requirements pursuant to 35 Ill. Adm. Code 203 or to Prevention of Significant Deterioration (PSD) pursuant to Section 9.1(a) of the Act; or
 - ii. Make the emission unit a support facility of a source that is subject to Section 39.5 of the Act.

- e. At least three days prior to moving the emission unit to a new site, the owner or operator shall notify the Illinois EPA by certified mail. The notification shall include the items listed in 35 Ill. Adm. Code 201.170(b)(5), unless the emission unit is exempt pursuant to 35 Ill. Adm. Code 201.170(d):
 - i. The location of the new site;
 - ii. The estimated emissions of all regulated air pollutants while located at the new site; and
 - iii. That the operation for the emission unit will be consistent with its construction and operating permits.
 - f. The owner or operator shall keep a copy of the construction and operating permits for that emission unit on the site where the emission unit is in operation.
10. Compliance with the requirements of Condition 6(b) shall be demonstrated as follows:
- a. If the Permittee is relying on Condition 6(b)(i) above to show compliance the Permittee shall maintain records of all moisture content tests performed, including date, time, individual performing test, location of sample e.g., prior to crushing or as shipped.
 - b. If the Permittee is relying on Condition 6(b)(ii) above to show compliance the Permittee shall maintain operating logs for the water spray equipment, including dates and times of usage, malfunctions (type, date and measures taken to correct), water pressure, and dates when there was at least 0.25" of rainfall during the preceding 24 hours and the water spray equipment was not operated.
 - c. The Permittee shall maintain weekly records of water consumption in the spray equipment, as determined by the meter required by Condition 6(b)(ii)(B) and amount of precipitation specified in Condition 10 (b).
11. This permit does not exempt the Permittee from obtaining a Construction and/or Operating Permit for any additional emission units in excess of those units specified in this permit, unless such emission units or operations are already exempted from permitting requirements pursuant to 35 Ill. Adm. Code 201.146.
- 12a. The crusher shall be operated in accordance with good operating practices to minimize particulate matter emissions.
- b. Inspections of the crusher and associated control equipment shall be performed as necessary but at least once per week when the equipment is in operation to confirm compliance with the above requirements.

13. The Permittee shall maintain monthly records of:
 - a. The types and amount of material processed (tons/month, tons/year).
 - b. PM emissions (tons/month, tons/year) with supporting calculations.
14. 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 an Illinois EPA request for records during the course of a source inspection.
15. 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.
16. 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
17. The lifetime operating permit must be revised for 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;

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

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

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

ECB:GB:cjc

cc: Region 3

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the concrete/aggregate processing 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. 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.

- 1a. Operation and emissions of the concrete/aggregate processing plant shall not exceed the following limits:

<u>Equipment</u>	<u>(Tons/Hour)</u>	<u>Aggregate Throughput</u>		<u>Emission Factor (Lbs/Tons)</u>		<u>Emissions (Tons/Year)</u>	
		<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>PM</u>	<u>PM₁₀</u>	<u>PM</u>	<u>PM₁₀</u>
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 - ii.
 - A. 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.
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