

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

R.A. Cullinan & Son, Inc.
Attn: Edward C. Hanna
121 West Park Street
Tremont, IL 61568

Application No.: 75090052
Applicant's Designation: ASPHALT
Subject: Asphalt Plant
Date Issued: November 28, 2000
Location: Highway I155, Hopedale

I.D. No.: 179809AAD
Date Received: April 24, 2000
Expiration Date: November 28, 2005

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of an asphalt plant with residual oil fired rotary drier, a baghouse, a jaw crusher, asphalt storage tanks, and fuel oil storage tanks 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 nitrogen oxides, sulfur dioxide, carbon monoxide and particulate matter from the asphalt plant to less than major source thresholds, as further described in Attachment A. As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program permit.
 - b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
 - c. This permit supersedes the current permit(s) issued for this location.
2. Emissions and operation of the asphalt plant shall not exceed the following limits:

Asphalt Concrete Production	
<u>(Ton/Month)</u>	<u>(Ton/Year)</u>
130,000	640,000

<u>Pollutant</u>	<u>Emission Factor</u> (Lb/Ton)	<u>Emissions</u>	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides	0.17	10.9	54.4
Sulfur Dioxide	0.24	7.7	38.4
Particulate Matter	0.085	5.5	27.2
Carbon Monoxide	0.069	4.5	22.1
Volatile Organic Material	0.034	<u>2.2</u>	<u>10.9</u>
	Totals:	30.8	153.0

These limits are based on the maximum asphalt production, standard AP-42 emission factors, and 50% attenuation of sulfur dioxide by adsorption in alkaline aggregate. Compliance with annual limits shall be determined from a running total of 12 months of data.

3. Emissions and operation of the crushing plant shall not exceed the following limits:

	Crusher Throughput		Emission Factor (Lb/Ton)	Particulate Matter Emissions	
	(Ton/Month)	(Ton/Year)		(Tons/Mo)	(Tons/Yr)
	50,000	250,000			
<u>Equipment</u>					
1 Crusher			0.0007	0.02	0.10
Up to 3 Screens			0.0018	0.14	0.70
Up to 10 Conveyors			0.0001	<u>0.04</u>	<u>0.20</u>
			Totals:	0.20	1.00

These limits are based on the maximum crusher throughput and standard controlled emission factors (with wet suppression or aggregate moisture content of 1.5% minimum). Compliance with annual limits shall be determined from a running total of 12 months of data.

- 4a. Within 90 days of a written request from the Agency, pursuant to 35 Ill. Adm. Code Section 201.282, the emissions and opacity of the exhaust from the plant shall be measured by an approved testing service, during conditions which are representative of the maximum performance. The Agency may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.
- b. i. The following methods and procedures shall be used for testing of emissions. Refer to 40 CFR 60, Appendix A for USEPA test methods.
- | | |
|---------------------------|----------------|
| Opacity | USEPA Method 9 |
| Location of Sample Points | USEPA Method 1 |
| Gas Flow and Velocity | USEPA Method 2 |
| Particulate Matter | USEPA Method 5 |
- ii. A test shall consist of three separate runs each at least 60 minutes in duration. Compliance shall be determined from the average of the runs provided that the Agency may accept the arithmetic mean of the two runs in circumstances described in 40 CFR 60.8(f).
- c. Testing shall be performed by a qualified independent testing service.

- d. At least 30 days prior to the actual date of testing a written test plan shall be submitted to the Agency for review and approval. A copy shall also be submitted to the USEPA. This plan shall describe the specific procedures for testing, including:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The conditions under which testing will be performed, including a discussion of why these conditions will be representative of the maximum operating rate, the levels of operating parameters at or within which compliance is intended to be shown, if applicable, and the means by which the operating parameters for the process and any control equipment will be determined.
- e. The Agency shall be notified prior to these tests to enable the Agency to observe these tests. Notification for the expected date of testing shall be submitted a minimum of thirty (30) days prior to the expected date of testing shall be submitted a minimum of five (5) working days prior to the actual date of the tests. The Agency may, at its discretion, accept notification with shorter advance notice provided that the Agency will not accept such notifications if it interferes with the Agency's ability to observe the testing.
5. The Permittee shall maintain monthly records of the following items:
 - a. Asphalt concrete production (tons/month and tons/yr); and
 - b. Crusher throughput (tons/month and tons/year).
6. All records required by this permit shall be retained at a readily accessible location at the plant for at least 3 years from the date of entry and shall be made available for inspection and copying by the Agency and USEPA upon request.
7. If there is an exceedance of the requirements of this permit as determined by the record required by this permit, the Permittee shall submit a report to the Agency's Compliance and Systems Management 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. This report should be sent to:

Illinois Environmental Protection Agency
Bureau of Air
Compliance and Systems Management Section
P.O. Box 19276
Springfield, IL 62794-9276
8. 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.
9. The assembly of this plant at a new location will require a construction permit for the new location. This permit must be obtained prior to commencing construction at the new location.
 - 10a. The Permittee shall maintain operating and maintenance logs for the dryer control system, including: maintenance activities, with date and description of inspections, repair actions, and equipment replacements, etc.
 - b. These records shall be retained at a readily accessible location at the plant for at least 3 years from the date of entry and shall be made available for inspection and copying by the Agency upon request.
 - 11a. The Final Report(s) for all tests shall be submitted within 90 days after the date of the test. The Final Report shall include as a minimum:
 - i. General information describing the test, including the name and identification of the emission source which was tested, date of test, names of personnel performing the tests, and Agency observers, if any;
 - ii. A summary of results;
 - iii. Description of test procedures, including description of sampling points, test equipment, and test schedule;
 - iv. Detailed description of test conditions, including:
 - A. Process information, i.e., process rate, aggregate type, fuel type, and firing rate.
 - 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.
 - b. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

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

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

Illinois Environmental Protection Agency
Division of Air Pollution Control
5415 North University
Peoria, Illinois 61614

12. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: asphalt production and crusher throughput from the prior calendar year. If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement to that effect.
- 13a. Organic liquid by products or waste materials shall not be used at this source without written approval from the Agency.
 - b. The Permittee shall notify the Agency prior to any change in the type of fuel used at the source.
14. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.
15. The following Standard Conditions are not federally enforceable: Standard Conditions 3(a), 8, 9, 10, and 11.

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

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

DES:JDK:psj

Attachment

cc: IEPA, FOS Region 2
IEPA, CASM

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the asphalt plant and the crushing 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, e.g., 100 tons per year each of NO_x, SO₂ and CO 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.

2. Emissions and operation of the asphalt plant shall not exceed the following limits:

<u>Asphalt Concrete Production</u>			
<u>(Ton/Month)</u>		<u>(Ton/Year)</u>	
130,000		640,000	
<u>Pollutant</u>	<u>Emission Factor</u> <u>(Lb/Ton)</u>	<u>Emissions</u> <u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides	0.17	10.9	54.4
Sulfur Dioxide	0.24	7.7	38.4
Particulate Matter	0.085	5.5	27.2
Carbon Monoxide	0.069	4.5	22.1
Volatile Organic Material	0.034	<u>2.2</u>	<u>10.9</u>
	Totals:	30.8	153.0

These limits are based on the maximum asphalt production, standard AP-42 emission factors, and 50% attenuation of sulfur dioxide by adsorption in alkaline aggregate. Compliance with annual limits shall be determined from a running total of 12 months of data.

3. Emissions and operation of the crushing plant shall not exceed the following limits:

<u>Crusher Throughput</u>			
<u>(Ton/Month)</u>		<u>(Ton/Year)</u>	
50,000		250,000	
<u>Equipment</u>	<u>Emission Factor</u> <u>(Lb/Ton)</u>	<u>Particulate Matter</u> <u>Emissions</u> <u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
1 Crusher	0.0007	0.02	0.10
Up to 3 Screen	0.0018	0.14	0.70
Up to 10 Conveyors	0.0001	<u>0.04</u>	<u>0.20</u>
	Totals:	0.20	1.00

These limits are based on the maximum crusher throughput and standard controlled emission factors (with wet suppression or aggregate moisture content of 1.5% minimum). Compliance with annual limits shall be determined from a running total of 12 months of data.

4. Particulate Matter Fugitive Emissions

Includes emissions from handling and erosion of storage piles, and paved and unpaved plant road traffic: 12.4 tons/yr.

JDK:psj