

217/782-2113

"RENEWAL"
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

Curran Contracting Company
Attn: Michael Leopardo
7502 South Main Street
Crystal Lake, Illinois 60014

<u>Application No.:</u> 87030010	<u>I.D. No.:</u> 097811AAI
<u>Applicant's Designation:</u>	<u>Date Received:</u> July 20, 2000
<u>Subject:</u> Asphalt Plant	
<u>Date Issued:</u> June 6, 2001	<u>Expiration Date:</u> June 6, 2006
<u>Location:</u> 941 Skokie Highway, Lake Bluff	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of gas fired drum-mix asphalt plant with baghouse, 3 liquid asphalt storage tanks (2 - 30,000 gallon and 1 - 10,000 gallon), 2 fuel oil storage tanks (8,000 gallon and 2,000 gallon), one 8,000 gallon gasoline storage tank, 1 emulsified asphalt tank (10,000-gallon), and 1 cut back asphalt storage tank (10,000-gallon) as described in the 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 carbon monoxide (CO) and volatile organic material (VOM) from the asphalt plant to less than major source thresholds, as 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.
- 2a. This asphalt plant is subject to New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and I. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. The emissions from the asphalt plant shall not contain particulate matter in excess of 0.04 gr/dscf and shall not exhibit 20% opacity or greater, pursuant to the NSPS, 40 CFR 60.92.
 - c. At all times the Permittee shall also maintain and operate the Asphalt Plant, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the NSPS, 40 CFR 60.11(d).

- d. Pursuant to 35 Ill. Adm. Code 212.313 emissions of PM₁₀ from particulate control equipment shall not exceed 0.03 gr/dscf.
- 3a. The 2 liquid asphalt storage tank(s) (30,000 gallon) are subject to New Source Performance Standards (NSPS), 40 CFR 60 Subpart Kb. The Illinois EPA is administering these standards in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. At all times, the Permittee shall, to the extent practicable, maintain and operate these tanks, in a manner consistent with good air pollution control practice for minimizing emissions, pursuant to the New Source Performance Standard.
 - c. The Permittee shall fulfill the monitoring of operations requirements of the New Source Performance Standards, 40 CFR 60.116b(a) and (b) for the 2 liquid asphalt storage tanks (30,000 gallon). That is, records showing the dimensions of the storage vessel and an analysis showing the capacity of the storage vessel, shall be maintained and readily accessible for the life of the source.
- 4. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program Permit (CAAPP), and Section 112(G) of the Clean Air Act.
- 5. 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.
- 6a. Operation of the asphalt plant shall not exceed the following limits:
 Asphalt Concrete Production Rate: 475 tons/hour, and 900,000 tons/yr
 Asphalt Tank Heater Firing Rate: 1 mmBtu/hr
- b. Emissions and operation of asphalt plant shall not exceed the following limits:

<u>Equipment</u>	<u>Asphalt Production</u>		<u>Pollutant</u>	<u>Emission Factor (Lb/Ton)</u>	<u>Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>			<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Gas Fired Drum-Mix Asphalt Plant	200,000	900,000	TSP	0.033	6,600	14.85
			CO	0.13	26,000	58.50
			NO _x	0.026	5,200	11.70
			SO ₂	0.0034	680	1.53
			VOM	0.032	6,400	14.40

These limits are based on standard AP-42 emission factors, natural gas as the only fuel fired in the dryer, and a maximum hourly capacity of 475 tons/hour. Compliance with annual limits shall be determined from a running total of 12 months of data.

- c. This permit is issued based on negligible emissions of volatile organic material (VOM) from 3 liquid asphalt storage tanks, 2 fuel oil storage tanks, 1 emulsified asphalt tank, 1 cut back asphalt storage tank, and one gasoline storage tank. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 7a. Within 90 days of a written request from the Illinois EPA, pursuant to 35 Ill. Adm. code Section 201.282, the emissions and opacity of the exhaust from the asphalt plant shall be measured by an approved testing service, 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 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 Illinois EPA 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 Illinois EPA for review and approval. 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 Illinois EPA shall be notified prior to these tests to enable the Illinois EPA 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. Notification of the actual date and expected time of testing shall be submitted a minimum of five (5) working days prior to the actual date of the tests. 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 testing.
8. If the rotary dryer control system is not operating properly while the dryer is operated or there is an exceedance of the requirements of this permit as determined by the records required by Conditions 9 and 11, the Permittee shall submit a report 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.
9. 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 or filter bag replacements, etc.
10. 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 Illinois EPA 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.
11. The Permittee shall maintain annual and monthly records of the following items:

- a. Asphalt production (tons/mo, tons/yr); and
 - b. Natural gas usage in rotary dryer (mmscf/mo, mmscf/yr).
12. 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 within 30 days after the exceedance. The report shall include the emissions released in accordance with the record keeping 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
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

13. 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
9511 West Harrison
Des Plaines, Illinois 60016

14. The 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 Illinois EPA and USEPA upon request.
15. 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.
16. 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.

17. The assembly of any these plants 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.
18. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. Asphalt production; and
 - b. Fuel consumption for the dryer and heater.

It should be noted that the asphalt tank heater is exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(d).

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

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

DES:EEJ:psj

cc: Illinois EPA, FOS Region 1
USEPA

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the asphalt plant and aggregate 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. This is handling 500,000 tons of asphalt production per year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of carbon monoxide (CO) and 25 tons per year of volatile organic material (VOM) 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.

1a. Operation of the Asphalt Plant shall not exceed the following limits:

Asphalt Concrete Production Rate: 475 tons/hour, and 500,000 tons/yr
 Asphalt Tank Heater Firing Rate: 1 mmBtu/hr

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

<u>Equipment</u>	<u>Asphalt Production</u>		<u>Pollutant</u>	<u>Emission Factor (Lb/Ton)</u>	<u>Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>			<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
Gas Fired Drum-Mix Asphalt Plant	200,000	900,000	TSP	0.033	6,600	14.85
			CO	0.13	26,000	58.50
			NO _x	0.026	5,200	11.70
			SO ₂	0.0034	680	1.53
			VOM	0.032	6,400	14.40

c. Emissions and operation of asphalt storage tank heater shall not exceed the following limits:

<u>Equipment</u>	<u>Heat Input Rating (mmBtu/Hr)</u>	<u>Pollutant</u>	<u>Emission Factor (Lb/mmscf)</u>	<u>Emissions</u>	
				<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Gas Fired Asphalt Tank Heater	1	NO _x	100	0.10	0.43
		CO	84	0.08	0.36

d. This permit is issued based on negligible emissions of volatile organic material (VOM) from 3 liquid asphalt storage tanks, 2 fuel oil storage tanks, 1 emulsified asphalt tank, 1 cut back asphalt storage tank, and one gasoline storage tank. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.

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