

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
RENEWAL -- NSPS SOURCE

Permittee

P. H. Broughton and Sons
Attn: David Broughton
905 North Lincoln Avenue
Springfield, Illinois 62702

Application No.: 73010605 I.D. No.: 167822AAF
Applicant's Designation: ASPT PLANT Date Received: January 3, 2000
Subject: Asphalt Plant
Date Issued: June 2, 2000 Expiration Date: June 2, 2005
Location: 905 North Lincoln Avenue, Springfield

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of #2 fuel-oil fired batch mix asphalt plant, 1.41 mmBtu #2 fuel-oil fired asphalt tank heater, and 3 asphalt storage tanks (10,000-gallon, 20,000-gallon, and 5,000-gallon) as described in 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 sulfur dioxide (SO₂), nitrogen oxides (NO_x) and particulate matter (PM₁₀) 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.
- 2a. The 20,000-gallon asphalt storage tank is 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 20,000-gallon asphalt storage tank. 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.

- 3a. Emissions and operation of #2 fuel-oil fired batch-mix asphalt plant shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Asphalt Production</u>		<u>Pollutant</u>	<u>Emission Factor (Lb/Ton)</u>	<u>Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>			<u>(Lb/Mo)</u>	<u>(Ton/Yr)</u>
#2 Fuel-Oil Fired Batch-Mix Asphalt Plant	60,000	270,000	TSP	0.1	6000.0	13.50
			CO	0.069	4140.0	9.32
			NO _x	0.17	10200.0	22.95
			SO ₂	0.24	14400.0	32.40
			VOM	0.006	360.0	0.81

These limits are based on standard AP-42 emission factors, the use of #2 fuel-oil with a maximum sulfur content of .3% and a maximum hourly capacity of 180 tons/hour. Compliance with annual limits shall be determined from a running total of 12 months of data.

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

<u>Item of Equipment</u>	<u>Heat Input Rating (mmBtu/Hr)</u>	<u>Pollutant</u>	<u>Emission Factor (Lb/1000 gal)</u>	<u>Emissions</u>	
				<u>(Lb/Hr)</u>	<u>(T/Yr)</u>
#2 Fuel-Oil Fired Asphalt Tank Heater	1.41	NO _x	20	0.20	0.88
		CO	5	0.05	0.22
		TSP	2	0.02	0.09
		SO ₂	42.6	0.43	1.88

These limits are based on standard AP-42 emission factors and 8,760 hours of operation and the use of #3 fuel-oil with a maximum sulfur content of .3% as the only fuel fired in the heater. 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 asphalt storage tanks (20,000-gallon, 10,000-gallon, and 5,000-gallon). For this purpose emissions from each emission source, shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.

- 4a. Operation of the Asphalt Plant shall not exceed the following limits:

Asphalt Concrete Production Rate: 180 tons/hr and 270,000 tons/yr
 Asphalt Tank Heater Fuel Usage: 1.41 mmBtu/hr

- b. i. At the above location, the Permittee shall not keep, store, or utilize a fuel with a sulfur content greater than 0.3 weight percent.

- ii. The Illinois EPA shall be allowed to sample all fuels stored at the source.
- c. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.
- 5a. 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 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 preform 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
Sulfur Monoxide	USEPA Method 6
Nitrogen Oxide ₂	USEPA Method 7
- 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.

- 6a. The Permittee shall maintain operating and maintenance logs for the rotary dryer control system, including: operating data, with pressure drop and stack condition, on daily startup and every four hours thereafter.
- b. The Permittee shall maintain annual and monthly records of the following items:
 - i. Asphalt concrete production (tons/month and tons/year);
 - ii. Asphalt dryer fuel type and sulfur content;
 - iii. Asphalt tank heater fuel type and sulfur content; and
 - iv. Asphalt tank heater fuel consumption (gallon/month and gallon/year).
7. 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.
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 Condition 6, 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. 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.
10. 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.

11. This permit supersedes the current permit(s) issued for this location.
- 12a. 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.
 - 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 Illinois EPA upon request.
- 13a. 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.
- 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

14. The Permittee shall submit the following additional information from the prior calendar year, along with the Annual Emissions Report, due May 1st of each year:

- a. asphalt production
- b. fuel consumption

This report should be submitted to the Compliance Section at the address indicated in Condition 13b.

15a. Organic liquid by-products or waste materials shall not be used at this source without written approval from the Illinois EPA.

- b. The Permittee shall notify the Illinois EPA prior to any change in the type of fuel used at the source.

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.

It should be noted that the fuel-oil storage tanks are exempt from state permit requirements, pursuant to 35 Ill. Adm. Code 201.146(n).

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 2
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emissions Summary

- 1a. Emissions and operation of #2 fuel-oil fired batch-mix asphalt plant shall not exceed the following limits:

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