

217/782-2113

"REVISED"
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Rowe Construction Company
Attn: Kenneth L. Wagoner
1523 North Cottage Road
Bloomington, Illinois 60108

Application No.: 72100874
Applicant's Designation: ROWE090494
Subject: Asphalt Production
Date Issued: October 28, 1999
Location: Rural Heyworth

I.D. No.: 113825AAD
Date Received: September 30, 1999
Expiration Date: September 14, 2004

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of batch mix asphalt plant with an oil fired rotary dryer controlled by cyclone and baghouse, an oil fired asphalt storage tank heater, and asphalt storage tank 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 nitrous oxide 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. Operation of the Asphalt Plant shall not exceed the following limits:

Asphalt Concrete Production Rate: 205 tons/hr and 75,000 tons/yr
Dryer Firing Rate: 108 mmBtu/hr
Asphalt Tank Heater Fuel Usage: 2.115 mmBtu/hr
- b. 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.
3. These conditions effectively limit the potential emissions of air pollutants from the source to less than major source thresholds (i.e., nitrous oxides to less than 100 tons/year). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.

- 4a. Emissions and operation of the asphalt plant shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Pollutant</u>	<u>Emission</u>		
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>		<u>Factor (Lb/Ton)</u>	<u>Emissions (Lb/Mo) (T/Yr)</u>	
Asphalt Plant	12,500	75,000	TSP	0.04	500.00	1.50
			CO	0.069	862.50	2.59
			NO _x	0.17	2125.00	6.38
			SO ₂	0.144	1800.00	5.40
			VOM	0.006	75.00	0.23

These limits are based on standard AP-42 emission factors and #2 fuel oil used as the combustion fuel in the asphalt dryer. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of the heating units shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Rating (mmBtu/Hr)</u>	<u>SO₂</u>		<u>NO_x</u>	
		<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>	<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Asphalt Tank Heater	2.115	0.64	2.82	0.30	1.32

These limits are based on AP-42 emission factors and #2 fuel oil used as the combustion fuel. Compliance with annual limits shall be determined from a running total of 12 months of data.

5. This permit is issued based on negligible emissions of volatile organic material (VOM) from the asphalt storage tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

- 6a. 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 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.
- 7a. 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 hourly records of the following items:
 - i. Rotary dryer raw material feed rate (tons/hour).
 - ii. Type of aggregate processed including slag and recycled material.
- c. The Permittee shall maintain daily records of the following items:
 - i. Rotary concrete production (tons/day).
 - ii. Asphalt dryer fuel type and consumption (gal/day).

- d. The Permittee shall maintain annual and monthly records of the following items:
 - i. Asphalt concrete production (tons/month and tons/year).
 - ii. Asphalt heater and rotary dryer fuel consumption (gal/month and gal/yr).
8. 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.
9. 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 7, 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.
10. 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.
11. 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.
12. This permit supersedes all current permit(s) issued for this location.
- 13a. 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.
- 14a. 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)
1340 North Ninth Street
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
Eisenhower Tower
1701 South First Avenue
Maywood, Illinois 60153

15. 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 11b.

Page 6

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.

Please note that this permit has been revised to reflect the request of the company to decrease total asphalt production from 450,000 to 75,000 tons per year, and the correction to the mmBtu of asphalt storage tank heater from 19.46 to 2.115.

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:jar\8

cc: Illinois EPA, FOS Region 3
Illinois EPA, Compliance Section
USEPA

Attachment A - Emissions Summary

- 1a. Emissions and operation of the asphalt plant shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</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>(T/Yr)</u>
Asphalt Plant	12,500	75,000	TSP	0.04	500.00	1.50
			CO	0.069	862.50	2.59
			NO _x	0.17	2125.00	6.38
			SO ₂	0.144	1800.00	5.40
			VOM	0.006	75.00	0.23

These limits are based on standard AP-42 emission factors and #2 fuel oil used as the combustion fuel in the asphalt dryer. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Emissions and operation of the heating units shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Rating (mmBtu/Hr)</u>	<u>SO₂</u>		<u>NO_x</u>	
		<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>	<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
Asphalt Tank Heater	2.115	0.64	2.82	0.30	1.32

These limits are based on AP-42 emission factors and #2 fuel oil used as the combustion fuel. Compliance with annual limits shall be determined from a running total of 12 months of data.

2. This permit is issued based on negligible emissions of volatile organic material (VOM) from the asphalt storage tanks. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.

DES:EEJ:jar\8

PROJECT SUMMARY

I. INTRODUCTION

Rowe Construction currently operates under federally enforceable state operating permit (FESOP) which was issued five years ago and is close to its expiration date. The company requested a renewal of their FESOP to continue to operate as non-major source for the purposes of the Clean Air Act Permit Program (CAAPP). Production and emission limitations, as well as monitoring and recordkeeping conditions contained in the FESOP have prevented the facility from being a major source and will assure this status in the future. These conditions would be enforceable by both the State of Illinois and USEPA.

II. SOURCE DESCRIPTION

Rowe Construction operates a batch mix asphalt plant with an oil-fired rotary dryer controlled by cyclone and baghouse, an oil-fired asphalt storage tank heater, and asphalt storage tank.

III. EMISSIONS

The main source of emissions at the facility is asphalt production in rotary dryer. This process generates whole spectrum of pollutants predominantly represented by nitrogen oxides (NO_x) and carbon monoxide (CO). The operation of the sterilizer and incinerator cause emissions of hazardous air pollutants: ethylene oxide and hydrogen chloride.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois. The Board has standards for sources of nitrogen oxides (NO_x) and carbon monoxide (CO) emissions. This site readily complies with all applicable Board standards.

V. PROPOSED PERMIT

The conditions of the proposed permit contain limitations and requirements to assure that this facility will be operated as a non-major source. The permit sets limitations on production throughput. These limitations are consistent with the historical operation and capacity of the facility.

The permit conditions also establish appropriate compliance procedures, including inspection practices, recordkeeping requirements and reporting requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the facility is operating within the limitations set by the permit and are properly controlling emissions.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that the facility meets all applicable state and federal air pollution control requirements, subject to the conditions proposed in the draft permit. The Illinois EPA is therefore proposing to issue a permit with federally enforceable limits for this operation.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

EEJ:72100874:jar\8