

217/782-2113

"REVISED"
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
NSPS SOURCE

PERMITTEE

R. A. Cullinan and Sons, Inc.
Attn: Edward C. Hanna
121 West Park Street
Tremont, Illinois 61568

Application No.: 72101102

I.D. No.: 143065AKA

Applicant's Designation: SVM-2000

Date Received: August 31, 1994

Subject: CMI Drum Mix Asphalt Plant

Date Issued: February 13, 1995

Expiration Date: February 13, 2000

Location: 3000 Monarch Street, Peoria

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of drum-mix asphalt plant with a natural gas fired rotary dryer equipped with a baghouse, twelve (12) asphalt storage tanks, one 14,000 gallon diesel fuel oil storage tank, and a rotating drum crusher 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 particulate matter from the rock crushing 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 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 .04 gr/dscf and shall not exhibit 20% opacity or greater, pursuant to the NSPS 40 CFR 60.92.
- c. The Permittee shall 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).

3a. Operation of the Asphalt Plant shall not exceed the following limits:

Asphaltic Concrete Production Rate: 375 tons/hour, and 300,000 tons/yr
Dryer Firing Rate: 120 mmBtu/hr
Asphalt Tank Heater Firing Rate: 2.5 mmBtu/hr
Dryer Natural Gas Usage: 45 million cu. ft/yr

- b. This permit is issued based on the use of natural gas for the dryer and the tank heater. Use of any other fuel will require a revised permit.
- 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.

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

Crushing Plant Input Feed Rate: 175 Tons/hour and 60,000 Tons/yr

- 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.
- c.
 - i. This permit is based on use of water sprays at crusher and on other necessary emission sources to provide moisture that will reduce emissions of particulate matter.
 - ii. 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.
 - iii. Inspections of water spray equipment and operation (such as leaking, adequate flow maintenance, clogging of flow lines, etc) shall be performed at least once per week.

5a. Within 90 days of a written request from the Agency, pursuant to 35 Ill. Adm. Code Section 201.282, the emissions and opacity of exhaust from the asphalt plant shall be measured 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
Sulfur Dioxide	USEPA Method 6
Nitrogen Dioxide	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 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. 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 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.
- 6a. The Permittee shall maintain operating logs for:
- i. The asphalt plant dryer control system, including operating data (pressure drop and stack condition), daily upon startup and every four hours thereafter (only during times of actual operation);
 - ii. The crushing plant water spray equipment, including dates and times of usage, malfunctions (type, date and measures taken to correct) and water pressure.
- b. The Permittee shall maintain daily records of the following items:
- i. Amount of production for each type of aggregate processed used in the Asphalt Plant including slag and recycled material (tons/day)
 - ii. Asphaltic concrete production (tons/day)

- c. The Permittee shall maintain weekly records of water consumption in the spray equipment, as determined by the meter required by Condition 4(c)(ii).
- d. The Permittee shall maintain monthly records of the following items:
 - i. Asphaltic concrete production (tons/month, and tons/yr)
 - ii. Natural gas usage (million cu. ft.)
 - iii. Production entering the primary crusher (tons/month)
 - iv. Primary crusher operating hours (hours/month, and hours/yr)
- 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 Agency and USEPA upon request.
- 8. If the dryer control system is not operating properly while the dryer is operated, the water spray equipment is not operating properly while a crusher or other emission source is operated, or there is an exceedance of the requirements of this permit as determined by the records required by this permit the Permittee shall submit a quarterly report to the Agency's Compliance Monitoring Section in Springfield, Illinois within 30 days after the end of the quarter. The report shall include the emissions on an hourly basis, 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 transportation and assembly of either plant to a new location will require a new Construction and Operating Permit for the new location. This permit must be obtained prior to reassembling the plant at the new location.
- 11. This permit supersedes the current permits issued for this location.

The following special conditions are not federally enforceable.

- 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 Agency upon request.
- 13a. The Final Report(s) for the tests specified in Condition 5 shall be submitted within 180 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. Submittals of information shall be made as follows:
- i. Notices of Test - one copy to Source Emission Test Specialist and one copy to the Regional Office.
 - ii. Final Report - one copy to Source Emission Test Specialist, one copy to the Regional Office, and one copy to Permit Section.

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

Illinois Environmental Protection Agency
Attn: Source Emission Test Specialist
Division of Air Pollution Control
1701 First Avenue
Maywood, Illinois 60153

14. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: asphalt production, fuel consumption, aggregation production, and total particulate matter emissions 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.
15. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.

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

Sincerely,

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

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cc: IEPA, FOS Region 2
USEPA

Attachment A - Emissions Summary

1. Emissions from the Asphalt Plant:

<u>Throughput</u>	<u>Emission Unit</u>	<u>Pollutant</u>	<u>Emission Rate</u>	<u>Emissions</u>
300,000 ton/yr (Asphalt)	Asphalt Plant	PM	0.028 lb/ton* NSPS	11.07 ton/yr
		NO _x	550 lb/million cu. ft. AP-42	59.40 ton/yr
		VOM	0.028 lb/ton AP-42	4.20 ton/yr
		CO	40 lb/million cu. ft. AP-42	4.32 ton/yr
	Asphalt Heater	NO _x	100 lb/million cu. ft. AP-42	1.10 ton/yr
		CO	21 lb/million cu. ft. AP-42	0.44 ton/yr
	Asphalt and Fuel Storage Tanks	VOM	0.1 lb/hr	0.44 ton/yr

* Equivalent to 0.04 gr/scf at design flow rate of 51,500 dscf/min for 375 tons/hr.

This table defines the potential emissions of the asphalt plant and is based on the actual emissions determined from hourly unit capacity, stack test data (for particulate matter only) and standard AP-42 emission factors.

2a. Emissions of particulate matter from the crushing plant:

<u>Throughput</u>	<u>Activity</u>	<u>Pollutant</u>	<u>Emission Rate</u>	<u>Emissions</u>
60,000 ton/yr (aggregate)	Primary crushing	Particulate Matter	0.0016 lb/ton	0.44 ton/yr

This table defines the potential emissions of the crushing plant and is based on the use of AP-42 emission factors with wet suppression or moist rock (1.5% or greater for crushing) at maximum annual throughput.

3. Particulate Matter Fugitive Emissions

Includes emissions from working and wind erosion of storage piles, and plant vehicle traffic: 22.30 tons/yr.

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November 24, 1999

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

I.D. No.: 143065AKA

Dear Mr. Hanna:

Enclosed is a revised permit letter which reflects only a change of ownership. Please note that if you have changed or intend to change this operation it will be necessary to apply for revision of your air pollution permit(s).

If you have any questions or require any assistance concerning these matters, contact Karen Luparell at 217/782-2113.

Very truly yours,

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

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Enclosure

cc: Region 2
I.D. File
Permit File