

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

The Hill and Griffith Co.
Attn: Lori Yeager
1262 State Avenue
Cincinnati, Ohio 45204

Application No.: 72110216 I.D. No.: 031051AAI
Applicant's Designation: MILLS Date Received: December 17, 1999
Subject: Foundry Aggregate Plant
Date Issued: March 1, 2000 Expiration Date: November 26, 2001
Location: 4606 - 10 West 16th Street, Cicero

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of the equipment listed in Attachment B and pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and to the following special conditions:

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/yr for particulate matter less than 10 microns). As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. Foundry sand additive production from this facility shall not exceed 16,000 tons/mo and 160,000 tons/yr. This represents the maximum amount of product processed through the weigh hopper and mixing system, maximum throughput of other process equipment is half these totals.
- b. Production and emissions of particulate matter less than 10 microns shall not exceed the following limits:

| <u>Emission Unit</u> | <u>Control Type</u> | <u>Control Efficiency, %</u> | <u>PM₁₀ Emissions</u> | |
|----------------------|---------------------|------------------------------|----------------------------------|-----------------|
| | | | <u>(Lb/Mo)</u> | <u>(Ton/Yr)</u> |
| Coal Mill 030 | Cyclone & Filter | 99 | 6,400 | 31.9 |
| Coal Mill 044 | Cyclone & Filter | 99 | 6,400 | 31.9 |

(Continued)

| <u>Emission Unit</u> | <u>Control Type</u> | <u>Control Efficiency, %</u> | <u>PM₁₀ Emissions</u> | |
|------------------------|---------------------|------------------------------|----------------------------------|-----------------|
| | | | <u>(Lb/Mo)</u> | <u>(Ton/Yr)</u> |
| Ground Coal | Filter | 99 | 88 | 0.44 |
| Railroad Car Loading | Filter | 99 | 88 | 0.44 |
| Silo #1 | Filter | 99 | 88 | 0.44 |
| Silo #2 | Filter | 99 | 88 | 0.44 |
| Silo #3 | Filter | 99 | 88 | 0.44 |
| Silo #4 & #5 | Filter | 99 | 88 | 0.44 |
| Silo #7 | Filter | 99 | 88 | 0.44 |
| Silo #8 | Filter | 99 | 88 | 0.44 |
| Silo #9 | Filter | 99 | 88 | 0.44 |
| Bag Dump Hopper | Filter | 99 | 20 | 0.10 |
| Weigh Hopper | Filter | 99 | 40 | 0.20 |
| Mixing System | Filter | 99 | 40 | 0.20 |
| Finished Product | Filter | 99 | 88 | 0.44 |
| West Loadout | Filter | 99 | 88 | 0.44 |
| East Loadout | Filter | 99 | 88 | 0.44 |
| Truck Fill Silo #6 | Filter | 99 | 88 | 0.44 |
| Ground Coal South Silo | Filter | 99 | 88 | 0.44 |
| | | | | <u>70.51</u> |

These limits are based on standard AP-42 emission factors; Table 11.23-1 for the coal mills (79.8 lb/ton) and bag dump, weigh hopper and mixing system (0.22 lb/ton); and Table 11.24-2 for all other processes (1.1 lb/ton).

- c. Compliance with annual limits shall be determined on a monthly basis using the data for the current month plus the sum of the data for the preceding 11 months.
3. The Permittee shall operate each process only when its emission control equipment is properly operating under the design specifications.
4. The Permittee shall maintain records of the following items:
 - a. Coal, clay, soda ash, cellulose usage in tons/month and tons/year.
 - b. Production of foundry sand additive in tons/month and tons/year.
 - c. Emissions: For each pollutant emitted, the pollutant type and quantity in lbs/month and tons/year.

- 5a. The Permittee shall, in accordance with the manufacturer and/or vendor recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
 - b. For each fabric filter, the Permittee shall, at a minimum, perform internal and external inspections, twice each year. Permittee shall inspect for leaks, holes, seals, wear, and other problems, and promptly repair all problems found.
 - c. The Permittee shall maintain operating and maintenance logs for the pollution control equipment, including: maintenance activities, with date and description of inspections, repair actions, and equipment or filter bag replacements, etc.
 - d. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.
6. 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's Compliance 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.
 7. All reports, notifications, etc., required by this permit shall be sent to:

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

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
Eisenhower Tower
1701 First Avenue
Maywood, Illinois 60153

8. 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.
9. The Permittee shall submit an annual emission statement to the Illinois EPA by May 1st of each year. This report shall include as a minimum: amount of foundry sand additives produced (tons/year).
10. The Permittee shall not 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. This permit contains the federally enforceable conditions from Construction Permit(s) 99120048. These conditions effectively limit the potential emissions of air pollutants from the source to less than major source thresholds (i.e., particulate matter to less than 70.51 tons per year, etc.). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit.

Please note that this permit has incorporated Silo #9 and filter from Construction Permit 99120048.

If you have any questions regarding this permit, please call Jim Cobb at 217/782-2113.

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

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cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
USEPA

Attachment A - Actual Emissions Summary

This attachment provides a summary of the maximum emissions from this foundry sand manufacturing facility 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/yr of PM₁₀ 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.

1. Production and emissions of particulate matter less than 10 microns shall not exceed the following limits:

Foundry Sand Additives Production: 160,000 tons/year

| <u>Emission Unit</u> | <u>Control Type</u> | <u>Control Efficiency, %</u> | <u>PM₁₀ Emissions</u> | |
|------------------------|---------------------|------------------------------|----------------------------------|-----------------|
| | | | <u>(Lb/Mo)</u> | <u>(Ton/Yr)</u> |
| Coal Mill 030 | Cyclone & Filter | 99 | 6,400 | 31.9 |
| Coal Mill 044 | Cyclone & Filter | 99 | 6,400 | 31.9 |
| Ground Coal | Filter | 99 | 88 | 0.44 |
| Railroad Car Loading | Filter | 99 | 88 | 0.44 |
| Silo #1 | Filter | 99 | 88 | 0.44 |
| Silo #2 | Filter | 99 | 88 | 0.44 |
| Silo #3 | Filter | 99 | 88 | 0.44 |
| Silo #4 & #5 | Filter | 99 | 88 | 0.44 |
| Silo #7 | Filter | 99 | 88 | 0.44 |
| Silo #8 | Filter | 99 | 88 | 0.44 |
| Silo #9 | Filter | 99 | 88 | 0.44 |
| Bag Dump Hopper | Filter | 99 | 20 | 0.1 |
| Weigh Hopper | Filter | 99 | 40 | 0.2 |
| Mixing System | Filter | 99 | 40 | 0.2 |
| Finished Product | Filter | 99 | 88 | 0.44 |
| West Loadout | Filter | 99 | 88 | 0.44 |
| East Loadout | Filter | 99 | 88 | 0.44 |
| Truck Fill Silo #9 | Filter | 99 | 88 | 0.44 |
| Ground Coal South Silo | Filter | 99 | 88 | 0.44 |
| | | | | <u>70.51</u> |

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Attachment B - List of Permitted Equipment

| <u>Description</u> | <u>Control</u> |
|--------------------------|----------------------------|
| Coal Mill 030 | Cyclone and Dust Collector |
| Coal Mill 044 | Cyclone and Dust Collector |
| Ground Coal | Filter |
| Railroad Car Loading | Filter |
| Silo #1 | Filter |
| Silo #2 | Filter |
| Silo #3 | Filter |
| Silo #4 and #5 | Filter |
| Silo #7 | Filter |
| Silo #8 | Filter |
| Bag Dump Hopper | Filter |
| Weigh Hopper | Filter |
| Mixing System | Filter |
| Finished Product Loading | Filter |
| West Loadout | Filter |
| East Loadout | Filter |
| Truck Fill Silo #9 | Filter |
| Ground Coal South Silo | Filter |
| Heaters (9) | ----- |

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