

(Continued) <u>Equipment</u>	Process Weight Rate		Emission Factor (Lb/Ton)	Control Efficiency (%)	PM Emissions	
	(Ton/Mo)	(Ton/Yr)			(Ton/Mo)	(Ton/Yr)
Raw Material Bucket Elevator	60	600	0.24	99	0.01	0.01
Spray Drying Tower	16,900	169,000	90.0	99	7.61	76.10
Packaging Bucket Elevator	16,900	169,000	0.24	99	0.02	0.20
Packaging Room	16,900	169,000	1.8	99	0.16	1.55
Conveyors	16,900	169,000	0.36	99	0.03	0.30
				Total	7.92	78.8

These limits define the actual emissions of PM and are based on maximum material usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 3a. Emissions and operation of the boilers and furnace shall not exceed the following limits:

<u>Material</u>	Usage		<u>Pollutant</u>	Emission Factor (Lb/mmscf)	Emissions	
	(mmscf/Mo)	(mmscf/Yr)			(Ton/Mo)	(Ton/Yr)
Natural Gas	10	80	NO _x	100	0.5	4.0
			CO	84	0.42	3.4
			PM	7.6	0.04	0.3
			VOM	5.5	0.03	0.22

These limits define the actual emissions of NO_x, CO, PM and VOM and are based on maximum material usage, and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel used in the boilers and furnace. Use of any other fuel other than natural gas requires a permit revision.
4. Emissions of volatile organic material (VOM) and operation of the spray tower shall not exceed the following limits:

	Process Weight Rate		Emission Factor (Lb/Ton)	VOM Emissions	
	(Tons/Month)	(Tons/Year)		(Tons/Month)	(Tons/Year)
	16,900	169,000	0.05	0.43	4.3

These limits define the actual emission of VOM and are based on maximum material usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

5. 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.

6. In the event that the operation of this emission unit 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 odor nuisance.
7. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
- 8a. The plant shall be operated under the provisions of an Operating Program designed to significantly reduce fugitive particulate matter emissions and consistent with the requirements of 35 Ill. Adm. Code 212.310.
- b. The operating program shall be amended from time to time by the Permittee so that the operating program is current. Such amendments shall be consistent with the requirements set forth by this condition and shall be submitted to the Illinois EPA.
9. The Permittee shall maintain records of the following items:
 - a. Process weight rate for all equipment listed in Condition 2 (tons/month and tons/year);
 - b. Natural gas usage for the boilers and furnaces (mmscf/month and mmscf/year); and
 - c. Detailed calculations of PM and PM₁₀ emissions (tons/month and tons/year).
10. 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 or 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 or USEPA request for records during the course of a source inspection.
11. 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.

12. 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

13. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. Process weight rate for all equipment listed in Condition 2 (tons/month and tons/year);
 - b. Natural gas usage for the boilers and furnaces (mmscf/month and mmscf/year); and
 - c. Detailed calculations of PM and PM₁₀ emissions (tons/month and tons/year).

If there have been no exceedances during the calendar year, the Annual Emission Report shall include a statement to that effect.

If you have any questions on this, please call Tara T. Nguyen-Ede at 217/782-2113.

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

DES:TNE:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from detergent manufacturing 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. The resulting maximum emissions are well below the levels, (i.e., 100 tons/year for particulate matter-10 (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. Emissions and operation of the equipment shall not exceed the following limits:

<u>Equipment</u>	<u>Process Weight Rate</u>		<u>Emission Factor (Lb/Ton)</u>	<u>Control Efficiency (%)</u>	<u>PM Emissions</u>	
	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>			<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Railcar Unloading (Track 2)	5,800	58,000	0.032	99	0.01	0.01
5 Storage Silos	16,900	169,000	0.72	99	0.07	0.61
Weigh Hopper	16,900	169,000	0.02	99	0.01	0.02
Raw Material Bucket Elevator	60	600	0.24	99	0.01	0.01
Spray Drying Tower	16,900	169,000	90.0	99	7.61	76.10
Packaging Bucket Elevator	16,900	169,000	0.24	99	0.02	0.20
Packaging Room	16,900	169,000	1.8	99	0.16	1.55
Conveyors	16,900	169,000	0.36	99	<u>0.03</u>	<u>0.30</u>
				Total	7.92	78.8

These limits define the actual emissions of PM and are based on maximum material usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 2a. Emissions and operation of the boilers and furnace shall not exceed the following limits:

<u>Material</u>	<u>Usage</u>		<u>Pollutant</u>	<u>Emission Factor (Lb/mmscf)</u>	<u>Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>			<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
Natural Gas	10	80	NO _x	100	0.5	4.0
			CO	84	0.42	3.4
			PM	7.6	0.04	0.3
			VOM	5.5	0.03	0.22

These limits define the actual emissions of NO_x, CO, PM and VOM and are based on maximum material usage, and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Natural gas shall be the only fuel used in the boilers and furnace. Use of any other fuel other than natural gas requires a permit revision.
- 3. Emissions of volatile organic material (VOM) and operation of the spray tower shall not exceed the following limits:

<u>Process Weight Rate</u>		<u>Emission Factor</u>	<u>VOM Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Lb/Ton)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
16,900	169,000	0.05	0.43	4.3

These limits define the actual emission of VOM and are based on maximum material usage and standard emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 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.

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