

217/782-2113

LIFETIME OPERATING PERMIT -- NSPS SOURCE - REVISED

PERMITTEE

Roquette America, Inc.
Attn: Eugene Taylor
1417 Exchange Street
Keokuk, Iowa 52632

Application No.: 82080006

I.D. No.: 097035AAS

Applicant's Designation: SORBITOL

Date Received: December 13, 2004

Subject: Sorbitol Manufacturing

Date Issued: March 11, 2005

Expiration Date: See Condition 1.

Location: 1550 Northwestern Avenue, Gurnee

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of:

Rental Boiler
Process Boiler
Hot Water Boiler
2 Dextrose Bins with Fabric Filters
Hydrogen Chloride Storage Tank with Fume Scrubber
2 Dextrose Solution Tanks
3 Bag Dumping Stations Controlled by a Baghouse
Powder Tower 1 Equipment
 1 Mill with 2 Cyclones and 2 Bag Filters
 Sorbitol Production Equipment PCT001 with Baghouse
 1 Vacuum Cleaner System with Bag Filter
 Filter Unit FL3420
 Filter Unit FL3450
 Filter Unit (FS)
 Filter Unit FL3320
 Filter Unit FL3321
 Filter Units FL3240 and FL3241
Gas Fired Boiler B107B
Powder Tower 2 Equipment
 Solidificator/Cooler with Baghouse
 Cooling Table with Baghouse
 Grinder with 2 Separation Cyclones Controlled by 2 Baghouses
 2 Sifters Controlled by a Baghouse
 2 Storage Tanks with a Baghouse
 2 Packaging Lines with a Baghouse
Reclaim System with a Scrubber
1 Sugar Silo with Bin Vent Filter
Sugar Blending and Packaging Operations with Dust Collector

pursuant to the above-referenced application. This permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This permit shall expire 180 days after the Illinois EPA sends a written request for the renewal of this permit.
- b. This permit shall terminate if it is withdrawn or is superseded by a revised permit.

- 2a. The new boilers are subject to a New Source Performance Standard (NSPS) for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. The Permittee shall fulfill applicable notification and record keeping requirements of the NSPS, 40 CFR 60.7, and 40 CFR 60.48(c).
- c. At all times, the Permittee shall, to the extent practicable, maintain and operate the boiler in a manner consistent with good air pollution control practice for minimizing emissions.

3. Emissions and operation from all natural gas combustion shall not exceed the following limits:

<u>Natural Gas Firing Rate</u>		<u>E M I S S I O N S</u>		<u>S I O N S</u>	
<u>(mmscf/Month)</u>	<u>(mmscf/Year)</u>	<u>Nitrogen Oxides</u>		<u>Carbon Monoxide</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
125	1,500	6.25	75.0	5.25	63.0

<u>Particulate Matter</u>		<u>E M I S S I O N S</u>		<u>S I O N S</u>	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>Volatile Organic Material</u>		<u>Sulfur Dioxide</u>	
		<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
0.48	5.7	0.34	4.2	0.04	0.45

These limits are based on standard emission factors (AP-42, 1.4) and maximum natural gas usage. Compliance with annual limits shall be determined from a running total of 12 months of data.

4. Emissions and operation of Powder Tower 2 equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Process Weight Rate</u>	<u>PM Emissions</u>	
	<u>(Lb/Hr)</u>	<u>(Lb/Hour)</u>	<u>(Ton/Yr)</u>
Solidificator/Cooler	20,000	0.23	1.0
Cooling Table	20,000	1.00	4.4
Grinder	20,000	1.14	5.0
Sifter (Each)	10,000	0.31	1.4
Tank (Each)	5,000	0.23	1.0
Bag Filler (Each)	5,000	0.23	1.0
Reclaim Tank	2,000	0.10	0.4

These limits are based on the actual emission rates as stated in the permit application and 8,760 hours of operation per year. Compliance with annual limits shall be determined from a running total of 12 months of data.

5. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Grain Loading</u>	<u>Particulate Matter Emissions</u>	
	<u>(gr/dscf)</u>	<u>(Lb/Hour)</u>	<u>(Tons/Year)</u>
Sugar Blending and Packaging	0.01	0.6	2.6

These limits are based on continuous operation (8,736 hr/yr) and the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

6. Emissions and operation of Powder Tower 1 equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hour/Year)</u>	<u>PWR (Lb/Hr)</u>	<u>Particulate Matter Emissions</u>	
			<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
PCT 0001	8,736	20,000	1.0	4.37

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

7. Emissions and operation of Powder Tower 1 equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours (Hour/Year)</u>	<u>Particulate Matter Emissions</u>	
		<u>(Lb/Hour)</u>	<u>(Tons/Year)</u>
Sorbitol Mill	8,736	1.14	5.00
Filter Unit FL3280	8,736	2.0	8.74

These limits are based on the information provided in the permit application. Compliance with annual limits shall be determined from a running total of 12 months of data.

8. Emissions of particulate matter from 2 dextrose bins shall not exceed 10.31 tons/year. This limit is based on the allowable emission limit pursuant to 35 Ill. Adm. Code 212.321 at the maximum operating rate (20 tons/year) and the maximum hours of operation (1,650 hrs/yr) indicated in the permit application.
9. Emissions of particulate matter from the vacuum cleaner system shall not exceed 11.8 tons/year. This limit is based on the allowable emission limit (2.7 lb/hr) at the maximum operating rate (2,220 lb/hr) and the maximum hours of operation (8,736) indicated in the permit application.
10. Emissions of particulate matter from filter unit FL3420 (Powder Tower 1) shall not exceed 2.4 tons/year. This limit is based on the allowable emission limit (0.55 lb/hour) and the maximum hours of operation (8,736) indicated in the permit application.
11. Emissions of particulate matter from filter unit FL3450 (Powder Tower 1) shall not exceed 2.4 tons/year. This limit is based on the allowable emission limit (0.55 lb/hour) and the maximum hours of operation (8,736) indicated in the permit application.
12. Emissions of particulate matter from filter unit (FS) (Powder Tower 1) shall not exceed 3.5 tons/year. This limit is based on the allowable emission limit (0.8 lb/hour) and the maximum hours of operation (8,736) indicated in the permit application.

13. Emissions of particulate matter from filter unit FL3320 (Powder Tower 1) shall not exceed 2.4 tons/year. This limit is based on the allowable emission limit (0.55 lb/hour) and the maximum hours of operation (8,736) indicated in the permit application.
14. Emissions of particulate matter from filter unit FL3321 (Powder Tower 1) shall not exceed 2.4 tons/year. This limit is based on the allowable emission limit (0.55 lb/hour) and the maximum hours of operation (8,736) indicated in the permit application.
15. This permit is issued based on negligible emissions of particulate matter from the three bag dumping stations. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
16. This permit is issued based on negligible emissions of particulate matter from the sugar silo with bin vent filter. For this purpose emissions from each emission source shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
17. The Permittee shall at all times, to the extent practicable, maintain and operate the aforementioned emission sources, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.
18. The Permittee shall maintain monthly records of the following items:
 - a. Natural gas usage (scf/month and scf/year);
 - b. Production (tons/month and ton/year); and
 - c. Particulate matter and nitrogen oxides emissions (ton/month and ton/year).
19. 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 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.
20. 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.
21. 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

22. Persons with lifetime operating permits must obtain a revised permit for any of the following changes at the source:
- a. An increase in emissions above the amount the emission unit or the source is permitted to emit;
 - b. A modification;
 - c. A change in operations that will result in the source's noncompliance with conditions in the existing permit; or
 - d. A change in ownership, company name, or address, so that the application or existing permit is no longer accurate.

Please note that this permit is revised to incorporate Construction Permit 04120028.

If you have any questions on this permit, please contact John Blazis at 217/782-2113.

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

DES:JPB:jar

cc: Region 1