

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - NSPS SOURCE -- RENEWAL

PERMITTEE

Uniqema
Attn: Rick A. Foor
4650 South Racine Avenue
Chicago, Illinois 60609

Application No.: 72100410

I.D. No.: 031600CGF

Applicant's Designation:

Date Received: March 21, 2002

Subject: Fatty Acid Plant

Date Issued:

Expiration Date:

Location: 4650 South Racine, Chicago

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of four gas-fired boilers, wastewater treatment system, raw material unloading operation, splitting unit, glycerine evaporation unit, wet separation unit, hydrogenation unit, oleic acid and stearic acid distillation unit, stearic acid flaker controlled by a baghouse, glycerine distillation unit controlled by a scrubber, continuous hardening operation controlled by a baghouse and storage tanks controlled by a scrubber, and a tank farm storing raw materials and intermittent and final products controlled by a scrubber pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and 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/year for nitrogen oxide (NO_x)). As a result the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by 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 permit(s) for this location.
- 2a. The organic liquid storage tanks having capacity more than 10,000 gallons and constructed after July 23, 1984 are subject to a New Source Performance Standard (NSPS) for volatile organic liquid storage vessels, 40 CFR 60, Subpart Kb. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
 - b. The Permittee of the storage vessels shall keep readily accessible records showing the dimension of the storage vessels and an analysis showing the capacity of the storage vessels.
 - c. At all times, the Permittee shall also, to the extent practicable, maintain and operate the eight storage tanks, in a manner consistent with good air pollution control practice.

- 3a. The Nebraska boiler is subject to New Source Performance Standard (NSPS) for small industrial steam generating units, 40 CFR 60, Subparts Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.
- b. For this boiler the Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.
- c. At all times, the Permittee shall also, to the extent practicable, maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

4. Operations and emissions of the boilers (combined) shall not exceed the following limits:

Natural Gas Usage: 130 mmscf/mo, 1,200 mmscf/yr

<u>Pollutant</u>	<u>Emission Factor</u> (lb/mmscf)	<u>Emissions</u>	
		(Ton/Mo)	(Ton/Yr)
Nitrogen Oxides (NO _x)	100	6.5	60.0
Carbon Monoxide (CO)	84	5.5	50.4
Particulate Matter (PM)	7.6	0.5	4.6
Volatile Organic Materials (VOM)	5.5	0.4	3.3

These limits are based on the maximum fuel usage and standard AP-42 emission factors. 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 materials and particulate matter from glycerine distillation unit, raw material unloading area, splitting unit, glycerine evaporation unit, wet separation unit, hydrogenation unit, oleic acid and stearic distillation unit, stearic acid flaker, wastewater treatment system, continuous hardening operation and tank farm. For this purpose, emissions of each contaminant from each unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year for VOM.
- 6. 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 odor nuisance.
- 7. The Permittee shall maintain monthly records of the following items:
 - a. Natural gas usage (10⁶ scf/month and 10⁶ scf/year).
 - b. Animal fat process rate (Tons/Mo, Tons/Yr).
- 8. 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.

9. 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.
10. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: natural gas usage (mmscf/yr). If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement of that effect.
11. 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
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Agency's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

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

DES:VJB:

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from natural gas fired steam boiler plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant, e.g., use of 1,200 mmscf of natural gas per year. The resulting maximum emissions are well below the levels, e.g., 100 tons per year of NO_x 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.

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VJB: