

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - REVISED

PERMITTEE

Sunnyside Corporation
Attn: Henry E. Buchanan
225 Carpenter Avenue
Wheeling, IL 60090

Application No.: 76060093 I.D. No.: 031324ABX
Applicant's Designation: 052088APC5 Date Received: May 2, 2003
Subject: Chemical Blending/Processing
Date Issued: May 12, 2003 Expiration Date: March 24, 2005
Location: 225 Carpenter Avenue, Wheeling

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 18 holding/blending tanks, nine fill lines including a truck loading/unloading station, eight natural gas fired combustion units, and 18 storage tanks pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1. This federally enforceable state operating permit (FESOP) is issued to limit the emissions of volatile organic material (VOM) and hazardous air pollutants (HAPs) from the facility to less than major source thresholds for each pollutant (25 tons/year for VOM and combined HAPs, and 10 tons/year for an individual HAP), 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.
 - c. This permit supersedes the current permits issued for this location.
- 2a. Operation of the Chemical Blending and Processing facility shall not exceed the following limits:

i. Emission Source Group 1 - Material Handling

<u>Material</u>	<u>Activity*</u>	<u>Throughput</u>	
		<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>
Group A Materials which emit VOM such that (MW) x (VP) is greater than or equal to 75.0	Storage	277,000	3,308,000
	Blending	44,000	527,000
	Filling	277,000	3,308,000
Group B Materials which emit VOM such that (MW) x (VP) is greater than or equal to 15.0 but less than 75.0	Storage	195,000	2,340,000
	Blending	33,500	400,000
	Filling	195,000	2,340,000

Group C Materials which emit
VOM such that $(MW) \times$
(VP) is greater than
or equal to 1.0 but
less than 15.0

Storage	1,774,500	21,294,000
Blending	302,000	3,620,000
Filling	1,774,500	21,294,000

(Continued)

<u>Material</u>	<u>Activity*</u>	<u>Throughput</u>	
		<u>(Gal/Mo)</u>	<u>(Gal/Yr)</u>
Group D Materials which emit VOM such that (MW) x (VP) is less than 1	Storage	597,500	7,170,000
	Blending	597,500	7,170,000
	Filling	597,500	7,170,000
Group E HAP Solvent Material Handling are identical to the VOM values above with the exceptions that:	1. Materials which emit HAP such that (MW) x (VP) is greater than or equal to 75.0		
	Storage	190,000	2,270,000
	Blending	32,500	386,000
	Filling	190,000	2,270,000
	2. Methylene Chloride		
	Storage	42,000	500,000
	Blending	33,500	400,000
	Filling	42,000	500,000
	3. Muriatic (Hydrochloric) Acid		
	Storage	1,040,000	12,480,000
	Blending	-----	-----
	Filling	1,040,000	12,480,000

* Storage includes truck unloading; filling includes truck loading

ii. Emission Source Group 2 - Fuel Combustion Units

Natural Gas Usage - 5.5 million cu. ft/mo, 66 mmcf/yr

- b. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month and the preceding 11 months.
- 3a. This permit is issued based on the blending operations not being subject to the requirements of Subpart QQ of the 35 Ill. Adm. Code, Part 218. This is a consequence of the voluntarily requested limits of this federally enforceable state operating permit.
- b. This permit is issued based on the operation of all storage tanks and filling operations not being subject to the requirements of Subpart TT of the 35 Ill. Adm. Code Part 218. This is a consequence of the voluntarily requested production limits of this federally enforceable state operating permit.
- 4. 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.

5. The Permittee shall maintain monthly records of the following items:
 - a. Number of gallons of each type of product blended or filled per line;
 - b. Grouping of each product blended or filled (e.g., Group B);
 - c. Vapor pressure and molecular weight of each product blended or filled per line;
 - d. For materials with vapor pressure greater than 0.1 psia, material stored in each storage tank and throughput of material (as supported by purchase records) of each storage tank; and
 - e. Natural gas consumption (cu. ft.).
6. 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.
7. 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.
8. 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

9. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: solvent usage in chemical blending/processing and throughput of each material stored in all storage tanks from the previous calendar year. If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement to that effect.

It should be noted that this permit has been revised to change the usage and emission limits in Condition 2 and to reflect the change in the number of storage tanks.

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

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

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cc: Region 1

Attachment A - Emission Summary

1a. VOM and HAP Emissions:

i. Emission Source Group 1 - Material Handling

<u>Material</u>	<u>Activity*</u>	<u>Throughput</u>		<u>Emissions</u>	
		(Gal/Mo)	(Gal/Yr)	(Lb/Mo)	(Ton/Yr)
Group A**	Storage	277,000	3,308,000	665	4.0
	Blending	44,000	527,000	128	0.8
	Filling	277,000	3,308,000	803	4.8
Group B***	Storage	195,000	2,340,000	100	0.6
	Blending	33,500	400,000	47	0.3
	Filling	195,000	2,340,000	272	1.6
Group C***	Storage	1,774,500	21,294,000	135	0.8
	Blending	302,000	3,620,000	69	0.4
	Filling	1,774,500	21,294,000	404	2.4
Group D***	Storage	597,500	7,170,000	4	0.02
	Blending	597,500	7,170,000	4	0.02
	Filling	597,500	7,170,000	4	0.02
Group E1.**	Storage	190,000	2,270,000	560	3.3
	Blending	32,500	386,000	110	0.7
	Filling	190,000	2,270,000	640	3.8
E2.****	Storage	42,000	500,000	400	2.4
	Blending	33,500	400,000	475	2.8
	Filling	42,000	500,000	596	3.5
E3.****	Storage	1,040,000	12,480,000	17	0.1
	Blending	-----	-----	0	0
	Filling	1,040,000	12,480,000	425	2.5

* Storage includes truck unloading; filling includes truck loading.

** Groups A emissions are VOM only; Group E1 emissions are those HAPs that are a subset of Group A materials.

*** Groups B - D emissions are for both VOM and HAP.

**** Groups E2 and E3 emissions are emissions of methylene chloride and muriatic acid, respectively.

b. Emission Estimates:

i. Storage: Based on AP-42 Volume 1, Chapter 12.

ii. Blending/Holding Tanks and Filling Lines: Method used is the following saturated volume displacement calculation:

$$\text{VOM Emitted} = \frac{\text{volume (gals)}}{7.48 \text{ (gal/cf)}} \times \frac{\text{vapor pressure (psi)}}{14.7 \text{ psi}} \times \frac{1 \text{ mole}}{387 \text{ (cf)}} \times \frac{\text{MW (lb)}}{\text{mole}}$$

Volume = Amount of material blended or filled

Vapor Pressure = Material vapor pressure

MW = Material molecular weight

2. Emission Source Group 2 - Fuel Combustion Units (Boilers, Furnaces and Heating Units)

Natural Gas Usage		Emission Type	Emission Limit (Lbs/Mo)	Maximum Emissions (Tons/Yr)
(mmft ³ /Mo)	(mmft ³ /Yr)			
5.5	66.0	CO	462	2.8
		NO _x	550	3.3

The emissions of CO and NO_x were determined from using standard AP-42 emission factors for natural gas combustion.

3. This permit is issued based on negligible emissions of particulate matter, volatile organic material, dioxide from the eight gas-fired fuel combustion units. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year.
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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