

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

The Gates Rubber Company
Attn.: Chuck Buchna
Post Office Box 1196
Route 150 East Knoxville Road
Galesburg, Illinois 61402-1196

Application No.: 72111011

I.D. No.: 095808AAB

Applicant's Designation:

Date Received: August 1, 1994

Subject: Galesburg Hose Plant

Date Issued:

Expiration Date:

Location: Route 150 East Knoxville Road, Galesburg

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of the rubber hose manufacturing plant pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 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 volatile organic material (VOM), 10 tons/year for a single HAP and 25 tons/year of any combination of HAPs). As a result the source is excluded from the requirement 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.
2. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.

3a. Emissions and operation of the rubber hose manufacturing plant shall not exceed the following limits:

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u>	<u>Emissions (tpy)</u>		
		<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>
2 Boilers	Natural Gas	53	350	100, 84 lb/mmscf		17.5	14.7
	#2 Fuel Oil		2 mmgal/yr	39.8, 20, 5 lb/Kgal	40	20	5

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u>	<u>Emissions (tpy)</u>		
		<u>(tpm)</u>	<u>(tpy)</u>		<u>VOM</u>	<u>HAPs</u>	<u>PM</u>
#1-4 Mixer/Drop Mills	Rubber	7,500	50,000	4.44E-4, 1.4E-4 lb/lb	22.2	7.0	8.9
11 Extrusion Lines	Rubber	2,250	15,000	1.06E-4, 7.53E-5 lb/lb	1.6	1.13	
7 Vulcanizers	Rubber	2,250	15,000	1.29E-3, 4.7E-4 lb/lb	0.1	7.1	
Rubber Presses	Rubber	2.5	15	6.68E-3, 1.36E-3 lb/lb	0.1	0.02	
Calendar Line	Zinc Stearate, Rubber	225	1,500	3.84E-4, 1.02E-4 lb/lb	0.6	0.16	
Compound Area				2 lb/hr from bghs			0.88
Bulk Carbon Black System	Carbon Black	3,000	20,000	0.1%			20
HFM and Vertical Braiders	Ethyl Acetate	0.3	2	100%	2	2	
Plastic Extruders	Plastics	900	6,000	0.02%	1.2		
Plastic Braiders	Plastics	0.6	4	100%	4		
Hose Printing	Ink Solvents	0.3	2	100%	2		
Dept. 50 Hose Wash	Mineral Spirits/ IPA	0.08	0.5	100%	0.5		
TWT Dye Applicator	Dye	0.6	4	100%	4		
Lab Flusher	Acetone	0.5	3	100%	3		
Plastic Sheath Cure	Plastics	900	6,000	0.02%	1.2		
Silicone Coating	Silicone	2.25	15	1.5%			
Totals					42.5	17.4	<u>0.23</u> 30

- b. Usage and emissions of VOM from all cleanup operations shall not exceed 3.1 tpy.
- c. Total plant-wide production of rubber shall not exceed 7,500 tons per month and 50,000 tons per year.

These limits are based on maximum material throughputs, VOM contents and standard AP-42 emission factors from draft section 4.12, manufacture of rubber products. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 4. No person shall cause or allow the emission of carbon monoxide into the atmosphere from each individual boiler to exceed 200 ppm in accordance with 35 Ill. Adm. Code 216.121.
- 5. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from each boiler to exceed 0.3 lbs/mmBtu in any one hour period when burning distillate fuel oil exclusively in accord with 35 Ill. Adm. Code 214.161(b).
- 6. Organic liquid by-products or waste materials shall not be used in any fuel combustion emission source without written approval from the Illinois EPA.
- 7. The Illinois EPA shall be allowed to sample all fuels stored at the above location.
- 8. The Permittee shall notify the Illinois EPA prior to any change in the type of fuel used at the source.
- 9. Natural gas and distillate fuel oil shall be the only fuel(s) fired in the above referenced boilers.
- 10. Particulate matter emissions from the bulk materials pneumatic transfer systems and Banbury mixers shall be controlled with baghouses.
- 11. This permit is issued based upon emissions of photochemically reactive organic materials, as defined under 35 Ill. Adm. Code 211.4690, from any emission source or operation using organic material, being less than 8 pounds per hour, pursuant to 35 Ill. Adm. Code 215.301.
- 12. This permit is issued based upon particulate matter (TSP) emissions from the emission sources covered by the above referenced permit application being in compliance with 35 Ill. Adm. Code Section 212.322, TSP emissions from these sources shall not exceed the hourly emissions limitations based on each emission sources hourly process weight rate.
- 13. This permit is issued based upon negligible emissions of volatile organic material from the 50,000 gallon fuel oil tank, 25,000 gallon aromatic oil tank, 25,000 gallon paraffinic oil tank, 25,000 gallon petroleum oil tank, oil/water separator, plastics calcinator, and impulse lab. For this purpose emissions from each piece of equipment

shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.

14. This permit is issued based upon negligible emissions of particulate matter from the calcium carbonate system and hose skivers. For this purpose emissions from each piece of equipment shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.
15. At the above location, the Permittee shall not keep, store, or utilize:
 - a. distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:
 - i. 0.28 weight percent, or
 - ii. the wt. percent given by the formula: Maximum wt. percent sulfur = $(0.000015) \times (\text{Gross heating value of oil, BTU/lb})$.
16. The Permittee shall maintain monthly records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in Condition Nos. 2 and 3.
 - a. Monthly and annual (i.e., 12 month running total) usages for all materials (lb or gallon/month);
 - b. Natural gas and fuel oil usage (mmscf and gallon/month and year);
 - c. Total mixed rubber production (lb/month and lb/year);
 - d. Monthly plant emissions of criteria pollutants, individual HAPs, and total HAPs; and
 - e. Annual plant emissions of criteria pollutants, individual HAPs, and total HAPs (i.e., 12 month running total).
17. 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.
18. 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.

19. 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
5415 North University
Peoria, Illinois 61614

20. In conjunction with the Annual Emissions Report, due May 1st of each year, as required in 35 Ill. Adm. Code Section 201.302 and Part 254, the records referenced in Condition 10 shall be compiled and submitted as an addendum to the report. This shall include but is not limited to the following:

- a. Each month's monthly and annual material usage's including natural gas and #2 fuel oil for the preceding calendar year (i.e., preceding 12 months),
- b. Each month's, monthly and annual plant emissions of criteria pollutants, individual HAPs and total HAPs, for the preceding calendar year (i.e., preceding 12 months), and
- c. A summary of the months that the monthly running total of annual emissions and material usage's exceeded the annual limitations in Conditions 3, if any.

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

Please note that the generator is exempt from state permit requirements, pursuant to 201.146 (i).

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

DES:RBS:psj

cc: Illinois EPA, FOS Region 2
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the hose 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. This is processing 100 million lb/year of rubber. The resulting maximum emissions are well below the levels, e.g., 100 tons per year for volatile organic material (VOM), 100 tons per year for particulate matter of diameter 10 microns or less, 10 tons per year for a single HAP and 25 tons per year of any combination of HAPs 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.

- 1a. Emissions and operation of the rubber hose manufacturing plant shall not exceed the following limits:

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u>	<u>Emissions (tpy)</u>		
		<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>
2 Boilers	Natural Gas	53	350	100, 84 lb/mmscf		17.5	14.7
	#2 Fuel Oil		2 mmgal/yr	39.8, 20, 5 lb/Kgal	40	20	5

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>Emission Factor</u>	<u>Emissions (tpy)</u>		
		<u>(tpm)</u>	<u>(tpy)</u>		<u>VOM</u>	<u>HAPs</u>	<u>PM</u>
#1-4 Mixer/Drop Mills	Rubber	7,500	50,000	4.44E-4, 1.4E-4 lb/lb	22.2	7.0	8.9
11 Extrusion Lines	Rubber	2,250	15,000	1.06E-4, 7.53E-5 lb/lb	1.6	1.13	
7 Vulcanizers	Rubber	2,250	15,000	1.29E-3, 4.7E-4 lb/lb	0.1	7.1	
Rubber Presses	Rubber	2.5	15	6.68E-3, 1.36E-3 lb/lb	0.1	0.02	
Calendar Line	Zinc Stearate, Rubber	225	1,500	3.84E-4, 1.02E-4 lb/lb	0.6	0.16	
Compound Area				2 lb/hr from bghs			0.88
Bulk Carbon Black System	Carbon Black	3,000	20,000	0.1%			20
HFM and Vertical Braiders	Ethyl Acetate	0.3	2	100%	2	2	
Plastic Extruders	Plastics	900	6,000	0.02%	1.2		
Plastic Braiders	Plastics	0.6	4	100%	4		

<u>Equipment</u>	<u>Material</u>	<u>Usage</u>		<u>Emission</u> <u>Factor</u>	<u>Emissions (tpy)</u>			
		<u>(tpm)</u>	<u>(tpy)</u>		<u>VOM</u>	<u>HAPs</u>	<u>PM</u>	
Hose Printing	Ink	0.3	2	100%	2			
	Solvents							
Dept. 50 Hose Wash	Mineral Spirits/ IPA	0.08	0.5	100%	0.5			
TWT Dye Applicator	Dye	0.6	4	100%	4			
Lab Flusher	Acetone	0.5	3	100%	3			
Plastic Sheath Cure	Plastics	900	6,000	0.02%	1.2			
Silicone Coating	Silicone	2.25	15	1.5%				
Totals						<u>42.5</u>	<u>17.4</u>	<u>0.23</u> 30

- b. Usage and emissions of VOM from all cleanup operations shall not exceed 3.1 tpy.
- 2. As a consequence of the requirements of this permit, the emissions of hazardous air pollutants (HAP) as listed in Section 112(b) of the Clean Air Act from this source shall be less than 10 tons/year of any single HAP and 25 tons/year of any combination of such HAPs so that HAP emissions do not trigger the requirements to obtain a Clean Air Act Permit Program permit from the Illinois EPA.
- 3. This permit is issued based upon negligible emissions of volatile organic material from the 50,000 gallon fuel oil tank, 25,000 gallon aromatic oil tank, 25,000 gallon paraffinic oil tank, 25,000 gallon petroleum oil tank, oil/water separator, plastics calcinator, and impulse lab. For this purpose emissions from each piece of equipment shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.
- 4. This permit is issued based upon negligible emissions of particulate matter from the calcium carbonate system and hose skivers. For this purpose emissions from each piece of equipment shall not exceed nominal rates of 0.1 pound per hour and 0.44 ton per year.

RBS:psj