

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Sponge Cushion, Inc.
Attn: Hugh McLaren
902 Armstrong Street
Morris, Illinois 60450

Application No.: 73100161

I.D. No.: 063060AAP

Applicant's Designation: SCIFESOP

Date Received: May 23, 2007

Subject: Sponge Cushion Plant

Date Issued: August 7, 2008

Expiration Date: August 7, 2013

Location: 902 Armstrong Street, Morris, Grundy County

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a sponge cushion plant consisting of the following emission units: No. 9 mixer, two 60 inch mills, 3 stage filter, silo, two weigh stations, baghouse, compounding station, compounding station baghouse, two No. 11 mixers, two mixer baghouses, 100 inch mill, forming line 1, line 1 filter, forming line 2, thermal heaters, cooling tower, storage tanks, wrapper, and scrap rubber grinder 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 Particulate Matter less than 10 microns (PM₁₀) and Volatile Organic Material (VOM), 10 tons/year for any single hazardous air pollutant (HAP) and 25 tons/year for any combination of such 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.
- 2a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
- b. Pursuant to 35 Ill. Adm. Code 212.301, no person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally toward the zenith at a point beyond the property line of the source.

- c. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hour (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.
- d. Pursuant to 35 Ill. Adm. Code 212.321(a), no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.
- 4a. Pursuant to 35 Ill. Adm. Code 215.122(b), no person shall cause or allow the loading of any organic material into any stationary tank having a storage capacity of greater than 946 l (250 gallons), unless such tank is equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 or unless such tank is a pressure tank as described in 35 Ill. Adm. Code 215.121(a) or is fitted with a recovery system as described in 35 Ill. Adm. Code 215.121(b)(2).
- b. Pursuant to 35 Ill. Adm. Code 215.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission source, except as provided in 35 Ill. Adm. Code 215.302, 215.303, 215.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 215 Subpart K shall apply only to photochemically reactive material.
5. This permit is issued based on the cooling tower not using chromium-based water treatment chemicals. As a result, this permit is issued based on the source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Industrial Process Cooling Towers, 40 CFR 63 Subpart Q.
6. Pursuant to 35 Ill. Adm. Code 215.122(c), if no odor nuisance exists the limitations of 35 Ill. Adm. Code 215.122 shall only apply to the loading of volatile organic liquid with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3°K (70°F).

- 7a. 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.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the pollution control equipment covered under this permit such that the pollution control equipment be kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.
- 8a. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission Factor (lb/Ton)</u>	<u>PM₁₀ Emissions</u>	
	<u>(lb/Day)</u>	<u>(T/Yr)</u>		<u>(lb/Day)</u>	<u>(T/Yr)</u>
Silo	220,689	40,276	0.41	45.2	8.25
Line 2 Weigh Station	101,842	18,586	0.41	20.9	3.81
Compounding Station	16,678	3,044	0.72	6.0	1.10
Line 1 Mixer	192,000	35,040	0.27	25.9	4.73
Line 1 Weigh Station	118,850	21,690	0.41	24.4	4.45
Line 2 Mixer	163,564	29,850	0.27	22.1	4.03
Forming Line 1	192,000	35,040	0.12	11.5	2.10
Forming Line 2	163,400	29,850	0.16	13.3	2.48
No. 9 Mixer	43,100	7,900	0.02	0.5	0.08
Line 1 60 Inch Mill	192,000	35,040	0.03	2.9	0.53
No. 9 60 Inch Mill	43,000	7,900	0.02	0.5	0.08
100 Inch Mill	163,250	29,795	0.03	2.4	0.44
Scrap Rubber Grinder	6,000	1,100	0.80	2.4	0.44
Wrapper	355,565	64,891	0.01	2.4	0.44
				Total:	32.96

These limits are based on maximum capacities of equipment, special emission factors, and stack test emission factors.

- b. Emissions and operation of the cooling tower shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Water Usage</u>		<u>Emission Factor (lb/mmgal)</u>	<u>PM₁₀ Emissions</u>	
	<u>(mmgal/mo)</u>	<u>(mmgal/Yr)</u>		<u>(T/mo)</u>	<u>(T/Yr)</u>
Cooling tower	13.27	157.7	19.6	0.13	1.54

These limits are based on the maximum use of water and a standard emission factor (Table 13.4-1, AP-42, Fifth Edition, Volume I, January 1995).

- c. Emissions and operation of the thermal heaters shall not exceed the following limits:

- i. Natural Gas Usage: 0.27 mmscf/day, 95.7 mmscf/year.
- ii. Emissions from the combustion of natural gas:

<u>Pollutant</u>	<u>Emission Factor (lbs/mmscf)</u>	<u>Emissions (lb/day)</u>	<u>Emissions (Tons/Yr)</u>
Carbon Monoxide (CO)	84.0	22.68	4.02
Nitrogen Oxides (NO _x)	100.0	27.00	4.79
Particulate Matter (PM ₁₀)	7.6	2.05	0.36
Sulfur Dioxide (SO ₂)	0.6	0.03	0.03
Volatile Organic Material (VOM)	5.5	1.49	0.26

These limits are based on the maximum fuel usage and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

- d. Emissions and operation of the sponge cushion plant shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission Factor (lbs/Ton)</u>	<u>VOM Emissions</u>	
	<u>(Ton/mo)</u>	<u>(Ton/Yr)</u>		<u>(T/mo)</u>	<u>(T/Yr)</u>
Forming Line 1	<u>3,504</u>	35,040	0.24	<u>0.42</u>	4.2
Forming Line 2	<u>2,985</u>	29,850	1.05	<u>1.57</u>	15.7

These limits are based on maximum capacities of equipment and stack test emission factors.

- e. Hazardous Air Pollutants (HAP) emissions from the sponge cushion plant shall not exceed 0.79 ton/year. This limit is based on a maximum of 7,900 ton/year of rubber with a maximum free styrene content of 0.01%.
- f. Emission and operation of the oil storage tanks shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission Factor (lbs/mmgal)</u>	<u>VOM Emissions</u>	
	<u>(mmgal/mo)</u>	<u>(mmgal/Yr)</u>		<u>(T/mo)</u>	<u>(T/Yr)</u>
Oil Storage Tanks	0.32	3.2	333.0	0.05	0.5

These limits are based on maximum throughput and use of the TANKS program (Version 4.09D, October 5, 2006).

- 9. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.9 tons/month and 9.0 tons/year of any single HAP and 2.25 tons/month and 22.5 tons/year of any combination of such HAPs. 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.

10. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 11a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
 - i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.
- b. Testing required by Condition 12 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
- 12a Pursuant to 35 Ill. Adm. Code 212.107, for both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR Part 60, Appendix A, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. 35 Ill. Adm. Code 212 Subpart A shall not apply to 35 Ill. Adm. Code 212.301.
- b. Pursuant to 35 Ill. Adm. Code 212.109, except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data

reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged.

- c. Pursuant to 35 Ill. Adm. Code 212.110(a), measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR Part 60, Appendix A, Methods 5, 5A, 5D, or 5E.
 - d. Pursuant to 35 Ill. Adm. Code 212.110(b), the volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4.
 - e. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
13. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If

relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

14. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- 15a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Records addressing use of good operating practices for the pollution control equipment covered under this permit:
 - A. Records for periodic inspection of the pollution control equipment covered under this permit with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. The material throughput of each item of equipment in Condition 8(a) (lbs/day, tons/month, and tons/year);
 - iii. The amount of water used in the cooling tower (gallons/month and gallons/year);
 - iv. Natural gas usage of the thermal heaters (mmscf/month and mmscf/year);
 - v. The material throughput of the forming lines (tons/month and tons/year);
 - vi. Material throughput of the oil storage tanks (gallons/month and gallons/year); and
 - vii. Monthly and annual emissions of CO, NO_x, PM₁₀, SO₂, VOM and HAPs with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) 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.

16. If there is an exceedance of or a deviation from 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 or deviation. 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 deviation and efforts to reduce emissions and future occurrences.
17. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
18. Two (2) copies of required reports and notifications 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

It should be noted that this permit has been revised so as to no longer include the operation of the waste incinerator and the trash grinder.

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

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: _____

ECB:GB:jws

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the sponge cushion 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 (e.g., 100 tons of PM₁₀ and VOM, 10 tons per year for a single HAP, and 25 tons per year for any combination of such HAP) 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.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)					Single	Total
	<u>CO</u>	<u>NOx</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>VOM</u>	<u>HAP</u>	<u>HAPs</u>
Silo			8.25				
Line 2 Weigh Station			3.81				
Compounding Station			1.10				
Line 1 Mixer			4.73				
Line 1 Weigh Station			4.45				
Line 2 Mixer			4.03				
Forming Line 1			2.10				
Forming Line 2			2.48				
No. 9 Mixer			0.08				
Line 1 60 Inch Mill			0.53				
No. 9 60 Inch Mill			0.08				
100 Inch Mill			0.44				
Scrap Rubber Grinder			0.44				
Wrapper			0.44				
Cooling tower			1.54				
Thermal Heaters	4.02	4.79	0.36	0.03	0.26		
Forming Line 1					4.20		
Forming Line 2					15.70		
<u>Oil Storage Tanks</u>	--	--	--	--	0.50	--	--
Totals	4.02	4.79	34.86	0.03	20.66	9.0	22.5

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