

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

A193229510

FACILITY: Royal Adhesives & Sealants		SRN / ID: A1932
LOCATION: 4401 PAGE AVE, MICHIGAN CTR		DISTRICT: Jackson
CITY: MICHIGAN CTR		COUNTY: JACKSON
CONTACT: Dan Dixon, Project Engineering Manager		ACTIVITY DATE: 05/14/2015
STAFF: Brian Carley	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled Inspection		
RESOLVED COMPLAINTS:		

Facility Contact: Dan Dixon, Senior Project Engineering Manager
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Email: Dan.Dixon@rascp.com

Michael Gabor and I arrived for our appointment with Jake Simon, Environmental Health & Safety Engineer for this facility, to discuss their MAERS submittal and to do an inspection. This was Jake's last week with the company and he introduced us to Dan Dixon who would be our contact for this facility. After giving them the Environmental Inspection pamphlet and quickly going over the inspection procedure. We then went over their MAERS submittals and how they calculated their emissions. They gave Michael and me copies of the information that showed their emissions, where they got their emission factors from, and their monthly calculations (see MAERS file). I told them that they do not need to add in all the extra information that they included in their 2015 submittal. All they really need is the summary that includes the emission factor and where they got it from, the production from each line, the control efficiency of the control device (if there is one for that line) and the annual emission(s) for each line. If they are doing anything other a mass balance equation, I would like to see how they calculated the emissions. The rest of the information that they included, should be kept on file in case we require more information to do our audit. While we were going over the information, we discovered three minor errors in this year's submittal which I will fix when I get back to the office.

After we finished discussing the MAERS, Jake then took Michael and me on a tour of the facility to determine compliance with PTI #99-10B, which was issued on August 5, 2014. The following cover discusses the compliance with each table in 99-10B.

EU-KALAR

This table covers the process to pelletize butyl rubber compounds. This emission unit started operation in December, 2014. They reported in their MAERS submittal that they emitted 0.805 pounds (0.0004 tons) of PM10 in 2014, which is well below their limit of 0.01 tons/year per Special Condition (S.C.) I.2. The system is controlled by a Torit dust collector and was operating at the time of the inspection (S.C. IV.1). They are in the process of connecting the ductwork so that it will exhaust indoors as described in the description for this table. Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1. I have determined that they are in compliance with this table.

EU-S EA

This table covers a 3,500 gallon ethyl acetate storage tank. This tank is no longer on site.

FG-SEDMIXERS

This table covers 5 mixers that manufacture butyl tape compounds and ethylene vinyl acetate compounds. They reported in their MAERS submittal that they emitted 1,117 pounds (0.56 tons) of PM10 in 2014, which is well below their limit of 2.4 tons/year per S.C. I.1. They also reported that they used 436,769 pounds (218.38 tons) of talc and 26,283 pounds (13.14 tons) of silica, both of which are well below their limits of 1,198 tons of talc and 519 tons of silica (S.C. II.1 and II.2). All the mixers are controlled by a single Torit dust collector and it was operating at the time of the inspection (S.C. IV.1). Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period material usage and emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1 and VI.2, respectively. I have determined that they are in compliance with this table.

FG-DOLPHIN

This table covers the group of mixers used to manufacture solvent based adhesives, sealants, and coatings. They reported in their MAERS submittal that they emitted 139 pounds (0.56 tons) of PM10 in 2014,

which is well below their limit of 2.4 tons/year per S.C. I.1. They also reported 992 pounds of VOC emissions in 2014, which is well below their limit of 10 tons/yr (S.C. I.3). They operated this group for 6,000 hours in 2014 which gives them a VOC emission of 0.165 pounds/hr (pph), which is well below their limit of 5.88 pph (S.C. I.2). Also, based on their MAERS report, their methanol and xylene emission rates were 0.002 pph and 0.0002 pph, respectively, which were well below their limits of 3.25 pph and 0.5 pph, respectively (S.C. I.4 and I.5). They also reported that they used 2,428 pounds (1.214 tons) of talc and 6,278 pounds (3.14 tons) of silica, both of which are well below their limits of 1,980 tons of talc and 195 tons of silica (S.C. II.1 and II.2). Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period material usage and emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1 and VI.2, respectively. I have determined that they are in compliance with this table.

FG-CAULK

This table covers four mixers that manufacture solvent based butyl caulking. They reported in their MAERS submittal that they emitted 15,382 pounds (7.7 tons) of VOC emissions in 2014, which is well below their limit of 30.12 tons/yr (S.C. I.1). They also reported 1,693 pounds (0.85 tons) of PM10 in 2014, which is well below their limit of 1.4 tons/year per S.C. I.2. Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period VOC and PM10 emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1 and VI.2, respectively. I also verified that they were recording the monthly material usage and VOC content of each material used in this process. I have determined that they are in compliance with this table.

FG-EPDMPRIMING

This table covers two lines for solvent primer application on EPDM/TPO roofing tape. They reported in their MAERS submittal that they emitted 37,195 pounds (18.6 tons) of VOC emissions in 2014, which is well below their limit of 30 tons/yr (S.C. I.2). They operated these lines for 8,000 hours in 2014, which calculates a VOC emission rate of 4.65 pph (S.C. I.1). They reported that they used 43,600 pounds of primer, which is below their limit of 56,470 pounds per 12 month rolling time period (S.C. II.1). Jake was able to show that they were using the roll coaters as required in S.C. IV.1. They are using MSDS for their VOC content of the primers and the current listing of the chemical composition of each material (S.C. V.1 and VI.2). Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period VOC emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1. I also verified that they were recording the monthly material usage and VOC content of each material used in this process. All their waste material was being stored in closed containers (S.C. IX.1). I have determined that they are in compliance with this table.

FG-TO1

This table covers two rubber extrusion lines, which started operating in December, 2014. They reported in their MAERS submittal that they emitted 22,748 pounds (0.0114 tons) of VOC emissions in 2014 and 444,1882 pounds (0.2221 tons) in January through April, 2015 (see attached) for a total of 466,9362 pounds (0.2335 tons), which is well below their limit of 2.5 tons/yr (S.C. I.2). They operated these lines for 1,246.18 hours in the time period of November, 2014 through April, 2015, which calculates a VOC emission rate of 0.37 pph and is well below their limit of 0.57 pph (S.C. I.1). These lines are controlled with a thermal oxidizer and they are using a circle chart to monitor the combustion chamber temperature. Their recent uses of these lines show them to having an average temperature over 1,800°F which exceeds the minimum temperature of 1,500°F (S.C. IV.1, IV.2, V.2, and V.4). Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period VOC emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.1. I also verified that they were recording the monthly material usage and VOC content of each material used in this process. All their waste material was being stored in closed containers (S.C. IX.1). I have determined that they are in compliance with this table.

FGFACILITY

This table covers all process equipment at the facility, including equipment covered by other permits, grandfathered equipment, and exempt equipment. For 2014, they reported 37,055 pounds (18.53 tons) of PM10 and 54,391 pounds (27.2 tons) of VOC, both of which are well below their limits of 50 tons/year for PM10 and 85 tons/year for VOC (S.C. I.1 and I.2). The HAP with the largest total emission in 2014 was acrylic acid with 4,080 pounds (2.04 tons) which is well below their limit of 8.5 tons/year for individual HAP (S.C. I.3). The HAP total emission for 2014 was 5,868 pounds (2.93 tons) which is well below their limit of 15 tons/year. They used a total of 439,197 pounds (219.6 tons) of talc in the entire facility for 2014, which is well below their limit of 3,178 tons/year (S.C. II.1). Jake showed us their electronic spreadsheet where they keep track of their monthly and 12-month rolling time period VOC and PM10 emission calculations. I was able to verify that they were keeping the records as required in S.C. VI.2 and VI.3, respectively. I also verified that they were recording the monthly

material usage and VOC content of each material used in this process, which they are getting from the MSDS (S.C. VI.1). I have determined that they are in compliance with this table.

They are also keeping track of the emissions of the units that are exempt per Rule 290 and the emissions of the units that are exempt by rule other than Rule 290. Their records showed that they are in compliance with the requirements of the Part 2 exemptions. Based on their MAERS submittal and the information gathered during this inspection, I determined that they are in compliance with PTI #99-10B.

NAME

Brian Calvey

DATE

5/27/15

SUPERVISOR

