

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

N101425587

FACILITY: MAGNI INDUSTRIES INC	SRN / ID: N1014
LOCATION: 2771 HAMMOND, DETROIT	DISTRICT: Detroit
CITY: DETROIT	COUNTY: WAYNE
CONTACT: Mary Kay Heidtke , EHS Engineer	ACTIVITY DATE: 06/20/2014
STAFF: Jorge Acevedo	COMPLIANCE STATUS: Compliance
SUBJECT:	SOURCE CLASS: SM OPT OUT
RESOLVED COMPLAINTS:	

MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
INSPECTION REPORT

COMPANY NAME :Magni Industries
FACILITY ADDRESS :2771 Hammond Street, MI 48209
STATE REGISTRAT. NUMBER :N1014
SIC CODE : 2851
EPA SOURCE CLASS : B
EPA POLLUTANT CLASS : O
LEVEL OF INSPECTION : PCE
DATE OF INSPECTION : 6/20/14
TIME OF INSPECTION :11:30 AM
DATE OF REPORT : 7/11/14
REASON FOR INSPECTION : Scheduled Inspection.
INSPECTED BY : Jorge Acevedo
PERSONNEL PRESENT :Mary Kay Heidtke
FACILITY PHONE NUMBER : 313-576-3018
FACILITY FAX NUMBER : 313-576-1990

FACILITY BACKGROUND:

Magni Industries is a manufacturer of industrial coatings. Magni provides the following description from their website (www.themagnigroup.com):

"At these locations, Detroit, Kentucky & Germany, we manufacture Magni's coatings. We take raw materials and manufacture over 100 different coatings to meet customer criteria and surpass industry standards. Continuous inspections assure quality and customer satisfaction. We are also ISO-9001:2008 registered. Our manufacturing plants and research centers are located together in the same buildings which encourages idea sharing and timely resolutions to any challenges."

The Detroit facility features computer-controlled inventory of both raw and finished goods, computerized weigh-up and measuring systems, high-capacity air handling equipment, and the ability to ship finished product in a variety of bulk containers (400- gallon totes, 55-gallon drums, and 5-gallon pails). It has four 8000-gallon raw material holding tanks, as well as four 3,000-gallon holding tanks for finished goods. Its high-capacity milling equipment is dedicated by type of raw material to avoid process contamination.

The plant is South of Michigan Avenue, North of Vernor Highway, West of Junction Street, and East of Livernois Ave. in Detroit.

INSPECTION NARRATIVE:

On June 20, 2014, I conducted a scheduled inspection of Magni Industries. I arrived in the vicinity at 11:20 AM. I drove the boundary of the plant. Winds were from the North at the time of my visit. It was lightly raining with cloudy skies. I did not detect any odors on Military Street. On the other streets(Federal, Hammond, and Ranspach), I did not detect odors. I entered the facility at 11:30AM. I met with Mary Kay Heidtke and explained the reason for the inspection. We walked to her office so that we could take a look at the facility records, which are required by PTI 181-06C, which was issued May 30, 2012. Ms. Heidtke showed the records on the computer. She said that they are using DEACOM software to keep track of their records and emission calculations. She said it is similar to SAP software but better suited for smaller companies. I observed her computer and ran through the different records that are required by the permit. They appeared to be in compliance but Ms. Heidtke said she would email me a copy of the various spreadsheets. She said that she keeps records of the raw materials purchased and what is manufactured. I received the records on June 23, 2014, via email.

We talked about the process and Ms. Heidtke explained that Magni's main product are anti-corrosive coatings. The raw materials and process has essentially stayed the same since the last inspection. Ms. Heidtke explained that since the last inspection, they are using a software program equipped with a pressure sensor in the filters in the weigh up area. The program notifies staff when the pressure drop reached a certain threshold indicating that the filters need to be replaced.

After our discussion, we went into the manufacturing facility. We started in the mixers and mills area. I observed three larger mills and a small mill which is used for 55 gallon amounts. I also observed six mixers. Mixers are the 1st stage and makes the mixture homogenous. The mills breaks down the powder and is the final step. Raw materials are pumped into the mills through the bottom. The top is covered when the mill is in operation. Each of the mills is exhausted through a dust collector . At the final milling stage, the coating is tested in the QC lab to make sure that it meets the specification of the customer (viscosity, wt-solids). After the process is complete, the coating is pumped to the desired container, 55gallon drum, 5 gallon drum, or 350 gallon tote. Finished product can also be pumped to four holding tanks. I also observed four tanks which are under the floor, which you can get to by ladder. They are horizontal and have a 4000 gallon capacity. Two store resin, one stores PMA and the other one stores DBE. The PMA is used to clean the mills after each use depending on the next product.

We then went into the raw materials and finished products warehouse. Raw materials are brought in, stored, and the documents are checked for accounting purposes. The finished materials have a minimum storage time and that is due to the fact that Magni operates a batch process for the coatings. Finished coatings are stored in 5-gallon buckets and 350 gallon totes. We then went into the weigh up area. No activity was occurring at the time of the inspection.

Next, I observed a research spray booth. Records were kept near the booth and did not appear to be used often. I asked Ms. Heidtke about the oven line that operated during the last inspection and she said that it had been dismantled in 2012 and showed me where it was previously located. Ms. Heidtke also showed me a pilot resin manufacturing unit. It was not operating at the time of the inspection and was not used frequently according to Ms. Heidtke. I asked Ms. Heidtke if the facility had any boilers or emergency generators and she replied that there were no boilers or generators onsite.

We went back to the lobby. Ms. Heidtke said that she would email me the records. I left the facility at 12:35PM.

APPLICABLE RULES/PERMIT CONDITIONS:

Permit 181-06C
Issued May 30, 2012

The following conditions apply to: FGFACILITY

DESCRIPTION: All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

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POLLUTION CONTROL EQUIPMENT: N/A

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	0.02 lb VOC per lb solvent used	Test method	GC 13	R 336.1901
Compliance assumed. This is the AP-42 emission factor. Barring actual testing data, it is assumed this is the true solvent loss. .				
2. VOC	32.1 pph	Test method	GC 13	R 336.1901
Compliance assumed. Testing would be required to determine compliance.				
3. VOC	44.6 tpy	12-month rolling time period as determined at the end of each calendar month.	SC VI.3	R 336.1702(a), R 336.1901
Compliance- Emissions did not exceed 44.6 tpy VOC. Recordkeeping was provided and was placed in the facility file.				
4. PM	0.10 lbs per 1000 lbs of exhaust gas	Test method	GC 13	R 336.1331
Compliance assumed. Testing would be required to determine compliance. Observation of fabric filters and baghouse do not indicate any excess particulate emissions.				
5. Individual HAP	8.9 tpy	12-month rolling time period as determined at the end of each calendar month.	SC VI.3	R 336.1205(3)
Compliance- Emissions did not exceed 8.9 tpy for a single HAP. Recordkeeping was provided and was placed in the facility file.				
6. Aggregate HAPs	22.4 tpy	12-month rolling time period as determined at the end of each calendar month.	SC VI.3	R 336.1205(3)
Compliance- Emissions did not exceed 22.4 tpy for aggregate HAPs. Recordkeeping was provided and was placed in the facility file.				

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Solvent	4,550 gallons per day	Daily	FGFACILITY	SC VI.1, VI.2	R 336.1901
Compliance. Records indicate that the daily usage limit was not exceeded.					
2. Solvent	490,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1901
Compliance. Records indicate that the yearly limit was not exceeded.					
3. Solvent	9.1 lb VOC per gallon	Instantaneous	FGFACILITY	GC 13, SC VI.3	R 336.1901
Compliance. The solvent that is used has a VOC content of 9.05 lbs/Gallon. It is at the permit limit. Magni says that this is their highest VOC containing solvent.					
4. Resin	310,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1901
Compliance- Records indicate that the Resin limit was not exceeded.					
5. Solvent (Bulk storage tanks)	300,000 gallons per year	12-month rolling time period as determined at the end of each calendar month	FGFACILITY	SC VI.1, VI.2	R 336.1901
Compliance- Records indicate that the solvent limit was not exceeded.					

6. The permittee shall not produce more than 6,500 gallons of paint per day. (R 336.1205, R 336.1225, R 336.1702, R 336.1901)

Compliance- Records indicate that the production limit was not exceeded.

7. The permittee shall not produce more than 750,000 gallons of paint per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205, R 336.1225, R 336.1702, R 336.1901)

Compliance. Records indicate that the yearly production limit was not exceeded.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the paint manufacturing equipment at FGFACILITY for more than 6,000 hours per 12-month rolling time period as determined at the end of each calendar month. (R 336.1205, R 336.1225, R 336.1702, R 336.1901)

Compliance- Records indicate that the operation limit was not exceeded.

2. The permittee shall not operate FGFACILITY unless all provisions of Rule 630 are met. (R 336.1630, R 336.1702(a) and (d))

In compliance. No mixers, mills, and tanks were observed uncovered during operation. Cleaning solvent is stored closed containers. I did not observe cleaning of the mills at the time of inspection.

3. The permittee shall handle all VOC containing materials, including finished products, resins, and solvents, in a manner to minimize the generation of fugitive emissions. The permittee shall keep mixers, mills, and

containers covered at all times except when operator access is necessary. (R 336.1225, R 336.1702(a), R 336.1901)

In compliance. No mixers, mills, and tanks were observed uncovered during operation.

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate EU00003 unless the fabric filter is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, maintaining and operating the unit in accordance with manufacturer's recommendations. (R 336.1301, R 336.1331, R 336.1901, R 336.1910)

In compliance. Fabric Filters are maintained properly. I did not see evidence of poor operation of the fabric filter at the time of my inspection.

2. The permittee shall not operate the FGFACILITY storage tanks unless the corresponding pressure-vacuum vent, vapor balance system, and submerged fill pipe are installed, maintained, and operated in a satisfactory manner. (R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)

Compliance- The operational status of the exhaust system is checked every operating day and recorded.

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall keep, in a satisfactory manner, daily records of the hours of operation, type and amount of raw materials used, and amount of paint produced for FGFACILITY. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Records were kept.

2. The permittee shall keep, in a satisfactory manner, records of the raw materials in each FGFACILITY storage tank. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Records were kept.

3. The permittee shall calculate the VOC, individual HAP, and aggregate HAPs emission rates from FGFACILITY monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)

Compliance- Calculations were done and provided to AQD staff.

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEF1	32	46	R 336.1901
2. SVEF2	32	46	R 336.1901
3. SVEF3	18	46	R 336.1901
4. SVEF4	18	46	R 336.1901
5. SVEF5	14	46	R 336.1901
6. SVEF14	22	28	R 336.1901
7. SVEF15	24	28	R 336.1901

IN COMPLIANCE- Based on my observations, the stacks appeared to be in compliance, but no measurements were taken.

IX. OTHER REQUIREMENTS

1. N/A

COMPLAINT/COMPLIANCE HISTORY:

There have been no complaints nor violations registered against Magni Industries.

OUTSTANDING CONSENT ORDERS:

None

OUTSTANDING LOVs

None

OPERATING SCHEDULE/PRODUCTION RATE:

Magni Industries operates 10-12 hours a day, five days a week.

APPLICABLE FUGITIVE DUST CONTROL PLAN CONDITIONS:

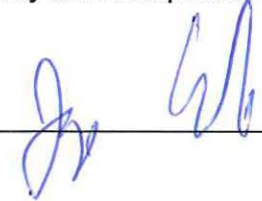
NA- Magni has paved lots.

MAERS REPORT REVIEW

Pollutant	2013 Emissions(TPY)
PM	6.62
VOC	35.54

FINAL COMPLIANCE DETERMINATION:

The facility is in compliance with applicable regulations at the time of the inspection.

NAME 

DATE 7-11-14

SUPERVISOR W.M.