

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

U25141591932290

FACILITY: MJ Manufacturing Company		SRN / ID: U251415919
LOCATION: 2441 East Bristol Road, Burton		DISTRICT: Lansing
CITY: Burton		COUNTY: GENESEE
CONTACT: Ed Arends, President		ACTIVITY DATE: 10/20/2015
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, self-initiated inspection of facility last visited by AQD in 1995.		
RESOLVED COMPLAINTS:		

On 10/20/2015, the Department of Environmental Quality (DEQ), Air Quality Division (AQD) conducted an unannounced, self-initiated inspection of MJ Manufacturing Company (MJ Manufacturing).

Environmental contact:

Ed Arends, President; 810-744-3840; mjmanufacturing@comcast.net

Lisa Garty, Quality Manager; 810-744-3840; mjmanufacturing@comcast.net

Facility description:

MJ Manufacturing is a parts coating and assembly plant, using spray painting and powder coating, when painting is done onsite.

Emission units*:

Emission unit	Description of emission unit	Michigan Air Pollution Control Rule	Status
Spray paint process	Spray painting process, with free standing bank of filter panels, and two portable natural gas heaters	287(c), 282(b)(i)	Compliance
Powder coating booth	Large powder coating booth, with natural gas-fired curing oven	287(d), 282(b)(i)	Compliance
Parts washing containers (cold cleaners)	Containers of mineral spirits	285(r)(iv), and either 611 or 707	Did not observe

*An *emission unit* is any part of a stationary source that emits or has the potential to emit an air contaminant.

Regulatory overview:

MJ Manufacturing is considered a true *minor source*, not having the Potential to Emit (PTE) to be a *major source* of criteria pollutants. *Criteria pollutants* are those for which a National Ambient Air Quality Standard exists, and include carbon monoxide, nitrogen oxides, sulfur dioxide, volatile organic compounds (VOCs), lead, particulate matter smaller than 10 microns, and particulate matter smaller than 2.5 microns. A major source has a PTE of 100 tons per year (TPY) or more, of a criteria pollutant. VOCs are likely to be the main pollutant of concern from a facility which applies paint to a product. A facility with a coating booth where liquid coatings are applied, under the Rule 287(c) exemption from the requirement of Rule 201 to obtain a permit to install, can be considered to have PTE of up to 6 TPY of VOCs, well below the 100 TPY threshold.

This facility is considered a minor or *area source* for Hazardous Air Pollutants (HAPs), rather than a major source for HAPs. A major HAPs source would have a PTE of 10 TPY or more for a single HAP, or a PTE of 25 TPY or more for combined HAPs. A PTE of 6 TPY VOC for a painting process may be considered equivalent to a PTE of 6 TPY for HAPs.

Because the facility is considered a true minor source for HAPs, it is not subject to 40 CFR Part 63, Subpart M, the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for Surface

Coating of Miscellaneous Metal Parts and Products.

This facility is not considered subject to 40 CFR Part 63, Subpart HHHHHH, Paint Stripping and Miscellaneous Surface Coating at Area Sources, which is also known as the area source Maximum Achievable Control Technology (MACT) for coating operations. A facility is subject to this regulation if they meet certain criteria, including the use of coatings containing the HAPs (compounds of cadmium, chromium, lead, nickel, and manganese) which are targeted by the MACT. It is my understanding that the coatings used by MJ Manufacturing do not contain these HAPs. The AQD has not been delegated authority from the U.S. Environmental protection Agency to enforce this regulation.

Fee status:

This facility is not considered fee-subject, for the following reasons. Because it is not a major source for criteria pollutants, it is not classified as Category I. Additionally, because it is not a major source for Hazardous Air Pollutants (HAPs), and is not subject to federal New Source Performance Standards, it is not classified as Category II. Finally, because it is not subject to federal MACT standards, it is not classified as Category III. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS). MAERS reporting would not typically be required for a facility with VOC emissions of less than 10 TPY.

Location:

The facility is located on East Bristol Road, at the west end of an industrial area. To the west is an overgrown tract of land, and an abandoned rail line, with residences 500 feet away from the plant. To the south is another overgrown piece of land, with the closest residences 500 feet to the south southwest of the plant. To the east are industrial properties for about 3,000 feet, with commercial properties past those. To the north is an industrial area, with the nearest residences about 700 feet from the plant.

Recent history:

In 2014, AQD received an e-mail from Stephanie Kammer of the Water Resources Division, regarding concerns about powder coating. She believed that paint pigment from powder coating was being emitted onto the roof of the facility, and being washed off of the roof.

AQD had previously visited this facility, in November of 1995, in response to a complaint made by a former employee. AQD determined that MJ Manufacturing Company met the exemption criteria of Rule 287(c), for the paints which they were spray applying to products, at that time. No instances of noncompliance were identified, during the 1995 visit.

Arrival:

Prior to arrival, I drove past the facility, to check for odors, and detected none. Weather conditions were partly sunny, and 65-70 degrees F, with winds out of the southwest, at 0-5 miles per hour. No visible emissions were observed coming from the facility.

I parked in the office parking lot at 11:47 AM, where I saw a vehicle present. I then met Mr. Ed Arends, President, as he was leaving the office. I explained that I would like to conduct an inspection, since S. Kammer of WRD had recently expressed a concern about the powder coating booth, and since AQD had not been here for 20 years. He explained that he was on his way to a prior engagement, but if I were to wait just a few minutes, Ms. Lisa Garty, Quality Manager, would be returning to the site, and could take me through the plant. I agreed to this, and waited a few minutes until Ms. Garty returned.

I provided a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, and provided my identification/credentials, per AQD procedure. I also provided a copy of the Boiler NESHAP informational card. Ms. Garty explained that they do not have a boiler onsite, but they do have one working hot water heater. A hot water heater at an area source of HAPs would not be subject to this federal Generally Achievable Control Technology (GACT) regulation, under 40 CFR Part 63, Subpart JJJJJJ, Section 63.11195(f). To meet the definition of a hot water heater in the GACT, the unit must be

no more than 120 gallons in capacity.

Inspection:

There are currently two employees, in addition to Mr. Arends and Ms. Garty, I was told. It is my understanding that they apply paint to steel stampings, or send these parts offsite to be coated, or sometimes plated. The parts are then assembled here, and packaged. I was informed that they are currently painting bumpers for RVs, and medium duty trucks.

Spray painting booth; Rule 287(c):

The spray painting process was not running, at the time of the inspection. They use a free standing wall or screen of mat/panel filters behind the parts they are painting. The parts travel on a chain on edge conveyor. Behind the screen of panel filters, an air intake exhausted upwards, to the outside air. I was informed that the panel filters are replaced on a daily basis.

Rule 287(c) exempts from the requirement to obtain a permit to install:

(c) A surface coating line if all of the following conditions are met:

(i) The coating use rate is not more than 200 gallons, as applied, minus water, per month.

(ii) Any exhaust system that serves only coating spray equipment is supplied with a properly installed and operating particulate control system.

(iii) Monthly coating use records are maintained on file for the most recent 2-year period and are made available to the air quality division upon request.

From a telephone call I made to Mr. Arends some time after the inspection, it is my understanding that they use less than 5 gallons of coatings per year, far below the 200 gallons per month allowed by the Rule 287(c) exemption.

There were two small, portable natural gas-fired heaters to cure paint on the parts. It is my understanding that these small, portable heaters are each far below 50 million Btu/hr in heat input capacity. Rule 282(b)(i) exempts from the requirement to obtain a permit to install equipment for space heating which burns sweet natural gas, where each piece of equipment has a rated heat input capacity of not more than 50 million Btu/hr.

Powder coating booth; Rule 287(d):

Rule 287(d) exempts from the requirement to obtain a permit to install:

(d) A powder coating booth that has an appropriately designed and operated particulate control system and associated ovens.

The powder coating booth was not operating, during the inspection. It is large enough to coat beams which are 20 feet in length, I was informed. In the booth, which was large enough to walk through, a 10 inch wide strip of filter material was missing from a vertical, wall-mounted panel of filters. I inquired as to why a portion of the exhaust inlet was not covered by filter material, and Ms. Garty advised me that she did not know why this was the case. I was informed that filter material would be put in place.

During the inspection, I checked the downspouts in the facility's east parking lot. The pavement at the outlets of the spouts showed no traces of colored pigments or powders being washed there, from the roof of the building. It is my understanding that the roof of the building is where the powder coat booth exhaust stack is located.

During my post-inspection telephone conversation with Mr. Arends, he confirmed that the missing strip of filtration material had been replaced immediately.

The curing oven for the booth is natural gas-fired, but Mr. Arends indicated that it has a rated heat input

capacity of under 50 million Btu/hr. Based on this information, the curing oven should satisfy the criteria for the Rule 282(b)(i) exemption.

Parts washing containers (cold cleaners); Rule 285(r)(iv):

A cold cleaner is defined by Michigan Air Pollution Control Rule 103(aa), as follows:

"Cold cleaner" means a tank containing organic solvent at a temperature below its boiling point which is used to spray, brush, flush, or immerse a metallic object for the purpose of cleaning or degreasing.

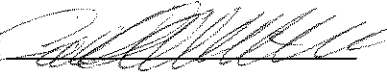
I was informed that MJ Manufacturing has parts washing containers, using mineral spirits as the cleaning solution. They would therefore be classified as cold cleaners. I was informed that the kind of mineral spirits they use is GPC95.

I did not observe the parts washers, during the inspection. Relevant Michigan Air Pollution Control Rules include Rule 611, for existing (installed prior to 7/1/1979) cold cleaners, and Rule 707, for new (installed on and after 7/1/1979) cold cleaners. These rules require written procedures for the operation of cold cleaners that comply with the provisions of the rules to be "posted in an accessible, conspicuous location near the cold cleaner." I did not check for the presence of written procedures, during the inspection. To ensure compliance with this requirement, I am mailing copies of the orange DEQ stickers which list cold cleaner operating procedures, so these can be posted in a location near the parts washer.

Conclusion:

I did not observe any instances of noncompliance. The only area of concern I identified was in the powder coating booth, where a 10 inch wide strip of filter material was missing from a wall-mounted panel of filters. A check of downspouts in the facility parking lot showed no traces of colored pigments or powders being washed there, from the roof of the building. It is my understanding that the missing filter material was immediately replaced, so this issue is considered resolved.

NAME



DATE

2/12/2016

SUPERVISOR

