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

| FACILITY: REULAND ELECTRIC CO                    |                               | SRN / ID: B2685           |  |
|--------------------------------------------------|-------------------------------|---------------------------|--|
| LOCATION: 4500 E GRAND RIVER, HOWELL             |                               | DISTRICT: Lansing         |  |
| CITY: HOWELL                                     |                               | COUNTY: LIVINGSTON        |  |
| CONTACT: Jeff Knight, Parts & Service Supervisor |                               | ACTIVITY DATE: 07/11/2018 |  |
| STAFF: Samantha Braman                           | COMPLIANCE STATUS: Compliance | SOURCE CLASS: MINOR       |  |
| SUBJECT: Semi-unannounced, so                    | heduled inspection.           | ······                    |  |
| RESOLVED COMPLAINTS:                             |                               |                           |  |

Safety Equipment Required: Steel-toed boots, safety glasses and ear plugs.

**Purpose:** Unannounced, scheduled inspection by Sam Braman and Dan McGeen for compliance with permit No. 292-91.

**Location:** Reuland Electric is in the city of Howell just North of I-96. The facility is approximately 310 feet from a daycare and 1,200 feet from the nearest residence, (map attached).

**Facility Background/Regulatory Overview:** Reuland Electric's main operations consist of manufacturing and assembly of motors and brakes for elevators and cranes. Reuland Electric is considered a minor source of air emissions. The facility operates under a Permit to Install for an electrically heated fluid evaporator No. 292-91 issued on 8/15/1991.

A *major source* has the potential to emit (PTE) of 100 tons per year (TPY) or more, of one of the 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. It is also considered a minor area source for Hazardous Air Pollutants (HAPs), because it was not considered to have a PTE of 10 TPY or more for a single HAP, nor to have PTE of 25 TPY or more for combined HAPs.

Fee Status: This facility does not belong to a category fee and is not required to report to MAERs.

Inspection: Arrived: 2:57 PM Departed: 4:00 PM

There were no visible emissions from the facility upon arrival. No odors were identified on Grand River approaching the facility or surrounding the complex.

It is best to call ahead prior to this inspection as the Corporate office in California requires the plant manager to getheir approval for government visitors. I spoke with Cathy Janis, Human Resources Assistant on Tuesday afternoo to give notice that I would be visiting. Upon arrival on late Wednesday morning, there was not yet approval from Corporate office in California. Dan and I returned just before 3 pm and were greeted by Bruce Bigos, Maintenance Lead and Jeff Knight, Parts & Service Supervisor. At the end of the inspection I explained that we like to be able to do our inspections unannounced, and I was told we might be able to get approval a couple months in advance.

Bigos and Knight led Dan and I in a tour of the facility where we first inspected the fluid evaporator which is used to remove some of the water from compressor and cutting oil. This device reduces the volume of the waste oil prior to disposal. There were no visible emissions from the process. Waste oil is manifested offsite by Crystal Clean. This process is in compliance with Permit to Install No. 292-91 which requires no visible emissions and no substitution of materials.

The cold cleaners were not in operation at this time, however all were equipped with metal lids as required. These are exempt under Rule 281(h). Since the last inspection they have added a cold cleaner so there are currently four units, however; one is not being used. The cold cleaners utilize 106 + mineral spirits and waste cleaner is manifested offsite by Crystal Clean. Dan and I provided Bigos and Knight with some Cold Cleaner Operating Procedures materials to put on their cleaners.

The paint booth utilizes water-based paint. It uses air and four layers of multiple diameter cardboard filters to capture paint. Paint usage is about 2 gallons per month of water-base coating. This process is exempt under Rule 287(c). Filters are replaced every couple months, or as needed.

Next, we looked at a natural gas oven used for curing. Parts are dipped in varnished and then set on a rack to drip dry before being placed in the oven to cure. The oven operates at 275 degrees F. This process is exempt under Rule 287(c). Varnish use is less than 30 gallons a month. There were no visible emissions from the oven stack.

There are 3 aluminum melting pots for the die casting process that produces the rotors for the motors. These parts are then sent to the natural gas annealing furnace (282(i)) installed in 1966 that operates at 1540 degrees F. This facility is not subject to 40CFR Part 63 Subpart RRR because it is not a secondary aluminum production facility and the facility is not a major source of HAPs. Only clean aluminum and unprocessed scrap that is generated onsite are melted. These are exempt under Rule 282(iv).

This facility has no boilers and no emergency generators.

Table 1: This table demonstrates the different emission units, their descriptions, permit number or exemption, and C for compliant or NC for noncompliance.

| 1 | Fluid evaporator | Electric evaporator used to remove<br>water from compressor and cutting<br>oil | PTI 292-91     | С |
|---|------------------|--------------------------------------------------------------------------------|----------------|---|
| 2 | Cold cleaners    | Four cold cleaners used periodically to clean metal parts.                     | Exempt 281(h)  | С |
| 3 | Paint booth      | Dry filter booth using 4 multiple<br>diameter layers of cardboard filters.     | Exempt 287(c)  | С |
| 4 | Curing oven      | Natural gas oven used to cure<br>varnish coated parts.                         | Exempt 287(c)  | С |
| 5 | Melting pots     | Electric melting pots used to melt<br>aluminum                                 | Exempt 282(iv) | С |

Recordkeeping: We discussed the recordkeeping requirements of PTI 292-91. Exemption 287(c) allows up to 200 gallons of paint usage per month from the paint booth. It is our understanding that the facility has less than 200 gallons of paint usage per year, and therefore less than the maximum allotted 200 gallons pe month to meet exemption 287(c). We discussed the level of difficulty associated with documenting such a minimal amount of monthly paint use, however, we agreed that the facility would try to keep better monthly records of paint usage in order to meet the exemption.

Summary: Facility appeared to be in compliance with their permit and all applicable state air regulations. No violations were noted during this inspection.

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SUPERVISOR B.M.

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