

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

N690840368

FACILITY: A & C Electric		SRN / ID: N6908
LOCATION: 41225 Irwin Road, HARRISON TWP		DISTRICT: Southeast Michigan
CITY: HARRISON TWP		COUNTY: MACOMB
CONTACT: Sam Arker , Business Development		ACTIVITY DATE: 05/10/2017
STAFF: Kerry Kelly	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Minor
SUBJECT: Based on the information gathered during this inspection, it appears A & C Electric is in violation of PTI 344-00 Special Conditions 1, 2, 5, 6, 8, 11, 12, and 13 of PTI 344-00. In addition it appear A & C Electric is in violation of R 336.1201 for installing a burn-off oven, two bake ovens, and two tanks without first obtaining a permit to install.		
RESOLVED COMPLAINTS:		

On May 10, 2017, I (Kerry Kelly) conducted a scheduled inspection of A & C Electric located at 41225 Irwin Road, Harrison Township, Michigan. This facility is identified by the State of Michigan with the State Registration Number (SRN) N6908. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and Permit to Install (PTI) Number .

A & C Electric operates an electric motor repair facility in Macomb County. The facility is immediately surrounded with industrial and commercial properties. The nearest residential area is approximately three-tenths of a mile south-southeast of A & C Electric. Equipment permitted in PTI 344-00 is a Bayco model BB-252 heat cleaning oven.

INSPECTION

On October 12, 2016 at approximately 12:45 PM, I entered A & C Electric, introduced myself, showed my DEQ photo credentials, and gave my card to Ms. Jewel Arker, President, A & C Electric. Ms. Arker told me I would need to come back when either Mr. Dan Arker or Mr. Sam Arker was available. I explained our Right of Entry regulation (R 324.5526), gave her a copy of the "ENTRY FOR INSPECTIONS" fact sheet, and asked if there was another employee available to assist me during the inspection. Ms. Arker re-iterated she would prefer I come back when either Mr. Dan Arker or Mr. Sam Arker was available. I left A & C Electric, returning on May 10, 2017.

On May 10, 2017 I called A & C Electric and spoke with Mr. Sam Arker. The purpose of the call was to determine if Mr. Dan Arker or Mr. Sam Arker would be available May 10, 2017. Mr. Arker said he would be available at the facility between 2:00 PM and 5:00 PM on May 10, 2017.

At approximately 2:50 PM on May 10, 2017, I arrived at A & C Electric, entered the office, introduced myself, showed my DEQ photo credentials, and explained the purpose of the inspection to Mr. Sam Arker, Business Development, A & C Electric. Mr. Arker answered questions and guided me during the facility walk through.

According to Mr. Arker, A & C Electric employs approximately 16 people and operates 7 AM to 5 PM Monday through Friday.

During the facility walk-through I inspected two burn-off ovens, two bake ovens, two dip tanks, a saw mill, a sand blast unit, balancers, 2 presses, 3 lathes, a milling machine, and a mig, tig, and arc welder. The equipment at the facility is used to dismantle, clean, wind, and assemble electric motors.

BURN-OFF OVENS

The burn-off ovens at A & C are used to clean copper from electric motor parts.

The first oven I inspected was a Bayco model BB-252 and is permitted in PTI 344-00. This oven was not operating at the time of the inspection.

Special Conditions 1. and 2. limit the particulate emissions to 0.05 lbs/1000 lbs of exhaust gases and 0.17 pounds/hour respectively. Compliance with the emission rates are to be demonstrated by operating the afterburner above 1400 degrees Fahrenheit, not opening the oven after the cleaning cycle has started, and keeping the records required in Special Condition 11. through 13. I sent Mr. Arker an email requesting he send the records required in Special Conditions 11. through 13. of PTI 344-00 by May 27,

2017. I have not received the records required in Special Conditions 11. through 13. A & C Electric did not demonstrate compliance with emission limits in Special Conditions 1. and 2.

Visible emissions from the Bayco burn-off oven are limited to 5 percent opacity per Special Condition 3. of of PTI 344-00. Compliance with the opacity limit was not evaluated because the oven was not operating at the time of the inspection.

Special Condition 4. prohibits the processing of asbestos or chloride containing wire insulation in the Bayco oven. Mr. Arker stated only copper, no asbestos or chloride containing insulation, is processed in the Bayco oven.

A & C is only permitted to process 300 pounds or less of coated wire in any given batch according to Special Condition 5. Records of the amount of coated wire processed per batch were requested and were not received. It appears A & C Electric is in violation of Special Condition 5.

Special Condition 6. and 9. of PTI 344-00 require the Bayco oven be equipped with a properly installed and operating afterburner and afterburner temperature monitor. I observed what appeared to be the burner for the afterburner and a temperature gauge for the afterburner on the Bayco oven. Proper operation of the afterburner includes maintaining the afterburner at a minimum of 1400 degrees Fahrenheit. Records of the afterburner temperature were requested and not received. It appears A & C Electric is in violation of Special Condition 6.

Special Conditions 7. and 8. of PTI 344-00 specifies that the permittee not open the Bayco oven after the cleaning cycle has started and that operating procedures be posted in a conspicuous place near the oven. According to Mr. Arker, the operator does not open the oven door after the cleaning cycle starts as specified in Special Condition 7. I did not see operating procedures posted in a conspicuous area near the Bayco oven. This appears to be a violation of Special Condition 8. of PTI 344-00.

Special condition 10. requires the afterburner temperature be continuously monitored. There was a chart recorder on the Bayco oven which indicates the afterburner temperature is being continuously monitored as required in Special Condition 10.

On May 18, 2017, I sent Mr. Arker an email requesting he send the following records required in Special Conditions 11. through 13. of PTI 344-00 by May 27, 2017:

- Total hours of operation, including date and time, the burn off oven was operating
- Chart recording of temperature of the afterburner while the burn off oven is operating
- Pounds of coated wire processed in each batch, including date and time

To date, I have not received the requested records from Mr. Arker. Failure to submit the requested records appears to be a violation of Special Conditions 11. through 13. of PTI 344-00.

Special Condition 14. requires the Bayco oven stack height be at least 27 feet above ground level and the stack diameter be no more than 16 inches. I was unable to see the Bayco oven stack during the inspection. Compliance with Special Condition 14. was not evaluated.

The second burn-off oven I inspected was located next to the Bayco, was smaller than the Bayco, and had a label with the name "Cramer" on it. This oven appeared to be equipped with an afterburner and temperature gauge. According to Mr. Arker, the second oven is used only about once a month and was at the facility when the Bayco oven was permitted. There is no mention of this oven in the permit application, PTI 344-00, nor the staff activity report from the year 2000. This oven is unpermitted and, as a result, is being operated in violation of R 336.1201.

DIP TANKS

Next, I inspected two unpermitted tanks used to clean motor parts. The tanks were covered and heated during the inspection. In the June 23, 2000 AQD inspection report, the inspector noted one of the tanks was filled with varnish that contained xylene and naphtha and the other tank contained water and steam. A violation notice was issued to A & C Electric on June 28, 2000 for installing and operating the varnish tank without an air quality permit. In the response to the violation the consultant stated the dip tank was "exempt under Rule 290" and the company would be switching to a "non-toxic product by the

end of the year". Mr. Arker said A & C Electric uses a non-toxic product in the tank now. I asked Mr. Arker for the safety data sheets (SDSs) for the cleaning product during the inspection. Mr. Arker said he did not know what an SDS was. I explained what an SDS is and told him he could get the information from the manufacturer. An employee pointed to a bucket next to one of the tanks and said that was the cleaning product used in the tanks. The label on the bucket read "DWS 230". Mr. Arker did not provide an SDS for the cleaning solution to demonstrate the product is "non-toxic" nor records to show the washer is exempt per Rule 290. As a result, it appears the A & C Electric is in violation of R 336.1201 for operating the dip tank without first obtaining a permit to install.

BAKE OVENS

In addition to the two burn-off ovens, I inspected a Steelman and an Enterprise electric bake oven at A & C Electric. Neither drying oven is permitted. According to Mr. Arker, the Steelman oven operates at 225 degrees Fahrenheit and is used to dry parts after they are washed. The Enterprise oven, according to Mr. Arker, operates at 325 degrees Fahrenheit. In the June 23, 2000 AQD inspection report, the inspector noted one of the bake ovens is used to bake varnish onto the wire. There was no mention of a second bake oven in the June 2000 report. A violation notice was issued to A & C Electric on June 28, 2000 for installing and operating the one bake oven without an air quality permit. In the response to the violation the consultant stated the bake oven was "exempt under Rule 290". Rule 290 emission records for the bake oven were not requested during my inspection because Mr. Arker said the solution used in the tanks was not toxic. Mr. Arker did not provide SDSs to verify the composition of the product/s used in tanks were not toxic. It appears A & C Electric is in violation of R 336.1201 for operating the bake ovens without first obtaining a permit to install.

MISCELLANEOUS EQUIPMENT

In the dismantle and assembly area of the facility I inspected a saw mill, a sand blast unit, balancers, 2 presses, 3 lathes, a milling machine, and a mig, tig, and arc welder. The emissions from each of these pieces of equipment were released into the general in-plant environment. This equipment appears to be exempt per R 336.1285(2)(i) and R 336.1285(2)(l).

CONCLUSION

Based on the information gathered during this inspection, it appears A & C Electric is in violation of PTI 344-00 Special Conditions 1, 2, 5, 6, 8, 11, 12, and 13 of PTI 344-00. In addition it appears A & C Electric is in violation of R 336.1201 for installing a burn-off oven, two bake ovens, and two tanks without first obtaining a permit to install.

NAME

K. Kelly

DATE

7/24/17

SUPERVISOR

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