

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

N690859377

FACILITY: A & C Electric		SRN / ID: N6908
LOCATION: 41225 Irwin Road, HARRISON TWP		DISTRICT: Warren
CITY: HARRISON TWP		COUNTY: MACOMB
CONTACT: Dan Arker , President		ACTIVITY DATE: 08/17/2021
STAFF: Kaitlyn Leffert	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: MINOR
SUBJECT: FY2021 Scheduled Inspection		
RESOLVED COMPLAINTS:		

On August 17, 2021, I conducted a scheduled inspection of A&C Electric, located at 41225 Irwin Road, Harrison Township, MI. A&C Electric is an electric motor repair facility that is permitted to operate a heat cleaning oven. The purpose of the inspection was to determine the facility's compliance with 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 344-00.

I first attempted to inspect the facility on August 10, 2021. I arrived at the site, but there were not any staff available to walk me through the facility, so I left my business card and said I would contact them to schedule an inspection. After an email exchange with Dan Arker, President, A&C Electric, a follow-up visit was scheduled for August 17, 2021.

I arrived at the site around 1:00 pm and met with Dan Arker. I explained the purpose of my visit and then we went back to walk through the facility. The burn-off oven was not operating at the time of my inspection but was in the process of being set up to run this week. I noted that the operating procedures were clearly posted on the burn-off oven, as required by PTI No. 344-00, S.C. 8. There was also a sign on the oven indicating that the maximum amount of coated wire to be processed per batch is 300 pounds.

In addition to the permitted burn-off oven, the company also operates a wire coating process, dismantling and assembly process, and a cold cleaner. The wire coating process is a large dip tank filled with varnish. The motors with coiled wire are dipped into the tank. During my inspection, the tank was open and recently coated wire was hanging above the tank to dry. I also observed that the cold cleaner was closed and that operating instructions were posted near the cold cleaner.

Recordkeeping

AC Electric is required to maintain records of the operating hours of the oven, continuous records of the afterburner temperature while the oven is operating, and pounds of wire processed through the burn-off oven. Last year, the facility was found to be in violation for not properly maintaining records of the pounds of coated wire processed in the oven. A&C Electric had been recording the total weight of the materials processed in the burn-off oven, not just the weight of the coated wire. The violation was resolved when AC Electric provided updated recordkeeping, where the pounds of just the coated wire were recorded on the temperature chart for each batch processed in the oven.

Following my inspection, I was provided copies of the records for every day that the oven operated so far in 2021. A&C Electric has continued to maintain records in the same format provided last year. These records include the temperature of the main chamber and the afterburner over the course of the oven operation, the time span that the oven was operated per batch, and the amount of coated wire processed in each batch. The facility therefore appears to be adequately maintaining all records required by PTI No. 344-00.

PTI No. 344-00 S.C. 5 limits the quantity of coated wire that can be processed in any given batch to 300 pounds. So far in 2021, the burn-off oven has operated on 43 days. The pounds of coated wire processed per batch ranged from 3 pounds to 285 pounds per batch. The two batches that were at the highest weight of 285 pounds were on June 24, 2021 and June 25, 2021.

PTI No. 344-00 S.C. 6 requires that afterburner temperature be maintained above 1400°F. The temperature records show that the afterburner is regularly maintained between 1,500°F and 1,580°F. On July 23rd, the afterburner temperature appeared to be just above 1,400°F for most of the operation and did drop below 1,400°F for approximately one hour. It was noted by the facility that the rear door was accidentally left open during operation of the oven on this day, leading to lower than typical temperatures in both the main chamber and the afterburner. This was the only instance where the temperature dropped below the minimum afterburner temperature. Due to short time frame in which the temperature dropped and the fact that the violation was quickly resolved, I will not be issuing a violation notice for the temperature deviation on July 23rd.

Wire Coating Process

The wire coating process at A&C Electric was previously determined to be exempt according to Rule 287(2)(c), which applies to coating processes that use less than 200 gallons of coating per month. Following my inspection, I requested copies of the records of varnish usage in the wire coating process. The provided records indicate that the facility purchases the varnish in 55-gallon drums at a time. The previous two purchases of the varnish were made on July 14, 2020 and December 17, 2020. Based on these purchase records, approximately 110 gallons of varnish were used in the wire coating process over the past year or so at the facility. These purchase records indicate that the wire coating process continues to be considered exempt according to Rule 287 (2)(c).

Conclusion

While reviewing the oven records provided by the facility, it was noted that A&C Electric operated the burn-off oven while the afterburner temperature was below the minimum permitted temperature of 1,400°F. However, this deviation was only for an hour, was noted by the company, and quickly corrected. Therefore, a violation notice is not being issued for this temperature deviation. Based on my inspection, A&C Electric appears to be operating in compliance with all other conditions of PTI No. 344-00 and applicable air quality rules and regulations.

NAME *Hailey Jeffert*

DATE 09/29/2021

SUPERVISOR *K. Kelly*