

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

N162233172

FACILITY: POLLARD (U.S.) LTD		SRN / ID: N1622
LOCATION: 775 JAMES L HART PKWY, YPSILANTI		DISTRICT: Jackson
CITY: YPSILANTI		COUNTY: WASHTENAW
CONTACT: Darrell Ward , Director of Quality, Safety, & Environment		ACTIVITY DATE: 01/19/2016
STAFF: Zachary Durham	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of PTI 89-99D and PTI 89-99E while on-site during a stack test observation.		
RESOLVED COMPLAINTS:		

Contact

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Purpose

Brian Carley and I arrived on site at around 9:00am on Tuesday, January 19, 2016. A stack test was scheduled to be conducted by their consulting firm, Derenzo and Associates, and so Tom Gasloli of AQD was also at the facility. This was an unannounced inspection that coincided with the stack test being performed.

Background

Pollard is a synthetic minor opt-out source of hazardous air pollutants (HAP) and minor for all other source categories. Their operations consist of various different printing lines that are used to produce a number of different scratch-off lottery ticket games. They are currently operating under two active permits, 89-99D and 89-99E. The most recent revision, 89-99E, is set to expire on 2/20/16 and allows Pollard to operate printing press EU_COMCO for a period of 8 hours per day uncontrolled. This measure was added in order to allow Pollard to get their new printing line, EU-TRESU, to full operational capacity.

The printing industry is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) under 40 CFR 63 Subpart KK, which includes various styles of presses. Pollard, however, is not subject to Subpart KK by meeting the requirements of an area source of HAP emission as defined in 63.820(a)(2).

During the last inspection in January 2014 the facility was issued a violation notice for failing to perform catalyst testing once every 6 months since the catalyst had been in service for 6 years or more. However, if the catalyst is replaced and less than 6 years old, it shall be tested once every 12 months. This issue has since been resolved and the system for alerting the appropriate staff when the catalyst needs to be sampled has been fixed. The most recent test was performed on 12/19/15. The catalytic oxidizer is currently able to process emissions from either EU-TRESU or EU_COMCO, but not both simultaneously.

The permits that are currently active may undergo revision in the near future, as Pollard may have a need to continue operation of equipment in a fashion covered by 89-99E. A conversation with Darrell Ward indicated that language from the voided permit, 89-99C, may be helpful to include in future modifications.

The company recently implemented a consumables tracking system that will allow them to more accurately track and control their material and chemical throughput.

Compliance Evaluation

EU-TRESU (PTI 89-99D & PTI 89-99E)

This is the emission unit for a natural gas fired flexographic printing line that has a capability of running water-based, solvent-based, and ultra violet (UV) inks. The areas of the press that utilize HAP and VOC containing compounds are covered by non-fugitive enclosures to ensure capture of potential emissions. The limits and actual emissions for this piece of equipment are as follows:

- 1) Dimethylaminoethanol (DMEA) limit of 3.25 tpy. Actual 12-month rolling emissions are 0.47 tons.

(PTI 89-99E)

- 2) VOC < 2,000 lbs/month. December 2015 monthly emissions after catalytic oxidizer were 1,086.1 lbs. (PTI 89-99D)
- 3) VOC limit of 31.8 tpy. Actual 12-month rolling emissions are 6.97 tons. (PTI 89-99D)

These calculations were made by tracking throughput based on material composition, including content of the regulated chemicals containing DMEA and VOC. Additionally, attached is the most recent catalyst performance certification as required by PTI 89-99D. This test indicates the catalyst is performing at a destruction efficiency of >98% while at a temperature of 600°F. The panel on the catalytic oxidizer showed it was currently operating at a temperature of 670°F.

FGPRINTING (PTI 89-99E)

This is the flexible group for the other four pieces of equipment set to be replaced by EU-TRESU, which are operating during this transitional period. The equipment includes EU_TAIYO, EU_AQUA-FLEX, EU_COMCO, and EU_IJ-IMAGER. The following emission limits and actual emissions have been tracked in the attached records:

- 1) VOC limit of 22.7 tpy. Actual 12-month rolling emissions are 9.76 tons.
- 2) VOC <2,000 lbs/month for EU_AQUA-FLEX. The record indicates November 2015 emissions of 1,122 lbs of VOC, which is uncontrolled.
- 3) DMEA limit of 0.45 lbs/hr for EU_AQUA-FLEX. Attached record shows 0.26 lbs/hr DMEA.
- 4) DMEA limit of 1.25 lbs/hr for EU_COMCO. Attached record shows 0.94 lbs/hr DMEA before catalytic oxidizer and 0.03 lbs/hr after.
- 5) DMEA limit of 10.9 lbs/day for EU_AQUA-FLEX. Average daily emissions for November 2015 were 3.49 lbs.
- 6) DMEA limit of 10 lbs/day for EU_COMCO. Average daily emissions for November 2015 were 0.41 lbs after catalytic oxidizer.

Additionally, the material limits listed in the record keeping indicate the fountain solution is 0.2% by weight VOC, which is less than the restriction of 5%. The second condition under the material limit conditions includes two options for compliance with coatings used in EU_TAIYO and EU_COMCO; coatings, as applied, should be either less than 25% by volume of the volatile fraction, or the non-volatile fraction must be greater than 60% by volume, as applied. Attached is a document prepared by the consultant, Derenzo, which has calculated the volatile portion at 30% by volume and the non-volatile portion at 62%, as applied.

FGFACILITY (PTI 89-99D)

This is the flexible group for the source-wide conditions and target individual and aggregate HAP emissions. The attached records show a combined total of 0.10 tons of HAP in the last 12-month rolling calendar, which is well below both the individual and aggregate limits of <9.0 and <22.5 tpy, respectively. Additionally, there are limits on Cumene at 0.17 tpy and Naphthalene at 0.10 tpy. Both of these chemicals have only just been added, so a 12-month rolling calendar is not yet available. However, during December 2015, cumene was calculated at 0.05 lbs and naphthalene at 0.24 lbs after oxidation, which is on track to be well under the permitted values.

Summary

Upon arriving at the facility Brian and I were greeted by Darrell Ward and Tom Gasloli. We signed in and were briefed on the company's privacy and safety policies. Because this facility produces sensitive material and codes important game data, they do not allow cell phones or cameras within the facility. From there, we entered the plant floor and walked through the operation of the new line being tested, EU-TRESU.

We observed water-based coating areas without the need for enclosures as well as enclosed, solvent-based application stages throughout the press. Darrell informed us that approximately a half of a mile of paper is being fed through the machine at any given moment.

Next, we headed to the testing trailer being operated by Derenzo where Tom Gasloli stayed while Brian, Darrell and I continued on a tour of the rest of the facility. We observed the other four presses and printing systems, though they were not currently running: EU_TAIYO, EU_AQUA-FLEX, EU_IJ-IMAGER, and EU_COMCO. EU_TAIYO uses a coating of <1% VOC to print on the back of tickets, which is then cured with UV lights. EU_AQUA-FLEX prints the security layers of the ticket and emissions from here are vented uncontrolled. EU_IJ-

IMAGER prints the barcodes with a water-based ink. Finally, EU_COMCO is used to apply protective coatings and the scratch-off inks to the tickets. EU_COMCO can be controlled with the catalytic oxidizer during times when EU-TRESU is not operating, but under PTI 89-99E it can be operated uncontrolled for 8 hours per day. An attached email from Darrell indicates that EU_COMCO has been operating controlled for the majority of this permitting period.

From there we observed some of the operations involving packaging the final materials. This process is carried out by several employees as well as robotic systems. Individual boxes are packed and placed on a pallet for delivery.

Compliance Status and Recommendations

I have determined that this facility is in compliance with both PTI 89-99D and PTI 89-99E.

I recommend that the facility seek any extensions or other permitting needs while they continue their transition to the EU-TRESU line before PTI 89-99E expires on 2/20/16.

NAME Jack Durham DATE 2/4/16 SUPERVISOR 