**IACES-** Activity Report

SCANNED

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

B617523972		
FACILITY: Coding Products, A Division of Illinois Tool Works		SRN / ID: B6175
LOCATION: 111 W. Park Dr., KALKASKA		DISTRICT: Gaylord
CITY: KALKASKA		COUNTY: KALKASKA
CONTACT: Lisa Surowitz , Environmental Mgr.		ACTIVITY DATE: 12/10/2013
STAFF: Gloria Torello	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Fiscal Year 2014 F	DE.	Anna Anna Anna Anna Anna Anna Anna Anna
RESOLVED COMPLAINTS:		

# Directions.

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From southbound 131 in Kalkaska, turn left/east onto Dresden Street. Turn right onto W Park Dr.

### Application.

The ROP application was the most recent application received for this facility. The ROP was issued on December 9, 2013. This facility applies solvent-based coatings to rolls of polyester film (web). There are six webcoating lines used for this purpose.

EUCOATER1, EUCOATER2, and EUCOATER3 utilize the Hot Stamp process with the Mayer Rod Coating Technology. The process uses a roll of web that travels continuously through the coating header where excess coating is applied and is then removed by the Mayer Rod. The web then proceeds to the oven for drying where the solvents (VOC) are flashed. VOC emissions from EUCOATER1 and EUCOATER2 are sent to the regenerative thermal oxidizer (RTO) for destruction. VOC emissions from EUCOATER3 are sent to the solvent vapor recovery system to condense the VOC vapors and recover the VOC for reuse.

EUCOATER4, EUCOATER5, and EUCOATER6 utilize the Thermal Transfer process with the Gravure Technology. The process uses the same polyester web used by EUCOATERS 1, 2 and 3, and the web also travels through the coating header where coatings are applied. The difference between the Mayer Rod Coating Technology and the Gravure Technology processes is, the Gravure Technology uses a smaller amount of coating that conforms to the amount of coating needed to produce the required markings on the product. Similarly, the web then proceeds to the ovens for drying where the VOC are flashed. VOC emissions from EUCOATER4, EUCOATER5, and EUCOATER6 are sent to the RTO for destruction.

EUCOAER6 may use the Mayer Rod or Gravure Technology process.

Once dried, the web is rolled and can be sent to the customer in a roll, or can be cut on site into various sizes to meet the needs of the customer.

The ROP requires 98 percent or more of the VOC must be destroyed in the RTO.

## Permit.

The MI-ROP-B6175-2013 was issued on December 9, 2013. The ROP expires on December 9, 2018.

## MACES: Regulatory Summary includes:

- 40 CFR Part 63 Subpart JJJJ,
- 40 CFR Part 64 (CAM all coaters).

## MAP, etc.

The malfunction abatement plan (MAP) was approved by the AQD on December 4, 2012. The MAP includes all six coaters.

The monitoring plan for the Capture System/Permanent Total Enclosures on EUCOATERS 1,2, 4, 5, and 6 was approved by the AQD on July 25, 2913.

## MACTS.

http://intranet.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=244... 5/22/2014

The coaters are subject to 40 CFR Part 63 Subpart JJJJ because the facility is major for HAPs.

### Records.

Records were reviewed during the site inspection, and copies of some records were provided as examples for the full compliance evaluation. The records reviewed focused on Appendices A-F. Lisa Surowitz, B6175, provided updated records/appendices that fit the new ROP. Lisa explained how the records demonstrate compliance with the permit conditions including HAPs reduction, and liquid to liquid material balance. Review included records showing compliance with the conditions of the, now one day expired, old ROP. Review of some records had only one day's worth of data because the new ROP was just issued.

## MAERS.

The 2013 MAERS included the six emission units in the ROP.

### Brochure.

The inspection brochure will be forwarded to the permittee with the site inspection notes via email.

### Reporting.

The permittee is timely in submitting the annual, semiannual, and deviation reports. Any issues with these reports would be address when they are received and reviewed. When testing, the permittee is timely in submitting to the AQD test plans, notifications, and test reports. In the past, the permittee was timely in reporting to AQD a deviation.

## CAM Reporting.

The old ROP did not include CAM requirements. The new ROP has CAM requirements and a CAM semiannual report will be needed for the reporting period January- June 2014.

### Inspection.

On December 10, 2013 Gloria Torello met Lisa Surowitz at Coding Products. Lisa is the Process Engineer, and may be reached at 231-258-5521, extension 3164. Mary Kate Phillips is the new Responsible Official. Mike Kyro is the Authorized Representative of the Responsible official. Kate Wooer no longer works at the facility.

The ROP issued December 9, 2013 was used for the inspection. The inspection started with a review of records and ended with a tour of the facility. As a general statement, the records represent compliance with the permit conditions. The facility operated during the inspection. Odors were present inside the building, but not outdoors.

#### MI-ROP-B6175-2012. EUCOATER3

EUCOATER3 is in a separate table (it is not included with FGCOATING12456) because EUCOATER3 uses a solvent recovery system for control. Different sections of 40 CFR Part 63 Subpart JJJJ apply to EUCOATER3. Only EUCOATER 3 may use coat big mix coating X-43, which is used for the products going to the medical industry.

## I. Emission Limits.

Organic HAP emissions are limited to no more than 5% of HAPs applied for each month. See the Appendix 7F record. Appendix 7F documents HAP reduction per emission unit by percent. In December 2013, the to-date record showed EUCOATER3 with 1.6% HAPs going to atmosphere.

### III. Process/Operational Restrictions.

EUCOATER3<sup>'</sup> will shut in if the recovery system malfunctions. Therefore, EUCOATER3 only operates when the solvent recovery system is installed, and purging only takes place with the solvent recovery system is operating.

### V. Testing.

Condition 1.c. is applicable to the facility. The permittee determines HAP mass fraction of coating materials by Formulation Data.

### VI. Monitoring/Recordkeeping.

The permittee monitors and keeps records per the condition.

VI.5, for CAM compliance, the solvent recovery system will shut down if the heat exchanger is out of the range of 26-51 percent. The MAP, approved by AQD on December 4, 2012 includes at IV.A, "Should...control equipment malfunction or operate outside normal operating parameters, the computer shuts down the coating lines(s) automatically."

VII. Reporting.

VII.7 AQD receive the record for 40 CFR Subpart JJJJ on March 13, 2014 for July-December 2013.

VII.8&9. The new ROP requires CAM reports. On April 16, 2014 Torello sent Lisa an email reminding her of this. Templates for CAM records are found at:

http://www.deg.state.mi.us/aps/downloads/rop/ROPbackground/CAM\_Excursion\_Exceedance\_Report.pdf

http://www.deg.state.mi.us/aps/downloads/rop/ROPbackground/CAM Monitor Downtime Report.pdf

## FGCOATING12456

FGCOATING12456, these coaters are in a separate table (they are not included with EUCOATER 3) because FGCOATING12456 coaters use the RTO for VOC control.

I. Emission limits.

Organic HAP is limited to no more than 5% applied for each month. See the Appendix 7F record. Appendix 7F documents HAP reduction per emission unit by percent. In December 2013, the to-date record showed each EU in this FG with less than 1.0% HAPs going to atmosphere.

### III. Process/Operational Restrictions.

III.1. Only EUCOATER 3 may use coat big mix coating X-43, which is used for the products going to the medical industry, X-43 is not used in FGCOATING12456.

III.2 & 3. The FG operates and cleans-up with the capture system/permanent total enclosure, and the RTO operating. The requirements of Appendix 9 (example: average velocity through all NDO must be at least 200 feet/minute) was confirmed in testing in 2012.

III. 5. The VOC destruction efficiency of 98% was documented in 2012 testing.

III.6. Records show the RTO operates above the permitted minimum of 1400 degrees F.

III.7. The continuous parameter monitoring system on the capture system/permanent total enclosure includes an alarm that goes off if, for example, a door on the capture system is left open.

III.8. Testing in 2012 demonstrated the compliance with the emission limits with the capture system/permanent total enclosure operating at -3.5" WC.

III. 9. On July 25, 2013 the AQD approved the Monitoring Plan for the Capture System/Permanent Total Enclosure on EUCOATER1, 2, 4, 5, 6. For example, the plan includes: Monitoring Approach, Indicator Range, An excursion is defined as a setting above -3.5 inches of water which is controlled by the oxidizer fan. If the oxidizer malfunctions, then the Emission Units, the process, shuts down.

III.10.-12. The MAP, approved by AQD on December 4, 2012 includes at IV.A. "Should...control equipment malfunction or operate outside normal operating parameters, the computer shuts down the coating line(s) automatically."

### IV. Design/Equipment Parameters

IV. 1 & 2. The RTO is equipped with a continuous working temperature monitor. By design, the RTO has a retention time of 0.5 seconds.

## V. Testing

In 2012 the permittee completed testing per the then active ROP. Any issues with the test results would have been addressed then. The next testing is due in 2017.

VI. Monitoring/Recordkeeping

VI.1. RTO temperature is monitored and recorded per the ROP.

VI.2.-7. On July 25, 2013 the AQD approved the permittee's monitoring plan for the Capture System/Permanent Total Enclosures (CS/PTE) on EU Coaters 1, 2, 4, 5, and 6. The CS/PTE is monitored per the plan.

VI.8. Organic HAP emissions are limited to no more than 5% of HAPs applied for each month. See the Appendix 7F record which documents HAP reduction per emission unit by percent.

VI.9. Should control equipment malfunction or operate outside normal operating parameters, the computer shuts down the coating lines(s) automatically.

### VII. Reporting

VII.4. The AQD received the report for 40 CFR Subpart JJJJ on March 13, 2014 for July-December 2013. This report is in accordance with 40 CFR 63.3400(c) and included (c)(2)(vi).

VII.5. The permittee does not have to submit this report because, 63.3400(g)(2) states in part, "Separate startup, shutdown, and malfunction reports are not required if the information is included in the report specified in paragraph (c)(2)(vi)." See also VII.4 above.

VII.10&11. VII.8&9. The new ROP requires CAM reports. On April 16, 2014 Torello sent Lisa an email reminding her of this. Templates for CAM records are found at:

http://www.deg.state.mi.us/aps/downloads/rop/ROPbackground/CAM Excursion Exceedance Report.pdf

http://www.deq.state.mi.us/aps/downloads/rop/ROPbackground/CAM\_Monitor\_Downtime\_Report.pdf

IX. Other.

On July 25, 2013 the AQD approved the Capture System/Permanent Total Enclosure plan. On December 4, 2012 the AQD approved the MAP.

### FGCOATING ALL

I. Emission Limits.

I.1. For the VOC emissions in pounds per hour, see the Appendix 7D record, VOC emissions are below the 47.9 #/hr limit.

I.2. For the VOC emissions in tons per year, see the Appendix 7E record-which shows VOC emissions are below the 171.9 tons/year (the January 21, 2013 record shows VOC emissions of 25.99 tons per year rolling).

I.3. For the VOC emissions in pounds per gallon of solids applied, see the Appendix 7B record. The records provided are from December 1 & 7, 2013 and are blank. The blank means the permittee did not use the alternative in I.3.

III. Process/Operational Restrictions

III.1. Waste coatings and/or solvents are recovered or sent to Safety Clean.

## V. Testing

V.1. In 2012 the permittee completed testing per the then active ROP. Any issues with the test results would have been addressed then. The next testing is due in 2017.

V.2. Daily the permittee tests the VOC content of non-waterborne coatings.

V.3. Every five years stack testing confirms the VOC emissions in pounds per gallon of solids applied for each coater in EUCOATER 3.

VI. Monitoring/Recordkeeping

The permittee calculates and records the VOC emissions as required in Appendices A-E.

\*Lisa said she will request from AQD a change/minor modification to Appendix 7B.

### VIII. Stack/Vent

The stack did not change with the new ROP.



IX.1. The web coating lines are labeled.

IX.2. The RTO or SRS are installed and operating during clean-up and purge operations.

## FG COLDCLEANERS

The permittee is meeting the intent of the cold cleaner conditions.

Preventative Maintenance/Malfunction Abatement Plan. The permittee is meeting the intent of the MAP.

\*Page 6 of the MAP references Appendix A, but does not include any appendix. Torello will resolve this with Lisa.

Monitoring Plan on Capture System/Permanent Total Enclosure on EUCOATERs 1, 2, 4, 5, and 6. The permittee is meeting the intent of the Monitoring Plan on Capture System/Permanent Total Enclosure monitoring plan.

### Other.

On 4/16/14 Torello sent Lisa via email scanned copies of the approval letters and associated MAP, and Monitoring Plan Capture System/Permanent Total Enclosure on EUCOATERs 1, 2, 4, 5, and 6, per Lisa's request.

## Compliance Status.

At this time the permittee and AQD are not involved in an escalated enforcement action. Based upon this review, the facility is in compliance with the conditions of the ROP.

\*Follow-up needed. NAME

DATE 5-22-14

SUPERVISOR