

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

B617567663

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 , Production Manager	ACTIVITY DATE: 05/25/2023
STAFF: Sharon LeBlanc	COMPLIANCE STATUS: Compliance
SUBJECT: 2023 FCE identified a limited number of recordkeeping issues that the Facility has committed to correcting. sgl	SOURCE CLASS: MAJOR
RESOLVED COMPLAINTS:	

On May 25, 2023, AQD District Staff conducted an unannounced, scheduled site inspection of Coding Products, a division of Illinois Tool Works (B6175) (AKA the Facility), located at 111 West Park Drive, Kalkaska, Kalkaska County, Michigan.

The Facility operates under MI-ROP-B6175-2013. The ROP renewal application for the referenced permit was received on May 17, 2018, and determined complete and the Application Shield was issued on June 6, 2018. The document is under peer review.

The most recent site inspection was conducted on August 31, 2021. No compliance issues were identified at the time of the site inspection.

Weather conditions at the time of the site inspection consisted of clear blue skies, with temperatures in the mid-40's. Little to no wind was noted. No visible emissions were noted from the stacks associated with the Facility. Neither coating lines 3 nor 5 were operating at the time of the May 23, 2023, site inspection.

District Staff met with Lisa Surowitz, Production Manager. Mr. Ian Rittof, the former environmental contact has been gone for appx. 3 years and has not been replaced. Ms. Surowitz reported that her last day is June 9, 2023. Mr. Mike Kyro, operations manager, will be the contact until staff is replaced.

It is worth noting that at the time of the site inspection, records were maintained in the form of daily and monthly printouts in a three-ring binder. The data contained appeared to be complete and in compliance with recordkeeping requirements under the ROP. Copies of records for review were requested at the time of the May 25, 2023, site inspection, and were received electronically later that day. Supplemental information was requested as part of records review/report preparation activities.

SOURCE DESCRIPTION

The Facility is located in the Kalkaska Enterprise Industrial Park located at the intersection of Dresden Road and Park Drive, Village of Kalkaska, Kalkaska Township, Kalkaska County, Michigan. Located at the center of the industrial park which is bounded to the south and west by residential properties, to the north by a mix of commercial/industrial properties and to the east with a mix of undeveloped properties and residential properties.

Coding Products, Incorporated has been in business since 1977. The facility was purchased by Illinois Tool Works in 1991 and reports both domestic and international sales of their products. Their product line consists of hot stamp foils and thermal transfer ribbons used in a wide range of printing services, and can be found on piping, cable, medical equipment, credit cards and wine corks. With respect to process, the facility applies solvent-based coating to rolls of polyester film, (AKA web). The source operates:

- Hot stamp marking (HS), and
- Thermal Transfer (TTR)

There are 6 web-coating lines (EUCOATER1 through EUCOATER6, FGCOATINGALL) presently being used onsite. Inks are mixed onsite and are stored predominantly in 55-gallon drums onsite. The Facility is divided into two sections three coating lines in each, and each with their own blending/hazardous material storage rooms. Pigments are added as mixed. The facility operates their own product lab to confirm ink quality and VOC content. HAP content for their inks is determined from raw material information and calculated when the formulas are developed.

Equipment – Permitted

Permitted equipment associated with the site includes the six coating lines (EUCOATER1 through EUCOATER6) and their associated pollution control devices and three cold cleaners (COLDCLEANERA through COLDCLEANERC). The nine EUs are organized into three Flexible Groups (FGs). The six coating lines are part organized into two FGs, and are summarized below:

EU (installation date)	Flexible Group	Pollution Control Device	VOC limit
EUCOATER1 (1978)	FGCOATING12456 FGCOATINGALL	RTO with Capture System/Permanent Total Enclosure	Yes
EUCOATER2 (1981)	FGCOATING12456		Yes

	FGCOATINGALL	RTO with Capture System/Permanent Total Enclosure	
EUCOATER3 (1985)	FGCOATINGALL	Solvent Recovery System	Yes
EUCOATER4 (1998)	FGCOATING12456 FGCOATINGALL	RTO with Capture System/Permanent Total Enclosure	Yes
EUCOATER5 (1999)	FGCOATING12456 FGCOATINGALL	RTO with Capture System/Permanent Total Enclosure	Yes
EUCOATER6 (2001)	FGCOATING12456 FGCOATINGALL	RTO with Capture System/Permanent Total Enclosure	Yes

The cold cleaners are primarily for manual cleaning of coating line rods, etc. Each cold cleaner meets the 10 square foot air/vapor interface requirement for Rule 201 exemption (Rule 281(2)(h)). All three of the cold cleaners are part of FGCOLDCLEANERS. A previous review of records indicated that there was a total of four cold cleaners associated with the site. EUCOLDCLEANERA through EUCOLDCLEANERD were installed in 1993, 1985, 1999 and 2001, respectively. Per MAERS EUCOLDCLEANERD was dismantled in 2017. This unit was not in operation, and therefore not identified in the 2013 ROP.

Equipment – Exempt

Exempt equipment identified in the ROP renewal package (Part D) include twelve storage tanks (DVTANK1 through DVTANK12) and solvent distillation equipment (DVDISTILLATION).

EU ID	EU Description	Rule 201 Exemption
DVDISTILLATION	Solvent Distillation Equipment	Rule 285(2)(u)
DVDRUMWASHER	Drum Washer	Rule 281 (2)(e)

* Rule (2)(285)(u)), which exempts solvent distillation and antifreeze reclamation equipment that has a rated capacity of not more than 55 gallons was identified.

Evaluation of the drum washer indicated that under Rule 281(2)(e), which includes equipment used for washing and drying materials in which 1) the materials itself cannot become an air contaminant, 2) no VOC with a vapor pressure greater than 0.1 millimeter of mercury at standard conditions are used in the process, and 3) no oil or solid fuel is burned.

With the exception of Tank 7 – Acetone, which is reported to be exempt from Rule 201 permitting under Rule 290(a)(i), the remaining containers are reported exempt from Rule 201 permitting under Rule 284. The tanks reported onsite as well as the Rule 201 exemption citations and Rule 212(4) citations are summarized below:

Tank Content	Tank ID (DVTANK#)	Rule 201 Exemption
Toluene	1 & 2	Rule 284(i)
Methyl Ethyl Ketone	3, 4 & 10	Rule 284(i)
Blend 1*	5 & 6	Rule 284(i)
Acetone	7	Rule 290(a)(i)
Isopropanol	8	Rule 284(i)
Methanol	9	Rule 284(n)
Blend 6*	11	Rule 284(i)
Blend 4*	12	Rule 284(i)

* The “Blends” are Methyl Ethyl Ketone and toluene blends used for inks. Note that Tank 11 is used for cleaning or is sold.

Ten of the above tanks reference Rule 284(2)(i) as the exemption for Rule 201 permitting. The referenced exemption is for: *Storage, mixing, blending or transfer operations of volatile organic compounds or non-carcinogenic liquids in a vessel that has a capacity of not more*

than 40,000 gallons where the contents have a true vapor pressure of not more than 1.5 psia at the actual storage conditions.

Rule 284 (2)(n), which is referenced for tank #9 is for “*storage of methanol in a vessel that has a capacity of not more than 30,000 gallons.* “

The above ground storage tank farm onsite consists of tanks with tertiary containment. All the tanks were well below the 30,000 and 40,000-gallon capacity specified in the exemptions.

Process Description

EUCOATER1, EUCOATER2 and EUCOATER3 utilize the HS process with the Mayer Rod coating technology. The Mayer Rod Coating technology consists of a metal rod wound with a tight spiral of wire. The grooves between the wire coil determines the amount of coating applied to a web substrate. The thickness of the coating is proportional to the diameter of the wire on the metal rod. The coating appears as straight lines across the web substrate until surface tension of the coating pulls the stripes together to form a flat surface. The web then proceeds to the oven for drying during which the solvents (VOC) are flashed.

VOC emissions from EUCOATER1 and EUCOATER2 are sent to the regenerative thermal oxidizer (RTO). VOC emissions from EUCOATER3 are sent to the nitrogen blanket solvent vapor recovery system to condense the VOCs for reuse. These three lines are located in the northern portion of the building.

EUCOATER4, EUCOATER5 and EUCOATER6 utilize the TTR process with the Gravure technology. The process uses the same polyester web which travels through the coating header where coatings are applied. The Gravure coating technology relies on an engraved roller running through an enclosed chamber, which fills the engraved portion of the roller with coating. The excess coating is wiped from roller and the remaining coating is then deposited onto the web. As with the Mayer Rod technology, surface tension of the coating causes a flat surface to form. 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 VOCs are flashed. VOC emissions of EUCOATER4, EUCOATER5 and EUCOATER6 are sent to the RTO for destruction. EUCOATER6 can be used as either a Gravure or Mayer Rod process. These three lines are located in the southern portion of the building.

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

Permitting History

The following summarizes the permit history for the coating lines onsite:

Coating Line #	Permit	Permit Issuance Date	Comment
1	413-77	8/5/1997	Installation
2	413-77A	12/1/1980	Installation
3	383-84	5/14/1984	Installation
4	651-89	1/29/90	Installation
1-4	321-92	9/11/1992	all 4 lines incorporated into one permit. Lines 1&2 = RTO, Lines 3&4 = solvent recovery.
Na	321-92B	1/28/1998	Replacement RTO
Na	321-92C	4/14/1998	Replacement of components of line 4, and tie into RTO
5 & 6	321-92D	July 1999	Relocation of lines 1 & 4, and installation of lines 5 & 6.
3	224-03	4/1/2004	Revision of 321-92D with respect to line 3

321-92A issued on July 28, 1995, for a soil vapor extraction system which has since been removed and the permit voided. Permit 31-92D best reflects the present Facility layout. No permits have been issued since the 2013 ROP renewal. No ROP modifications have been processed since issuance of MI-ROP-B6175-2013.

Regulatory Summary

The Facility is considered a major source based on the potential to emit (PTE) criteria pollutant (VOC) emissions of greater than 100 tons per year. In addition, the Facility is considered a major source of Hazardous Air Pollutants (HAPs) based on combined PTE of combined HAPs is greater than 25 tons per year. Actual VOC emissions reported for 2021 and 2022 are 24.246 TPY and 21.883 TPY, respectively.

The PTE greenhouse gases reported as part of the 2013 ROP renewal package indicated that the Facility had the PTE CO₂ equivalent gases of less than 100,000 tons per year.

The Facility is not considered a Prevention of Significant Deterioration (PSD)(40 CFR Part 18) Facility as at the time of New Source Review (NSR) accepted a limit that kept the potential to emit for VOCs to less than 250 tons per year.

Based on the PTE pre control emissions of greater than 100 tons per year, the source is subject to Compliance Assurance Monitoring (CAM) (40 CFR Part 64). A revised CAM plan was included as part of the ROP renewal package. All six coating lines are subject to CAM.

National Emission Standards for Hazardous Air Pollutants (NESHAP) regulations promulgated pursuant to Section 112 of the Clean Air Act (CAA) are found in 40 CFR parts 61 and 63. NESHAP or Maximum Achievable Control Technology (MACT) standards apply to major source of Hazardous Air Pollutants (HAPs). Major sources of HAP are defined to have either > 10 tons/Year of any individual HAP, or >25 tons of combined HAPs. The subject site is identified as being subject to 40 CFR Part 63, Subpart JJJJ, the MACT Standards for Paper and other Web Coating. Requirements under the subpart were incorporated into the ROP during the 2013 renewal.

40 CFR part 63 subparts EEEE (Organic Liquid Distribution MACT) (OLD MACT) are also believed to be required onsite, as the site includes storage tanks, mixing tanks, transport piping, etc. that is associated with the manufacturing process onsite. The Facility has indicated that it does not believe that it is subject to the referenced MACT due to being subject to the MACT Standards for Paper and other Web Coatings. However, the Subpart JJJJ MACT standards do not identify the OLD equipment by definition as part of the affected source. As part of the ROP Renewal process, it was determined that unless either modifications to the tanks, or increases in organic liquid usage and transfer onsite occur, the only requirements under the subpart will be recordkeeping and reporting.

The Facility reports that fugitives are determined using a mass balance calculation, and reflects the difference between the calculated total emissions, less the destruction efficiency (ies) and RTO emissions.

In addition to the above referenced information:

- The source is not subject to the federal ozone-depleting regulations (40 CFR Part 82).
- The source is not subject to the Federal prevention of accidental release regulations (Section 112(r) of the Clean Air Act Amendments, 40 CFR Part 68).
- The source has never been subject to the Cross-State Air Pollution Rules (CSAPR) or the Acid Rain Program.

Emission Limits, Pollution Control and Monitoring Requirements

Emissions associated with the Facility consist of VOCs/HAPs. As part of the most recent ROP renewal application (Part C) the Facility reported the following Potential to Emit.

Parameter	Potential to Emit	Comment
VOCs and HAPs	171.9 Ton/year each	Potential to Emit is limited by legally enforceable limit (FGCOATINGALL)
Fugitives	69.69 Ton/year	Mass balance calculation, corrected to reflect destruction efficiency(ies) and RTO emissions.

Plans- The Facility submitted the required plans as part of the 2018 ROP Renewal Application. The documents have been revised and resubmitted, during the ROP renewal process. Approval letters for the most recent revisions have been issued on June 7, 2023, as part of this FCE determination. These documents included:

Document	UAR	EU-Parameter
Startup/Shutdown/Malfunction Abatement Plan (SSMAP) (12/30/2014)	63.6(e) R336.1911, R336.1912	EUCOATER3- HE-4 Heater liquid levels O2 concentrations
	63.3350 (f)	FGCOATING12456

<p>Monitoring Plan for the Capture System/Permanent Total Enclosures (CS/PTE) (5/17/2018)</p>		<p>CS/PTE pressure sensors and RTO fan differential pressures-</p>
<p>Compliance Assurance Monitoring Plan (CAM Plan). (5/17/2018)</p>	<p>64.6 & 64.7</p>	<p>All 6 coating lines – FGCOATING12456 – RTO temp, RTO differential pressure, and CS/PTE pressure sensors EUCOATER#3 -- micro motion meter flow/recovered volume</p>

The Facility utilizes both computer operated Data Acquisition System(s) (DAS) and Process/Parameter Monitoring System to operate process equipment, pollution controls and collect data required to verify compliance with permit requirements. Auto shutdowns of process equipment are in place should pollution control devices fail, or operational parameters exceed set ranges.

The following summarizes the pollution control devices and their respective EU/FG and parameters. The same parameters are not monitored in all three plans.

Control Device	RTO	PTE	Solvent Recovery System
Document	<p>CAM Plan SSMAP CSPT Monitoring Plan (fan only)</p>	CSPT Monitoring Plan	<p>CAM Plan SSMAP</p>
EUs	<p>FGCOATER12456 FGCOATINGALL</p>	<p>FGCOATER12456 FGCOATINGALL</p>	EUCOATER3

Monitoring Parameter	RTO Temp RTO Differential Pressure across fan	RTO Differential Pressure CS/PTE Pressure sensors	O2 sensor Liquid/solvent levels
DAS	RTO Temperature only	RTO Temperature and CS/PTE pressure sensors	No
monitoring Device	two integrated thermocouples (temp)	differential pressure across RTO fan (maintained by vacuum sensor transducer) 1 pressure sensor for each CS/PTE	O2 sensors
Operational Range	1600-1650 degrees F 0.5 second residency	<-3.483 in H2O differential pressure across RTO fan <-0.007 in H2O minimum vacuum for each CS/PTE	50% fluid/solvent level %
Auto Shut down point	1450 degrees F outside of -3.0 to -4.0 inches of H2O	None	> 82% fluid/solvent level O2 levels >5%
Start up	1450 degrees coating process is initiated	None	O2 levels <3.5%
Other	verification testing of destruction efficiency every 5 years	If RTO shuts down, process interlock also shuts down coating lines. verification of capture efficiency every 5 years	Weekly liquid-liquid material balance Daily Mass Balance calculation performed

COMPLIANCE –

Consent Orders - A review of District Files indicates that two consent orders are of record for the Facility and include:

ID Number	Termination Date	Violation
7-1992	Feb. 3, 1998	Emission exceedance
22-2007	December 29, 2010	Failure to complete timely testing of MACT requirements

Emission calculations associated with MI-ROP-B6175-2013 are completed using Forms 7A-7F from the ROP Appendices. Note that at the time of the May 25, 2023, site inspection, the Facility reported that these forms are maintained to show compliance. The forms are as summarized:

- Form 7A, Daily VOC emission rates for EUCOATER3 and FGCOATINGALL
- Form 7B, Average lbs VOC per gallon applied solids for each coater per calendar day
- Form 7C, total Actual Combined VOC for Each coating line for Calendar week
- Form 7D, Daily and weekly VOC emissions in lbs/hr from all coating lines plus cleanup and purge operations
- Form 7E, Total VOC Emissions for FGCOATING-ALL for calendar month and 12-month rolling
- Form 7F, Monthly HAP emissions for EUCOATER3 and FGCOATING12456
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Copies of the required daily and monthly forms for select dates were provided upon request and were used to determine compliance with permit limits. Select data from these forms and other records are incorporated into this document.

MAERS – The Facility reports annual emissions in MAERS. A review of submittals for calendar years 2021 and 2022 indicated that the Facility uses MAERS emission factors to determine annual emissions for reporting. The Facility has historically used Reporting Groups “RG”, and have clumped together EUs utilizing the RTO as a pollution control device. Emissions reported for the source for two most recent calendar years are summarized below:

Calendar Year	NOX (TPY)	SO2 (TPY)	VOC (TPY)

2021	2.212	0.009	24.246
2022	2.373	0.10	21.883

EUCOATER 3 -

EUCOATER3 is unique to the 5 other coating lines in that it operates a nitrogen blanket solvent vapor recovery system as a control rather than a PTE and RTO like FGCOATING12456. The solvent recovery unit operates continuously when EUCOATER3 is in operation. At the time of the May 25, 2023, site inspection EUCOATER3 was not in operation.

In this coating line, the coating is added to the web substrate which immediately enters a drying oven through a curtained opening. The oven contains a nitrogen atmosphere that is vented to the solvent recover skid. A series of heat exchangers (condensers) remove the volatile organic compounds from the nitrogen gas and the “clean” nitrogen is recycled back to the oven. Volumes of volatile matter recovered by the solvent recovery device is measured by a micro motion meter.

The micro motion meter (Micro Motion Model D and DT Sensor, SN 2060950 purchased July 30, 1998) is reported by the Facility to not require calibration. In addition, the Facility reports resetting the unit at the beginning of each run, with manual logging of throughput throughout the day and at the end of each run. The data is used by their “ERP” system to generate the Appendix 7 calculations. (monthly). Volatile emissions can only occur prior to and following drying in the oven.

Emission Limits -- Emission limits for EUCOATER3 are based on a 95% reduction of organic HAPs (monthly). (SC I.1) Organic HAP data for select dates is summarized below:

Calendar Month	Organic HAP
March 2022	3.0%
June 2022	2.0%
September 2022	3.3%

December 2022	3.2%
March 2023	3.5%
Limits	5% (SC I.1)

Material Limits – No material limits exist for EUCOATER3.

Process/Operational Restrictions – Under the existing ROP, EUCOATER3 is not allowed to operate and/or purge unless the solvent recovery system is installed and operating (SC III.1 & III.2). The Facility reports that the solvent recovery system is installed and operating properly, and has been verified in previous site visits, though it was not operating at the time of the May 25, 2023, site inspection.

SC III.3 requires the permittee to determine volatile matter recovered and conduct monthly liquid-liquid material balance. Readily available records appear to indicate compliance with the requirement. As previously indicated this is completed using a micro motion meter, which in compliance with SC III.4 is calibrated (done at Factory), maintained and operated per the manufacturer's specs, and is certified by the manufacturer to be accurate to within plus or minus 2 percent by mass required under SC III.4(+/- 0.15% liquid by liquid and +/- 0.65% gas) per the manufacturer)

Design/Equipment Parameters – None

Testing/Sampling – The permittee is required to determine the organic HAP mass fraction of each coating material “as-purchased” by one of three methods (SC V.1): Method 311, Method 24, or formulation data. In compliance with the permit condition, the Facility utilizes formulation data to determine the organic HAP mass fraction of each coating material. Each coating being mixed on-site and assigned an ID for tracking based on the coating/product and color. The facility operates their own product lab (including a solids analyzer) to confirm ink quality, percent solvents and VOC/HAP content.

Monitoring/Recordkeeping – Requirements for EUCOATER3 includes the following monthly records under SC VI.1:

- Material usage, (note records summarized daily as part of Appendix 7A form)
- Organic HAP content (% HAP from coating formula as part of Appendix 7A)
- Organic HAP usage
- Volatile matter usage
- Coating Solids usage

As previously indicated, the Facility shows compliance with recordkeeping through forms Appendix 7A through 7F. At the time of the inspection, it appears that only daily and/or weekly records are being kept with respect to the above referenced records primarily in forms 7A. The data exists for compiling monthly totals, however, at this time it is not summarized for the month. Written documentation that the Facility was previously notified that the required monthly summary requirements were not being met in compliance with SC VI.1 was not found. The Facility was notified of this deficiency as part of this site inspection and has committed to meeting the monthly recordkeeping for SC VI.1.

Records are also required with respect to all liquid-liquid balances performed (SC VI.2), which are required at minimum on a monthly basis using the form in Appendix 7A or an equivalent form to convert the data and determine the following: (SC VI.3)

- The mass of each coating material applied on the web coating line, (Appendix 7A)
- The organic HAP content of each coating material as-applied, (Appendix 7A)
- The amount of volatile organic matter recovered for the month.

Copies of the Appendix 7A form with required data and subsequent form 7F, are maintained by the Facility and appear to be in general compliance with the referenced conditions. Select data for EUCOATER3 for May 24, 2023, indicates that only one coating was applied (Ink 100008) :

Coating Used	Mass of Coating Material as-applied	Organic HAP Content as-applied	Gallons solid as applied
May 24, 2023	1.94 lbs VOC/gallon	48.17%	44.37

Select monthly data is presented below:

Calendar Month	Total HAP as Applied	Actual Organic HAP Emissions	Volatile Organic Matter recovered (%)
March 2022	58469.85	1775.88	97
June 2022	31540.39	620.17	98
September 2022	31634.49	1049.03	96.7

December 2022	40149.00	1282.98	96.8
March 2023	49179.50	1720.89	96.5

It should be noted the SC VI.4 requires determination of allowable organic HAP emissions on a monthly basis. The UAR identified for this condition is 63.3370(l). However, upon closer review it appears that the identified UAR is for emissions reductions using an RTO, which is not applicable for EUCOATER3. This EU would be subject to 63.3370(j) based on the solvent recovery system, and compliance is shown per 63.3370(j)(1)(x)(a) (\geq 95% recovery of volatile organic matter).

The permittee is required to monitor the P2 blower and liquid level on HE-4 on the solvent recovery system as indicators of a properly functioning solvent recovery system. (SC VI.5 & SC VI.6). The referenced parameter monitoring is part of the Facility CAM Plan for EUCOATER3. The Facility reports that the solvent recovery system is considered an “always controlled” system because it has an auto shutdown should the levels go out of range. No requirements for recording of the P2 blower and the HE-4 liquid level are included in the ROP.

In general compliance with SC VI.9 and the CAM Plan, the Facility reports that the vendor maintains a blower and parts to allow for expeditious restoration of EUCOATER3 including the control device and associated capture system) (SC VI.8). The Facility report that valves, etal are common and readily available.

No monitoring malfunctions (SC VI.7), exceedances or excursions have been reported for the Facility since the previous site inspection. Per the Facility the solvent recovery system does not have a lot of moving parts. In 2022 there was a replacement of the liquid nitrogen line solenoid valve due to a failure. Recent repairs included a blower was replaced on April 9, 2023. The system is monitored through the Wonderware software which has not been replaced since it was installed.

Records provided by the Facility at the time of the inspection, as well as supplemental records provided electronically appear with the limited exceptions noted to be consistent with the monitoring and record keeping requirements under MI-ROP-B6175-2013. It is noted that records for the Facility are predominantly hardcopy records printed from the Facility’s DAS system.

Reporting –The permittee is required to submit the following reports:

- Semiannual and annual certifications of compliance (SC VII.1 & 2)
- Notification of any deviation for any averaging period the permittee does not have valid monitoring data and such data required (SC VII.6)

- Semiannual compliance reporting for subpart JJJJ as required by 40 CFR 63.3400(c). (SC VII.7)
- Semiannual monitoring reports for CAM excursions and/or exceedances (SC VII.8) or monitor downtime (SC VII.9)

A review of document submittals indicates that the Facility has submitted the referenced documents as required and in a timely manner. It should be noted that initial review of the District Files failed to identify semiannual submittal of compliance reporting under Subpart JJJJ (SC VII.7). The Facility was able to confirm the submittals for the calendar years 2021 and 2022, however it was noted that the submittals were identified in the “other reporting” portion of the AQD EQP form 5736 (aka cert form) submitted as part of the compliance package, that portion of the document is “additional monitoring reports other applicable documents required by the RO Permit are attached as described”. There were no attached documents, so administrative staff did not input the attempted submittal. The reporting requirement has been provided to Facility Staff.

In addition, the permittee is required to submit two copies of complete test protocols to the AQD at least 30-days prior to the anticipated test date (SC VII.3), 7-day advance notification of testing (SC VII.4) and two copies of test reports with test results to the AQD within 60-days following the last date of the test (SC VII.5). With the exception of submittal of test results for the June 2, 2022, test activities, the Facility appears to be in compliance with the referenced test reporting requirements.

Stack/Vent Restrictions – None

Other Requirements – The permittee is required under SC IX.1 to demonstrate the overall organic HAP control efficiency is equal to 95% on a monthly basis.

SC IX.2 requires the permittee to maintain a SSMAP approved by the AQD. This document as previously indicated in this report has been prepared and the most recent revision submitted as part of the ROP Renewal Package. Components of the plan are summarized earlier in this report.

SC IX.3 contains a high-level citation requiring compliance with all applicable requirements of 40 CFR, Part 63, Subpart JJJJ, NESHAP: Paper and Other Web Coating. Applicable requirements under the subpart have been previously incorporated into the ROP, and compliance with the ROP would reflect compliance with the subpart.

SC IX.5 & 4 refer to compliance with all applicable requirements of 40 CFR, Part 64 (Compliance Assurance Monitoring) and notification requirements should the CAM Plan be found to be inadequate. A CAM Plan for the Facility was included in the most recent ROP

Renewal Package, and has been summarized earlier in this report. Components of the plan have been incorporated as permit conditions and have been addressed previously.

The CAM Plan for the Facility consists of two parts. The first being the monitoring requirements associated with the RTO and CS/PTE which controls emissions for FGCOATING12456. The second portion being monitoring requirements proposed for the solvent recovery system associated with EUCOATER#3. The biggest changes associated with the CAM plan for the Facility reflects changes from operational setpoints to development and recording of operational ranges for parameters determined to reflect proper operation of the control devices.

During recent discussions it has been indicated that the RTO fan is located before/upstream of the RTO and that fan speed, and ultimately the differential pressure across the RTO fan is monitored/controlled by a vacuum sensor transducer. The -3.5 inches of H₂O differential pressure reflects the setpoint for the RTO fan has historically been a CAM parameter for the RTO and the CS/PTE. Sensors in the CS/PTE allows for adjustments in Fan speed to maintain the vacuum and a differential pressure across the fan at the desired -3.5 inches of H₂O.

The most recent revision of the CAM Plan also identifies an operating temperature excursion of less than the 3-hour rolling average of 1609 degrees Fahrenheit, or as determined by the most recent destruction efficiency testing.

With respect to the solvent recovery system, there appears to be only a limited number of parameters that can be monitored. Facility staff indicated that in general, the operating software parameters were determined by the developer to ensure safe operation of the unit, not necessarily ensure maximum VOC recovery.

FGCOATING12456 –

EUCOATER1, EUCOATER2, EUCOATER4, EUCOATER5 and EUCOATER6 all utilize a capture system (permanent total enclosure or PTE for each coating line) and shared RTO to meet emission limits. The RTO operates continuously when any coating lines (except EUCOATER3) is operating. The RTO fan pulls emissions from the PTE, creating a negative pressure environment and sends them into the RTO for destruction in the combustion chambers. The RTO secondary combustion chamber (two chambers) temperature is reported to have an operational setpoint of 1600 degrees Fahrenheit and is monitored continuously by a DAS'. The system records the RTO temperatures every 5-minutes.

All 5 lines are considered "always controlled" workstations, in that the workstation and it's associated dryer is ducted directly to the RTO control device with no bypass. Should the RTO fail, there is an interlock that will shut down the coating lines.

Conditions for FGCOATING12456 focus on organic HAP and MACT requirements for the five EUs and their associated pollution control devices.

Emission limits – Emissions associated with FGCOATING12456 are limited to no more than 5% of the organic HAP concentration as applied (SC I.1) and reflects a 95% reduction by the pollution controls. Compliance with the limit is verified by stack testing (SC V.2 & 3). The results of which are summarized below:

Date	Parameter	Inlet Average Collection Rate (lb/hr)	Outlet Average Emission Rate (lb/hr)	Measured Destruction Efficiency (%)
April 24-25, 2012	VOC	286.7	2.658	99.1
April 18, 2017	NMOC	unavailable	unavailable	98.8
June 2, 2022	THC (as propane)	407.7	3.84	99.1
Limit	NA	NA	NA	95 (HAPs) (SC I.1) 98 (VOCs) (SC III.5)

Material Limits – None

Process/Operational Restrictions – Permit requirements for the FG include the following:

- Release coat big mix coating X-43 may not be used on any coating line in this FG (SC III.1)

The Facility reports compliance with the above requirement. The referenced coating is a low percent coating (<3%) only used on EUCOATER3.

- Coating lines in FGCOATING12456 may not be operated unless the capture system/permanent total enclosures (CS/PTE) as described in Appendix 9 of the ROP are installed and operating properly. (SC III.2)
- A Continuous Parameter Monitoring System (CPMS) shall be installed/operated on the CS/PTE. (SC III.7)
- Compliance with emission limits is shown if the CS/PTE is operated at minus three and a half inches (-3.5") water column on the RTO fan as established in accordance with testing, or as established in future testing. (SC III.8)

At the time of the May 25, 2023, site inspection, the coating lines associated with FGCOATING12456 have CS/PTE(s) installed and a CPMS has been installed to monitor the differential pressure across the RTO as well as vacuum within the CS/PTE. Based on information provided, they appear to be operating properly.

- Installation and proper operation of the RTO prior to conducting any clean-up operations (SC III.4) or operation of any coating lines in the FG (SC III.3).
- A CPMS shall be installed/operated on the RTO (SC III.10)
- RTO operational temperature shall be a minimum of 1400 degrees F or higher (SC III.6 & 12)
- Compliance with emission limits will be demonstrated if the RTO is operated such that the average temperature is greater than the temperature established during testing for each 3-hour block period. (SC III.11 & 12)
- RTO combustion temperature data shall be reduced to 3-hour block averages (SC III.12)
- VOC destruction efficiency of RTO will be a minimum of 98% (SC III.5)

With respect to the RTO, a CPMS has been installed to continuously monitor and record the average temperature for the two secondary chambers. The unit is reported to be operated at a set point of 1600 degrees F and operates in general compliance with temperature requirements. Verification of destruction efficiency is conducted every 5 years, the most recent being testing activities conducted on June 2, 2022.

At the time of report preparation, the facility reports that the RTO is monitored continuously and recorded every 5 minutes (more frequently than the minimum once every 15-minutes), the data is not reduced to 3-hour block averages but does exist so that it could be manually determined. The fact that the data has not been reduced to the 3-hour block averages is a violation of permit condition SC III.12, the Facility has committed verbally to correction of the issue.

At the time of the May 25, 2023, site inspection the following operational parameters were recorded for the RTO:

- Differential pressure setpoint of -3.5
- Differential pressure of -3.47
- Secondary chamber set point of 1600 degrees
- Secondary chamber temperature of 1604 degrees

The Facility reports downloading the temperature chart once per month. An example of the temperature chart was viewed at the time of the May 25, 2023, site inspection.

Design/Equipment Parameters – Requirements for FGCOATING12456 under this section include an RTO design that includes a minimum of 0.5 seconds or more retention time of air contaminants in the RTO (SC IV.2) and a continuous combustion temperature monitor (SC IV.1). The Facility reports compliance with the retention time. Installation of the continuous combustion temperature monitor was confirmed at the time of the May 25, 2023, site inspection.

Testing/Sampling – Performance testing of the RTO and CS/PTE is required every 5 years (SC V.2 & 3). During RTO performance testing the permittee is required to record process information to determine conditions in existence at the time of the RTO performance test (SC V.5) as well as establish RTO operating limits using combustion temperature data recorded during to determine the average combustion temperature/minimum operating limit for the RTO. (SC V.6) RTO performance test data is summarized below:

Test Date	Average Combustion Temperature Recorded (degrees F)	Differential Pressure (inches H2O)
April 24-25, 2012	NR	NR
April 18, 2017	1604	-3.49
June 2, 2022*	1603	-3.47
Limits	1400 (SC III.6) 1603** (SC III.11)	-3.5 (SC III.8)

*Note that data presented in the Montrose Air Quality Services July 13, 2022, test report indicated that the average RTO temperature was recorded once per test run as indicated in the May 27, 2022, approval letter for the April 25, 2022, proposed test protocols.

**SCIII.11 specifies that the permittee shall demonstrate compliance with the emission limits if the RTO is operated such that the average temperature is greater than the temperature established during testing for each 3-hour period. The Facility reported a setpoint of 1600

degrees F at the time of the June 2, 2022, verification testing. The data logged by the CPMS for the RTO reported an average of 1603 degrees F based on readings every 5 minutes for the three-hour period.

A review of the July 13, 2022, test report indicated that documentation of the CS/PTE capture efficiency verification was not included in the test report. Verification of the capture efficiency of the PTE (Method 204) is confirmation of a minimum flow measurement of 200 feet per minute is required to assume 100% capture efficiency. The method allows for a vacuum pressure (-0.007 inch-H₂O is equivalent to 200 ft/min) to be used as a surrogate for air flow. Recent testing is summarized below:

Date	Flowrate	Comment
April 24-25, 2012	120-400 fpm	<200 fpm reported for EUCOATER1 and EUCOATER2 Units passed smoke testing and facial velocity evaluations.
April 18, 2017*	Yes	Co. agreed to install differential pressure gauges at inlet of each PTE. Pressure/vacuum sensors were installed inside each coating line PTE.
June 2, 2022	NR	Data has been requested from Testers.
Limit	> 200 ft/min	

*Note that control efficiencies were determined by USEPA Method 204. At the time of testing no flowmeters or differential gauges were reported present except for a differential gauge at the inlet of the RTO fan, which creates the negative pressure in the PTE. Differential pressures were measured at both natural draft openings (NDOs) at each coating line. An additional requirement of Method 204 requires that the NDO is a minimum of 4 equivalent opening diameters from each emitting point. At the time of the 2017 testing it was determined that EUCOATER1 and EUCOATER2 did not meet the requirement. Modifications were made to reduce the opening diameters to meet the Method 204 requirement.

It should be noted that at the time of the 2017 testing NDOs were documented for each of the coating head enclosures. Those areas not incorporated into the NDO measurements are required to be sealed closed during operation. Verification that no open NDOs are present at the time of the May 25, 2023, inspection.

Data recorded for each sensor includes readings every 15-minutes, an hour average and a 3-hour average . At this time no alarms exist for the sensors, the Facility reports that meetings with their contractor are scheduled to address the issue.

At the time of report preparation, it appears that the July 13, 2022, test report was not submitted to AQD TPU or District Staff which reflects a violation of SC VII.5, which requires submittal of two copies within 60-days of the last day of testing. An electronic copy of the document was provided by the Facility upon request.

Monitoring/Recordkeeping – With respect to the RTO, the permittee is required to do the following:

- Monitor and record the temperature in the RTO on a continuous basis (SC VI.1 & 13)
- Install, calibrate and maintain and operate temperature monitoring equipment per the manufacturer's specifications, the data logger and temperature indicator must be verified every 3 months (SC VI.6)
- Install, calibrate, operate and maintain a temperature monitoring device equipped with a continuous recorder with an accuracy of plus or minus 1 percent of the temp being monitored in degrees Celsius or plus or minus one degree Celsius, whichever is greater. (SC VI.6)
- The permittee shall use the temperature of 1400 degrees Fahrenheit as an indicator of proper operation and to assure compliance with the VOC limit, an excursion being an RTO temperature of less than 1400 degrees Fahrenheit (SC VI.12 & 14)
- Demonstrate the overall organic HAP control efficiency is equal to 95 percent using form 7F or an equivalent method approved by the District Supervisor. (SC VII.8)

As previously indicated the RTO temperature is monitored on a continuous basis and recorded every 5 minutes. SC VI.15 requires monitoring on a continuous basis at all times that FGCOATING12456 components are operational. The setpoint for the secondary chamber is a temperature of 1600 degrees F (well above the 1400 degrees F required in SC III.6 and SC VI.14). In addition, verification testing is done at a setpoint of 1600 degrees, i.e. setting operational parameters for compliance to 1600, rather than the lower 1400 degrees.

The Facility reports that operational controls for the RTO are “hard programmed” in the PLC for shutdown should the temperatures in the RTO secondary chambers drop below 1450 degrees. This threshold can not be changed on any of the operator screens.

Monitoring malfunctions are defined in SC VI.15. One monitor failure was reported for the RTO temperature recorder for one 28-day period in October 22, and was reported in the 2022 second semi-annual certification and the 2022 annual certification forms. The RTO logic is such that the unit will shutdown should the RTO temperature drop below 1450 degrees F. No shutdown occurred and the recorder was replaced as soon as possible.

With respect to the CS/PTE, the permittee is required to develop a site-specific monitoring plan for the CS/PTE (SC IX.1) per the requirements of SC VI.2. The referenced plan (revised May 2018) on includes monitoring of the differential pressure and secondary combustion

chamber temperatures, as well as individual pressure sensors within each coater head. Any deviation from the operating parameter value or range are considered a deviation per SC VI.4. No data recording frequency is included in the CSPTE Plan. The monitoring devices are operated at all times the EUs are in operation to ensure compliance with CAM (SC VI.22). Components of the plan are summarized earlier in this document.

Review of the SSMAP plan is required annually under SC VI.5. The latest review was conducted on September 23, 2022. The SSMAP, CAM and Monitoring Plan for the CS/PTE are being reviewed as part of the FCE by Facility Staff.

Static pressure of the permanent total enclosure is used as an indicator of a proper function of the PTE (SC VI.16) as well as an assurance of compliance with the VOC limit (SC VI.18). An excursion for VOC is a reading of static pressures above -3.5 inches of H₂O (SC VI.18). Static pressure during previous total enclosure testing was set at -3.5 inches of water column and is controlled by the thermal oxidizer fan.

The permittee is required to use a vacuum sensor (transducer) to increase or decrease the fan speed to maintain the pressure of the PTEs. (SC VI.17) The required sensors have been installed in each of the FGCOATING12456 coating line enclosures since the 2017 verification testing activities. Sensor data is being recorded once every 15-minutes, as well as a one-hour and 3-hour average which is in compliance with SC VI.11. The referenced data is maintained electronically and can be produced on a monthly basis in compliance with SC VI.10.

Data collection by the CPMS occurs during period of operation for each coating line (SC VI.22) and per the requirements of SC VI.11 for the CS/PTE and RTO is required:

- To take at least 1 reading every 15 minutes (4 per hour)
- Determine the hourly average and three-hour block average for data collected during operation per the requirements of SC VII.11
- Valid data sets as defined in SC VI.11 must consist of at least 90% of the hours during which the process is operated.

A review of records indicates that the CPMS with respect to the CS/PTE are in compliance with the above referenced requirements. Recorded RTO temperature data is collected every 5 minutes, exceeding the minimum requirement of once per 15-minute time period. As previously indicated, data exists to generate hourly and 3-hour block averages for the RTO, though none are presently determined.

No excursions or exceedances have been reported for the Facility since the last inspection. Therefore, requirements under SC VI.20 are not applicable at this time.

Reporting – In addition to annual and semiannual reporting of monitoring and deviations (SC VII.2 & 3), the Facility is required to submit the following semiannual reports:

- 40 CFR Subpart JJJJ NESHAP Compliance reports (SC VII.4)
- Startup, Shutdown and Malfunction report (SC VII.5)
- CAM excursions and/or exceedance reports (SC VII.10) and
- CAM monitor downtime reports (SC VII.11)

A review of records indicated that all reporting has been completed in a timely manner.

Prior to verification testing activities, the Facility is required to submit a notification of performance testing and two complete test protocols to the AQD (SC VII.7) as well as 7-day notification prior to testing (SC VII.8). Test reports are required to be submitted within 60-days following the last day of testing (SC VII.9). With the exception of the submittal of the June 2, 2022, test report not being received in a timely manner, it appears that the above referenced requirements were met with reference to the June 2, 2022, test activities.

Stack/Vent Restrictions – RTO stack heights were verified in conjunction with the May 25, 2023, site inspection. Readings taken using a Nikon Range Finder indicated heights ranging from 42.7 to 47.4 feet, and indicate compliance with the minimum stack height of 45 feet above land surface for SVOXIDIZER (SC VIII.1).

Other -- Other requirements for FGCOATING12456 include a high level citation for compliance with 40 CFR, Part 63, Subpart JJJJ NESHAP for HAPs: Paper and other Web Coating (SC IX.3). Requirements of the subpart have been incorporated into the most recent ROP renewal, and compliance with the conditions of the ROP would indicate general compliance with the subpart.

The Facility is required to maintain a monitoring plan for the CSPTTE (approved by the AQD) (SC IX.1) and a SSMAP for the RTO (SC IX.2). The referenced documents, with revision dates of May 2018, were included in the most recent ROP Renewal Package. Components of the referenced plans are discussed earlier in this document.

SC IX.4 requires the permittee to promptly notify AQD for the need to modify the CAM Plan if the existing plan (2018) is found to be inadequate. No notification has been found in district files.

FGCOATING-ALL –

This FG reflects requirements for all 6 coating lines and their associated pollution control equipment. Conditions applicable to the flexible group include:

- VOC emission limits for both individual EUs as well as all EUs combined.
- VOC testing requirements.
- Record keeping and VOC calculation requirements.
- Annual and semi annual reporting requirements.
- Stack/vent requirements, as well as misc. requirements.

Emission Limits – VOC emission limits for FGCOATING-ALL consist of the following limits:

- 47.8 lbs VOC/hour from all EUs and cleanup and purge operations combined (SC I.1)
- 4.79 lbs VOC/gallon of solids applied for each EU, based upon a 24-hour averaging period (SC I.3)

Note that SC I.3 is equivalent to a coating comprised of not more than 2.9 lbs VOC/gallon of coating (minus water) as applied with a VOC density of 7.36 lbs/gallon and 100% mass transfer efficiency. The Release coat big mix coating (X-43) in EUCOATER3 is exempt from this requirement. The permittee may comply with this requirement through emission averaging of all 6 lines if:

- the average VOC emissions from FGCOATING-ALL are less than 4.31 lbs VOC/gallon solids applied, determined on a calendar day basis, and
- the average VOC emissions from FGCOATING-ALL are calculated using the method given in Appendix 7B or an equivalent approved method.

In addition, the Facility has an annual VOC emission limit of:

- 171.9 tons VOC/year from all EUs and cleanup and purge operations combined (SC I.2)

The required VOC emissions are summarized under forms appendix 7A and 7D select data for March and May 2023 are summarized below, indicate emission levels well below allowed VOC concentrations:

Date	VOC (lb/Hr)	VOC (lb/gallon solids applied based on 24 hr averaging)	Average VOC Emissions (VOC/gallon solids applied)
March 24, 2023	14.21	0.253	0.205
May 24, 2023	24.36	0.280	0.750

Limit	47.8 (SC I.1) (Appendix 7D)	4.79 (SC I.3) (Appendix 7A)	4.31 (calendar day) (Appendix 7A)
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Annual emissions for select dates from form Appendix 7E are summarized below and show compliance with emission limits.:

Date	VOC per Month (Tons)	VOC per 12-month Rolling time period (tons)
March 2022	2.38	23.76
June 2022	1.15	23.35
September 2022	1.53	22.80
December 2022	1.65	22.84
March 2023	2.16	22.71
Limit	NA	171.9 tons (SC I.2)

Process Restrictions – SC III.1 requires the permittee to dispose of waste coating and/or solvents in a manner which minimizes the introduction of air contaminants into the outer air. The Facility has reported that all materials are containerized and capped, to minimize potential fugitive emissions.

Testing/Sampling –Requirements under this section include both stack testing for VOC emissions as well as Method 24 analysis of VOC content of any non-waterborne coatings, as applied. SC V.1 requires testing of combined total VOC lb/hr every five years. This requirement was met as part of the June 2, 2022, test activities and reported THC (as propane) at 3.84 lb/hr. in compliance with the testing requirements of SC V.1 and emission limit of SC I.1.

Per SC V.2 the permittee is required to randomly test non-waterborne coatings on a yearly basis for their VOC content as applied, using Method 24 or other AQD approved method. In addition, all coatings must be tested within a five-year period. Note that unlike some facilities that are limited to only a few coatings, the Facility reports over 100 different coatings/formulation. In addition, the Facility reports mixing their own coatings and conducting verification testing for every coating batch in order to confirm % solids, VOC and HAP content.

Per SC V.3, requires random testing of all coatings used in EUCOATER3 for actual VOC emission rates in lbs VOC per gallon of solids applied. Testing shall be conducted such that all coatings associated with EUCOATER3 will be tested within a five-year period. As previously indicated, all coatings used are mixed and verification testing conducted for every coating batch to confirm % solids, VOC and HAP content. Only Release coat big mix coating X-43 is not included under this condition.

Monitoring/Recordkeeping --

Reporting – In addition to annual and semiannual reporting of monitoring and deviations (SC VII.2 & 3), the Facility is required to submit prior to testing a notification of performance testing and two complete test protocols to the AQD (SC VII.7) as well as 7-day notification prior to testing (SC VII.8). Test reports are required to be submitted within 60-days following the last day of testing (SC VII.9). With the exception of the submittal of the test report not being received in a timely manner, it appears that the above referenced requirements were met with reference to the June 2, 2022, test activities.

Stack/Vent Restrictions – RTO stack heights were verified in conjunction with the May 25, 2023, site inspection. Readings taken using a Nikon Range Finder indicated heights ranging from 42.7 to 47.4 feet, and indicate compliance with the minimum stack height of 45 feet above land surface for SVOXIDIZER (SC VIII.1).

Other -- Other requirements for FGCOATING-ALL include SC IX.1, the permittee shall label each web coating line. This was verified at the time of the May 25, 2023, site inspection.

SC IX.2 limits the permittee from conducting any cleanup and/or purge activities unless the RTO or solvent recovery systems are installed and operating properly. Neither of the referenced activities were ongoing at the time of the May 25, 2023, site inspection, so a compliance determination could not be made at that time.

FG-COLDCLEANERS –

As previously indicated, three cold cleaners (EUCOLDCLEANERA through EUCOLDCLEANERC) exist on site. The cold cleaners are primarily for manual cleaning of coating line rods, etc. Each cold cleaner meets the 10 square foot air/vapor interface requirement for Rule 201 exemption (Rule 281(2)(h)).

Emission Limits – None

Material Limits – Material limits associated with the FG are limited to SC II.1, which restricts the cleaning solvents to no more than 5% by weight of the following halogenated compounds: Methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. The Facility reports that only methyl ethyl ketone and toluene are used as solvents, so the material limits do not apply as the solvents are in compliance with the limit.

Process/Operational Limits – SC III.1 limits cleaned parts to be drained for no less than 15 seconds or until dripping ceases. SC III.2 requires the permittee to perform routine maintenance on each cold cleaner as recommended by the manufacturer.

None of the cold cleaners were in use at the time of the May 25, 2023, site inspection, so verification of use practices with respect to the EUs could be made. The Facility reports that proper maintenance activities are taken for the existing cold cleaners.

Design/ Equipment Parameters – At the time of the May 25, 2023, site inspection, compliance with the following conditions were noted:

- The air/vapor interface is no more than 10 square feet (SC IV.1)
- The cold cleaners were equipped with a cover, and the covers were closed at the time of the site inspection (SC IV.3)
- The solvents in the cold cleaner are not agitated or heated (SC IV.4)

The Facility reports that cover for the cold cleaners are not mechanically assisted and that the cold cleaner are equipped with a device for cleaning parts (SC IV.2), the Reid vapor pressure of the solvents used are not more than .3 psia (SC IV.4).

Testing/Sampling – None

Monitoring/Recordkeeping – Applicable conditions under this section of the ROP includes:

- SC VI.2, the permittee maintains appropriate records on file for each cold cleaner identifying an unique identifier for each EU, date of installation, air/vapor interface area, applicable rule 201 exemption and reid pressure of any solvent.

EU	EUCOLDCLEANERA	EUCOLDCLEANERB	EUCOLDCLEANERC
Installation date	1993	1985	1999
Area of air/vapor interface (sq ft)	<10	<10	<10
Exemption	R. 281(2)(h)	R. 281(2)(h)	R. 281(2)(h)
Reid vapor pressure of solvent	<0.3 psi	<0.3 psi	<0.3 psi

Written operating procedures are posted on or above each unit in compliance with SC VI.3.

The Facility reports draining the material from the cold cleaners periodically, and then passing the material through the recovery still. Solvent recovered is used for cleaning or is sold. Bottoms are disposed of through an appropriate waste disposal company. (SC VI.4)

Reporting – In addition to annual and semiannual reporting of monitoring and deviations (SC VII.2 & 3), the ROP conditions for this FG indicate that the Facility is required to submit prior to testing a notification of performance testing and two complete test protocols to the AQD (SC VII.7) as well as 7-day notification prior to testing (SC VII.8). Test reports are required to be submitted within 60-days following the last day of testing (SC VII.9). As there are no stack test requirements it appears that these stack test reporting requirements are not applicable at this time. Annual and semi-annual reports appear to be complete and received in a timely manner.

Stack/Vent Restrictions – None

Other Conditions – None**SUMMARY**

On May 25, 2023, AQD District Staff conducted an unannounced, scheduled site inspection of Coding Products, a division of Illinois Tool Works (B6175) (AKA the Facility), located at 111 West Park Drive, Kalkaska, Kalkaska County, Michigan.

The Facility operates under MI-ROP-B6175-2013. The ROP renewal application for the referenced permit was received on May 17, 2018, and determined complete and the Application Shield was issued on June 6, 2018. The document is under peer review.

The most recent site inspection was conducted on August 31, 2021. No compliance issues were identified at the time of the site inspection.

Weather conditions at the time of the site inspection consisted of clear blue skies, with temperatures in the mid-40's. Little to no wind was noted. No visible emissions were noted from the stacks associated with the Facility. Neither coating lines 3 nor 5 were operating at the time of the May 23, 2023, site inspection.

The Facility is located in the Kalkaska Enterprise Industrial Park located at the intersection of Dresden Road and Park Drive, Village of Kalkaska, Kalkaska Township, Kalkaska County, Michigan. Located at the center of the industrial park which is bounded to the south and west by residential properties, to the north by a mix of commercial/industrial properties and to the east with a mix of undeveloped properties and residential properties.

Coding Products, Incorporated has been in business since 1977. The facility was purchased by Illinois Tool Works in 1991 and reports both domestic and international sales of their products. Their product line consists of hot stamp foils and thermal transfer ribbons used in a wide range of printing services, and can be found on piping, cable, medical equipment, credit cards and wine corks. With respect to process, the facility applies solvent-based coating to rolls of polyester film, (AKA web). The source operates:

- Hot stamp marking (HS), and
- Thermal Transfer (TTR) .

There are 6 web-coating lines (EUCOATER1 through EUCOATER6, FGCOATINGALL) presently being used onsite. Inks are mixed onsite and are stored predominantly in 55-gallon drums onsite. The Facility is divided into two sections three coating lines in each, and each with their own blending/hazardous material storage rooms. Pigments are added as

mixed. The facility operates their own product lab to confirm ink quality and VOC/HAP content.

District Staff met with Lisa Surowitz, Production Manager. Mr. Ian Rittof, the former environmental contact has been gone for appx. 3 years and has not been replaced. Ms. Surowitz reported that her last day is June 9, 2023. Mr. Mike Kyro, operations manager, will be the contact until staff is replaced.

Compliance issues noted as part of the May 25, 2023, site inspection and records review included the following:

- Failure to determine 3-hour block averages for RTO dated required under 40 CFR Part 63, Subpart JJJJ. (FGCOATING12456 SC III.12)

As indicated in the site inspection report, the CPMS continuously monitors RTO temperature and differential pressure data, recording the data at 5-minute intervals, however the data is not further reduced to the required 3-hour block averages.

- Late submittal of the July 13, 2022, stack test report summarizing June 2, 2022, test activities. (FGCOATING12456 SC VII.9)
- Failure to July 13, 2022, stack test report to include verification of CS/PTE activities reported to have been completed as part of the June 2, 2022, testing activities.

Upon notification that AQD staff had not received a copy of the referenced stack test report, the Facility promptly submitted a copy. With regards to the missing information, the test protocols indicated that the verification activities were to be completed, and AQD Staff onsite at the time of testing reported seeing the activities completed. Though they did not document the results. The Facility reports having contacted their subcontractor (Montrose) regarding the missing data. No changes have been made to the PTEs since the 2017 test activities.

- Monthly material use recordkeeping deficiency for EUCOATER3 (SC VI.1)

The referenced condition requires the permittee to record monthly totals of organic HAP content, organic HAP usage, volatile matter usage and coating solids usage. Data is maintained on a daily basis using form Appendix 7A, however the Facility does not summarize the daily data except for the purposes of determining emissions.

Discussions with Facility Staff during review of the data and document preparation has indicated that with the exception of the compliance issues associated with reporting for the June 2, 2022, verification test activities, that all other issues identified are correctable by the Facility, and that the Facility has indicated that the required changes will be made to bring

the facility into compliance. With correction of the above issues the Facility will be operating in general compliance with permit conditions.

NAME Sharon J LeBlanc

DATE 8-8-23

SUPERVISOR Shane Nixon