State Registration Number

B6175

# Michigan Department of Environmental Quality Air Quality Division RENEWABLE OPERATING PERMIT STAFF REPORT

ROP Number MI-ROP-B6175-2013

# **Coding Products, Incorporated**

SRN: B6175

Located at

111 West Park Drive, Kalkaska, Kalkaska County, Michigan 49646

Permit Number:

MI-ROP-B6175-2013

Staff Report Date: September 9, 2013

This Staff Report is published in accordance with Sections 5506 and 5511 of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Specifically, Rule 214(1) requires that the Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), prepare a report that sets forth the factual basis for the terms and conditions of the Renewable Operating Permit (ROP).

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September 9, 2013 - STAFF REPORT

# <u>Purpose</u>

Major stationary sources of air pollutants, and some non-major sources, are required to obtain and operate in compliance with a ROP pursuant to Title V of the federal Clean Air Act of 1990 and Michigan's Administrative Rules for air pollution control pursuant to Section 5506(1) of Act 451. Sources subject to the ROP program are defined by criteria in Rule 211(1). The ROP is intended to simplify and clarify a stationary source's applicable requirements and compliance with them by consolidating all state and federal air quality requirements into one document.

This report, as required by Rule 214(1), sets forth the applicable requirements and factual basis for the draft permit terms and conditions including citations of the underlying applicable requirements, an explanation of any equivalent requirements included in the draft permit pursuant to Rule 212(5), and any determination made pursuant to Rule 213(6) (a) (ii) regarding requirements that are not applicable to the stationary source.

| Stationary Source Mailing Address:                          | Coding Products, Incorporated<br>111 West Park Drive          |
|---|---|
| Source Registration Number (SRN):                           | Kalkaska, Michigan 49646<br>B6175                             |
| <b>.</b> ,  |   |
| North American Industry Classification System (NAICS) Code: | 339944  |
| Number of Stationary Source Sections:                       | 1   |
| Is Application for a Renewal or Initial Issuance?           | Renewal   |
| Application Number:   | 201200053   |
| Responsible Official:                                       | Mike Rasmussen, Illinois Tool Works, Inc.<br>219-688-4904     |
| AQD Contact:  | Gloria Torello, Environmental Quality Analyst<br>989-705-3410 |
| Date Permit Application Received:                           | April 16, 2012  |
| Date Application Was Administratively Complete:             | Yes   |
| Is Application Shield In Effect?                            | Yes   |
| Date Public Comment Begins:                                 | September 9, 2013   |
| Deadline for Public Comment:                                | October 9, 2013   |

### General Information

# Source Description

Coding Products, Incorporated is located in an industrial park in Kalkaska, Michigan. This facility applies solvent-based coatings to rolls of polyester film (web). There are six web-coating 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). 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 which 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.

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

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

The following table lists stationary source emission information as reported to the Michigan Air Emissions Reporting System in the **2012** submittal.

| Pollutant                                     | Tons per Year |
|---|---------------|
| Carbon Monoxide (CO)                          | 2.35          |
| Lead (Pb)                                     | -             |
| Nitrogen Oxides (NO <sub>x</sub> )            | -             |
| Particulate Matter (PM)                       | -             |
| Sulfur Dioxide (SO <sub>2</sub> )             | 0.01          |
| Volatile Organic Compounds (VOCs)             | 27.4          |
| Individual Hazardous Air Pollutants (HAPs) ** | -             |
| Total Hazardous Air Pollutants (HAPs)         | -             |

# TOTAL STATIONARY SOURCE EMISSIONS

\*\*As listed pursuant to Section 112(b) of the federal Clean Air Act.

In addition to the pollutants listed above that have been reported in MAERS, the potential to emit of Greenhouse Gases (GHG) in tons per year of CO2e is less than 100,000. CO2e is a calculation of the combined global warming potentials of six GHG (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride).

See Parts C and D in the draft ROP for summary tables of all processes at the stationary source that are subject to process-specific emission limits or standards.

## **Regulatory Analysis**

The following is a general description and history of the source. Any determinations of regulatory nonapplicability for this source are explained below in the Non-Applicable Requirement part of the Staff Report and identified in Part E of the ROP.

The stationary source is located in Kalkaska County, which is currently designated by the U.S. Environmental Protection Agency (USEPA) as attainment/unclassified for all criteria pollutants.

The stationary source is subject to Title 40 of the Code of Federal Regulations (CFR), Part 70, because the potential to emit VOC exceeds 100 tons per year, and the potential to emit of any single HAP regulated by the federal Clean Air Act, Section 112, is equal to or more than 10 tons per year and/or the potential to emit of all HAPs combined is more than 25 tons per year.

No emissions units at the stationary source are currently subject to the Prevention of Significant Deterioration (PSD) regulations of Part 18, Prevention of Significant Deterioration of PA 451, because at the time of New Source Review permitting the potential to emit of VOC was less than 250 tons per year.

At this time, there are no GHG applicable requirements to include in the ROP. The mandatory Greenhouse Gas Reporting Rule under 40 CFR, Part 98 is not an ROP applicable requirement and is not included in the ROP.

EUCOATER1, EUCOATER2, EUCOATER3 EUCOATER4, EUCOATER5, and EUCOATER6 at the stationary source are subject to the Maximum Achievable Control Technology Standards for National Emissions Standards for hazardous Air Pollutants: Paper and Other Web Coating promulgated in 40 CFR, Part 63, Subparts A and JJJJ.

The monitoring conditions contained in the ROP are necessary to demonstrate compliance with all applicable requirements and are consistent with the "Procedure for Evaluating Periodic Monitoring Submittals."

EUCOATER1, EUCOATER2, EUCOATER4, EUCOATER5, and EUCOATER6 at the stationary source are subject to the federal Compliance Assurance Monitoring (CAM) rule under 40 CFR, Part 64. The emission units have a RTO control device and potential pre-control emissions of VOC greater than the major source threshold level. The monitoring for the RTO is a Data Acquisition System (DAS) and process monitoring system. The process operations are linked to the compliance parameters, which are set in the computer to assure compliance with applicable permit limits.

EUCOATER 3 at the stationary source is subject to the federal CAM rule under 40 CFR, Part 64. This emission unit has a solvent vapor recovery system to condense the VOC vapors and recover the VOC for reuse and the system is used as a control device and potential pre-control emissions of VOC are greater than the major source threshold level. The monitoring for the solvent vapor recovery system is a Data Acquisition System (DAS) and process monitoring system. The process operations are linked to the compliance parameters, which are set in the computer to assure compliance with applicable permit limits.

Please refer to Parts B, C and D in the draft ROP for detailed regulatory citations for the stationary source. Part A contains regulatory citations for general conditions.

# Source-wide Permit to Install (PTI)

Rule 214a requires the issuance of a Source-wide PTI within the ROP for conditions established pursuant to Rule 201. All terms and conditions that were initially established in a PTI are identified with a footnote designation in the integrated ROP/PTI document.

The following table lists all individual PTIs that were incorporated into previous ROPs. The PTIs issued after the effective date of ROP No. MI-ROP-B6175-2008 are identified in Appendix 6 of the ROP.

| PTI Number |         |        |  |
|------------|---------|--------|--|
| 321-92C    | 321-92D | 244-03 |  |

#### Streamlined/Subsumed Requirements

This permit does not include any streamlined/subsumed requirements pursuant to Rules 213(2) and 213(6).

#### Non-applicable Requirements

Part E of the draft ROP lists requirements that are not applicable to this source as determined by the AQD, if any were proposed in the application. These determinations are incorporated into the permit shield provision set forth in Part A (General Conditions 26 through 29) of the draft ROP pursuant to Rule 213(6)(a)(ii).

### Processes in Application Not Identified in Draft ROP

The following table lists processes that were included in the ROP application as exempt devices under Rule 212(4). These processes are not subject to any process-specific emission limits or standards in any applicable requirement.

| Exempt<br>Emission Unit ID | Description of<br>Exempt Emission Unit                                   | Rule 212(4)<br>Exemption | Rule 201<br>Exemption |
|----------------------------|--|--------------------------|-----------------------|
| DVCONTAINERSOLV            | Cleaning Solvent Storage-Behind Coater 3                                 | Rule 212(4)(c)           | Rule 284(i)           |
| DVDISTILLATION             | Solvent Distillation Equipment   | Rule 212(4)(a)           | Rule 281(h)           |
| DVDRUMWASHER               | Drum Washer  | Rule 212(4)(a)           | Rule 281(h)           |
| DVCONTAINSOLV2             | Cleaning Solvent Storage-<br>Behinde Coater 5 Rule 212(4)(a) Rule 281(h) |                          | Rule 281(h)           |
| DVCONTAINSOLV3             | Cleaning Solvent Storage-HIR<br>Building                                 | Rule 212(4)(a)           | Rule 281(h)           |

### Draft ROP Terms/Conditions Not Agreed to by Applicant

This permit does not contain any terms and/or conditions that the AQD and the applicant did not agree upon pursuant to Rule 214(2).

# Compliance Status

The AQD finds that the stationary source is expected to be in compliance with all applicable requirements as of the effective date of this ROP.

### Action taken by the DEQ

The AQD proposes to approve this permit. A final decision on the ROP will not be made until the public and affected states have had an opportunity to comment on the AQD's proposed action and draft permit. In addition, the U.S. Environmental Protection Agency (USEPA) is allowed up to 45 days to review the draft permit and related material. The AQD is not required to accept recommendations that are not based on applicable requirements. The delegated decision maker for the AQD is Ms. Janis Denman, Cadillac District Supervisor. The final determination for ROP approval/disapproval will be based on the contents of the permit application, a judgment that the stationary source will be able to comply with applicable emission limits and other terms and conditions, and resolution of any objections by the USEPA.

#### Michigan Department of Environmental Quality Air Quality Division

State Registration Number

# **RENEWABLE OPERATING PERMIT**

**ROP Number** 

B6175

#### October 21, 2013 - STAFF REPORT ADDENDUM

MI-ROP-B6175-2013

#### Purpose

A Staff Report dated September 9, 2013 was developed in order to set forth the applicable requirements and factual basis for the draft Renewable Operating Permit (ROP) terms and conditions as required by R 336.1214(1). The purpose of this Staff Report Addendum is to summarize any significant comments received on the draft ROP during the 30-day public comment period as described in R 336.1214(3). In addition, this addendum describes any changes to the draft ROP resulting from these pertinent comments.

#### General Information

| Responsible Official: | Mike Rasmussen, Illinois Tool Works, Inc.<br>219-688-4904     |
|-----------------------|---|
| AQD Contact:          | Gloria Torello, Environmental Quality Analyst<br>989-705-3410 |

#### Summary of Pertinent Comments

No pertinent comments were received during the 30-day public comment period.

### Changes to the September 9, 2013, Draft ROP

The following condition was added to FGCOATING12456 VI. Monitoring. The condition was inadvertently omitted from the Draft ROP that went out on Public Notice.

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities, the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that FGCOATING12456 operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, in frequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee shall utilize pressure as an indicator of the proper functioning of the permanent total enclosure when FGCOATING12456 is operating. Data recorded during monitoring malfunctions, repair activities and AQ/QC operations shall not be used for 40 CFR, Part 64 compliance. **(40 CFR 64.6(c)(3), 64.7(c))**