

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

N169826829

|  |                               |                           |
|--|-------------------------------|---------------------------|
| FACILITY: Walsworth Publishing Company (formerly IPC)  |                               | SRN / ID: N1698           |
| LOCATION: 2180 MAIDEN LANE, SAINT JOSEPH               |                               | DISTRICT: Kalamazoo       |
| CITY: SAINT JOSEPH                                     |                               | COUNTY: BERRIEN           |
| CONTACT: Lee Myers, Distribution and Logistics Manager |                               | ACTIVITY DATE: 08/27/2014 |
| STAFF: Matthew Deskins                                 | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM OPT OUT  |
| SUBJECT: Unannounced Scheduled Inspection              |                               |                           |
| RESOLVED COMPLAINTS:                                   |                               |                           |

On August 27, 2014 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Walsworth Publishing Company (Formerly IPC Print Services) facility located in St. Joseph, Berrien County. According to district file information, Walsworth is a printing company with an opt-out permit issued to them by the AQD for their equipment and operations. The purpose of the inspection was to determine the facilities compliance with their PTI No. 232-97D and any other state or federal air regulations. Staff departed for the facility at approximately 9:10 a.m.

Staff arrived at the facility at approximately 10:30 a.m. Prior to entering the building staff looked to see if any visible emissions could be observed and none were noted. Staff then proceeded into the office area where they introduced them self to the receptionist (Chestney), stated the purpose of the visit, and asked if Lee Myers (Distribution and Logistics Manager) was available. Lee was the contact person staff met with during the previous inspection in 2010. Chestney stated that Lee was in a production meeting so she contacted Steve Wright but he said he couldn't be of assistance with an air inspection. She then contacted Lee who said he would be out to meet with staff in a little bit. Lee arrived to greet staff about 15 minutes later and staff introduced them self and stated the purpose of the visit. Lee mentioned he had several meetings scheduled that day and asked if staff could come back at another time. Staff mentioned that they are required to do unannounced inspections and would like to get it done that day since they drove down from Kalamazoo. Staff mentioned that the inspection shouldn't take up a lot of his time as long as they haven't changed any or added any new processes. Lee then led staff back to his office where staff gave him a business card and the DEQ's "Environmental Inspections Brochure". The following is a summary of staff's discussions with Lee, the inspection, and the facilities compliance status with the conditions contained within PTI No. 232-97D.

According to Lee, Walsworth is still strictly a printing operation that currently operates 3 shifts a day, 5 days a week, and employs about 225 people. He said that they will work 7 days some weeks depending on business which Lee says has been good. Staff noted that during the last inspection they were operating 2 shifts 5 days per week and employed approximately 230 people. Lee said that the bulk of their business is monthly magazines but that they still do a lot of catalogs also. He said that the magazines are monthly repetitive publications he termed short run (20,000 to 100,000 pieces within an individual job). Lee stated that they also still do some distribution of their print jobs for their customers which is why they have the ink jet printers for doing labels. Staff then showed Lee the section of the permit that lists the emission units and asked if they've added or removed any of the equipment since staff was last there in 2010 to which Lee stated no. Staff then asked about the inks used at the facility and if any have been added or changed. Lee stated that all inks are still the same and that they still use Central Ink as their supplier. Staff also asked if the mixing ratios of the various solutions and/or inks was still the same and he said they were. Staff then asked about the RTO and how it has been running. Lee said it is still the same unit and that it has been operating properly. He said that they have scheduled maintenance done on it and that they usually do general preventative maintenance on weekends. Staff then asked about records and in an effort to save Lee some time because of his meetings, staff asked him to e-mail them to staff. (Note: Lee e-mailed staff the records on August 29, 2014).

Staff then proceeded with Lee for a tour of the facility and their operations. Our first stop was at the area in the facility that houses the Heidelberg Presses and the Ink Jet printers. All this equipment was originally installed under the Rule 290 permit exemption but staff noted during a previous inspection that they exceeded the allowable monthly emissions so they modified their permit to include these units it. The ink jet printers use all black ink and are strictly used for the printing of mailing labels. They were all operating during staff's inspection and Lee stated that the mailing department operates 1 shift 5 days per week. The Heidelberg Presses are off-set lithographic presses which can only print one side of a

sheet of paper at a time and then has to be manually flipped. The paper comes in bulk and has to be cut into sheets. Sheetfed Press 1 (6 Color) and Press 2 (5 Color) were operational during staff's inspection. The presses still use cyan, blue, magenta, yellow, and black inks that come in 5 gallon buckets. As mentioned earlier, the ink is still being supplied by a company called Central Ink. Lee stated previously that these inks may also be used in the other printing presses when spot colors are needed (a.k.a. tinting).

Staff then proceeded with Lee to the area of the facility that houses the web presses. These are designated M1000A2, M1000A, M1000, M120A, and Mark VI. They use inks that are come in 330 gallon Totes that get piped/pumped to the various presses. The inks are the same colors as the ones used in the Heidelberg Presses but they have a different formulation do to the press method. The web presses also use paper that comes on a big roll that doesn't need to be pre-cut. The following is a summary of the various web presses and their operations:

**M1000A2:** This unit is known as a ten unit double web press meaning it can print up to 5 colors per side on a job if necessary as well as run two rolls of printing paper at the same time. The basic printing process consists of the ink being applied to rollers, the rollers then transfer it onto a metal plate where fountain solutions are added, it then gets transferred onto a rubber blanket that eventually applies it to the paper. After the printing is accomplished the paper passes through a gas fired dryer and then to a pre-tensioner. The pre-tensioner keeps the adequate tension of the paper for folding and cutting. After it is cut, it then heads to the finishing operation where it gets turned into a magazine or catalog. The emissions from this press are directed to the regenerative thermal oxidizer (RTO). Lee said that this is their workhorse press and operates 24 hours 5 days per week with some weekends as needed. It was operational during staff's inspection.

**M1000A:** The unit and its operations are identical to the M1000A2 and it also has its emissions controlled by the RTO. Lee said that they use it a lot but it isn't ran as much as the A2 unit. It was operational during staff's inspection and they were printing catalogs.

**M1000:** Identical to the previous two presses mentioned but is only a single web and its emissions are not controlled by the RTO. It was not operating during staff's inspection.

**MARK VI:** Is a single web printer that can print up to 4 colors at a time. It has its emissions controlled by the RTO. It was operating during staff's inspection.

**M120A:** This is a smaller press with a narrower web. It is capable of printing two colors at a time but they only do one and it is black on black. It was not operating during staff's inspection and Lee stated that they still don't use it much. Lee had mentioned during the previous inspection that they use to get a lot of business from the high tech companies such as Dell Computers for printing their user manuals and brochures that were included with their computers. He said now they don't include as much information with them so a lot of that work has gone away.

Staff then proceeded with Lee to the RTO controls. Staff noted it was currently operating at 1568 degrees Fahrenheit and now has a new data logger/recording device (Yokogawa FX1000) inside instead of a strip chart. Lee said he is able to pull up the monitoring data on his computer. Staff then looked at the unit itself outside and did not notice any VEs coming from it and it appeared to be running good.

Staff then proceeded with Lee to the chemical storage room where they store their waste products. They currently had approximately twenty 55 gallon drums of waste ready to be shipped. Lee said that USIT out of Livonia, MI picks up their waste on a monthly basis. Lee stated that most of their waste is considered liquid industrial but the press wash waste is considered hazardous. He said that they are designated as a Small Quantity Generator. He also said that they dispose of everything and don't do any reclaiming.

Staff then proceeded with Lee to the Recycle Room. In this room, all the paper scraps from any trimming/grinding of the paper is collected by a network of ducts and ultimately baled together. They then sell the bales for recycling. The emissions from this operation are controlled by a cyclone and two baghouses. It is a closed loop system and nothing is vented outside. This process would be exempt under Rule 285(vi).

Staff's last stop was at the binding area/finishing area where they use two different processes to bind

magazines, catalogs, manuals, etc. together. One process is called saddle stitch which uses a staple binding to hold things together. The other one uses hot melt glue that the binding passes through to hold the finish product together. This process is exempt under Rule 287(i). Staff then thanked Lee for his time and departed the facility at approximately 12:30 p.m.

As mentioned earlier, staff received the records from Lee on August 29, 2014. The following lists their permits special conditions and their compliance status with them.

#### Flexible Group Identification

| Flexible Group ID | Emission Units Included in Flexible Group   | Flexible Group Reference No. |
|-------------------|---|------------------------------|
| FGWebFed          | Five Webfed Heatset Offset Lithographic Printing Presses (WebFed): EUM-1000A2, EUM-1000A, EUM-1000, EUM-120A and EU_MarkVI. | 1                            |
| FGSheetFed        | Four Sheetfed Offset Lithographic Printing Presses and One Coater: EUSheetFed-01 through EUSheetFed-5.                      | 2                            |
| FGInkJet          | Three Ink Jet Printers: EUInkJet-01 through EUInkJet-03   | 3                            |
| FGSS              | All Emission Units Within the Stationary Source (All Grandfathered, Exempt, and Permitted Equipment).                       | 4                            |

#### The following conditions apply to: 1. FGWebFed

##### Emissions Limits

**1.1a:** The VOC content of the fountain solution used in FGWebFed has to be less than 5% by with as applied and shall not contain Isopropyl Alcohol, Propyl Alcohol, or Ethanol.

**AQD Comment:** COMPLIANCE. The fountain solution comes in 330 gallon totes and according to the MSDS looked at previously contains 1.3 pounds of VOC per gallon. They still dilute the solution with water at an approximate ratio of 4 ounces of solution to 1 gallon of water. If that ratio is still accurate then the VOC content as applied would be under 5% even if it was VOC content of the solution was 100%. The solutions do not contain any of the alcohols mentioned.

**1.1b:** The VOC emissions from FGWebFed cannot exceed 16.04 pounds per hour based on monthly emissions.

**AQD Comment:** COMPLIANCE. They had a column on their recordkeeping spreadsheet for this requirement but it had not been calculated. They have the information though and their emissions should be well under 16.04 pounds per hour. Staff e-mailed Lee to make sure they start calculating this.

**1.1c:** The VOC emissions from FGWebFed cannot exceed 65.0 tons per year based on a 12-month rolling time period.

**AQD Comment:** COMPLIANCE. According to records reviewed by staff, the most recent 12-month rolling time period (August 2013 – July 2014) VOC emissions totaled 18.4 tons.

##### Process/Operational Limits

**1.2** The permittee shall recover and reclaim, recycle, or dispose of all inks, fountain solutions, and blanket/roller wash (materials), in accordance with all applicable regulations. (R 336.1225, R 336.1702(a), R 336.1901)

**AQD Comment:** COMPLIANCE. The facility appears to be doing this and all waste is kept in closed 55 gallon drums. As mentioned earlier, Lee stated that they now use USIT out of Livonia for their waste disposal. He said that they have the waste hauled out every month.

**1.3** The permittee shall capture all waste materials and store them in closed containers. The permittee shall dispose of all waste materials in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1225, R 336.1702(a), R 336.1901)

**AQD Comment:** COMPLIANCE. Staff noted that all waste materials are stored in closed 55 gallon drums and are disposed of properly.

- 1.4 The permittee shall handle all VOC and/or HAP containing materials in a manner to minimize the generation of fugitive emissions. The permittee shall keep containers covered at all times except when operator access is necessary. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: COMPLIANCE. Staff did not note any materials uncovered during the inspection. Everything appeared to be stored in covered totes, drums, or buckets.

- 1.5 The permittee shall implement the following listed pollution prevention exercise for FGWebFed: (R 336.1225, R 336.1702(a), R 336.1901)
- a) If possible, eliminate (or use only on hard to clean spots) use of *type wash* cleaners or cleaners that contain hazardous air pollutants such as toluene and xylene.
  - b) If possible, collect and reuse cleaning solvent.
  - c) Ensure that used solvents and solvent saturated towels or wipes are not disposed with the trash.
  - d) Send solvents that cannot be reused off-site for recycling.
  - e) Conduct training on proper cleaning methods to assure success when using new materials and practices.
  - f) All press related cleaning solvents (blanket and roller washes) shall have composite partial vapor pressures that do not exceed 10 mmHg@20°C (68°F).
  - g) All containers of new and used VOC-containing press related cleaning materials (blanket and roller washes, and solvent-containing cleaning towels) shall be kept closed at all times.

AQD Comment: COMPLIANCE. Staff knows the facility is doing some of the above items and will have to assume that they are doing the others as well.

- 1.6 The permittee shall maintain and implement the approved Malfunction Abatement Plan (MAP) for the RTO. Alternate formats or revisions to the approved program must be approved by the AQD District Supervisor. (R 336.1911)

AQD Comment: COMPLIANCE. The facility does routine maintenance on the RTO as part of their preventative maintenance program for the facility although Lee wasn't aware of an approved MAP.

#### Equipment

- 1.7 The permittee shall not operate FGWebFed unless all dryers are installed, maintained and operated in a satisfactory manner. Satisfactory operation requires that the dryer associated with EUM-1000A2, EUM-1000A, and EUMarkVI are operating at a pressure lower than all adjacent areas so that air flows into the each dryer through all natural draft openings at all times. This shall be achieved by using existing built-in interlock system which will trigger automatically and shuts off the appropriate press if the dryer is not operating in negative pressure. (R 336.1225, R 336.1702(a), R 336.1910)

AQD Comment: COMPLIANCE. The dryers have a built in interlock system.

- 1.8 The permittee shall not operate EUM-1000A2, EUM-1000A, and EUMarkVI unless the RTO is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the RTO requires a minimum VOC destruction efficiency of 95 percent (by weight), and maintaining a minimum temperature of 1450 °F and a minimum retention time of 0.5 seconds. (R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)

AQD Comment: COMPLIANCE. During the inspection, the oxidizer was operating and the combustion temperature was indicating 1568 degrees F.

#### Testing

- 1.9 The permittee shall annually test and certify the built-in interlock system to show compliance with Special Condition No. 1.7. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: COMPLIANCE. On March 15, 2014 they tested the interlock system and the next test is scheduled for September 15, 2014. They also have a field service representative from TANN (part of

L&E Environmental) come out to do maintenance on the oxidizer and look things over annually.

1.10 The VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or 24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

AQD Comment: Appears to be in COMPLIANCE. AQD staff has not requested VOC content verification to date.

1.11 Upon written request from the AQD District Supervisor, verification of destruction efficiency of the RTO ducted to EUM1000A2, EUM-1000A, and EUMarkVI of the FGWebFed by testing at owner's expense, in accordance with Department requirements will be required. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of destruction efficiencies includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. (R 336.1205, R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2001, R 336.2003, R 336.2004, R 336.1205)

AQD Comment: COMPLIANCE. AQD staff has not requested that the facility conduct any testing to date.

#### Monitoring

1.12 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device. Also, the permittee shall use a continuous paper graph temperature recorder to monitor and record the bed temperature of RTO. The recorder shall be conspicuously located on the front of the RTO control panel (which is located south and east of the M1000A press and visible at eye level on the ground floor elevation). Any changes in device type, location or ability to monitor and record the temperature in satisfactory manner requires prior approval by the Air Quality Division District Supervisor. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: The RTO is now equipped with a computer data logger (installed approximately 2 months ago) instead of a strip chart which most companies have switched too for flares, carbon adsorption, RTO's, etc. Although the company didn't request prior approval before the change, these data loggers are a lot better system than strip chart or circular chart recorders so staff will not find them in violation in this instance. Lee can pull up current and previous data up on his computer with this system.

#### Recordkeeping / Reporting / Notification

1.13 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. Records appear to be done in an acceptable format.

1.14 The permittee shall keep a separate written record of the following for the FGWebFed on a calendar month averaging period:

- a) The type (ink, fountain solution, cleanup solvent (blanket/roller cleaning solvents), thinning, etc.) of each material used.
- b) Chemical composition of fountain solution, including weight percent of each component.
- c) The VOC content of each material, with water, (in percent by weight or pounds per gallon), as received and as applied.
- d) The usage rate (in pounds or gallons) of each material as applied.
- e) The amount (in pounds) of each material reclaimed.
- f) Record to demonstrate compliance with Special Condition No. 1.5.
- g) Actual hours of operation.

- h) VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. Staff noted that the above items were being kept on their recordkeeping spreadsheets or MSDS.

- 1.15 The permittee shall calculate the VOC content of the fountain solution using the method detailed in Appendix A or an alternate method approved by the AQD District Supervisor. Calculations shall include both dampening aid and wetting agent, as used, in percent by weight. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. Although the facility doesn't use Appendix A for their calculations, they have a pre-set mixing ratio of the solutions with water that they calculate their percentage from.

- 1.16 The permittee shall keep records (once per shift) the bed temperatures of the RTO. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: COMPLIANCE. They have computer data recorder that continuously records this information.

- 1.17 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: COMPLIANCE. The facility maintains a listing of all their MSDS.

- 1.18 The permittee shall keep annual testing and certification records of the built-in interlock system to show compliance with Special Condition No. 1.9. All records shall be kept on file for a period of five years and made available to the Department upon request. (R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: The facility has these records so far to date.

#### Stack/Vent Restrictions

- 1.19a SVRTO stack's maximum diameter is 24 inches and minimum height of 32 feet above ground level.
- 1.19b SVM1000 stack's maximum diameter is 16 inches and a minimum height of 32 feet above ground level.
- 1.19c SVM120A stacks's maximum diameter is 18 inches and a minimum height of 32 feet above ground level.

AQD Comment: The stacks all appear to meet the dimensional requirements above.

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The following conditions apply to: 2. FGSheetFed

#### Emissions Limits

- 1.1a: The VOC content of the fountain solution used in FGSheetFed has to be less than 5% by with as applied and shall not contain Isopropyl Alcohol, Propyl Alcohol, or Ethanol.

**AQD Comment: COMPLIANCE.** The fountain solution comes in 330 gallon totes and according to the MSDS looked at previously contains 1.3 pounds of VOC per gallon. They still dilute the solution with water at an approximate ratio of 4 ounces of solution to 1 gallon of water. If that ratio is still accurate then the VOC content as applied would be under 5% even if it was VOC content of the solution was 100%.

**1.1b:** The VOC emissions from FGSheetFed cannot exceed 18.6 tons per year based on a 12-month rolling time period.

**AQD Comment: COMPLIANCE.** According to records reviewed by staff, the most recent 12-month rolling time period (August 2013 – July 2014) VOC emissions totaled 11.62 tons.

#### Process/Operational Limits

**1.2** All waste inks and cleaning solvents shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

**AQD Comment: COMPLIANCE.** The facility appears to be doing this and all waste is kept in closed 55 gallon drums. As mentioned earlier, Lee stated that they now use USIT out of Livonia for their waste disposal. He said that they have the waste hauled out every month.

**1.3** The permittee shall implement the following listed pollution prevention exercise for the FGSheetFed: (R 336.1225, R 336.1702(a), R 336.1901)

- a) If possible, eliminate use of cleaners that contain hazardous air pollutants such as *toluene* and *xylene* or use only on hard to clean spots.
- b) If possible, collect and reuse cleaning solvent.
- c) Ensure that used solvents and solvent saturated towels or wipes are not disposed with the trash.
- d) Send solvents that cannot be reused off-site for recycling.
- e) Conduct training on proper cleaning methods to assure success when using new materials and practices.
- f) All press related cleaning solvents (blanket and roller washes) shall have composite partial vapor pressures that do not exceed 10 mmHg@20°C (68°F).
- g) All containers of new and used VOC-containing press related cleaning materials (blanket and roller washes, and solvent-containing cleaning towels) shall be kept closed at all times.

**AQD Comment: COMPLIANCE.** Staff knows the facility is doing some of the above items and will have to assume that they are doing the others as well.

#### Testing

**1.4** The VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or 24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

**AQD Comment: Appears to be in COMPLIANCE.** AQD staff has not requested VOC content verification to date.

#### Recordkeeping / Reporting / Notification

**1.5** All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205 (3), R 336.1224, R 336.1225, R 336.1702(a))

**AQD Comment: COMPLIANCE.** Records appear to be done in an acceptable format.

- 1.6 The permittee shall keep written record of the following for the FGSheetFed on a calendar month period:
- Identification of the category (e.g. ink, coating, blanket wash) of each VOC containing material used.
  - The VOC content of each VOC containing material as received and as-applied (percent by weight).
  - The usage (in pounds or gallons) of each VOC containing material.
  - VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

**AQD Comment: COMPLIANCE.** Staff noted that the above items were being kept on their recordkeeping spreadsheets

- 1.7 The permittee shall calculate the VOC content of the fountain solution using the method detailed in Appendix A or an alternate method approved by the AQD District Supervisor. Calculations shall include both dampening aid and wetting agent, as used, in percent by weight. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

**AQD Comment: COMPLIANCE.** Although the facility doesn't use Appendix A for their calculations, they have a pre-set mixing ratio of the solutions with water that they calculate their percentage from.

- 1.8 The permittee shall keep all applicable records to demonstrate compliance with Special Condition No. 1.3 as acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

**AQD Comment: COMPLIANCE.** The facility has various records to show compliance with SC 1.3.

- 1.9 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each VOC containing material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

**AQD Comment: COMPLIANCE.** The facility maintains a listing of all their MSDS.

The following conditions apply to: 3. FGInkJet

**Emissions Limits**

- 1.1: The VOC emissions from FGInkJet cannot exceed 0.7 tons per year based on a 12-month rolling time period.

**AQD Comment: COMPLIANCE.** According to records reviewed by staff, the most recent 12-month rolling time period (August 2013 – July 2014) VOC emissions totaled 0.73 tons.

**Process/Operational Limits**

- 1.2 All waste inks and cleaning solvents shall be captured and stored in closed containers and shall be disposed of in an acceptable manner in compliance with all applicable state rules and federal regulations. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

**AQD Comment: COMPLIANCE.** The facility appears to be doing this and all waste is kept in closed 55 gallon drums. As mentioned earlier, Lee stated that they now use USIT out of Livonia for their waste disposal. He said that they have the waste hauled out every month.

**Testing**

- 1.3 The VOC content of any material, as received and as applied, shall be determined using federal Reference Test Method 24 (inks, coatings, fountain solution additives and cleaning solvents) or



24A (only applies to solvent-borne inks and related coatings used in the publication rotogravure industry) pursuant to Rule 1040(5). Upon prior written approval by the AQD District Supervisor, VOC content may be determined from manufacturer's formulation data. If the Method 24 or 24A and the formulation values should differ, the Method 24 or 24A results shall be used to determine compliance. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

AQD Comment: Appears to be in COMPLIANCE. AQD staff has not requested VOC content verification to date.

#### Recordkeeping / Reporting / Notification

1.4 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205 (3), R 336.1224, R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. Records appear to be done in an acceptable format.

1.5 The permittee shall keep written record of the following for the FGInkJet on a calendar month period:

- Identification of the category (e.g. ink, coating, blanket wash) of each VOC containing material used.
- The VOC content of each VOC containing material as received and as-applied (percent by weight).
- The usage (in pounds or gallons) of each VOC containing material.
- VOC emission calculations determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. Staff noted that the above items were being kept on their recordkeeping spreadsheets

1.6 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each VOC containing material, including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a), R 336.1901)

AQD Comment: COMPLIANCE. The facility maintains a listing of all their MSDS.

#### The following conditions apply to : 4. FGSS

##### Emissions Limits

4.1a: The VOC emissions from FGSS cannot exceed 90 tons per year based on a 12-month rolling time period.

AQD Comment: COMPLIANCE. According to records reviewed by staff, the most recent 12-month rolling time period (August 2013 – July 2014) VOC emissions totaled 30.73 tons.

4.1b: Any individual HAP emission from FGSS cannot exceed 9.0 tons per year based on a 12-month rolling time period.

AQD Comment: COMPLIANCE. According to records reviewed by staff, the highest individual HAPs were Xylenes at 0.273 tons, Cumene at 0.171 tons, Methanol at 0.046 tons, and Napthalene at 0.042 tons.

4.1c: The combined HAP emissions from FGSS cannot exceed 22.5 tons per year based on a 12-month rolling time period.

AQD Comment: COMPLIANCE. According to records reviewed by staff, the most recent 12-month

rolling time period (August 2013 – July 2014) combined HAP emissions totaled 0.531 tons.

### Process/Operational Limits

- 4.2 All waste materials (ink, fountain solution, cleanup solvent (blanket/roller cleaning solvents), thinning, etc.) shall be captured and stored in closed containers and disposed of in an acceptable manner in compliance with all applicable rules and regulations. (R 336.1205(3), R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. The facility appears to be doing this and all waste is kept in closed 55 gallon drums. As mentioned earlier, Lee stated that they now use USIT out of Livonia for their waste disposal. He said that they have the waste hauled out every month.

### Testing

- 4.3 The VOC content of any material (ink, fountain solution, blanket/roller cleaning solvents, thinning, etc.) as applied and as received shall be determined using federal Reference Test Method 24 or 24A per the requirements of Rule 1040(5). Upon prior approval of the District Supervisor, Air Quality Division, VOC content may alternatively be determined from manufacturer's formulation data. (R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2040(5))

AQD Comment: Appears to be in COMPLIANCE. AQD staff has not requested VOC content verification to date.

- 4.4 The HAP content of any material (ink, fountain solution, blanket/roller cleaning solvents, thinning, etc.), as applied and as received, shall be determined using manufacturer's formulation data. Upon request of the District Supervisor, the HAP content of manufacturer's formulation data shall be verified using Method 311. (R 336.1299(e), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

AQD Comment: Appears to be in COMPLIANCE. The facility has the manufacturer's formulation data (MSDS) and the AQD has not requested any HAP content verification to date using EPA Method 311.

### Recordkeeping/Reporting/Notification

- 4.5 The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material (ink, fountain solution, cleanup solvent (blanket/roller cleaning solvents), thinning, etc.), including the weight percent of each component. The data may consist of Material Safety Data Sheets, manufacturer's formulation data, or both. The data shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1224, R 336.1225, R 336.1702(a))

AQD Comment: COMPLIANCE. The facility maintains a listing of all their MSDS.

- 4.6 All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(3), R 336.1225, R 336.1901)

AQD Comment: COMPLIANCE. Records appear to be done in an acceptable format.

- 4.7 The permittee shall keep the following information on a monthly basis for the FGSS:
- Each material (ink, fountain solution, cleanup solvent (blanket/roller cleaning solvents), thinning, etc.) used and reclaimed;
  - As received, VOC content of each material (with water);
  - VOC mass emission calculations determining the monthly emission rate in tons per month; and
  - Total combined VOC mass emission calculations determining the yearly emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five (5) years and made available to the Air Quality Division

upon request. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1702(d))

AQD Comment: COMPLIANCE. Staff noted that the above items were being kept on their recordkeeping spreadsheets

- 4.8 The permittee shall keep the following information on a monthly basis for the FGSS:
- Gallons used of each material;
  - Gallons reclaimed of each material, where applicable (typically cleanup or purge solvent);
  - HAP content, in pounds per gallon, of each material;
  - Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per month; and
  - Individual and aggregate HAP emission calculations determining the yearly emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The records shall be kept in a format acceptable to the AQD District Supervisor. All records shall be kept on file for a period of at least five (5) years and made available to the Air Quality Division upon request. (R 336.1205(3), R 336.1299(e))

AQD Comment: COMPLIANCE. Staff noted that the above items were being kept on their recordkeeping spreadsheets

Permit Date:

- 4.9 Within 30 calendar days after the issuance of this permit, the permittee shall label each emission unit with a method acceptable to the District Supervisor. The permittee must notify the District Supervisor, Air Quality Division, in writing as to the date that the labeling was completed. This notification shall take place within 15 calendar days after the labeling has been completed. (R 336.1201)

AQD Comment: COMPLIANCE. Each piece of equipment was labeled.

COMPLIANCE SUMMARY: The facility appears to be in COMPLIANCE with their PTI No. 232-97D at the present time.

NAME Matt Dahn

DATE 9-11-14

SUPERVISOR mq 9/11/2014