

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

B430226020

FACILITY: ESCO Company, LLC		SRN / ID: B4302
LOCATION: 1221 East Barney Avenue, MUSKEGON		DISTRICT: Grand Rapids
CITY: MUSKEGON		COUNTY: MUSKEGON
CONTACT: Bruce Katje , Regulatory Compliance Officer		ACTIVITY DATE: 07/15/2014
STAFF: Jenifer Dixon	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to complete a scheduled inspection and to determine the facility's compliance with all applicable Air Quality Rules and Regulations, Permit No.s 482-77, 658-84, 120-85, 467-87A, and 207-06 as well as all other applicable Air Quality Rules and Regulations.		
RESOLVED COMPLAINTS:		

This was an unannounced inspection. An "Environmental Inspections" brochure was provided at the time of the inspection.

The purpose of this inspection was to complete a scheduled inspection and to determine the facility's compliance with all applicable Air Quality Rules and Regulations, Permit No.s 482-77, 658-84, 120-85, 467-87A, and 207-06 as well as all other applicable Air Quality Rules and Regulations.

JD and Thomas Berdinski (TB), Water Resources Division, arrived in the area of the facility at approximately 9:45AM and departed at 11:45PM. No odors or excess opacity was observed during the time before, during, or after the inspection. Mr. Bruce Katje, VP of Operations, provided pertinent information regarding the facility and the operations contained therein during the time of the inspection as well as operational information and records after the inspection via e-mail.

ESCO Company LLC (ESCO) produces a variety of color formers. These inks are used either in situations where pressure sensitive or thermal inks are needed. ESCO sells the ink produced (in powder form) to manufacturers who create products such as carbonless receipt paper, thermochromics and laser imaging for end users.

### **PERMIT NO. 482-77**

The solvent recovery still covered by this permit is still in operation at the facility. The permit only has one special condition which limits the visible emission from the process to 20% or less. There were no visible emissions observed during the time of the inspection.

### **PERMIT NO. 658-84**

This permit covers the 10,000 gallon replacement tank for the caustic material used in the process. This is a steel tank that holds sodium hydroxide. This caustic material is used in the caustic scrubber which will be further discussed later in this report.

There is one special condition associated with this tank. The condition states that no raw materials will be substituted that would result in an appreciable change in the quality or any appreciable increase in the quantity of the emission of an air contaminant without notification. No changes have been made to the raw materials used.

This tank may qualify for a permitting exemption under the Rule 201 permitting exemption, Rule 284(i). This exemption allows for the storage of materials in containers of less than 40,000 gallons if the material has a vapor pressure of not more than 1.5 psia. According the information on the Dow Chemical website, sodium hydroxide has a vapor pressure of 1.5 psia, which would allow ESCO to void this permit if desired.

### **PERMIT NO. 120-85**

The PIPP vault is covered by this permit. The PIPP vault is a pollution incident prevention plan vault that is used to store rainwater and runoff from the facility. This vault does have a breathing vent. However, according to the Eval Form for the permit, this PIPP vault is not a source of air contaminants and likely does not require a permit. There are no visible emissions allowed from this process. No visible emissions were observed during the time of

the inspection.

### **PERMIT NO. 467-87A**

Permit No. 467-87A covers both the toluene and methyl chloride storage tanks.

Special Condition 13 – The applicant shall not operate the pressurized 8,000 gallon methyl chloride storage tank, hereinafter “tank”, unless the pressure in the tank is greater than 2-atmosphere absolute.

*This continues to be completed as required by the permit condition.*

### **PERMIT NO. 207-06**

#### **EUSTRIPPER**

##### **Emission Limits**

1.1a VOC emissions are limited to 0.72 pph based on a stack test.

*Compliance with this condition is assumed as long as proper operation is maintained. Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

1.1b VOC emissions are limited to 3.2 tpy based on a 12 month rolling time period as determined at the end of each calendar month.

*Based on the records received, the VOC emissions have been less than 2 tons for the time period of March 2014 through June 2014.*

##### **Monitoring**

1.2 The permittee shall monitor, in a satisfactory manner, the flow rate and the total VOC concentration of the effluent water stream for EUSTRIPPER on a monthly basis. 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. **[R336.1702(a) R336.1901]**

*Based on records reviewed this is being completed as required by the permit condition.*

##### **Recordkeeping/Reporting/Notification**

1.3 The permittee shall record, in a satisfactory manner, the flow rate and the total VOC concentration of the effluent water stream for EUSTRIPPER on a monthly basis. 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. **[R336.1702(a) R336.1901]**

*Based on records reviewed this is being completed as required by the permit condition.*

1.4 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of the VOC emission rates for EUSTRIPPER, as required by SC 1.1b. The permittee shall keep all records or file for a period of at least five years and make them available to the Department upon request. **[R336.1702(a), R336.1901]**

*Based on records reviewed this is being completed as required by the permit condition.*

##### **Stack/Vent Restrictions**

This section details the stack height and diameter restrictions for the emission unit. Based on visual observations of the stacks, the dimensions listed in the permit appear to coincide with the actual dimensions. The stacks were not physically measured.

#### **FGPRODUCTION**

##### **Emission Limits**

2.1a VOCs (normal mode) are limited to 16.8 pph based on stack test results.

*Compliance with this condition is assumed as long as proper operation is maintained. Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

2.1b VOCs (maintenance mode) are limited to 67.4 pph based on stack test results.

*Compliance with this condition is assumed as long as proper operation is maintained. Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

2.1c VOCs are limited to 27 tpy based on a 12-month rolling time period as determined at the end of each calendar month.

*For the time period of July 2013 through June 2014, the facility has operated well below the permitted limit with the highest emissions being in January 2014 with 13,924 pounds or 6.92 tons.*

2.1d PM is limited to 0.10 lbs per 1,000 lbs exhaust gas based on stack test results.

*Compliance with this condition is assumed as long as proper operation is maintained. Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

2.1e PM is limited to 0.5 pph based on stack test results.

*Compliance with this condition is assumed as long as proper operation is maintained. Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

#### **Process/Operational Limits**

2.2 Permittee shall not operate FGPRODUCTION with the VOC condenser system in maintenance mode for more than 5 percent of the time the process is operating, based on a 12-month rolling time period as determined at the end of each calendar month. **[R336.1225, R336.1910]**

*Based on the records reviewed, FGPRODUCTION did not operate in maintenance mode at all during the time period of September 2013 through March 2014.*

#### **Equipment**

2.3 The permittee shall not operate FGPRODUCTION, except as allowed by SC 2.2, unless the condenser is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the condenser includes a vapor outlet temperature of no greater than -10 °C. **[R336.1225, R336.1702(a), R336.1901, R336.1910]**

*Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

2.4 The permittee shall not operate the portions of FGPRODUCTION vented to the caustic scrubber, unless the caustic scrubber is installed, maintained and operated in a satisfactory manner. Satisfactory operation of the caustic scrubber includes an alarm for low pressure and low flow. **[R336.1225, R336.1702(a), R336.1901, R336.1910]**

*Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

#### **Testing**

2.5 Upon request by the AQD District Supervisor, the permittee shall verify and quantify VOC emission rates from FGPRODUCTION by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **[R336.1205, R336.1220, R336.1224, R336.1225, R336.1299, R336.1702, R336.2001, R336.2003, R336.2004, 40 CFF 52.21]**

*No testing is requested at this time.*

**Monitoring**

- 2.6 The permittee shall monitor, in a satisfactory manner, the time periods that FGPRODUCTION is operating in maintenance mode on a continuous basis. **[R336.1225, R336.1702, R336.1910]**

*Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

- 2.7 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor the vapor outlet temperature from the VOC condenser system of FGPRODUCTION on a continuous basis **[R336.1225, R336.1301, R336.1702, R336.1910]**

*Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

- 2.8 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a liquid flow indicator and a device to monitor pump pressure for the caustic scrubber of FGPRODUCTION on a continuous basis. **[R336.1225, R336.1301, R336.1702, R336.1910]**

*Based on observations made at the time of the inspection, the facility appears to be in compliance with this condition.*

**Recordkeeping/Reporting/Notification**

- 2.9 The permittee shall keep, in a satisfactory manner, monthly records of the number of batches and yield per batch of all products in the ODB-2, BuKeto, BuMAP, Black XV, N-102 and EtKeto processes for FGPRODUCTION. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1910]**

*Based on records reviewed, these records are being kept as required by the permit condition. For each month the process, the number of batches, and the average yield is recorded.*

- 2.10 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the time periods that FGPRODUCTION is operating in maintenance mode. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1910]**

*Based on records reviewed, these records are being kept as required by the permit condition.*

- 2.11 The permittee shall keep, in a satisfactory manner, records of the vapor outlet temperature for the VOC condenser system of FGPRODUCTION once per shift. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1910]**

*Based on observations of the VOC condenser logs made at the time of the inspection, the facility appears to be in compliance with this condition.*

- 2.12 The permittee shall keep, in a satisfactory manner, records of the verification of liquid flow and any low flow or low pressure alarms for the caustic scrubber of FGPRODUCTION once per batch. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702, R336.1910]**

*Based on observations of the caustic scrubber logs made at the time of the inspection, the facility appears to be in compliance with this condition.*

- 2.13 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of the VOC emission rates for FGPRODUCTION, as required by SC 2.1c. 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. **[R336.1205(2)]**

*Based on records reviewed, these records are being kept as required by the permit condition.*

**Stack/Vent Restrictions**

This section details the stack height and diameter restrictions for the emission unit. Based on visual observations of the stacks, the dimensions listed in the permit appear to coincide with the actual dimensions. The stacks were not physically measured.

### **FGFACILITY**

#### **Emission Limits**

3.1a Each Individual HAP is limited to less than 10 tpy based on a 12 month rolling time period as determined at the end of each calendar month.

*Based on records reviewed, the facility is in compliance with this condition. The highest emitting HAP recorded is toluene, with the highest 12 month rolling time period being January 2014 with 9,048 pounds or 4.5 tons.*

3.1b Aggregate HAPS are limited to less than 25 tpy based on a 12 month rolling time period as determined at the end of each calendar month.

*Based on records reviewed, the facility is in compliance with this condition. The highest emitting 12 month rolling time period being January 2014 with 14,134 pounds or 7.1 tons.*

#### **Recordkeeping / Reporting / Notification**

3.2 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period calculations of the individual HAP and aggregate HAP emission rates for FGFACILITY, as required by SC 3.1a and SC 3.1b. 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. **[R336.1205(2)]**

*Based on records reviewed, these records are being kept as required by the permit condition.*

### **BENZENE NESHAP (Subpart FF)**

Benzene NESHAP records were reviewed for 2013. Total benzene in the waste stream must be less than 1 Mg/yr. The facility is in compliance with this limit at 0.027 Mg/yr for 2013. The benzene concentration information for this calculation is based on testing done by an outside contractor.

Based on observations made at the time of the inspection and the subsequent review of the records supplied to JD by Mr. Katje, ESCO appears to be in compliance with associated permits discussed above and all other applicable Air Quality Rules and Regulations.

NAME 

DATE 7/22/14 SUPERVISOR PAB