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

FACILITY: Gage Products Company		SRN / ID: N0842
LOCATION: 625 Wanda Avenue, FERNDALE		DISTRICT: Southeast Michigan
CITY: FERNDALE		COUNTY: OAKLAND
CONTACT: Sharon Stahl, Environmental Manager		ACTIVITY DATE: 08/25/2014
STAFF: Robert Elmouchi	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: Scheduled inspection	l.	
RESOLVED COMPLAINTS:		

On August 25, 2014, I conducted a scheduled inspection of Gage Products Company (Gage) located at 821 Wanda, Ferndale, Michigan. This facility is uniquely identified by the Air Quality Division with the State Registration Number (SRN) of **N0842**. The purpose of this inspection was to determine the facility's compliance with the requirements of the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the administrative rules; and Renewable Operating Permit (ROP) No. MI-ROP-N0842-2013.

NOTE: Permit to Install (PTI) No. 43-08 was incorporated into MI-ROP-N0842-2013 on the effective date of June 4, 2013.

I entered the facility, met with Ms. Sharon Stahl, EHS Manger; and Ms. Julie Mileskiy, Environmental Engineer; and explained the purpose of the inspection. Ms. Stahl and Ms. Mileskiy escorted me throughout the inspection of the facility as well as provided records for review upon request.

Gage Products remanufactures used solvents and blends reclaimed product for use as coating line purge solvents. Gage also purchases new material to custom blend fuels for product development and emission-control testing.

Dell Marking Systems (Dell) makes specialty inks for industrial applications. Dell was initially owned by Gage then Dell subsequently purchased the ink manufacturing business from Gage. Dell remained located at the Gage campus until midyear 2014. During this site inspection, I visually confirmed that Dell manufacturing (which included a baghouse) and sales activities have been removed from this site. Also a Rule 201 exempt pilot distillation process was removed from this location and scraped. A web search indicates that Dell Marking Systems is still located on the Gage campus. On September 11, 2014, I called the Dell telephone number and spoke with Andorra, who informed me that Dell is not currently manufacturing inks. Andorra explained that Dell had proactively manufactured extra product before moving from the Gage campus. Andorra stated that Dell is currently seeking a new manufacturing location and that I should speak with Mr. Mike Grattan, who would address environmental compliance. Andorra took my contact information and stated that Mr. Grattan would contact me. Subsequent communication with Dell will be addressed in a future activity report under a new state registration number.

## FACILITY INSPECTION

### ROP No. MI-ROP-N0842-2013

http://intranet.deq.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=245... 9/11/2014

**SOURCE-WIDE REQUIREMENTS:** This table limits the facility's emission of individual hazardous air pollutants HAPs to 9.9 tons per year (TPY) and the combined emission of HAPs to 24.9 TPY. Ms. Stahl and Ms. Mileskiy presented records (see attached), which appear to demonstrate compliance with the emission limits. As of July 2014, the 12-month rolling **total aggregate** HAP emissions was 7.04 tons, which is less than the individual (9.9 tons per year) and aggregate (24.9 tons per year) HAP limits. As of July 2014, the 12-month rolling **total** VOC emissions was 25.96 tons, which is less than the VOC limit of 89 tons per year.

## EUNSPSSMALLTANKS

Gage maintains records showing the dimensions of the storage vessels and an analysis showing the capacity of the storage vessel as required per the monitoring / recordkeeping table and per 40 CFR 60.116(b). This source appears to comply with 40 CFR Subpart Kb, section 60.110b. Tanks No. 67 and 68, have a capacity less than or equal to 75 cubic meters.

### **NSPSMEDTANKS**

Gage maintains records showing the dimensions of the storage vessels and an analysis showing the capacity of the storage vessel as required per the monitoring / recordkeeping table and per 40 CFR 60.116(b). This source appears to comply with 40 CFR Subpart Kb, section 60.110b. Tanks No. 69, 70 and 71 have a capacity between 75 and 151 cubic meters. Gage has stored a liquid with a vapor pressure greater than or equal to 27.6 kPa and has notified the AQD as required per VII.1.

## **NSPSLARGETANKS**

These tanks are used to store product and waste from the remanufacturing process that are subject to New Source Performance Standards. Tanks 78, 79, 80, and 81 in this table appear to be in compliance with all permit requirements, including the requirement of an installed and operating vapor balance system, and recordkeeping requirements. Gage has stored a liquid with a vapor pressure greater than or equal to 27.6 kPa and has notified the AQD as required per VII.1.

**EUTANKER:** I observed the vent condenser system was installed and appeared to be operational. This vent condenser is located near the LSF covered area and the chiller is adjacent to the boiler building. Records of emissions are attached to this report.

**EUTOTE&DRUM** is part of FGFUELBLEND. This emission unit only contains diesel fuels.

## FGSUBDDTANKS

This flexible group consists of tanks and transfer system that meet the definition of a material management unit. Containers that are material management units subject to 40 CFR 63 Subpart DD requirements are evaluated in FGRULE290LSF. Also, receiver vessels that have emissions controlled by CDFINALCOND are evaluated in FG-SUBDD-

PROCESSVENTS. The permittee has a written startup, shutdown and malfunction plan for CMS as specified in 63.6(e)(3). I observed that the vapor balance transfer system appeared to be installed and operating properly.

### **FG-SUBDDLEAKS**

I discussed the required inspections and reviewed recordkeeping with Ms. Stahl and Ms.

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Mileskiy, who described their annual compliance activities, which appeared to be in compliance. I reviewed leak testing records and requested a few copies, which are attached to this report.

# FGTANKFARM

Four emission units are associated with this flexible group; EUTANKS, EUDRUMFILLING, EUTOTEFILLING and EUTANKERFILLING. Ms. Stahl and Ms. Mileskiy presented records (see attached), which appear to demonstrate compliance with all applicable recordkeeping and emission limits per permit conditions.

## **FGBOILERS**

I observed two boilers and there did not appear to be any changes made to the boilers since the previous inspection. I did observe the recordkeeping system displayed on the east wall in the boiler building. This manual system tracked maintenance activities and daily fuel consumption. The recordkeeping system showed that the fuel meter reading for August 24, 2014, was 312,936. At 10:25 a.m. on August 25, 2014, I recorded the value of 313,038 directly from the natural gas meter display. Ms. Stahl informed me that only one boiler is operated and the other boiler acts as an alternate source of steam in the event of an equipment failure. Even though alternate fuels are allowed to be combusted, only natural gas is combusted in the boilers. The boilers do not appear to be subject to 40 CFR Part 63, Subpart DDDDD and 40 CFR Part 63, Subpart JJJJJJ because they combust only natural gas.

## FGREMANUFACTURE

I observed the remanufacturing facility where two thin film evaporators are used to reclaim waste purge solvents, which are blended to make a recycled purge solvent. The first thin film evaporator performs the gross step of separating the liquids from the solids. The second thin film evaporator removes water and distills the reclaimed solvent mix into fractional (typically not pure) components.

FGREMANUFACTURE consists of EGNEWEVAPORATOR, EGOLDEVAPORATOR and EGDISTILLATION, the associated pollution control equipment and the monitoring and recordkeeping equipment. I observed the monitoring equipment. The electronic data logging system indicated the exhaust gas temperature of CDFINALCOND varied from 41.94°F to 42.14°F. The permit limit is 42° F. The chilled water & glycol outlet temperature of CDFINALCOND was 18.93°F, which appears to demonstrate compliance with the permit limit of 37° F and also appears to demonstrate compliance when the stack exhaust temperature exceeds 42° F. It is important to note that this process does not always have an exhausting flow and may actually draw ambient atmosphere into the exhaust stack, thereby temporarily increasing the temperature sensed at the stack exhaust, especially when the ambient temperature is high. During this inspection the ambient temperature was above 80°F.

# FGRULE290LIMITEDSTORAGE

This flexible group applies to the storage of incoming, or in transit, used solvents. The incoming material is routed through the remanufacturing process either by feeding directly from a tanker truck or by temporarily storing incoming material in the limited storage tanks. The in-transit material is received by Gage Products from their customer and then shipped to a waste disposal facility. I observed the in-transit material is stored in drums with sealed lids, which appear to satisfy the level one emission standards for containers. On the date of this inspection I observed nine 55 gallon drums and three 5 gallon pails. A vapor balancing system is used when transferring material to large storage vessels.

## FGRULE290

EGTOTECLEANING is the only emission unit currently active under this flexible group. Xylene is the tote cleaning process solvent. Ms. Stahl presented records (see attached), which appear to demonstrate compliance with the emission limits. The tote cleaning process uses a vapor recovery system for emission control. EUTANKERWASH has only been trailed by the permittee. The trial was performed without using a volatile organic solvent and has not been used since 2007. This source appears to comply with all the permit requirements associated with this flexible group.

## **FGCOLDCLEANERS**

The only previously observed parts cleaner in the 515 building appears to have been removed. It appears Gage no longer is in possession of cold parts cleaner. No cold cleaner has been installed since my previous inspection. Gage employees only use limited quantities of parts cleaners in a bucket or smaller container, which appears to be incompliance with the R281(h) exemption from R201.

### FGINK&SPECIALTY

Two emission units are associated with this flexible group; EGINK and EGSPECIALTY.

**EUINK** is owned and operated by Dell Marking Systems and is an independent business entity. As mentioned above, Dell Marking Systems has vacated the premises and, as of mid-2014, neither manufacturers nor sells from this location.

**EUSPECIALTY** is now the only emission unit represented in the **FGINK&SPECIALTY** flexible group. Fill house #3 and fill house 6 are two manufacturing areas on the Gage campus. **EUSPECIALTY** processes include fuel blending, the manufacturing of solvent-based and abrasive-based paint line flushing agents as well as booth coating materials used to facilitate the cleaning of spray booths and adjacent surfaces. The particulate capture system and baghouse appeared to be properly maintained and operated. I observed that the equipment covers appeared to be installed and operating properly. The emissions from this flexible group is limited to 8.0 tons of VOC per year based upon a twelve month rolling average and 0.01 pound of PM per 1,000 pounds of exhaust gas. The records provided appear to demonstrate compliance with the emission limits.

### FGTKS

**EU515TKS:** per PTI 43-08 were to be numbered 11, 25, 26, 27, 28, and 30. Gage Products changed two numbers identifying the tanks in this emission unit. The tanks in this emission unit are currently numbered 25, 26, 27, 29 30 and 31. Tanks 11 and 28 have not been moved from the tank farm.

**EU15KTKS:** (tanks numbered 203, 204, 205, 206, 207, and 208) has not been installed.

EUHIVPTKS: tanks 209 and 210 were installed and numbered.

**EU9600TKS:** tanks installed and numbered (211 through 222) and Gage began using tanks in this emission unit around July 2008.

Recordkeeping appears to demonstrate compliance.

## **FGBLEND**

The tanks in this flexible group are strictly used for blending materials. No purchased raw materials are stored in these tanks. Also, these tanks are not used to mix product from FGREMANUFACTURE. These tanks are analogous to industrial sized mixing bowls.

EU2300BLEND: (tanks numbered 223, 224, 225, and 226) has not been installed.

EU9600BLEND: tanks, per PTI 43-08 were to be numbered 229, 230, 231, 232, 233 and 234. As of June 2012 these tanks are numbered 229, 231, 232, 233, 234 and 235.

**EUNEBLEND:** tanks installed and numbered. These tanks are an existing part of permitted fuel blending operations.

EU515BLEND: tanks 92, 94, 95 and 96 for diesel fuel blending were installed. Some of these tanks were pre-existing from a previously permitted process. No stack controls for this emission unit are required per the permit.

Recordkeeping appears to demonstrate compliance.

### FGFUELBLEND

This flexible group consists of ten emission units; EU15KTKS, EU15KTKS, EUHIVPTKS, EU9600TKS, EU2300BLEND, EU9600BLEND, EUNEBLEND, EU515BLEND, EUTOTE&DRUM, and EUTANKER. Emissions from this flexible group are controlled with conservation vents, a vent condenser system and a vapor balance system. As of July 2014, the twelve-month rolling total VOC emissions were 4.88 tons per year, which appears to demonstrated compliance with the 21 ton per year permit limit.

### LAB PAINT BOOTHS: R287(c) EXEMPT COATING LINES

Gage has two R287(c) spray booths that appear to be exempt from R201. These coating lines (spray booths) are used to test the effectiveness of purge solvents. I observed that one spray booth was in the process of being cleaned and the filters were removed. The second booth appeared to have properly installed and maintained filters. Both spray booths appeared to have dedicated exhausts. I observed monthly logs and emissions are included in the sourcewide HAPs records as required per the ROP.

#### CONCLUSION

Gage Products Company appears to be in compliance with the evaluated air pollution control rules and permit conditions.

NAME Lenverte DATE 7/11/14 SUPERVISOR\_