# DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT AIR QUALITY DIVISION ACTIVITY REPORT: Scheduled Inspection

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FACILITY: Gage Products Company		SRN / ID: N0842	
LOCATION: 625 Wanda Avenue, FERNDALE		DISTRICT: Southeast Michigan	
CITY: FERNDALE		COUNTY: OAKLAND	
CONTACT: Sharon Stahl, Environmental Manager		<b>ACTIVITY DATE:</b> 06/13/2012	
STAFF: Robert Elmouchi	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR	
SUBJECT: Scheduled inspection.			
RESOLVED COMPLAINTS:			

On June 13, 2012, I conducted a targeted inspection of Gage Products Company (Gage) located at 821 Wanda, Ferndale, Michigan. Ms. Emily Wimmer, AQD Intern, accompanied me on this inspection. 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, Renewable Operating Permit (ROP) No. MI-ROP-N0842-2008, and Permit to Install (PTI) No. 43-08.

I entered the facility, presented photo identification and explained the purpose of the inspection to Sharon Stahl, EHS Manger, and Ms. Julie Mileskiy, Environmental Engineer. Ms. Stahl and Ms. Mileskiy escorted me and Ms. Wimmer during the inspection of the facility, presented records for review and provided copies of records as requested.

Gage Products remanufactures used solvent, blends fuel for dynamometer engine testing, and manufactures new solvents and inks. MI-ROP-N0842-2008 became effective on March 26, 2008, and PTI No. 43-08 was approved on April 15, 2008. Gage applied for this permit to install to increase fuel-blending capacity. Ink manufacturing is performed by Dell Marking Systems Inc., located at 721 Wanda Street, Ferndale, MI, which is located within the Gage campus and therefore has been included within Gage's SRN and emission reports.

#### FACILITY INSPECTION and PERMIT COMPLIANCE EVALUATION

As of the date of this inspection:

## PTI No. 43-08

## **EMISSION UNITS**

**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.

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.

**EUTOTE&DRUM:** was installed and operational.

**EUTANKER:** this process was operational on the date of the inspection. Staff 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.

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 April 2012, the 12-month rolling total aggregate HAP emissions was 6.05 tons, which is 61% of the individual HAP limit and 24% of the aggregate HAP limit. As of April 2012, the 12-month rolling total VOC emissions was 20.59 tons, which is 23% of the VOC limit.

**NOTE:** During the recordkeeping review on June 8, 2010, I observed a discrepancy in the emission totals. It was determined that even though Gage was recording the emissions as required per PTI No. 43-08, the emissions associated with this permit were not included in the source-wide (identified as "Facility Wide" on Gage's Monthly Emission Report) emission totals. This recordkeeping error appears to have been corrected. The flexible group emissions in PTI 43-08 appear to be entered on page 1 of 3 in Gage's *Monthly Emission Report*.

## ROP No. MI-ROP-N0842-2008

## **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.

## **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. NOTE: Gage has not stored a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa since 2001 therefore the permittee has not been required to keep records required per VI.2 since 2003.

#### **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). Staff observed that the vapor balance transfer system appeared to be installed and operating properly.

## **FG-SUBDDLEAKS**

Staff discussed the required inspections and reviewed recordkeeping with Ms. Stahl and Ms. Mileskiy, who described their annual compliance activities, which appeared to be in compliance.

## **FGTANKFARM**

Staff discussed the required inspections and reviewed recordkeeping with Ms. Stahl and Ms. Mileskiy, who described their annual compliance activities, which appear to be in compliance.

## **FGBOILERS**

Staff observed two boilers and there did not appear to be any changes made to the boilers since the previous inspection. Staff did observe the recordkeeping system displayed on the east wall in the boiler building. This manual system tracked maintenance activities and daily fuel consumption. Ms. Stahl informed staff that only natural gas is combusted in the boilers. Therefore, staff did not evaluate emission limits and material limits that do not apply to natural gas.

## EMERGENCY GENERATOR LOCATED OUTSIDE THE WEST DOOR OF THE BOILER BUILDING

I observed an emergency generator and gathered the following information:

Manufacturer: Detroit Diesel – Power System

Model: DDC100 Serial number: 17081

Volts: 480

KVA: 125 (equals 100 kilowatts)

Hour meter: 176.4

This generator is used to supply emergency power only to the boiler building to maintain boiler operation in the event of a power failure. Boiler generated steam is used to heat the buildings and process operations. It is important to maintain boiler operation during a power failure because a portion of the boiler generated steam is used to warm tank farm pipes and prevent them from freezing, which could cause a leak or rupture during cold weather.

The emergency generator engine is a spark ignition natural gas-fired RICE, which appears to be an existing engine subject to 40 CFR Part 63 Subpart ZZZZ. The compliance date for a spark ignition RICE is October 2013. Therefore, Gage Products does not appear to be in violation of Subpart ZZZZ.

#### **FGREMANUFACTURE**

Staff observed emission units; EGNEWEVAPORATOR, EGOLDEVAPORATOR and EGDISTILLATION, the associated pollution control equipment and the monitoring and recordkeeping equipment. Staff observed the monitoring equipment. The primary data recording equipment (a Honeywell Multitrend 5x electronic data logging system with a color LCD display) indicated the exhaust gas temperature of CDFINALCOND was in compliance with the permit limit of 42° F. The chilled water outlet temperature of CDFINALCOND also appeared to indicate compliance with the permit limit of 37° F.

## FGRULE290

At the time of the inspection, 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. Ms. Stall indicated that 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.

## 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. A vapor balancing system is used when transferring material to large storage vessels.

#### FGINK&SPECIALTY

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

**EGINK** is owned and operated by Dell Marking Systems. Dell Marking Systems receives color pastes, resins and dyes, which are blended to make water-based and solvent-based inks. All emissions from the Dell Marking Systems processes are included in FGINK&SPECIALTY emission limits. The EGINK buildings are the Dell Marking Systems and Fill House No. 4. Fill House No. 4 contains a R&D (pilot) Distillation Unit, which appears to be exempt from the requirements of R201 per R283. Powdered dyes are mixed in this building and a baghouse is used to control emissions from this process. Staff observed baghouse records, which were maintain as required per the permit condition. Staff interviewed Mr. Dan Dorshkind, Manufacturing Technician. Mr. Dorshkind stated that the baghouse is emptied once per year and the solids are collected in a 55 gallon drum.

The emission group **EGSPECIALTY** is part of the **FGINK&SPECIALTY** flexible group. **EGSPECIALTY** processes include fuel blending, the manufacturing of solvent-based and abrasive-based paint line cleaners as well as booth coating materials that facilitate cleaning of the spray booth and adjacent surfaces. 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. Staff did observe that the baghouses appeared to be installed and operating properly. Staff observed that all equipment covers appeared to be installed and operating properly.

## **FGTANKFARM**

Four emission units are associated with this flexible group; **EUTANKS** (consisting of 67 tanks), **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.

## 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. Staff observed that each spray booth appeared to have properly installed and maintained filters as well as a dedicated exhaust. Staff observed monthly logs and emissions are included in the source-wide HAPs records as required per the ROP.

## CONCLUSION

Gage Products Company appear	rs to be in compliance with th	ne evaluated air
pollution control rules and permit	conditions.	MIL
NAME HALL SULLAND	DATE 8/8/2012 SUBERVISOR	CTE