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

A403332005

FACILITY: The Dow Chemical Company U.S.A., Midland		**SRN / ID:** A4033
LOCATION: 1790 Building, MIDLAND		**DISTRICT:** Saginaw Bay
CITY: MIDLAND		**COUNTY:** MIDLAND
CONTACT: Kayla Peacock , Environmental Specialist		**ACTIVITY DATE:** 10/22/2015
STAFF: Kathy Brewer	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MEGASITE
SUBJECT: EUB7-S1 Incinerator complex tank farm		
RESOLVED COMPLAINTS:		

Inspection date: 10-22-2015
Compliance Status: Compliant

Dow and MDEQ-AQD staff present during the inspection included:

Kathy Brewer (MDEQ-AQD, EQA)
Kayla Peacock (Dow Chemical, Air Delivery Specialist)
Jim Nemeth (Dow Chemical, Environmental Technician)
Rik Lehman (Dow Chemical, Production Leader Environmental Services)
The inspection included a review of on-site records, viewing the incineration complex tank farm (EUB7-S1), and AQD file information.

Attachments:
June 2014 and June 2015 carbon bed operating hours, temperatures and regenerations
AQD File Documents Reviewed
July –Dec 2014 and Jan – June 2015 40 CFR 63 Subpart DD Semi Annual reports (OSWRO)
2014 Annual and Semi annual reports

The inspection included viewing instantaneous and historical on-site records, tanks 300, 400, 700, 101, & 601; the carbon unit, condenser, and temperature monitor on exhaust to SVB7. The onsite records and equipment inspection and the AQD file information review found no violations of the ROP EUB7-S1 conditions. All equipment appeared to be installed, monitored, and able to operate in compliance with ROP conditions.

Process Description:
Incineration complex tank farm in the environmental operations plant. Emission group consists of 10 tanks (described below) and a carbon adsorption unit for backup control. Emissions accounted for in this permit include those emissions from the Carbon bed and tank nos. V-101 and V-601. **Tank farm and railcar loading tie into the vent header. The vent header can be directed to the EU32INCINERATOR or the Carbon unit.**

The carbon is regenerated using steam desorbtion.

Items noted during the inspection.

EMISSION LIMITS

Pollutant	Limit	Records
1. VOC	11 pph Test Protocol	June 2014 record 0.5 pph June 2015 record 0.0 pph
2. VOC	1.2 tpy 12 month rolling average	June 2014 record 0.001564 June 2015 record 9.632 E-06

III. PROCESS/OPERATIONAL RESTRICTION(S) 1. ***In the event of a shutdown of Incinerator 32, the permittee may direct emissions from the vent header to the carbon bed unit for a period not to exceed a total of 876 hours per 12-month rolling time period as determined at the end of each calendar month.***

On-site records show the carbon bed operating time was 81.28 hours as of July 1, 2014 and 5.88 hours as of July 1, 2015.

According to the 40 CFR Part 63 Subpart DD reports and the ROP Deviation reports, vent streams from the incinerator complex tank farms were vented to the carbon units during times when the incinerator was operating. The incidents wee of short duration most being minutes or less. No OSWRO wastes were in the tanks. Control program defaults (AWFCO actions) more restrictive than required, were modified to allow venting to the EU32Incinerator in alignment with ROP requirements.

Under review is a company requested language change to the ROP conditions to reflect the allowed control option of venting to

the carbon units for periods when the EU32INCINERATOR may be unavailable for reasons other than "shutdown" which is the current language.

V. DESIGN/EQUIPMENT PARAMETER(S)

The permittee shall not operate EUB7-S1 unless emissions from the vent header are directed to the 32 Incinerator or the carbon bed unit or the vent header is not venting.

Control interlocks allow venting to carbon if EU32INCINERATOR is down or a tank pressure reaches a critical level. During the inspection the carbon beds were not operating, no flow was being sent to the carbon beds, and the control panel showed the valve (D1-0879) to the carbon unit was closed

The permittee shall not vent to the carbon bed unit unless the carbon bed unit is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, regenerating the carbon bed unit at least once per calendar week, when in use. In use is defined as when the vapor line valve opens to the carbon bed to allow emissions to the unit.

Regeneration of the carbon is done a minimum of weekly if not used every day. The control panel includes alarms for regeneration frequency on the carbon unit. Records review show the carbon was used June 1-9, and, 22-3, 2014. Regeneration occurred on June1, 3-7, and 27, 2014. In June 2015 the carbon unit was used on June 30, 2015. Regeneration occurred on June 2-20, and, 25-30, 2015.

To maintain performance expectations, the carbon is changed regardless of regeneration frequency.

The permittee shall not regenerate the carbon bed unit associated with EUB7-S1 unless the associated condenser is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the condenser includes, but is not limited to, an exit gas temperature of not more than 77°F during regeneration (steam desorption), based on the averaging time specified in SC VI.2 below [at least once every 15 minutes for at least 90% of the operating time during an operating calendar day].

Records review of condenser exhaust gas has temperatures for June 2014 and June 2015 found all exhaust gas temperatures were below 77F. On June 2, 2014, the record indicates an exhaust gas temperature of 78F during regeneration. However, the regeneration had been completed at the beginning of the 15 minute monitoring cycle.

VI. MONITORING/RECORDKEEPING

All the required records were available. See attached for examples from June 2014 & 2015 of the carbon bed unit regeneration on a per regeneration basis, when the carbon bed is in use, and records of the total time the vapor line valve position is open to the carbon bed on a per calendar day basis., & exit gas temperature of the condenser, during carbon bed regeneration

FGHONFUGITIVES

Per deviation reports, during a Dow Chemical EHS audit, it was discovered that criteria was not included on inspection checklists for seal system failure as part of pump and agitator weekly visual inspection requirements. Inspection checklists were updated to meet both RCRA and MACT requirements. EHS audit findings also included seven pumps and agitators operated intermittently, not in OHAP service, that were being monitored in the fugitive emissions program. The equipment was also exempt as it was in service less than 300 hours/year. The equipment was removed from monitoring.

NAME _____ DATE 4-1-2016 SUPERVISOR C. Hare