

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection

A404367988

FACILITY: Dow Silicones Corporation		SRN / ID: A4043
LOCATION: 3901 S Saginaw Rd, MIDLAND		DISTRICT: Bay City
CITY: MIDLAND		COUNTY: MIDLAND
CONTACT: Jim Alger , Midland Area State Air Permitting Specialist		ACTIVITY DATE: 06/29/2023
STAFF: Adam Shaffer	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MEGASITE
SUBJECT: Partial Compliance Evaluation of EU303-01, EU303-02 and EU303-06.		
RESOLVED COMPLAINTS:		

A partial compliance evaluation (PCE) consisting of an onsite inspection and records review was conducted by Air Quality Division (AQD) staff Adam Shaffer (AS) of the Dow Silicones Corporation (DSC) site located in Midland, MI. Applicable records were requested on June 21, 2023, to verify compliance with Renewable Operating Permit (ROP) No. MI-ROP-A4043-2019b and permit to install (PTI) No. 160-20A, specifically for emission units (EU)303-01, EU303-02, and EU303-06. Through these three emission units, select records were requested and reviewed for flexible groups (FG)THROX, FGSITESCRUBBERS, FGSITEBLOWER and FGMONMACT. An in-person inspection to verify onsite compliance was later completed on June 29, 2023.

Facility Description

DSC is a chemical processing facility. The facility is a mega-site and is a major source of hazardous air pollutants (HAPs), nitrous oxides (NOx), particulate matter (PM) and volatile organic compounds (VOCs). Additionally, the site is subject to various federal regulations and the site is operating under an EPA Civil Order No. 19-11880.

Offsite Compliance Review

DSC is required to submit semi-annual and annual compliance reports per Part A General Conditions 19-23 of MI-ROP-A4043-2019b. Previous reports were reviewed for select time periods.

One deviation was identified for EU303-06 and was described as Condenser 3458 not maintaining a maximum exit gas temperature of 10°C on a continuous basis. DSC said that a revised PTI application had been submitted for this emission unit describing that monitoring the condenser temperature condenser was only necessary if the THROX was not operating properly, however, this was not put in during the permitting process at the time. It appears that there is one product that is prone to gelling that will cause higher condenser temperatures. Even though the temperature intermittently went over the limit the THROX was operating properly, therefore, no negative impact to the environment. DSC submitted a PTI application to revise these conditions that was approved on December 16, 2022. No further action is necessary.

A second deviation was noted for EU303-02 and was described as the emission unit in operation while condenser 3400 was not operating properly. DSC said that condenser 3400 was removed from service and vents directed to THROX. This change appeared to have been made under Rule 285(2)(d), however, operating requirements were not considered in the existing permit. Since THROX is a more efficient control device, there was no impact to the environment. A PTI and an ROP modification were both submitted to address this deviation. No further action is necessary.

There are potentially several additional deviations that corresponded with EU303-01, EU303-02 and / or EU303-06, however, the issues noted did not appear to constitute a violation.

Based on the timing of the inspection, the 2022 Michigan Air Emissions Reporting System (MAERS) Report was reviewed. Upon review it appears DSC uses "Emission Master" software when determining emissions for each product. DSC uses MAERS emission factors for natural gas used. Additionally, fugitive emissions such as from LDAR monitoring and emissions from spills are added in as well. Upon initial review of the MAERS Report, discrepancies were noted between the emissions reported and the records provided for several recent inspections. In a follow up phone conversation on April 24, 2023, it was concluded that the discrepancies were from DSC reporting both process emissions and fugitive emissions together. Data was reviewed for several emission units inspected. Minor errors were noted, however, after further review the 2022 MAERS Report appears acceptable. Additionally, at this time the supporting documentation is acceptable, though it was stated to DSC staff moving forward that more specific supporting documentation to better understand how DSC came to the amount of emissions reported per each unit will be required. It should be noted that EU303-01, EU303-02 and EU303-06 were not included in this years MAERS review, however, will be included in the next emissions reporting year.

Compliance Evaluation

A request was sent to Mr. Jim Alger, Midland Area State Air Permitting Specialist, of DSC on June 21, 2023, for records required by ROP No. MI-ROP-A4043-2019b, specifically for EU303-01, EU303-02, EU303-06, FGTHROX, FGSITESCRUBBERS, FGSITEBLOWER and FGMONMACT. The onsite inspection was completed on June 29, 2023.

AQD staff AS arrived at the facility at 8:34am. Weather conditions at the time of the inspection were mostly cloudy skies, winds to the north at 5-10mph and temperatures in the mid 60's degrees Fahrenheit. Upon arrival AS met with Mr. Alger and several other company staff to initially go over records and later was provided a tour of the site, specifically of EU303-01, EU303-02 and EU303-06. Site-specific questions were answered by company staff at the time of the inspection.

As mentioned above DSC is a chemical processing facility. During the inspection, various components pertaining to EU303-01, EU303-02 and EU303-06 were reviewed and discussed at length with company staff.

ROP No. MI-ROP-A4043-2019b

EU303-01

This emission unit is for phenyl methyl fluids and resin hydrolysis polymerization. This emission unit vents to either the condenser 3475, carbon beds, the FGTHROX, or FGSITESCRUBBERS. This emission unit is subject to 40 CFR Part 63, Subpart FFFF and to the equipment leak provisions of 40 CFR Part 63, Subpart UU.

Onsite Observations

Per Special Condition (SC) III.1, the permittee shall not operate equipment in EU303-01 that exhausts directly to either FGTHROX or FGSITESCRUBBERS unless one of the follow specifics described in this condition are being met. It was verified by company staff for

select time periods there were no incidences where EU303-01 was operating and venting to either the FGTHROX or FGSITESCRUBBERS and they were not operating properly.

Per SC III.2, the permittee shall not operate equipment in EU303-01 that exhausts first to condenser 3475 and then to either the carbon beds, FGTHROX, or FGSITESCRUBBERS unless one of the following requirements is met that is further described in this special condition. It was verified by company staff there were no instances during select time periods reviewed where the applicable requirements of this condition were not met. Speaking with company staff at the time of the inspection, DSC primarily uses the option to vent to THROX for satisfactory operation while also operating the condenser. When asked why DSC runs the condenser it appeared to help knock out additional emissions which is acceptable. It was noted during the inspection of a permitting error for EU303-01. Satisfactory operation of the condenser 3475 while also venting to the site scrubbers or carbon beds is a minimum temperature of 2.2°C when it should be a maximum of 2.2°C. This appears to have been missed during the most recent permit for EU303-01 (PTI No. 158-20). Additionally, the PTI application appears to state it was intended to be the maximum temperature. Moving forward a PTI application shall be submitted by DSC to correct this permitting error. Temperature records were reviewed for select time periods onsite for condenser 3475. During the select time periods reviewed, DSC used THROX to control the emission from EU303-01 with the exception of one time noted on June 14, 2022. Upon further review, it was determined that EU303-01 was not operating during that time period which is acceptable. However, there were select time periods where emissions from EU303-01 were being controlled by THROX which was not operating properly, thus emissions were vented to the site scrubbers. This is described in this special condition and one of the requirements was then the minimum temperature of 2.2°C. It was verified during those time periods that the temperature (which was incorrectly permitted) was not meeting the required permitted range. After further review, it was determined that since this was an error in permitting, no violation notice would be issued at this time dependent on the timely submittal of a PTI application to correct this requirement.

Per SC IV.1, the permittee shall not operate equipment in EU303-01 that exhausts directly to either FGTHROX or FGSITESCRUBBERS unless one of the following requirements is met that is further described in this special condition. As discussed above, DSC primarily uses the THROX for control of emissions of EU303-01. During the time periods reviewed, when EU303-01 was in operation it was controlled by the THROX or FGSITESCRUBBERS if the THROX was not operating properly. However, the minimum temperature requirement of condenser 3475 was not met during those periods of control by FGSITESCRUBBERS. As mentioned above it was determined that since this was an error in permitting, no violation notice would be issued at this time dependent on the timely submittal of a PTI application to correct this requirement.

Per SC IV.2, the permittee shall not operate equipment in EU303-01 that exhausts directly to condenser 3475 and then to either the carbon beds or FGSITESCRUBBERS unless the requirements further described in this special condition are met. During the select time periods reviewed, the carbon beds were not used for control of EU303-01, however, they were in operation, and it would appear being used for EU303-19. As mentioned above, the FGSITESCRUBBERS were used for select time periods in the records reviewed, however, the condenser 3475 temperature was not at the required operating range. It was determined that since this was an error in permitting, no violation notice would be issued at this time dependent on the timely submittal of a PTI application to correct this requirement.

Per SC IV.3, the permittee shall equip and maintain condenser 3475 with a device to continuously monitor and record the condenser exit gas temperature. The permittee shall calibrate the exit gas temperature indicator in a satisfactory manner acceptable to the AQD District Supervisor. An exit gas temperature monitor was noted during the course of the site inspection and appeared to be operating properly. The emission unit EU303-01 was in operation at the time of the inspection. The monitor was reading around -2.0°C at the time of the inspection. Though it was not verified it was assumed that THROX (which was operating properly) was controlling emissions then at the time of the inspection. After further review this appears acceptable. The temperature monitor is calibrated every four years. The most recent calibrations were 08/06/21 / 09/28/20 and 09/14/16. It was determined that the 2020 calibration was the normal four-year calibration, and the 2021 calibration was part of a troubleshooting activity for the facility.

Per SC IV.4, the permittee shall equip and maintain the carbon beds with a device to continuously monitor the mass of the carbon beds. The permittee shall calibrate the carbon bed mass indicator in a satisfactory manner acceptable to the AQD District Supervisor. At the time of the inspection the carbon beds were both operating, though it appeared were being tested due to a federal requirement. Though it was not verified, the carbon beds would not have been used at the time of the inspection as control for EU303-01. Each of the two beds has a separate scale. At the time of the inspection the scales read 10 kg and 1.14 kg. The scales are calibrated every four years with both scales most recently calibrated on 12/01/16 and 12/25/20.

Ten stacks are listed as associated with this emission unit. Several stacks listed for EU303-01 are for the THROX or site wide scrubbers and were not reviewed during the course of the site inspection. Though the dimensions were not measured for the remaining stacks, based on the observations made at the time of the inspection, the dimensions appear to be consistent with what is listed in MI-ROP-A4043-2019b.

Records Review

This emission unit is subject to a 6.52 tons per year (tpy) VOC emission limit per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of April 2023, no emissions were reported emitted. As of April 2023, 23.90 lbs of VOC emissions were reported emitted per a 12-month rolling time period which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

Per SC VI.2, the permittee shall monitor and record the exit gas temperature for condenser 3475. Records were requested and reviewed for select time periods during the course of the site inspection. Based on the records reviewed, DSC appears to be keeping track of applicable records.

Per SC VI.3, when venting to the carbon beds, the permittee shall monitor and record the mass of the carbon beds. Records were requested and review for select time periods during the course of the site inspection. It should be noted that despite EU303-01 not using the carbon beds for control for the select time periods reviewed, DSC is still keeping track of applicable records. After further review, DSC appears to be keeping track of applicable records.

Per SC VI.4, the permittee shall keep track of monthly / 12-month rolling time period VOC emission records. Records were requested and provided for select time periods. Based on the records reviewed, DSC appears to be keeping track of applicable items.

EU303-02

This emission unit is for polymer and resin surge, mixing, filtration and blending. This emission unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF and to the equipment leak provisions of 40 CFR Part 53, Subpart UU.

Onsite Observations

At the time of the inspection, EU303-02 was not in operation. Per SC III.1, the permittee shall not operate equipment in EU303-02 that exhausts directly to either FGTHROX or FGSITESCRRUBBERS unless one of the following requirements is met that is further described in this special condition. It was verified by company staff during the select time periods reviewed that either the FGTHROX or the FGSITESCRRUBBERS was operating properly while emissions were being vented from EU303-02. Records of FGSITESCRRUBBER flow rates when the THROX was not operating properly were reviewed and appeared to be within the applicable Malfunction Abatement Plan (MAP) rates required for satisfactory operation.

Per SC IV.1, the permittee shall not operate equipment in EU303-02 that exhausts directly to either FGTHROX or FGSITESCRRUBBERS unless one of the following requirements is met that is further described in this special condition. As mentioned above it was verified by company staff there were no times during the select time periods reviewed where both the THROX and FGSITESCRRUBBERS were not operating properly while receiving emissions from EU303-02. Additionally, records reviewed as discussed above appeared to show this to be correct.

There are fourteen stacks associated with this emission unit. Several stacks listed for EU303-02 are for the THROX or site wide scrubbers and were not reviewed during the course of the site inspection. Though the dimensions were not measured for the remaining stacks, based on the observations made at the time of the inspection, the dimensions appear to be consistent with what is listed in MI-ROP-A4043-2019b.

Records Review

This emission unit is subject to a 1.36 tpy VOC emission limit per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of April 2023, 22.74 lbs of VOCs were reported emitted. As of April 2023, 187.31 lbs (approximately 0.093 tpy) were reported emitted per a 12-month rolling time period which is well within the permitted limit. Previous 12-month rolling time periods reviewed also appeared to be within the permitted limit.

This emission unit is subject to a 0.31 tpy vinyl dimethylsilanol (CAS No. 5906-75-2) emission limit per a 12-month rolling time period. Records were requested and reviewed for select time periods. Based on the records provided it appears that since May 2021, emissions were only reported in May 2021, October 2021, October 2022 and April 2023. Emission totals for April 2023 were 0.000188 lbs and DSC is well within the vinyl dimethylsilanol emission limit.

Per SC VI.2, the permittee shall keep track of monthly / 12-month rolling time period VOC emissions. Records were requested and reviewed for select time periods. Based on the records reviewed, DSC appears to be keeping track of applicable records.

Per SC VI.3, the permittee shall keep track of monthly / 12-month rolling time period vinyl dimethylsilanol emissions. Records were requested and reviewed for select time periods. Based on the records reviewed, DSC appears to be keeping track of applicable records.

EU303-06

This emission unit is for batch and semi continuous polymer and resin processing including reactors, distillation columns, strippers, receivers, storage tanks, accumulators, separators, vacuum pumps, condensers, adsorbers, filters and related equipment. This emission unit is subject to the requirements of 40 CFR Part 63, Subpart FFFF and Subpart UU.

Onsite Observations

During the course of the inspection, EU303-06 was observed in operation. Per SC III.1, the permittee shall not operate equipment in EU303-06 that exhausts first to the condenser 1637, and then to either FGTHROX or FGSITESCUBBERS, unless one of the following requirements is met that is further described in this condition. Emissions are primarily controlled by the THROX unless the control is down in which case emissions would then be controlled by the FGSITESCUBBERS. DSC staff verified that there were no time periods where EU303-06 and condenser 1637 were in operation and venting to the THROX or FGSITESCUBBERS when both pollution control equipment was not operating properly. Temperature records for select time periods were reviewed for condenser 1637. Based on the records reviewed, there appeared to be no issues. Records of FGSITESCUBBER flow rates when the THROX was not operating properly were reviewed and appeared to be within the applicable MAP rates required for satisfactory operation. Based on the records reviewed, no further action is necessary at this time.

Per SC III.2, the permittee shall not operate equipment in EU303-06 that exhausts first to condenser 3458, and then either to FGTHROX or FGSITESCUBBERS, unless one of the following requirements is met that is further described in this condition. Temperature records for condenser 3458 were requested and reviewed for select time periods. It was verified by company staff of the temperature exceedance on August 1, 2022, where DSC exceeded the temperature limit of 10°C for approximately five and a half hours. Upon further review with DSC staff the prior permit had a condition that even though emissions could be controlled by the THROX, if they exceeded the 10°C it was a deviation. In the most recent PTI No. 160-20A, approved on November 10, 2022, that error was corrected for EU303-06. Additional records reviewed appeared to show no additional exceedances prior to the approval of PTI No. 160-20A. Records reviewed for select time periods following the approval of PTI No. 160-20A appeared acceptable. It was noted during time periods of bypass from the FGTHROX to the FGSITESCUBBERS, the temperature for condenser 3458 appeared to be within the applicable range.

Per SC III.3, the permittee shall not operate equipment in EU303-06 that exhausts to either FGTHROX or FGSITESCUBBERS unless one of the following requirements is met that is further described in this condition. As discussed above, based on the information provided and reviewed, DSC appears to be meeting the requirements of this condition.

Per SC IV.1, the permittee shall not operate equipment in EU303-06 that exhausts to condenser 1637 unless the condenser is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor, which includes meeting the requirements of SC III.1(b) or SC III.1(c). The emission unit and condenser 1637 were observed operating at the time of the inspection. The condenser 1637 monitor read 14.7°C which is not within the limit if going to the site scrubbers, but the emissions would have been venting to the THROX, therefore, this was acceptable. As discussed above based on the records reviewed and observations made at the time of the inspection, DSC appears to be operating condenser 1637 in a satisfactory manner.

Per SC IV.2, the permittee shall not operate equipment in EU303-06 that exhausts to HX condenser 3458 unless the condenser is installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor, which includes meeting the requirements of SC III.2(b) or SC III.2(c). The emission unit and HX condenser 3458 were observed operating at the time of the inspection. The HX condenser 3458 monitor read 10.8°C which is not within the limit if going to the site scrubbers, but the emissions would have been venting to the THROX, therefore, this was acceptable. As discussed above based on the records reviewed and observations made at the time of the inspection, DSC appears to be operating the HX condenser 3458 in a satisfactory manner.

Per SC IV.3, the permittee shall not operate equipment in EU303-06 that exhausts to FGTHROX or FGSITESCRUBBERS unless FGTHROX or FGSITESCRUBBERS are installed, maintained and operated in a satisfactory manner acceptable to the AQD District Supervisor, which includes meeting the requirements of SC III.1, SC III.2, and / or SC III.3. As discussed above, based on the observations made at the time of the inspection and records reviewed, DSC appears to be meeting the requirements for this special condition.

Per SC IV.4, the permittee shall equip and maintain each condenser (1637 and 3458) with a device to continuously monitor and record the condenser exit gas temperature. The permittee shall calibrate the exit gas temperature indicators in a satisfactory manner. Monitors were observed for both temperature condensers at the time of the inspection. The condenser 1637 was calibrated on 11/29/17 and 09/15/21 and the HX condenser 3458 was calibrated on 04/15/21.

There are ten stacks associated with this emission unit. Several stacks listed in EU303-06 are for the THROX or site wide scrubbers and were not reviewed during the course of the site inspection. An error was noted in that the max exhaust and minimum height dimensions were incorrectly switched. This was discussed with company staff and a PTI application shall be submitted moving forward to fix the stack measurements. When compared correctly at the time of the inspection, the dimensions appear to be consistent with what is listed in MI-ROP-A4043-2019b.

Records Review

This emission unit is subject to a VOC emission limit of 4.15 tpy per a 12-month rolling time period. Records were requested and reviewed for select time periods. For the month of April 2023, 0.09 lbs of VOCs were reported emitted. As of April 2023, 297.17 lbs (approximately 0.148 tons) of VOCs were reported emitted per a 12-month rolling time period which is within the permitted limit. Previous 12-month rolling time periods reviewed also were within the permitted limit.

Per SC VI.2, the permittee shall monitor and record the exit gas temperature of each condenser (1637 and 3458) with instrumentation acceptable to the AQD. Records were requested and reviewed for select time periods. Based on the records reviewed, DSC appears to be keeping track of temperature records for the two applicable condensers.

Per SC VI.3, the permittee shall keep track of monthly / 12-month rolling time period VOC emission records. Records were requested and reviewed for select time periods. Based on the records reviewed, it appears that DSC is keeping track of applicable records.

FGSITEBLOWER

This flexible group is for the site vent consolidation and blower system that collects vapor streams from numerous emission units and vents throughout the facility and routes them to either the on-site thermal oxidizer with heat recovery (EUTHROX) or to a site-wide water scrubber system. There are two parts to the site vent consolidation and blower system: a dry vent header system for water reactive vent and wet vent header system for vents that can contain water.

It should be noted that only portions of this flexible group were reviewed in order to verify that EU303-06 is in compliance with FGSITEBLOWER.

Per SC IV.1, the permittee shall not operate the emission units in FGSITEBLOWER unless they are routed to EUTHROX or the site wide water scrubbers except as further described in this condition, and the control device is installed, maintained and operated in a satisfactory manner in accordance with the sites MAP. Dates of any events where emissions from FGSITEBLOWERS being sent to EUTHROX / site wide scrubbers when EUTHROX / site wide scrubbers were not in operation were requested for select time periods. It was verified by company staff there were no reported incidents during the time periods reviewed. This appears acceptable.

Per SC VI.1, the permittee shall record the time and duration of each bypass episode wherein the vents comprising FGSITEBLOWER are not routed to EUTHROX. Records were requested and provided for select time periods. There were instances in May 2022, December 2022 and February 2023 where emissions were routed from the THROX to the FGSITESCRUBBERS. Reasonings behind each of the events were requested and provided as well as the corrective actions taken to address the issues. After further review, the records appear acceptable.

FGSITESCRUBBER

This flexible group is for the site-wide water scrubber system. FGSITESCRUBBERS will remove HCl and chlorosilanes from the FGSITEBLOWER consolidated vent system prior to discharge to atmosphere when the site wide thermal oxidizer system is not operating properly.

It should be noted that only portions of this flexible group were reviewed in order to verify that EU303-01, EU303-02 and EU303-06 are in compliance with FGSITESCRUBBERS.

Per SC I.1, this flexible group is subject to a 7.1 pounds per hour (pph) benzene emission limit per testing protocol and/or the Benzene Emissions Management and Monitoring Plan (BEMMP). Records were requested and reviewed for select time periods. The highest pph noted in the records reviewed was 5.4 pph which is well within the permitted limit. It was noted previously that this value is the worst case of each vent for that particular time period

(month) and not necessarily were all vent emissions on the same day. This appears to show that even adding together the worst-case emissions for that time period, DSC is still in compliance. Based on the records reviewed, it appears that DSC is meeting this emission limit.

Per SC III.2, the permittee shall not bypass EUTHROX unless the vents listed in this flexible group are routed to either the site wide scrubbers or the control equipment specified in these vents' emission unit tables in ROP No. MI-ROP0A4043-2008 (or subsequent revisions) and the control equipment is installed, maintained, and operated in a satisfactory manner. Records were requested for time periods where emissions from the applicable vents were controlled by EUTHROX or site wide scrubbers or local control where it was not operating properly. It was verified by DSC staff that for the select time periods reviewed there were no instances where FSITESCRUBBER, and/or local control was not operating properly during bypass events. This appears acceptable.

Per SC III.5, proper operation of the site wide water scrubbers includes the total scrubber water flow rate shall not be less than the minimum flow rates specified in the MAP, dated February 14, 2018. As discussed above, it was verified by DSC staff that during the time periods reviewed there were instances when emissions were rerouted from going to the THROX to the site wide scrubbers when EU303-01, EU303-02 and/or EU303-06 would have been being controlled by the mentioned equipment. Flow rates during those time periods were requested and reviewed. The MAP requires each section of the scrubbers to have a minimum flow rate of 50 gallons per minute when accepting emissions and the combined flow rate from the recycle and city water shall be 100 gallons per minute. Flow rate records reviewed for the select times that emissions were being vented to FGSITESCRUBBERS appeared to show that the applicable flow rates were being met. After further review this appears acceptable.

Per SC VI.2, the permittee shall keep track, in a satisfactory manner, of continuous records of scrubber flow rates for the site wide water scrubbers. As mentioned above, records for when FGSITESCRUBBERS were being used to control emissions were requested and provided. Based on the records provided, DSC appears to be meeting this condition.

Per SC VI.3, the permittee shall keep, in a satisfactory manner, records demonstrating that the BEMMP is being implemented and maintained as required by SC III.1. As discussed above, applicable records were requested for select time periods to verify the hourly benzene emission rate. Based on the records provided, DSC appears to be meeting the requirements for this condition.

FGTHROX

This flexible group is for the site wide thermal oxidizer system. The THROX will remove VOC, HAPs, PM10, hydrogen chloride, and other toxic air contaminants from the FGSITEBLOWER consolidated vent system prior to discharge to atmosphere. This flexible group is subject to the requirements of 40 CFR Part 63, Subpart FFFF. FGTHROX is a CAM subject emission unit subject to the requirements of 40 CFR Part 64.

It should be noted that only portions of this flexible group were reviewed in order to verify that EU303-01, EU303-02 and EU303-06 are in compliance with FGTHROX.

Per SC IV.1, the permittee shall not route process vents to EUTHROX unless the burner, quencher, absorber, and two 2-stage ionizing wet scrubbers (IWS) in series are installed,

maintained, and operated in a satisfactory manner. Satisfactory operation includes various criteria that are then listed in this condition. Temperature records for EUTHROX were requested and provided for select time periods. It was verified by company staff during the select time periods reviewed that there were no instances when emissions were being controlled by the THROX when it wasn't operating properly. During instances when the THROX was not operating properly, emissions would have been routed to the site scrubbers or local control as discussed above which were noted to be operating properly during the time periods reviewed.

FGMONMACT

This flexible group applies to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source and meet the criteria specific in 40 CFR Part 63 Subpart FFFF (NESHAP Subpart FFFF).

It should be noted that only portions of this flexible group were reviewed in order to verify that EU303-01, EU303-02 and EU303-06 are in compliance with FGMONMACT. The three emission units are associated with the following MCPU's:

EU303-01: MCPU-032 and -065

EU303-02: MCPU-007, -018, -023, -032, -047, -064, -065, -106, -115, and -125

EU303-06: MCPU-018, -028, -047 and -080

The MCPU-032 and -065 are Group 1 for continuous process vents. DSC is meeting the compliance work practice standards required by this NESHAP by venting to the THROX. The MCPU-018, -023, -032, -047, -106, -115, and -125 DSC stated were Group 2 batch process vents. Total emissions for each Group 2 MCPU for 2022 and 2023 were provided and appear to be within the 10,000 lbs per year limit. The remaining MCPU's are considered subject to this NESHAP but due to the total uncontrolled HAP emissions being less than 200 lb/yr they are exempt.

Conclusion

Based on the observations made and records reviewed, DSC appears to be in compliance with MI-ROP-A4043-2019b / PTI No. 160-20A, specifically the portions related to EU303-01, EU303-02, and EU303-06.

NAME Adam J. Smith

DATE 08/11/23

SUPERVISOR C. Hare