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

A404324583

FACILITY: Dow Corning - Midland Plant		**SRN / ID:** A4043
LOCATION: 3901 S Saginaw Rd, MIDLAND		**DISTRICT:** Saginaw Bay
CITY: MIDLAND		**COUNTY:** MIDLAND
CONTACT: Mike Gruber , Air & Water Team Leader		**ACTIVITY DATE:** 02/18/2014
STAFF: Jennifer Lang	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MEGASITE
SUBJECT: EU303-01, EU303-02, EU303-03, EU303-06 & FGLEAKDETECTION - Scheduled Inspection		
RESOLVED COMPLAINTS:		

Inspection date: 2/18/14
Inspection started: 9:00 am
Inspection ended: 12:00 pm

Dow Corning and MDEQ-AQD staff present during the inspection.

Jenny Lang (MDEQ-AQD, Environment Engineer Specialist)
Steve Moser (Dow Corning, Assistant General Council)
Mike Gruber (Dow Corning, Air & Water Team Leader)

EU303-01

Compliance Status: Compliance

Items noted during the inspection.

1. EU303-01 covers the phenyl methyl fluids and resin hydrolysis and polymerization process. EU303-01 is equipped with the following air pollution control (APC) equipment: condenser 3469, 337 wet scrubbers (FG337SCRUBBER), THROX (FGTHROX), and site scrubbers (FGSITESCRUBBERS). EU303-01 was venting to the THROX at the time of my inspection.

   Scrubber 22451 is listed as an APC device in table EU303-01 of ROP No. MI-ROP-A4043-2008 (hereinafter "ROP"). However, Dow Corning (DC) informed me during the inspection that this scrubber no longer exists. According Steve Moser in an email dated 3/5/14 (see attached), the 22451 scrubber was redundant air pollution control and was removed. The chlorosilane tanks formerly controlled by the 22451 scrubber were directed to the 337 tower scrubbers, the Site Scrubbers, or the Site THROX. PTI 804-92C allows the use of the 337 tower scrubbers in addition to the 22451 scrubber, and AQD Rule 285 allows the use of the Site THROX and Site Scrubbers in addition to the 337 scrubbers.

   I did not inspect FG337SCRUBBER, FGTHROX, FGSITESCRUBBERS, or FGSITEBLOWER (flexible groups associated with EU303-01) during my inspection as I previously inspected them on 11/13/13 (i.e., FGTHROX, FGSITESCRUBBERS, and FGSITEBLOWER) and 11/26/13 (i.e., FG337SCRUBBER) and found them to be in compliance with air quality rules and regulations.

2. Condition no. VI.1 of table EU303-01 of the ROP states, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exit gas temperature of condenser no. 3469. Condition no. III.1 of the same table in the ROP states, if the exit gas temperature of condenser no. 3469 exceeds 50 degrees F (10 degrees C), the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 10:45 am, I observed the following operational parameter data for condenser 3469 in the control room for EU303-01 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 3469 controls emission from kettle 3463. DC was loading kettle 3463 at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 3469	-2.4 degrees C (instantaneous)	Hi ≥ 6.0 degrees C

		Hi – Hi ≥ 8.0 degrees C Max ≥ 10 degrees C

**All alarm set points are instantaneous.

3. Condition no. VI.3 of table EU303-01 of the ROP states, within 30 days following the end of each calendar month, permittee shall calculate and record emissions from the process for the previous month to demonstrate compliance with the 12-month rolling time period emission limits specified in the table. Condition no. I.2 of the same table in the ROP limits VOC emissions from EU303-01 to 5.4 tpy (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC emissions through December 2013. On 3/5/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC emissions through December 2013 for EU303-01 were 0.27 tpy.

4. Condition no. VII.1 of table EU303-01 of the ROP states, each semiannual report of deviations shall include summary information on the number, duration and cause of CAM excursions and/or exceedances and the corrective actions taken. Condition no. VII.2 of the same table states, each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for CAM monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). According to the latest ROP deviation report received on 9/16/13 for reporting period 1/1/13 through 6/30/13, there were no CAM excursions and/or exceedances or monitor downtime incidents for EU303-01.

EU303-02

Compliance Status: Compliance

Items noted during the inspection.

1. EU303-02 covers the polymer and resin surge, mixing, filtration and blending process. According to table EU303-02 in the ROP, this process is equipped with the following air pollution control equipment: condenser 3400. However, according to the ROP renewal application received by the MDEQ-AQD on 3/4/13, EU303-02 also vents to FGTHROX and FGSITESCRUBBERS. During the inspection, DC informed me that condenser 3400 no longer exists as it was replaced with FGTHROX and FGSITESCRUBBERS. Condenser 3400 was removed from service in 2013. DC further explained that replacement of the condenser with the THROX and the site-wide scrubbers was done under AQD Rule 285.

   I did not inspect FGTHROX or FGSITESCRUBBERS (flexible groups associated with EU303-02) during my inspection as I previously inspected them on 11/13/13 and found them to be in compliance with air quality rules and regulations.

2. Condition no. VI.2 of table EU303-02 of the ROP states, within 30 days following the end of each calendar month, permittee shall calculate and record emissions from the process for the previous month to demonstrate compliance with the 12-month rolling time period emission limits specified in the table. Condition no. I.2 of the same table in the ROP limits VOC emissions from EU303-02 to 4.0 tpy (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC emissions through December 2013. On 3/5/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC emissions through December 2013 for EU303-02 were 0.17 tpy.

3. Condition no. VII.4 of table EU303-02 of the ROP states, each semiannual report of deviations shall include summary information on the number, duration and cause of CAM excursions and/or exceedances and the corrective actions taken. Condition no. VII.5 of the same table states, each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for CAM monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). According to the latest ROP deviation report received on 9/16/13 for reporting period 1/1/13 through 6/30/13, there were no CAM excursions and/or exceedances or monitor downtime incidents for EU303-02.

EU303-03

Compliance Status: Compliance

Items noted during the inspection.

1. EU303-03 covers specific ventilation for manway loading, filter and valving stations, wash drains, strainer cleaning stations, lab bath, etc. and related equipment. There is no air pollution control equipment associated with this emission unit. In addition, there are no requirements in this table other than reporting requirements (i.e., AQD Rule 912 and the semi-annual and annual ROP deviation reporting requirements). The latest ROP deviation report for DC was received by the MDEQ-AQD on 9/16/13 for reporting period 1/1/13 through 6/30/13, and there were no ROP deviations listed for EU303-03.

EU303-06

Compliance Status: Compliance

Items noted during the inspection.

1. EU303-06 covers 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 also subject to the requirements of 40 CFR Part 61, Subparts A, J and V (FGLEAKDETECTION – see discussion below regarding compliance with these requirements). EU303-06 is equipped with the following APC equipment: condensers (1637, 3458, 3475, 1623, 1645, 3303, 3307), and a carbon drum that acts as backup when the THROX (FGTHROX) is down. According to the ROP renewal application received by the MDEQ-AQD on 3/4/13, EU303-06 also vents to FGTHROX and FGSITESCRUBBERS. EU303-06 was venting to the THROX at the time of my inspection.

   Adsorber 1655 is listed as an APC device in table EU303-06 of the ROP. However, DC informed me during the inspection that this adsorber no longer exists as it was replaced with the THROX under AQD Rule 285.

   I did not inspect FGTHROX or FGSITESCRUBBERS (flexible groups associated with EU303-06) during my inspection as I previously inspected them on 11/13/13 and found them to be in compliance with air quality rules and regulations.

2. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 1637. Condition no. III.3 of the same table in the ROP states, if the exhaust gas temperature at the outlet of condenser no. 1637 exceeds 50 degrees F (10 degrees C), the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 10:59 am, I observed the following operational parameter data for condenser no. 1637 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 1637 controls emissions from vacuum pump 1636 which was not running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 1637 exhaust gas temperature	15.6 degrees C (instantaneous)	Hi ≥ 6.0 degrees C Hi – Hi ≥ 8.0 degrees C Max ≥ 10 degrees C

   **All alarm set points are instantaneous.

   It should be noted that although the exhaust gas temperature was greater than the permit limit (10 degrees C) at the time of my inspection, this does not constitute non-compliance as vacuum pump 1636 was not running, and in the event it was, the site-wide THROX was operational.

3. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 3458. Condition no. III.2 of the same table in the ROP states, the exhaust gas temperature at the outlet of condenser no. 3458 on the silicone mixing process shall not exceed 50 F (10 degrees C). At 11:01 am, I observed the following operational parameter data for condenser no. 3458 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided

the data. Condenser 3458 controls emissions from vacuum pump nos. 1625 and 24466 which were running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 3458	-10 degrees C (instantaneous)	Hi ≥ 6.0 degrees C Hi – Hi ≥ 8.0 degrees C Max ≥ 10 degrees C

**All alarm set points are instantaneous.

4. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 3475. Condition no. III.1 of the same table in the ROP states, the exhaust gas temperature at the outlet of condenser no. 3475 shall not exceed 36 F (2.22 degrees C). At 11:02 am, I observed the following operational parameter data for condenser no. 3475 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 3475 controls emissions from vacuum pump 3473 which was running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 3475	-5.3 degrees C (instantaneous)	Hi ≥ -1.8 degrees C Hi – Hi ≥ 0.2 degrees C Max ≥ 2.2 degrees C

**All alarm set points are instantaneous.

5. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 1623. Condition no. III.4 of the same table in the ROP states, if the exhaust gas temperature at the outlet of condenser no. 1623 exceeds 95 F (35 degrees C), DC shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 11:04 am, I observed the following operational parameter data for condenser no. 1623 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 1623 controls emissions from kettle 1610 which was not running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 1623	25.1 degrees C (instantaneous)	Hi ≥ 31.0 degrees C Hi – Hi ≥ 33.0 degrees C Max ≥ 35 degrees C

**All alarm set points are instantaneous.

6. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 1645. Condition no. III.4 of the same table in the ROP states, if the exhaust gas temperature at the outlet of condenser no. 1645 exceeds 95 F (35 degrees C), DC shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 11:05 am, I observed the following operational parameter data for condenser no. 1645 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 1645 controls emissions from kettle 1620 which was not running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 1645	28.2 degrees C (instantaneous)	Hi ≥ 31.0 degrees C Hi – Hi ≥ 33.0 degrees C Max ≥ 35 degrees C

**All alarm set points are instantaneous.

7. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 3303. Condition no. III.4 of the same table in the ROP states, if the exhaust gas temperature at the outlet of condenser no. 3303 exceeds 95 F (35 degrees C), DC shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 11:06 am, I observed the following operational parameter data for condenser no. 3303 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 3303 controls emissions from kettle 3350 which was running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 3303	22.9 degrees C (instantaneous)	Hi ≥ 31.0 degrees C Hi – Hi ≥ 33.0 degrees C Max ≥ 35 degrees C

**All alarm set points are instantaneous.

8. Condition no. VI.1 of table EU303-06 of the ROP states, in part, DC shall monitor and record, on a continuous basis (i.e., at least once every 15-minutes), the exhaust gas temperature of condenser no. 3307. Condition no. III.4 of the same table in the ROP states, if the exhaust gas temperature at the outlet of condenser no. 3307 exceeds 95 F (35 degrees C), DC shall implement corrective action and maintain a record of action taken to prevent reoccurrence. At 11:06 am, I observed the following operational parameter data for condenser no. 3307 in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. Condenser 3307 controls emissions from kettle 3304 which was not running at the time of my inspection.

Operational Parameter	Observed Value	Alarm Set Point**
Condenser 3307	27.1 degrees C (instantaneous)	Hi ≥ 31.0 degrees C Hi – Hi ≥ 33.0 degrees C Max ≥ 35 degrees C

**All alarm set points are instantaneous.

9. Condition no. VI.4 of table EU303-06 of the ROP states, while venting to the carbon drum, DC shall monitor and record the drum weight once every 8 hours. According to DC, they continuously monitor the drum weight. Condition no. III.5 of the same table in the ROP states, while venting to the carbon drum, if the weight of the drum exceeds 36 pounds (16.33 kilograms), DC shall implement correction action and maintain a record of action taken to prevent reoccurrence. At 11:08 am, I observed the following operational parameter data for the carbon drum in the control room for EU303-06 at Building 303. Dan Confer (DC Quality Engineer) and Matt Maiers (DC Manufacturing Engineer) provided the data. The carbon drum system is comprised of a west and east drum that operate in parallel.

Operational Parameter	Observed Value	Alarm Set Point**
West carbon drum	0.2 kg (instantaneous)	≥ 15.4 kg
East carbon drum	5.2 kg (instantaneous)	≥ 15.4 kg

**All alarm set points are instantaneous.

10. Condition no. VI.5 of table EU303-06 of the ROP states, within 30 days following the end of each calendar month, permittee shall calculate and record emissions from the process for the previous month to demonstrate compliance with the 12-month rolling time period emission limits specified in the table. Condition nos. I.2 and 4 of the same table in the ROP limit VOC and benzene emissions from EU303-06 to 30.0 and 0.2 tpy, respectively (based on a 12-month rolling time period as determined at the end of each calendar month). During the inspection, I asked for the 12-month rolling total VOC and benzene emissions through December 2013. On 3/5/14, I received the requested information. According to data provided by DC (see attached), the 12-month rolling total VOC and benzene emissions through December 2013 for EU303-06 were 0.15 and 0.0 tpy, respectively.

11. Condition no. VII.4 of table EU303-06 of the ROP states, each semiannual report of deviations shall include summary information on the number, duration and cause of CAM excursions and/or exceedances and the corrective actions taken. Condition no. VII.5 of the same table states, each semiannual report of deviations shall include summary information on the number, duration and cause (including unknown cause, if applicable) for CAM monitor downtime incidents (other than monitor downtime associated with zero and span or other daily calibration checks, if applicable). According to the latest ROP deviation report received on 9/16/13 for reporting period 1/1/13 through 6/30/13, there were no CAM excursions and/or exceedances or monitor downtime incidents for EU303-06.

FGLEAKDETECTION

Compliance Status: Compliance

Items noted during the inspection.

1. EU303-06 is subject to the requirements of 40 CFR Part 61, Subparts A, J and V (FGLEAKDETECTION). As of the inspection, the latest semi-annual report for FGLEAKDETECTION was received by the MDEQ-AQD on 8/16/13. This report covered reporting period 2/1/13 through 7/31/13. Questions asked during my inspection were based on this report. Following my inspection (i.e. on the afternoon of 2/18/14), I received the semi-annual report for FGLEAKDETECTION for reporting period 8/1/13 through 1/31/14. This report was not the basis for questions asked during my inspection.

2. Based upon the report received on 8/16/13, there was one pump leak detected in May at compliance group "303". During my inspection, I requested a copy of the records required by 61.246(c)(1 – 9) for the leaking pump. On 3/5/14, I received the requested information (see attached), and it appears to meet the regulatory requirements.

3. Based upon my review of the semi-annual report received on 8/16/13, it appears to meet the reporting requirements of 61.247(b). During the inspection, I asked Mike if the component detail list provided in the report included equipment that is designated as "no detectable emissions" (NDEs), "unsafe to monitor", or "difficult to monitor". Mike thought that the "difficult to monitor" equipment was designated by a "D" in the "Category" column of the list. All other equipment was designated as normal ("N"). Mike was not sure if equipment "unsafe to monitor" or equipment having NDEs was included in the component detail list, and said he'd have to check with Jim Peck to find out and get back with me. I told Mike that depending upon Jim's response, I may request more information pursuant to the recordkeeping requirements of 61.246(e) and (f).

   On 3/5/14, Steve Moser emailed me and stated equipment is designated either "N" (= Normal), "D" (= Difficult to Monitor) or "U" (= Unsafe to Monitor) in the semi-annual Benzene NESHAP report. There is no separate or special designation for equipment with NDEs. Equipment having NDEs would be designated "N" unless it otherwise qualifies as "D" or "U". With respect to "U" designations, the Midland Site currently does not have any components in benzene service that qualify as "unsafe to monitor."

   In an email dated 3/6/14, I asked DC for the following additional information.

   1. For equipment having NDEs, 61.246(e)(2)(i) requires DC to maintain a list of identification numbers of this equipment. Could you provide me with this specific list and the information required in 61.246(e)(4)(i -iii) for the last compliance test?

   2. Pursuant to the requirements of 61.246(f)(2), could you provide me with the following for tag #051675 (i.e., a valve listed as "D" in your component detail list for unit 304 in the semi-annual benzene NESHAP report covering reporting period 2/1/13 – 7/31/13)?

      A. An explanation stating why the valve is difficult to monitor.
      B. The planned schedule for monitoring the valve.

   With regard to item #1 above, during an unrelated inspection on 3/13/14, DC provided me with the requested information. An official copy of this information was received on 3/19/14 (see attached).

   DC has NDE pumps and pressure relief devices. According to 61.242-2(e)(3), NDE pumps shall be tested for compliance initially upon designation and annually thereafter. Based upon information received on 3/19/14, all NDE pumps were tested in 2013 and all readings were less than 500 ppm above background.

According to 61.242-4, pressure relief devices in gas/vapor service do not have to be tested annually. They only have to be tested for NDEs after a relief event.

Based upon this information, DC appears to be in compliance with the requirements of 61.246(e)(2)(i) and 61.246(e)(4)(i-iii).

With regard to item #2 above, during an unrelated inspection on 3/13/14, Jim Peck of DC informed me that valve #051675 was designated as difficult-to-monitor ("D") as it's more than 2 meters above the support surface, and the schedule for monitoring is annually. Based upon Mr. Peck's statements, DC appears to be in compliance with the requirements of 61.242-7(h)(1) and (3).

4. During the inspection, I also asked Mike if they were following any of the alternative standards for valves under either 61.243-1 or 61.243-2. Mike wasn't certain, but thought they were following the alternative standard under 61.243-1. Under this alternative, the total number of leaking valves shall not exceed 2.0%, and valves must be tested for leaks annually. Again, Mike said he'd check with Jim Peck and get back with me.

   On 3/5/14, Steve Moser emailed me and stated the Midland Site is following the alternative standard under 61.243-2(b)(3), which states "After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service." According to Steve, the valve leak rate for 2013 was 0%, well below the 2% limit specified in the standard.

NAME Jonathan Lee DATE 3/20/14 SUPERVISOR C. Hare

Lang, Jennifer (DEQ)

From: steve.moser@dowcorning.com
Sent: Wednesday, March 05, 2014 11:17 AM
To: Lang, Jennifer (DEQ); mike.gruber@dowcorning.com
Subject: RE: Dow Corning - 2/18/14 Inspection - Follow Up Information Requested
Attachments: Summary of Emissions for EU303-01_02_and_06.pdf; May 2013 Leaking Pump Record.pdf

Jennifer,

Embedded in your note below and the attached documents is the follow up information you requested during your last inspection. Thank you for your patience. Please let me know if you have any questions. See you next week.

Steve

From: Lang, Jennifer (DEQ) [mailto:LANGJ1@michigan.gov]
Sent: Friday, February 28, 2014 12:05 PM
To: GRUBER, MICHAEL E. (MEGRUBER); MOSER, STEPHEN V. (SVMOSER)
Subject: Dow Corning - 2/18/14 Inspection - Follow Up Information Requested

Mike & Steve,

Just thought I'd touch base with you about the follow up material I requested from the inspection on 2/18/14 as I haven't received anything to date. The following items were requested during the inspection.

1. Additional information regarding the removal of scrubber 22451 from EU303-01. In particular, additional information describing why the scrubber was removed and under what AQD exemption.

[MOSER, STEPHEN V. (SVMOSER)] The 22451 scrubber was redundant air pollution control under permit 804-92C and was removed. The chlorosilane tanks formerly controlled by the 22451 scrubber were directed to the 337 tower scrubbers, the Site Scrubbers, or the Site Throx. Permit 804-92C allows the use of the of the 337 tower scrubbers in addition to the 22451 scrubber and Michigan R285 allows the use of the Site Throx and Site Scrubbers in addition to the 337 scrubbers.

2. 12-month rolling total VOC emissions through December 2013 for EU303-01 & EU303-02.

[MOSER, STEPHEN V. (SVMOSER)] See attached Summary of Emissions for EU303-01, -02 and -06.

3. Validation of the operating parameter recorded for condenser 1637 at EU303-06 during the inspection. Please refer to the email I sent to Mike on 2/24/14.

[MOSER, STEPHEN V. (SVMOSER)] The temperature recorded for condenser 1637 was correct. At the time, Throx was running and the process was venting to Throx. Under these circumstances, the condenser is not subject to the local temperature conditions set forth in the permit.

4. 12-month rolling total VOC and benzene emissions through December 2013 for EU303-06.

[MOSER, STEPHEN V. (SVMOSER)] See attached Summary of Emissions for EU303-01, -02 and -06.

5. A copy of the records required by 61.246(c)(1-9) for the leaking pump at compliance group 303 which was identified in the benzene NESHAP leak report received by the AQD on 8/16/13.

[MOSER, STEPHEN V. (SVMOSER)] See attached May 2013 Leaking Pump Record.

6. Is equipment designated "unsafe to monitor" or equipment having "no detectible emissions" included in the component detail list of the most recent benzene NESHAP leak report received by the AQD on 8/16/13? Depending upon the response, I may request more information pursuant to the recordkeeping requirements of 61.246(e) and (f).

[MOSER, STEPHEN V. (SVMOSER)] Equipment is designated either "N" (= Normal), "D" (= Difficult to Monitor) or "U" (= Unsafe to Monitor). There is no separate or special designation for equipment with "no detectible emissions." Equipment having "no detectible emissions" simply is subject to less frequent monitoring than other equipment. Such equipment would be designated "N" unless it otherwise qualifies as "D" or "U." With respect to "U" designations, the Midland Site currently does not have any components in benzene service that qualify as "unsafe to monitor."

7. Is Dow Corning following the alternative standards for valves under either 61.243-1 or 61.243-2? Again, based on the response, additional questions may follow.

[MOSER, STEPHEN V. (SVMOSER)] The Midland Site is following the alternative standard under 61.243-2(b)3, which states "After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to skip three of the quarterly leak detection periods for the valves in VHAP service." The valve leak rate for 2013 was 0%, well below the 2% limit of this standard.

Thanks ☺

Jennifer Lang, P.E.
Environmental Engineer Specialist
MDEQ - Air Quality Division
989-894-6216 (office)
989-891-9237 (fax)
langj1@michigan.gov

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Data Requested During 02/18/2014 Inspection

✓ A. **EU303-01 (ROP Mark-up Condition VI.2.)**
VOC Emissions (12-month rolling total as of end of December 2013): 0.27TPY (543.2 lbs/yr)

✓ B. **EU303-02 (ROP Mark-up Condition VI.2.)**
VOC Emissions (12-month rolling total as of end of December 2013): 0.17 TPY (336.4 lbs/yr)

✓ C. **EU303-06 (ROP Mark-up Condition VI.2.)**
VOC Emissions (12-month rolling total as of end of December 2013): 0.15 TPY (294.0 lbs/yr)
Benzene Emissions (12-month rolling total as of end of December 2013): 0.0 TPY (< 1 lbs/yr)

Leaker Detail Report

Report: R304_1

Report Date: 02/20/2014 3:54:46PM

Report Parameters

303

EPAV

PUMP Compliance Leak

Reporting Period: 2013-1-1 00:0C to 2013-12-31 23.

303

Class	Location	Date Reported	Test Type	Leak Def	1st Att. Due	Repair Due	Repaired	Details: Date	Event	Result	Technician	Instrument
Tag: 051026		**Drawing:** 300										
PUMP	2/0 SWSD V 3474 P1-3474	05/14/2013	V	499	05/19/2013	05/29/2013	05/24/2013					
								5/14/2013 8:00:00PM	Visual Insp Condition Noted	Fail FLUSH LINE LEAKING	OPS	VISUAL
								5/15/2013 11:00:00AM	Repair Attempt	TIGHTENED CONNECTIONS	OPS	
								5/17/2013 2:13:33PM	Visual Insp Condition Noted	Fail Flush Line Leaking	903164	0718022928
								5/24/2013 8:00:00AM	Repair Attempt	TIGHTENED CONNECTION	OPS	
								5/24/2013 2:20:24PM	Visual Insp Condition Noted	Pass R3 REPAIRED	903164	0718022928

DC 006080

List of NDE Equipment under Benzene NESHAP
March 13, 2014

Dow Corning Midland Plant

Rcvd by the MDEQ-AQD on 3/19/14.

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ComponentID	ComponentTag	UnitDescription	ComponentClass	ComponentType	CategoryCode	Test Date	Background Level (ppm)	Maximum Reading	Net Reading
14688	050862	308	PUMP	LEAKLESS DESIGN	N	1/16/2013 11:03:01 AM	0	27	27
14721	051106	505	PUMP	LEAKLESS DESIGN	N	5/16/2013 12:47:23 PM	0	3	3
14734	051395	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:40:58 AM	0	1	1
14741	051396	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:42:25 AM	0	1	1
18672	051593	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:57:08 AM	0	1	1
18679	051628	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:03:07 AM	0	3	3
18790	051026	303	PUMP	LEAKLESS DESIGN	N	5/24/2013 2:21:12 PM	0	3	3
18802	050310	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:28:01 AM	0	1	1
18835	050394	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:32:35 AM	0	1	1
18836	050403	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:34:09 AM	0	1	1
18925	050020	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:08:23 AM	0	1	1
18970	050171	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:14:08 AM	0	1	1
19004	050216	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:19:48 AM	0	1	1
19011	050245	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:24:14 AM	0	2	2
19014	050225	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:21:23 AM	0	1	1
19029	050273	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:25:51 AM	0	2	2
19988	051231	516	PUMP	LEAKLESS DESIGN	N	5/14/2013 9:31:31 AM	0	1	1
20042	051347	513	PUMP	LEAKLESS DESIGN	N	5/14/2013 9:48:17 AM	40	44	4
20075	050918	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:44:57 AM	0	5	5
20077	050919	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:46:41 AM	0	1	1
22156	050059	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:10:39 AM	0	6	6
22157	050071	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:11:33 AM	0	1	1
25897	051556	304	PUMP	LEAKLESS DESIGN	N	5/7/2013 8:51:39 AM	0	2	2
38577	051219	516	PUMP	LEAKLESS DESIGN	N	5/14/2013 9:22:45 AM	1	1	0
44212	050355	308	PUMP	LEAKLESS DESIGN	N	5/7/2013 9:29:11 AM	0	1	1
14783	051428	304	RELIEF		N	6/16/2004 10:07:10 AM	2	2	0
16755	051324	516	RELIEF		N	4/14/2004 10:45:42 AM	3	3	0
18722	051788	304	RELIEF		D	6/24/2004 8:35:11 AM	2	2	0
18735	051699	304	RELIEF		N	6/16/2004 11:52:33 AM	0	0	0
18736	051697	304	RELIEF		N	6/16/2004 11:52:46 AM	0	0	0
18738	051688	304	RELIEF		N	6/16/2004 11:53:01 AM	0	0	0
18739	051686	304	RELIEF		N	6/16/2004 11:53:16 AM	0	0	0
18764	30097	303	RELIEF		N	6/14/2004 2:30:46 PM	4	4	0
18780	30114	303	RELIEF		N	6/14/2004 2:31:16 PM	4	4	0
18901	050662	308	RELIEF		N				
18905	050661	308	RELIEF		N				
18931	050843	308	RELIEF		N				
19063	050799	308	RELIEF		N				
20032	051336	516	RELIEF		N	4/14/2004 10:44:18 AM	3	3	0
20033	051334	516	RELIEF		N	4/14/2004 10:44:27 AM	3	3	0
20034	051335	516	RELIEF		N	4/14/2004 10:44:46 AM	3	3	0
20037	051330	516	RELIEF		N	4/14/2004 10:45:29 AM	3	3	0
20038	051331	516	RELIEF		N	4/14/2004 10:45:55 AM	3	3	0
20045	051368	513	RELIEF		N	6/3/2004 5:13:38 PM	1	1	0
20072	051499	304	RELIEF		N	6/16/2004 7:40:49 AM	2	2	0
20073	051498	304	RELIEF		N	6/16/2004 7:41:22 AM	2	2	0
25942	051671	304	RELIEF		D				
25953	051755	304	RELIEF		D				
25971	051661	304	RELIEF		D				