DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

FCE Summary Report

Dow Corning	- Midland	Plar	nt			SRN :	A4043
3901 S Sagir	naw Rd					District :	Saginaw Bay
						County :	MIDLAND
MIDLAND	State:	MI	Zip Code :	48686			Compliance
ss: MEGA	SITE				Staf	f: Kathy	Brewer
Date : 10/1/20	014						9/27/2017
: FCE Oc	tober 2014	-Se	pt 2017				
		-36	φι 2017				
	3901 S Sagir /IDLAND ss : MEGA Date : 10/1/20	3901 S Saginaw Rd MIDLAND State: ss : MEGASITE Date : 10/1/2014	3901 S Saginaw Rd MIDLAND State: MI ss : MEGASITE Date : 10/1/2014	MIDLAND State: MI Zip Code : ss : MEGASITE Date : 10/1/2014	3901 S Saginaw Rd MIDLAND State: MI Zip Code : 48686 ss : MEGASITE Date : 10/1/2014	3901 S Saginaw Rd MIDLAND State: MI Zip Code : 48686 Comp Status ss : MEGASITE Stat Date : 10/1/2014 FCE Date	3901 S Saginaw Rd District : MIDLAND State: MI Zip Code : 48686 Compliance Status : ss : MEGASITE Staff : Kathy Date : 10/1/2014 FCE Completion Date :

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
09/22/2017	ROP Other	Compliance	2017 Fugitive Dust Control Plan. Unchanged
09/22/2017	MACT (Part 63)	Compliance	Subpart HHHHH Precompliance for bldg. 1353 Silicone Sealants and adhesives plant twin screw extruder.
09/21/2017	Scheduled Inspection	Compliance	EU501-01, 501-02, 501-49, R290 501-12, 501-47, 501-51; 505-01, 505-04 R290 505-04, 505-06- N
09/20/2017	MACT (Part 63)	Compliance	Subpart DDDDD Boiler MACT NOCS
09/20/2017	NESHAP (Part 61)	Compliance	Subpart FF; Annual Benzene Waste NESHAP Report
09/20/2017	Release Reports	Compliance	20 lbsToluene, 6 lbs Xylene, 8 lbs Hydrochloric Acid. Limit is 70 pph VOC, 11.1 TPY. Liner failure caused leak.
09/20/2017	Release Reports	Compliance	est 200 lbs Ethylenediamine Buckled tanker truck due to failed vacuum relief device. R290 process. uncontrolled release not from process activities.
09/20/2017	Release Reports	Compliance	18 lbs Toluene, < 0.01 lb Benzene, < 0.5 lb Methyl isobutyl ketone Wash out cap on waste trailer open. Silicone, emulsions & polymers - 303 bldg

Activity Date	Activity Type	Compliance Status	Comments
09/19/2017	Excess Emissions (CEM)	Compliance	4th Quarterly Excess Emissions Report; Quarterly Cylinder Gas Audit Results (FG432BOILERS, THROX) THROX 0.09% 02% CEMS downtime, 0.72% NOx CEMS downtime, EUboiler13 NOx and 02% 0.27% CEMS downtime, EUBOILER14 NOx and 02% 0.13% CEMS downtime ; all other excess emissions and CEMS downtime were 0%CEMS & w/in 15% gas cylinder audit for THROX. THROX THC CEMS not included. 432BOILERS RATA performed Q1.
09/19/2017	Excess Emissions (CEM)	Compliance	Quarterly Excess Emissions Report; Quarterly Cylinder Gas Audit Results (FG432BOILERS, THROX) Except for THROX 1.3% 02% CEMS downtime, 0.28% NOx CEMS downtime, EUboiler13 NOx and O2% 0.21% downtime; all other excess emissions and CEMS downtime were 0%CEMS & w/in 15% gas cylinder audit for THROX. THROX THC CEMS not included. 432BOILERS RATA performed Q1.
09/19/2017	CEM RATA	Unknown	432 Boilers NSPS Subpart Db Compliance CEMS Certification Report. EUBOILER 13 CEMS Ib/MMBTU were 25% relative accuracy. The report states an "alternative method" used for determining pas/fail. EUBOILER 14 is 19% of Relative accuracy. The RA is suppose to no more than 20%. A request made to TPU to review the results & determine compliance
09/19/2017	Excess Emissions (CEM)	Compliance	Second Quarter 2017 Excess Emission Report (FG432BOILERS and THROX). Except for THROX 0.27% 02% CEMS downtime, 0.41% NOx CEMS downtime, and 2.4% THC CEMS downtime, all other excess emissions and CEMS downtime were 0%CEMS w/in 15% gas cylinder audit
09/07/2017	Scheduled Inspection	Compliance	EU303-01, 303-09, R290 bldg. 303, 304-02, 515-01 IR Camera used - N
08/08/2017	Scheduled Inspection	Compliance	EU207-01, EU207-02, EU207-03, R290 EU207-04; 604-08, R290 604-10, R290 records 602-01,602- 02, 602-03, 602-04, 602-12

Activity Date	Activity Type	Compliance Status	Comments
08/08/2017	MACT (Part 63)	Compliance	Semi annual MACT reports DDDDD (boilers), EEEE(OLD MACT),FFFF(MON), NNNNN (HCL MACT - No exceedances) Reviewed during inspection at affected faciliites
08/08/2017	MACT (Part 63)	Compliance	Semi Annual NOCS Report; Includes MON Design Evaluation for bldg. 2901 Glycol condenser DV19735 98% removal of Toluene and acetonitrile
08/07/2017	ROP Annual Cert	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
08/07/2017	ROP SEMI 2 CERT	Compliance	
08/01/2017	MACT (Part 63)	Compliance	Semi annual MACT NNNNN reports. No exceedances or deviations. No changes to monitoring plan or LDAR plan
07/27/2017	Scheduled Inspection	Compliance	EU311-01, EU356-01, EU356-02, EU356-03, and EU340-01-N
07/11/2017	Scheduled Inspection	Compliance	EU502-01 plus record review of EU502-09 & EU502-11 plus R290 records for R290 EUs 502-10, 502-12, and 502-04; R284i records for 502-05-N
			EU325-03 plus records review for MAERS RG- TCS permit exempt EUs records to show compliance with R290 EU325-02, 325-07, 325-08.
06/28/2017	Scheduled Inspection	Compliance	EU324-01, 08, 18 & R290 MAERS RG-324 EUs [EU324- 02, 324-13, 324-1613], MAERS RG-100 R290 EUs [EU106-02, EU106-04, EU016-11, EU109-01, EU109-09]. -D
06/19/2017	ROP Semi 1 Cert	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
06/01/2017	Environmental Audit Notification	Compliance	

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Activity Date	Activity Type	Compliance Status	Comments
05/31/2017	MAERS	Compliance	Emissions are not included in attachments for many EUs, calculations are included with original permitting applications, some designated in the RO appendices, and verified on site during inspections. Calculations are based on mass balances, standard engineering practices, and vent sampling. EU101-01 had SCC addded rfo spark ignition engine, EU2701-01 is NG boilers had reduced MMCF & used MAERS emission factors, EU601- 01 had reduced product throughput & reduced VOC emissions w/no change in SCC, RG2504/2505 had increased throughput & increased ammonia & VOC emissions w/no change in SCC, RG321-01had reduced product throughput & reduced VOC emissions w/no change in SCC
05/24/2017	Scheduled Inspection	Compliance	FG325-01, EU325-01, FGHAP2012A2A, EU502-01-N
05/18/2017	Scheduled Inspection	Compliance	EU322-03, EU322-06, EU322-11- D
05/09/2017	Scheduled Inspection	Compliance	FG304VENTRECOVERY, 508-01, 502-07
05/09/2017	Stack Test	Unknown	FGTHROX Pending TPU review
04/11/2017	Scheduled Inspection	Compliance	FG337scrubber -D
04/10/2017	NESHAP (Part 61)	Compliance	No reported failures of regulated benzene components. Semi Annual Benzene NESHAPs Report LAST REPORT some processes shutdown or otherwise covered under 40 CFR Part 63 Subpart UU.
03/21/2017	Scheduled Inspection	Compliance	FG432Boilers inspection and RATA
03/15/2017	CEM RATA	Compliance	FGTHROX All CEMS passed
02/24/2017	Scheduled Inspection	Compliance	FGSITESCRUBBERS, FGSITEBLOWER-N
02/07/2017	Release Reports	Compliance	washout cap on trailer open. Silicone emulsions & polymers - waste included toluene, benzene, methyl isobutyl ketone. less than RQ. some material was cleaned off side of trailer
02/05/2017	ROP Annual Cert	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.

Activity Date	Activity Type	Compliance Status	Comments
01/10/2017	Scheduled Inspection	Compliance	FG-MACT-ZZZZ-EMERGENCY- RICE
12/30/2016	CEM RATA	Compliance	Boilers 12,13,14 at 432 Building. Comparison of 40 CFR Part 60 Appendix requirement that relative accuracy < 20% of mean value of the reference method test data. Boiler12 NOx RA = 6.10%, boiler13 NOx RA = 7.14%, boiler 14 NOx RA =9.73%. The boilers rated capacity = 101.76 MMBTU/Hr. Boiler 12 test at 75.7%, boiler 13 tested at 70.1%, boiler 14 tested at 69.7% capacity
12/06/2016	Scheduled Inspection	Compliance	EU321-01
12/06/2016	Scheduled Inspection	Compliance	FG322-01 (EU322-01, EU322-02, EU322-04) VCS production. Most resent PTI 242-07-D
12/01/2016	Excess Emissions (CEM)	Compliance	First quarter 2016 excess emissions report for boilers 12,13,14 and THROX and quarterly cylinder gas audit results. See review report for details
12/01/2016	MACT (Part 63)	Compliance	HCI MACT semi annual report: No operating HCL process during 7/1-12/31 2014. No emission exceedances during SSM, no malfunctions, no emission limit deviations. No periods when CMS out of control. LDAR followed. No revisions to site specific monitoring or LDAR NOCs. No routine maintenance events that caused an HCL storage tank device to exceed emission limits in Table 1 of the subpart. no maintenance events planned that may cause an exceedance.
12/01/2016	Excess Emissions (CEM)	Compliance	Third Quarter Excess Emissions Report for Boilers 12, 13, 14, and THROX See review report for details
12/01/2016	Excess Emissions (CEM)	Compliance	Excess emissions report for Boilers 12,13,14 and THROX and quarterly cylinder gas audit results Se review report for details

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Activity Date	Activity Type	Compliance Status	Comments
12/01/2016	MACT (Part 63)	Compliance	HC1 MACT Semi Annual Compliance Report: No operating HCL process during 1/1-6/30, 2014. No emission exceedances during SSM, no malfunctions, no emission limit deviations. No periods when CMS out of control. LDAR followed. No revisions to site specific monitoring or LDAR NOCs. No routine maintenance events that caused an HCL storage tank device to exceed emission limits in Table 1 of the subpart. no maintenance events planned that may cause an exceedance.
12/01/2016	MACT (Part 63)	Compliance	Semi-annual HC1 MACT Report: No operating HCL process during 7/1-12/31 2014. No emission exceedances during SSM, no malfunctions, no emission limit deviations. No periods when CMS out of control. LDAR followed. No revisions to site specific monitoring or LDAR NOCs. No routine maintenance events that caused an HCL storage tank device to exceed emission limits in Table 1 of the subpart. no maintenance events planned that may cause an exceedance.
11/30/2016	NESHAP (Part 61)	Compliance	Benzene Waster Operations 40 CFR Part 61 Subpart FF 61.357: 2014 total Benzene waste = 2.971 Mg; 1.933 sent offsite to independent incinerators, 1.03 Mg to Dow Chemical WWTP

Activity Date	Activity Type	Compliance Status	Comments
11/30/2016	NESHAP (Part 61)	Compliance	Semi-Annual Benzene fugitive emission NESHAPS Report:Dow Corning Semi annual benzene fugitive emissions report review 40 CFR Part61 subpart FF Report contained Shutdown times for EU303-06, EU304-03, EU308-02, EU505-01, EU508-01, EU515-01, EU304VR (vent recovery Determination that EU303-06 contains <10% benzene and removed as of February 2015 Components added for 304, 505, 516 Deleted components for 304 No repeat leakers reported Component detail list by class for 303, 304, 308, 505, 513, 516 Monitoring for 303, 304, 308, 505, 516 EU308-02 1 valve failure Sept. 29, 2014 found through Method 21 testing. isolated. Repaired Oct. 1, 2014
11/30/2016	NESHAP (Part 61)	Compliance	Semi-annual Benzene NESHAP report: Dow Corning Semi annual benzene fugitive emissions report review 40 CFR Part61 subpart FF Report contained Shutdown times for EU505-01, EU508-01, EU515-01, EU304VR (vent recovery) Components added for 304, 308, 505 Deleted components for 304, 308, 513, 516 No repeat leakers reported Component detail list by class for 303, 304, 308, 505, 513, 516 Monitoring for 303, 304, 308, 505, 516 EU308-02 1 pump failure May12, 2015 found through Method 21 testing. isolated. Repaired May 13, 2015 505 had 1 connector leak detected May 11, 2015 using Method 21 testing, repaired on 5/12

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Activity Date	Activity Type	Compliance Status	Comments
11/30/2016	NESHAP (Part 61)	Compliance	Semi Annual Benzene fugitive emission NESHAPS report:Dow Corning Semi annual benzene fugitive emissions report review 40 CFR Part61 subpart FF Report contained Shutdown times for EU303-06, EU304-03, EU308-02, EU505-01, EU508-01, EU515-01, EU304VR (vent recovery Determination that EU303-06 contains <10% benzene . Final verification completed shortly. Components added for 303, 304, 308 Deleted components for 304, 308, 513 No repeat leakers reported Component detail list by class for 303, 304, 308, 505, 513, 516 Monitoring for 303, 304, 308, 505, 516 EU308-02 1 pump seal failure on June 30, 2014 valve found through visual inspection. isolated. Repaired June 30, 2014.
11/30/2016	NESHAP (Part 61)	Compliance	Semi-annual Benzene NESHAPs report: Dow Corning Semi annual benzene fugitive emissions report review 40 CFR Part61 subpart FF Report contained Shutdown times for EU505-01, EU508-01, EU515-01, EU304VR (vent recovery) Components added for 308, 505, 516 Deleted components for 304, 505 Component detail list by class for 303,304,308,505, 513, 516 Monitoring for 304, 308,505,516 -EU308-02 Jan 17, 2016 1 pump leak through visual inspection. isolated. Repaired Jan18, 2016

Activity Date	Activity Type	Compliance Status	Comments
11/30/2016	NESHAP (Part 61)	Compliance	Semi annual Benzene NESHAPs Report:Dow Corning Semi annual benzene fugitive emissions report review 40 CFR Part61 subpart FF Report contained Shutdown times for EU505-01, EU508-01, EU515-01, EU304VR (vent recovery) Components added for 304, 308, 505, 513, 516 Deleted components for 304, 308, 505, 513, 516 Component detail list by class for 303, 304, 308, 505, 513, 516 Monitoring for 303, 304, 308, 505, 516 -EU304VR on April 5, 2016 1 pump April 5 failure found through visual inspection. isolated. Repaired April 5, 2016 505 had 1 connector leak detected in May 2016
11/30/2016	Environmental Audit Notification	Compliance	EG2504-01
11/30/2016	Environmental Audit Notification	Compliance	Organo Silanes and Silicones facilities (Buildings 321, 322, 324, 601, 604, 2703)
11/30/2016	Environmental Audit Notification	Compliance	EU207-04
11/22/2016	Scheduled Inspection	Compliance	EU2703-01; EU2703-03; EU2703- 17 several R290s in Organo silane manufacturing-D
11/21/2016	MACT (Part 63)	Compliance	Semi annual OLD MACT compliance. No SSM, no deviations, no leaks.
11/07/2016	MACT (Part 63)	Compliance	HC1 MACT Semi Annual Compliance Report. No deviations, no excess emissions, no SSM or Malfunctions. No CMS out of control periods.
11/07/2016	NESHAP (Part 61)	Compliance	Benzene Waste Operations. 2015 total Benzene waste = 3.802 Mg; 3.694 Mg sent offsite to independent incinerators, 0.108 Mg to Dow Chemical WWTP
11/03/2016	Scheduled Inspection	Compliance	EU212-03; EU2901-12
08/26/2016	Scheduled Inspection	Compliance	EU303-07
08/17/2016	ROP SEMI 2 CERT	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.

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Activity Date	Activity Type	Compliance Status	Comments
08/17/2016	ROP SEMI 2 CERT	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
07/14/2016	ROP Other	Compliance	2016 Fugitive Dust Control Plan. No changes. MAP included
07/06/2016	Release Reports	Compliance	EU322-03 Ammonia air release. Ammonia release from EU322-03 8AM for 3 -5 minutes. Est. of 10 lbs. Line filed w/gaseous ammonia vs. liquid ammonia. Line being prepped for maintenance. opening of drain plug resulted in visible release. Leaking isolation valve suspected.
05/25/2016	MAERS	Compliance	
03/25/2016	Stack Test	Compliance	CO, VOC, and PM10 emission test report for THROX at 2512 Building.FGTHROX - Testing of THROX exhaust consisted of three test runs for CO w/ all results being ND, PM10 w/an average 0.644 Lbs/hr & 2.82 TPY, and VOC average emissions of 0.2 ppm & 0.0161 Lbs/hr. Emission limits are 90 TPY for CO, 3.5 Lbs/hr & 13.4 TPY for PM, & 6.6 Lbs/hr for VOCs. Air flow rates, Temperature, moisture, O2 & CO2 were determined during the testing or during the concurrent RATA. The emissions test was required by PTI 91-07E. The overall emission summary provided in the test report indicates compliance with applicable emission limits
03/25/2016	CEM RATA	Compliance	RATA report for THROX at 2512 Building. Percent of mean of reference method reported were: NOx - 10.16% (Lbs/MMBTU), THC - 0.74% (ppm), CO2 - 6.4%, SCFM fro Monitoring Solutions - 10.23%, SCFM for SIC - 9.9%. CEMS relative accuracy shall not be greater than 20% of the mean value of reference method.
03/11/2016	CEM RATA	Compliance	Testing Protocol for 432 Boilers RATA - March 21-24, 2016. comments to TPU
02/01/2016	Excess Emissions (CEM)	Compliance	4th Quarter EER for boilers 12, 13, 14 and THROX and quarterly cylinder gas audit results. See attached summary

Activity Date	Activity Type	Compliance Status	Comments
12/10/2015	ROP Annual Cert	Compliance	Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
12/07/2015	ROP Other	Compliance	Fugitive Dust Control Plan for 2015. No changes. Sweep &/or powerwash several paved roads & lots. CaCl application on several unpaved roads & lots 1/month April - Oct
11/30/2015	CEM RATA	Compliance	RATA report for Boilers 12,13,14 at 432 Building. Mean of reference method reported were: #12 had 2.42% of mean, #13 had 13.05% of mean, #14 had 14.02% of mean. CEMS relative accuracy shall not be greater than 20% of the mean value of reference method.
11/18/2015	Excess Emissions (CEM)	Compliance	Excess emissions report for Boller 12, 13, 14 and THROX and quarterly cylinder gas audit results. See attached summary
11/12/2015	Excess Emissions (CEM)	Compliance	For Boiler 12, 13, 14 and THROX; quarterly cylinder gas audit results. See atached
11/12/2015	Excess Emissions (CEM)	Compliance	2nd Qtr Excess Emission Report for Boilers 12, 13, 14 and THROX; Qtrly Cylinder Gas Audit Results. See attached report
11/10/2015	Stack Test Observation		FGTHORX CO emission & RATA
11/09/2015	Scheduled Inspection	Compliance	FGTHROX
11/09/2015	Excess Emissions (CEM)	Compliance	Boilers 12, 13, 14 and THROX 4th quarter 2014. Throx RATA conducted during quarter See attached summary
11/09/2015	Excess Emissions (CEM)	Compliance	Steam Boilers 12, 13 and 14 and THROX. 3rd quarter. see attached summary
10/30/2015	Stack Test	Compliance	RATA Protocol (THROX) for November 10 and PM10 emission testing for November 11
10/08/2015	CAM Excursions/Exceedan ces	Compliance	Dow Corning - Each CAM excursion/exceedance listed in the report was also listed in the semi- annual ROP deviation report. Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.

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10/08/2015	ROP Semi 1 Cert	Compliance	EU325-01 1/5/2015 3 hrs 20
10/06/2015	ROP Semi r Cen	Compliance	mins Water flow <10 gpm to
			venture scrubber 22245-1 due to
			frozen muffler from leaking
			solenoid allowing valve to
			scrubber to self-open.
			Implemented preheat of water
			feed to scrubber. No excess
			emissions.
			EU502-01 FG337SCRUBEER
			1/5/2015 9 hours Recirc pump
			for scrubber 9960 lost prime. Low
			flow alarms & start up incorrectly
			acknowledged. Vents switched to
			scrubber 9950. No emission limit
			exceedances.
		1	EU303-06 FGFACILITY 1/6/2015
		1	62 minutes Phenyl methyl
			process vented to site vent header
			instead of carbon when THROX
			was down after initial interlock
			sent emissions to carbon.
			Operator error. Updated alert. No
			emission limit exceedances.
			EU2703-01 2/24/2015 3 hours
			When THROX down, vent to THROX closed and emissions
			sent to carbon adsorption system
			which leaked due to corrosion.
		1	Implemented annual PM drum
			inspection. No emission limit
			exceedances.
			EU108-01 2/28/2015 2 hours
			combined weight gain was 46
			pounds for 2 hours. Dow Corning
			does not believe there were
			excess emissions as each drum is
			rated to control emissions up to a
			gain of 45 pounds.
			EU325-01 4/23/2015 41 mins
			Scrubber 22245-1 1st stage flow
		1	<10 gpm when pump lost prime
			after 2nd scrubber bank turned on.
			2nd & 3rd stage flow maintained. No excess emissions.
]]	EU303-01 4/30/2015 14 hours ,
			29 minutes Condenser 3469 exit
			gas temperature >10 C when
			glycol not circulated to it during a
			THROX outage. SOP revised so
			glycol sent to condenser 3469
	-		when THROX down. No excess
			emissions.
			EU2901-02 FGRULE290
			5/1/2015 116 hours between Jan
			& May Scrubber 19734 Valve
			on water supply to top section of
			scrubber closed after earlier
			process shutdown. Water flow rate
			alarm set point incorrect. Water
L	<u> </u>		flow to bottom section maintained.

10/08/2015	ROP Semi 1 Cert	Compliance	Rule 290 exceedance in January for 909 lbs/month emissions. No exceedances in April or May. EU109-01 FGRULE290 5/28 - 30/2015 40 hours Scrubber 2210 bypassed due to plugged check valve in vent line from kettle to scrubber. Check valve replaced. No excess emissions. Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each non-compliance issue. Therefore, a VN was not issued for deviations listed in the report.
10/06/2015	CAM Excursions/Exceedan ces	Compliance	Dow Corning - Each CAM excursion/exceedance listed in the report was also listed in the semi- annual ROP deviation report. Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
10/06/2015	CAM monitor downtime	Compliance	none
10/06/2015	CAM monitor downtime	Compliance	None

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40/00/0045		Compliance	
10/06/2015	ROP Semi 1 Cert	Compliance	Sections 1 & 2 Several emission units & controls were impacted by two different factors during this reporting period. On 2/28/2014, electricians were installing a protective relay in an electrical substation for the plant when a relay tripped. The tripping relay resulted in a loss of electrical power & air to a significant portion of the plant that reduced pressure and flow in the site service water system. The power supply to the plant air compressors was changed to improve reliability. On 4/11 & 14/2014 city water main breaks w/in the plant resulted in a decreased water flow to several control devices. Processes were shutdown & main breaks repaired. Some additional backup water sources were installed. EU108-01 On 2/6/2014 the coolant inlet temperature on condenser 20729 exceeded -20F for 2 hours and 15 minutes due to a bad solenoid on the glycol compressor. Emission calculations performed at the increased temperature indicated that there were no excess emissions. EU212-03 DC updated vent calculations and emissions based on updated emission factors. When evaluated with the updated vent calculations, ethylbenzene emissions exceeded the R290 20 lb/month limit for Jan – April 2014 by 97.6, 84.3, 40.5, and 53.6 pounds respectively. Production limited to comply w/R290 limit until PTI 104-14 was issued on 8/21/2014. EU212-12, DC updated vent calculations and emissions based on updated emission factors. When evaluated with the updated vent calculations, ethylbenzene emissions exceeded the R290 10 lb/month limit for Jan – April 2014 by 97.6, 84.3, 40.5, and 53.6 pounds respectively. Production limited to comply w/R290 limit until PTI 104-14 was issued on 8/21/2014. EU212-12, DC updated vent calculations and emissions based on updated emission factors. When evaluated with the updated vent calculations, ethylbenzene emissions exceeded the R290 10 lb/month limit for Jan – April 2014 by 16, 610 3, 21 and 15 5
			When evaluated with the updated vent calculations, ethylbenzene emissions exceeded the R290 10 lb/month limit for Jan – April 2014 by 11.6, 10.3, 21, and 15.5 pounds respectively. PTI 48-14 was issued on May 1, 2014. Condition no. I.1 of the PTI limits VOC emissions from EU212-12 to 4.05 tpy.
	<u> </u>	· ·	EU 322-03 condenser #6391 outlet temp >30F for 15 minutes

10/06/2015	ROP Semi 1 Cert	Compliance	on 1/11/2014. An auto shutdown interlock was installed.
			EU 322-01 Emissions from scrubber #22452 were not vented at the permitted height for 3 hours when the scrubber became plugged on 2/1/2014. Plug removed. Alarm & SOP reviewed w/operator. On 4/11/2014 water flow to the scrubber dropped below 10 gpm for 10 minutes due to a water main brake.
			EU502-01 On 2/28 & 4/26/ 2014, tank not venting to site scrubbers for 8 ½ and 6 ½ hours respectively when material w/VP > allowed per R604 & Part 60,Subpart Kb. Projects completed to move high VP VOC material out of tank 25-01. On 4/8/2014 water flow to scrubber 9950 < 45 gpm for 15 minutes due to plugged recirc pump at pump start up.
			EU 601-01 3/11/2014 45 mins. Vac pump emissions temporarily routed to scrubber 5309 but scrubber shut down due to emergency shutdown procedure test occurring. Automated valve installed to close venting if scrubber water loss. 4/11 & 14/2014. 15 minutes per occurrence. City water main breaks resulted in low flow to scrubber 24683 & 5309 on 4/11, 24683 on 4/14.
			EU501-49 3/14 & 5/1/2014 5 minutes each. Condenser 15091 exit gas > 36F due to frozen material reducing flow. PTI application submitted to allow increased operating exit temperature after demonstrated no impact on emissions.
			EU325-01 5/3/2014 14 minutes venture scrubber 9958 HCL exceeded 10 ppmw limit & lb limit exceeded during offloading due to valve left open. Alarm added for open valve when flow present.
			EU602-01 FGRULE290 March, April & May 2014. Ethylbenzene & VOC lb/month exceed when stainless steel rupture disc blown.

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10/06/2015	ROP Semi 1 Cert	Compliance	Orientation of stack changed to prevent moisture & debris in stack. Replaced w/graphite rupture disc. Interlock added for blown disc . EU303-01 2/28/2014 3 hrs, 25 mins. Condenser 3469 exit gas >50F while in bypass mode due to tripped relay that shutdown throx & site scrubbers diverting flow back to condenser 3469. EU303-06 2/28/2014 9 hours Condenser 3475 exit gas >36F while in bypass mode due to tripped relay that shutdown throx & site scrubbers diverting flow back to condenser 3475.
			FG337 Scrubber – (north) 2/28/2014 30 minutes. No wat
10/06/2015	CAM Excursions/Exceedan ces	Compliance	Dow Corning - Each CAM excursion/exceedance listed in the report was also listed in the semi- annual ROP deviation report. Information regarding corrective action and action taken to prevent recurrence sufficiently resolved each excursion/exceedance. Therefore, a VN was not issued.
10/06/2015	CAM monitor downtime	Compliance	None

10/06/2015	ROP SEMI 2 CERT	Compliance	CAM Summary included Sources
10/00/2010	NOF SEIVILZ CERT	Compliance	CAM Summary included. Several low flow rates at control devices
			due to 11/12/2014 city water line
})	break on C road.
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		Į	Bldg 321 7/8/2014 Scrubber 7170
			& 4776 emissions vented to sewer
		· · · ·	due to plugging. Process alarm of
			40 " h2o added to alert when plugging occurs.
			FG322 7/16/2014 40 minutes
			Scrubber 22452 emissions
			discharged to sewer when gelling
			caused differential pressure >12"
			h2o. Process shutdown &
			scrubber cleaned.
			EU2703-09 8/8/2014 10 minutes
			9250 kettle over pressured & vented to atmosphere after
			rupture disk blown when N2 to
	}		9250 kettle not turned off. Kettle
			interlocks changed to lower
			pressure.
			EU602-03, EU602-07,
			FGRULE290 8/18 -9/15/2014
			No water flow to west condenser
			HX6168 when service water not
			turned on after maintenance. Set point alarm installed & SOP
	1		updated.
			EU601-01 8/24/2014 10 minutes
			Condenser 22580 gasket failure.
			EU2703-01, -02, -12, 14
			11/12/2014 13 minutes
			Reduced, & loss of, water flow to
			scrubber 9285 due to city water line break on C road.
	1	}	EU601-01 11/12/2014 5 minutes
			due to city water line break on C
		1	road Scrubber 24683 water flow
			<8 & <3 gpm; scrubber 5309 <18
			FG322-01 11/12/2014 11 minutes
			Scrubber 22452 liquid flow rate
			<10 gpm due to city water line
]	ļ		break on C road. EU604-08 11/12/2014 19 minutes
			Scrubber 22753 <3 gpm due to
ļ			city water line break on C road.
			EU207-01 12/1/2014 20 minutes
			SV207-001 vent line not
			reconnected after maintenance.
			EU108-01 carbon drums
			exceeded the 45 pound drum total
1	1		weight gain limit. Between 12/14 and 12/16/2014, the combined
			drum weight gain was reported as
			53 pounds.
			EU322-03 12/20/2014 20
			minutes During process start up
			cooling water to tank 7616 not
	L		turned on & condenser 6391

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10/06/2015	ROP SEMI 2 CERT	Compliance	coolant outlet temperatures >30F.
09/15/2015	MACT (Part 63)	Compliance	Semi Annual OLD MACT Compliance Report (Subpart EEEE). No deviations, SSM events. Item #4 (changes since submittal of NOCS) lists LDAR subject tanks & components with 325 valves monitored, 6 difficult to monitor valves not inspected, 5 exempt pumps not inspected. Item#8 describes most recent carbon tote replacement w/vents to atmosphere for no more than 10 hours each. The same replacement is anticipated during the July -Dec 2015 period. Tanks 5-508 & 5-509 will be open to atmosphere for no more than 4 hours each during planned pressure relief valve maintenances & 30 minutes each during vapor return line maintenance.
08/18/2015	Scheduled Inspection	Compliance	EU108-01, EU212-01 & EU212-12
08/04/2015	CEM RATA	Compliance	CEMS RATA Testing Protocol. Bldg 432, Gas Fired Boilers.
07/31/2015	MACT (Part 63)	Compliance	Semi Annual OLD MACT compliance report. 40 CFR 63 Subpart EEEE 63.2386(c). No SSM . No deviations. routine maintenance on tanks 5-508 & 5- 509 vented to atmosphere during tote replacement. Duration of < 10 hrs/tank.
07/31/2015	MACT (Part 63)	Compliance	HCL MACT semi-annual compliance report 40 CFR 63.9050. No emission limit exceedances during SSM, no malfunctions. No emission limit deviations. LDAR followed. no LDAR monitoring plan changes. No storage tank control exceedance due to HCL routine or planned maintenance.
05/26/2015	MAERS	Compliance	Calculations based on mass balance, standard engineering practices, vent sampling. Details can be obtained through PTI file
04/30/2015	CEM RATA	Compliance	RATA for FGTHROX - THROX Exhaust performed on Nov. 18, 2014. All results indicate compliance
04/30/2015	Stack Test	Compliance	Stack test FGTHROX - VOC, CO, and PM10. All results indicate compliance

Activity Date	Activity Type	Compliance Status	Comments
11/20/2014	Stack Test Observation	Compliance	FGTHROX RATA & Stack test for VOC, CO & PM10

Name: Laffer Date: 9/29/2017 Supervisor: C. Have Page 19 of 19

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