

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

FCE Summary Report

Facility : The Dow Chemical Company U.S.A., Midland	SRN : A4033
Location : 1790 Building	District : Saginaw Bay
	County : MIDLAND
City : MIDLAND State: MI Zip Code : 48674	Compliance Status : Compliance
Source Class : MEGASITE	Staff : Kathy Brewer
FCE Begin Date : 4/1/2012	FCE Completion Date : 3/31/2017
Comments : Any pending or noncompliance issues that occurred during the the five year FCE period have been resolved through correction actions. Overall the facility is in compliance with ROP requirements and other regulatory requirements reviewed.	

List of Partial Compliance Evaluations :

Activity Date	Activity Type	Compliance Status	Comments
03/31/2017	MACT (Part 63)	Compliance	No excess emissions, exceedances, excursions. No monitoring downtime. No leaks detected EUB5, EU09, EU35, EU82, EU13, EU89, EU54, FG858THROX, EU11, FG954THROX, FG963THROX, EUANION_XCHG, EU88, EU14, FGSARANTTU, EU18, EU94, FG290S.
02/27/2017	MACT (Part 63)	Compliance	Semi annual MACT Report FFFF Periodic Report. No out of limit parameters for Group 1 vents, no insufficient monitoring. Required leak & repair reporting included. Leak rate reporting method corrected, components/open ended lines in OHAP service not specifically identified, some visual inspections on pumps & agitators not performed, operating logs from some Batch operations not maintained but emission control performed. See attached review summary by M Breeden, reviewed by KLB.

Activity Date	Activity Type	Compliance Status	Comments
02/27/2017	MACT (Part 63)	Compliance	Semi annual MACT Report G Periodic Report EU11; (compliant) EU12(compliant) ; EUB5 (compliant). No Excess Emissions, Exceedances, Excursions, Monitoring downtime, or Leaks. See attached review summary generated by M Breeden & reviewed by KLB for details
02/15/2017	Stack Test Observation	Compliance	Confirmatory D/F test per 40 CFR Part 63 Subpart EEE (§63.1207)
02/02/2017	Excess Emissions (CEM)	Compliance	EU32 Incinerator Quarterly CEMS and CERMS Report and Excess Emission Report NOx, SO2, O2, CO. No periods of CERMS downtime. CO CERMS operated for 1918 hours; excess emissions due to planned & unplanned shutdowns and startups for 7 hours and 56 minutes, of which during 4 hours and 27 minutes there was no waste in the kiln.
02/02/2017	Excess Emissions (CEM)	Compliance	EU32INCINERATOR CERMS 4th Quarter QA Report. NOx & SO2. No out of control periods.
01/27/2017	MACT (Part 63)	Compliance	NOCS supplement for Subpart NNNNN 954 Building T-101 scrubber retest.
01/27/2017	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report; Quarterly CEMS and CERMS Summary and Excess Emissions Report 1800 - 2200 hours of operation
01/27/2017	Excess Emissions (CEM)	Compliance	EU32INCINERATOR Quarterly CERMS (SO2, NOx). 2035 hours
01/27/2017	Excess Emissions (CEM)	Compliance	32 Incinerator complex quarterly CEMS and CERMS quarterly summary and excess emission report. 2183 hours
01/27/2017	Excess Emissions (CEM)	Compliance	32 Incinerator complex quarterly CERMS (SO2, NOx) QA report. 2183 hours
01/27/2017	Excess Emissions (CEM)	Compliance	32 Incinerator - CEMS/CERMS quarterly summary and excess emission report. 2035 hours
01/24/2017	CEMS Test Observation	Compliance	EU32INCINERATOR CEMS#1 and CEMS#2

Activity Date	Activity Type	Compliance Status	Comments
01/19/2017	ROP SEMI 2 CERT	Compliance	LDAR sampling connectors >5% HAP service not uniquely identified. Identification and documentation updated; 2014 & 2015 MAERS reported emissions differ from on site records used for compliance. Emission models for MAERS were updated. MDEQ MAERS staff were informed of the different values. Heat exchanger monitoring done per approved method but concentration not corrected for the addition of make-up water, blow down or evaporative losses. the facility and sampling group will implement corrections to ensure proper analysis.
01/19/2017	ROP Semi 1 Cert	Compliance	Enhanced LDAR monitoring and records review found incomplete information. Updates to the inspector training, checklists, and MACT periodic reporting were done to clarify requirements. Events were included in ELP compliance reports.
01/19/2017	ROP Semi 1 Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Environmental Audit disclosures are also reviewed Of NOTE: Report included information on enhanced LDAR program related monitoring & tagging. For one of the deviations 7 components identified were tagged. The other two events reported were related to technician monitoring techniques and Comparative monitoring Leak Ratio. Both included in the report but not considered Method 21 deficiencies.
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx Report for Standby Boilers (FGBoilers 21 & 22). Q3 2016 401: 178 hours, 1.7 ton NOx, 402: 167 hours, 1.0 ton NOx

Activity Date	Activity Type	Compliance Status	Comments
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx report for site standby boilers. Q3 2015 401: 52 hours, 0.2 Tons NOx, 401: 43 hours, 0.2 tons NOx
01/18/2017	Other Non ROP	Compliance	Ozone depleting substances annual 2nd party transformation receipt
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx report for site standby boilers. Q2 2016 401: 154 hours, 1.6 ton, 402: 143 hours, 0.9 ton NOx
01/18/2017	Stack Test	Compliance	Boilers 21 & 22 Periodic NOx Emission Rate Testing Report. 0.152 NOx lbs/MMBTU There are no NOx Emission limits in the ROP for FGBOILERS21&22.
01/18/2017	Other Non ROP	Compliance	Ozone depleting substances annual 2nd party transformation receipt
01/18/2017	ROP Other	Compliance	AAMP 2016 4th Q QA/QC
01/18/2017	MACT (Part 63)	Compliance	Update to NOCS for Subpart DDDDD. Removed the "1111 Washington Street" boiler. The boiler is excluded per 63.7491(d). The 1111 Washington Street boiler is tankless heater that does not produce steam.
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx Report for Site Standby Boilers. 2nd Q 2014, 401: 50 hours, 0.3 Ton NOx; 402: 55 hours, 0.3 ton NOx
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx report for standby boilers. Q3 2014. 401: 74 hours, 0.9 tons NOx; 402: 80 hours, 0.4 tons NOx
01/18/2017	Excess Emissions (CEM)	Compliance	Quarterly NOx Report for Site Standby Boilers Q2 2015 402: 230hours, 0.1 tons
01/11/2017	Environmental Audit Notification	Compliance	Multiple 2017 dates. 6 manufacturing processes, 3 R&D, Site maintenance January through November 2017 start dates
12/21/2016	Environmental Audit Disclosure	Compliance	Ion Exchange Anion (EUANION_XCHG) No NREPA part 55 findings reported
12/21/2016	Environmental Audit Notification	Compliance	489 Building - EU09
12/21/2016	Environmental Audit Disclosure	Compliance	Sulfonamides (EU13) No NREPA part 55 findings reported.

Activity Date	Activity Type	Compliance Status	Comments
12/21/2016	Environmental Audit Disclosure	Compliance	Specialty Monomers (EU82 and EU94) Audit Description: Assess Compliance with Federal MACT Standards No NREPA part 55 findings reported.
12/21/2016	Environmental Audit Disclosure	Compliance	Methocel (EUB2) No NREPA part 55 findings reported
12/21/2016	Environmental Audit Disclosure	Compliance	Specialty Monomers - DVB 1130 Throx (EU95-S1) No NREPA part 55 findings reported

12/21/2016	Environmental Audit Disclosure	Compliance	<p>Incinerator (EU32INCINERATOR) NREPA 55</p> <p>A review of the data that are used to populate the incinerator mass feed rate calculations determined that the average chemical composition for each material is being input into the calculation instead of the maximum concentration as required by the Feedstream Analysis Plan (FAP). Dow analyzes waste streams for any material where 250,000 lbs/year or more are processed at the EU32INCINERATOR . If less than 250, 0000 lbs/yea r are processed, the component information is provided by the waste generator. The waste characterization information is entered into waste tracking system.</p> <p>Dow Chemical discovered that the process controller (IP21), had been using parameters the waste characterization average concentration values rather than maximum concentration values. The oversight was due to a combination of software and procedural errors.</p> <p>Dow Chemical also found nine regulated constituents that had been processed at the EU32INCINERATOR that did not have feed rates established due to lack of waste characterization information for the material. After discovering the average constituent concentrations were being used by IP21, Dow changed the feed rates to only allow 50% of the established feed rate for each waste stream.</p> <p>For all constituents except ash, the past five years of waste process records were evaluated to determine if emission limits or operating conditions were violated. The evaluation started with a conservative approach that assumed for a given waste stream the daily total material processed was all processed in a one hour period. If the potential to violate a limit under that circumstance, the processing of the waste stream was considered to be in compliance with the ROP and MACT conditions.</p> <p>Approximately 35 constituents</p>
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12/21/2016	Environmental Audit Disclosure	Compliance	<p>were further reviewed for feed rate looking across the day of operation. None were found to be violation of feed rate limits or emission limits</p> <p>Records were not as readily available for the most recent five year period for all ash containing waste streams. The facility conducted the same evaluation for the active ash containing waste stream for the August 2014 to the December 2017 period. The period prior to August 2014 information is available but requires manual entry of the waste characterization component values.</p> <p>Followed emission limit procedure to determine which days may have any values over limits. Only one day that was potentially over the allowed feed rate was the CPT in August</p>
12/21/2016	Environmental Audit Disclosure	Compliance	Midland R & D 1707 Building No NREPA part 55 findings reported
12/21/2016	Environmental Audit Disclosure	Compliance	Specialty Monomers (EU82 and EU94) Audit Description: 2016 EHS Integrated Audit No NREPA part 55 findings reported
12/16/2016	MACT (Part 63)	Compliance	Subpart HHHHH - Pre compliance report modification. EU04-S1 pollution control device modification request included. Not yet approved. Still operating under former operating scenario w/a carbon bed followed by impinging scrubber. Scrubber would be eliminated & emissions routed to second carbon bed.
12/16/2016	MACT (Part 63)	Compliance	Subpart HHHHH - Pre compliance report modification. EU04-S1 pollution control device modification request included. Not yet approved. Still operating under former operating scenario w/a carbon bed followed by impinging scrubber. Scrubber would be eliminated & emissions routed to second carbon bed.

Activity Date	Activity Type	Compliance Status	Comments
12/16/2016	MACT (Part 63)	Compliance	Subpart HHHHH - Pre compliance report modification. EU04-S1 pollution control device modification request included. Not yet approved. Still operating under former operating scenario w/a carbon bed followed by impinging scrubber. Scrubber would be eliminated & emissions routed to second carbon bed.
12/15/2016	Release Reports	Compliance	Trimethylamine, Bldg. 963, EUANION_XCHG-S1, 57 min., 18 lb., RQ = 100 lb. While investigating an in-plant odor, operations personnel discovered a leak coming from a flange. Stopped addition of material to the process, shutdown the process, and then vented the remaining pressure to an air pollution control device, stopping the leak.
12/15/2016	Release Reports	Compliance	Chlorine, Bldg. 680, EU13-S1, 1 lb., RQ = 10 lb. While investigating an in-plant odor during plant rounds, operations personnel discovered a leak coming from a valve. The process was immediately shutdown and the valve was isolated, stopping the leak.
11/30/2016	NESHAP (Part 61)	Compliance	Annual Benzene NESHAP Waste Report: 40 CFR Part 61 Subpart FF 61.357: 2015 total annual Benzene waste = 1.51Mg, 7.5% >2014; 17 new streams, 29 removed;
11/30/2016	Environmental Audit Notification	Compliance	EUB2 Methocel
11/30/2016	Environmental Audit Notification	Compliance	EU32INCINERATOR-S1
11/30/2016	Environmental Audit Notification	Compliance	Midland area corporate facilities: 1610, 2007, 2010, 2030, 2040, 2050, 5000, Larkin 100, Business Service Center, Dorinco Building, Employee Center, as well as Hangar 5 and 6 at MBS Airport
11/30/2016	NESHAP (Part 61)	Compliance	Annual Benzene NESHAP Waste Report: 40 CFR Part 61 Subpart FF 61.357: 2014 total annual Benzene waste = 1.41Mg, 1% >2014; 30 new streams, 20 removed;

Activity Date	Activity Type	Compliance Status	Comments
11/18/2016	Release Reports	Compliance	<p>Styrene, bldg. 954, EU86-S1, 10 min., 22 lb., RQ = 1,000 lb. an instrument tech was troubleshooting a level instrument (bubbler) on an unload vessel. Because all feeds to the unload vessel were stopped at the time, the instrument tech assumed that the material level would be below the top of the unload vessel. With that assumption, the instrument tech removed the plug on the bubbler's dip pipe, at which time material began flowing out of the dip pipe, leaking to the trench below and into the fire pit. The instrument tech immediately called operations for support. Operations responded and was able to stop the leak by securing the plug back into the bubbler's dip pipe. Dow's Emergency Services department also responded and applied a foam blanket over the material in the fire pit to suppress vapors and the associated odor. The material in the fire pit was pumped into a container for disposal.</p>
11/18/2016	Release Reports	Compliance	<p>Chloromethyl Methyl Ether, bldg. 963, EUANION_XCHG-S1, 0 min., 0 released, RQ = 10 lb. The in-plant chloromethyl methyl ether monitoring system alarmed, indicating a potential leak in the process. Operations personnel investigated the potential leak and determined it to be a false trip caused by a fugitive leak of methylene chloride very near the monitoring point. No leak of chloromethyl methyl ether could be found and the alarm cleared once the fugitive leak of methylene chloride was corrected. Since no leak of chloromethyl methyl ether occurred, no action was taken.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/18/2016	Release Reports	Compliance	Chloromethyl Methyl Ether, bldg. 458, EUANION_XCHG-S1, 23 min., .5 lb., RQ = 10 lb. The in-house monitoring system detected a potential leak. Operations personnel investigated and discovered a leak to be coming from a gasket on top of a reactor. Water was put on the leak area, the reactor was blown out, and then filled with water quenching the material and stopping the leak.
11/18/2016	Release Reports	Compliance	Chlorine, bldg. 680, EU13-S1, 15 min., .5 lb., RQ = 10 lb. While performing plant rounds, operations personnel discovered a leak coming from a gasket on a level transmitter on top of a vessel. Upon discovery, the process was shutdown, isolated, and cleared, stopping the leak. The level transmitter was re-gasketed.
11/18/2016	Stack Test Observation	Compliance	HCL scrubber MACT stack test
11/14/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg. 963, EUANION_XCHG-S1, 20 min, .5 lb., RQ = 10 lb. While investigating an in-plant monitoring system alarm, operations personnel discovered a leak coming from a heat exchanger. The process was immediately shutdown, the heat exchanger was isolated, and the area was flushed with water, stopping the leak.

Activity Date	Activity Type	Compliance Status	Comments
11/14/2016	Release Reports	Compliance	<p>Sodium Cyanide, bldg. 827, EU02-S1, 110 min., 4 lb., RQ = 10 lb. While performing rounds, operations personnel noticed liquid in the catch basin under the sodium cyanide cylinders that was not present on the previous shift's rounds. The liquid in the catch basin was checked with a monitor which confirmed the presence of the material. Operations personnel donned spill response PPE to investigate and found a leak at the cylinder outlet valve. The leak occurred at the connections between the vendor supplied cylinder and the vendor supplied cylinder valve. Operations personnel donned leak response PPE. Residual pressure on the cylinders was vented to a safe location and the connection on the cylinder valve was tightened further to stop the leak. The area was sprayed down with dilute caustic to mitigate hydrogen cyanide formation, per emergency response procedure. The area of the leak was decontaminated with water and all PPE and tools used in the response were decontaminated as well. Liquid wash from the spill response was contained and pumped into a tote for disposal.</p>
11/14/2016	Release Reports	Compliance	<p>Sodium Hydroxide, bldg. 948, EU12a-S1, 30 min., no release to the environment, RQ= 1,000. While working in the process, a contractor discovered a leak coming from a pipeline. The contractor immediately notified operations of the leak. The leaked material was washed to the building containment trenches and pumped into the facility's wastewater tank. The recovered material will be disposed of appropriately. No material was lost to the environment.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/14/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg. 963, EUANION_XCHG-S1, 100 min., <1 lb., RQ = 10 lb. While investigating an in-plant monitoring system alarm, operations personnel discovered a leak coming from a valve. The process was immediately shutdown, the valve was isolated, and the area was flushed with water, stopping the leak.
11/14/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg. 963, EUANION_XCHG-S1, 10 min., .5 lb, RQ = 10 lb. In preparation for routine maintenance, operations personnel isolated a scrubber unit from all energy sources and purged it to remove as much process material as possible. once the isolation of energy and purge were complete, operations personnel opened a low-point drain valve. Shortly after opening the low-point drain valve, the in-plant monitoring system alarmed, indicating a potential leak. Operations personnel investigated and discovered that a small amount of residual material that had drained out from behind the low-point drain valve was the source of the alarm.
11/14/2016	Release Reports	Compliance	Propylene Oxide While walking in the plant, operations personnel noticed an elevated reading on an in-plant area monitor and discovered a leak coming from the fitting of a 3-way valve.
10/20/2016	Scheduled Inspection	Compliance	EU94:DVB monomers EU95 tar incinerator IR camera
10/18/2016	ROP Semi 1 Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Environmental Audit disclosures are also reviewed
10/12/2016	Scheduled Inspection	Compliance	EUB2 Methocel; IR camera

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09/29/2016	Scheduled Inspection	Compliance	499 bldg. energy & utilities HCL Tank 477 bldg. BrBCB batch productions
09/21/2016	Release Reports	Compliance	Methyl chloride - propylene oxide, bldg. 1131, EUB2-S1, 78 min, 20 lb methyl chloride - 1 lb propylene oxide, methyl chloride RQ = 100 lb - propylene oxide RQ= 100 lb While investigating an LEL alarm, operations personnel discovered a leak coming from a flange.
09/21/2016	Release Reports	Compliance	Propylene oxide, bldg. 954, EU93-S1, 52 min, 5 lbs, RQ= 100 lbs. While conducting a Title V inspection of the facility, a DEQ inspector discovered a potential fugitive leak at a threaded connection on a long-line relief using their IR camera. The fugitive emission contractor was called in and verified, via the approved method, that it was leaking.
09/20/2016	CEM RATA		32 Incinerator Complex RATA report. KLB requested TPU review
09/20/2016	ROP Other	Compliance	Salzburg Landfill Fugitive Dust Control Program - semi annual update of facility map. Updated location of multiple temporary aggregate piles & one gravel parking lot now paved
09/20/2016	ROP Other	Compliance	Michigan Operations Fugitive Dust Control Program - semi annual update of facility map. Previously active cells status updated
09/20/2016	Scheduled Inspection	Compliance	B1385 R&D AEM Rule 290 BCB-AA - research, B1385-1712 R&D AEM SILK_Cyclotene Research,
09/19/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg 963, EUANION_XCHG-S1, 10 min, less than 1 lb, RQ= 10 lb. An in-plant monitoring system alarmed indicating a potential leak. Operations personnel investigated the alarm and discovered a leak coming from a failed section of pipe.
09/15/2016	Environmental Audit Disclosure	Compliance	Phenoxy herbicide - NREPA 55 - Emission generating scenarios in two facilities were not included in the emission totals reported in 2015 via the Michigan Air Emissions Reporting System.

Activity Date	Activity Type	Compliance Status	Comments
09/15/2016	Environmental Audit Disclosure	Compliance	Three Findings - Sulfoxaflor Insecticide EU02-S1 - First Finding: The HCl/Cl2 vent status was improperly assigned as Group 1 instead of Group 2. Second Finding: Dow discovered that process changes implemented had required an update to information submitted in a design evaluation and alternative monitoring request for the Sulfoxaflor 827 building scrubbers. Third Finding - under "General Group Findings" - Sections of several Notice of Compliance Status Reports were found with minor instances of incorrect information. All 3 documentation errors have been addressed or await EPA review
09/15/2016	Environmental Audit Disclosure	Compliance	Two Findings - Herbicide Formulations and Packaging - NREPA 55 - First Finding: Two sample boxes in heavy liquid organic hazardous air pollutant (OHAP) service did not have a sample bottle in place to meet secondary closure device requirements for open ended lines. Second Finding - under "General Group Findings"- Sections of several Notice of Compliance Status Reports were found with minor instances of incorrect information. Sample boxes in OHAP service are now labeled and facility training conducted. NOCS documentation corrected
09/15/2016	Environmental Audit Disclosure	Compliance	Specialty Monomers EU82 & EU94 - NREPA 55 - Emission generating scenarios in two facilities were not included in the emission totals reported in 2015 via the MAERS. 588 operations permitted bypass totaled additional 2 lbs VOC in 2015; 948 bldg. spent carbon degas estimated at additional 100 lbs SO2/PM per year. MAERS report corrected.

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09/15/2016	Environmental Audit Disclosure	Compliance	Sulfonamides EU 13 - NREPA 55 - Applicability determination and/or group determination information are missing for several wastewater points of determination that are subject to the Pesticides Active Ingredient Production. PAI MACT applicability determined and documented
09/15/2016	Environmental Audit Disclosure	Compliance	R & D -(1616/354/438 Buildings) - No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Environmental Operations (EUB7) No NREPA part 55 findings reported
09/14/2016	Environmental Audit Disclosure		Midland Advanced Electronic Materials (AEM) NREPA 55?
09/14/2016	Environmental Audit Disclosure	Compliance	Ion Exchange Resin Block NREPA 55 A sample port in hazardous air pollutant service did not have a secondary closure device for open ended lines. No evidence of leaks. This occurred in EUANION-XCHG-S1 . Sampling system updated to meet open-ended line requirements.
09/14/2016	Environmental Audit Disclosure	Compliance	Methocel Cellulose Ethers - NREPA 55 - In the METHOCEL HON Subpart H Periodic Report several discrepancies of reporting leak rates were found. Calculated leak rates updated (lower than reported) and included in periodic reports.
09/14/2016	Environmental Audit Disclosure	Compliance	Ion Exchange Copolymer No NREPA part 55 findings reported
09/14/2016	Environmental Audit Disclosure		941 Aminopyralid EU10 - NREPA part 55 - An audit of the emission calculations used to demonstrate compliance with the EU10-S1 emission limits identified certain unit operations and operational scenarios where emissions may exceed emissions stated in the PTI package.
09/14/2016	Environmental Audit Disclosure	Compliance	SARAN Resin Plant No NREPA part 55 findings reported

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09/14/2016	Environmental Audit Disclosure	Compliance	1130/588 Specialty Monomers - NREPA 55 - The facility did not specifically identify each equipment component in >5% OHAP service. This occurred in EU82 at 588 building. Compliance equipment >5%. OHAP identified on RPMs and on instrument diagrams.
09/14/2016	Environmental Audit Disclosure	Compliance	Two Findings - both NREPA 55 - Ion Exchange Manufacturing Facilities First Finding: 9/1/15, Vent SVEG9202 is listed in EUANION_XCHG-S1 of the ROP as 12" maximum diameter; field inspection indicates 18" diameter vertical discharge. Second Finding: 10/1/15, Vent SV88010 is listed in air permit EU88-S1 as "exhaust gases are not discharged upwards"; field inspection indicates vertical discharge upward. SVEG 9202 modified to 12". SV88010 description reviewed and corrected with ROP modification.
09/14/2016	Environmental Audit Disclosure	Compliance	Ion Exchange Copolymer MACT Compliance Assessment No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Environmental Operations 1005 Building (EUC3) - No NREPA part 55 findings reported
09/14/2016	Environmental Audit Disclosure	Compliance	Michigan Operations Site Wide Assessment - NREPA 55 - Several facilities were not fully meeting the requirements for the fugitive emissions program under HON equipment leaks, subpart H. Open-ended lines closed; inspection procedure updated. NOCs updated.

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09/14/2016	Environmental Audit Disclosure	Compliance	Two Findings Garlon Herbicides Production Plant NREPA 55: First Finding 7/15/14 - 9/19/14: Emissions reported for 477 Bldg and 1233 Bldg in 2013 in the MAERS do not precisely match the emissions recorded for determining compliance with Rule 290 requirements. Second Finding: 7/15/14 - 9/19/14: Insulated valves were monitored in a manner that did not precisely match Dow's EPA-approved alternative LDAR monitoring method. MAERS/R290 emissions corrected and report updated. Valves remonitored using approved method.
09/14/2016	Environmental Audit Disclosure	Compliance	Site Services and Remediation - No NREPA part 55 findings reported
09/14/2016	Environmental Audit Disclosure		Auburn Hills - NREPA 55?
09/14/2016	Environmental Audit Disclosure	Compliance	Dow Auto Glass Bonding - No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Maintenance Facilities - Original anticipated start date of October 1, 2014. Due to audit or schedule conflicts, the audit was postponed and performed on dates listed above. No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure		Three Findings - Environmental Operations - all three with NREPA 55. First Finding 1/12/15 - 3/6/15: The facility was not fully meeting the requirements of the MACT pump and agitator weekly visual inspection requirements. Second Finding 1/12/15 - 3/6/15: Seven pumps/agitators that were not in OHAP service were being monitored per the fugitive emissions program. Third Finding 1/12/15 - 3/6/15: The facility was not reporting the incineration of biomass as a Greenhouse Gas emission listed in Table C-1 and C-2 per 40 CFR Part 98.30(2)
09/14/2016	Environmental Audit Disclosure	Compliance	Dow POWERHOUSE Solar - No NREPA part 55 findings reported.

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09/14/2016	Environmental Audit Disclosure	Compliance	MI operations Site Wide Assessment Wastewater Going Offsite - NREPA 55 - Several Group 1 waste water streams subject to PAI and MON MACT regulations were shipped to offsite locations for disposal without the required notifications to the offsite disposal facility and required certification to the EPA by the offsite disposal facility. NOCS reports also did not properly identify the offsite disposal locations. Certifications submitted. NOCs updated.
09/14/2016	Environmental Audit Disclosure	Compliance	Three Findings - Dow Auto 100, 1037. 304 Buildings/Dow Auto Environmental Audit - NREPA 55. First Finding: Negative applicability documentation was missing for the Plastic Bonding process relative to the Misc Coating Manufacturing MACT (40 CFR Part 63 Subpart HHHHH). Second Finding: Documentation required by Organic Liquids Distribution NESHAP (40 CFR 63, Subpart EEEE, OLD MACT) was incomplete relative to the identification of each transfer rack that only unloads organic liquids and is not subject to control. Third Finding: A wastewater stream previously calculated to be Group 2, and sent to the on-site waste water treatment plant on the basis of that determination, was recently estimated to be Group 1 based on updated emission calculations. Process and control operations changed to assure Group 2. Subpart H5 Compliance report updated.
09/14/2016	Environmental Audit Disclosure	Compliance	SARAN Resins (EU35) - NREPA 55 - Documentation of operating parameters for the T-0474 Group 1 wastewater column is inconsistent among the following reports: the NOCS Report, the pre-compliance plan, and the design evaluation. Documentation updated.

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09/14/2016	Environmental Audit Disclosure	Compliance	EUANION_XCHG, EU88, FG963 THROX, and FG290 for CMMC and Fine Mesh processes/Ion Exchange Environmental Audit - NREPA 55 - The purge material from several routine samples containing partially soluble HAPs or soluble HAPS was not being disposed of in full accordance with the MON wastewater provisions and/or HON sampling connection system requirements. Sampling procedures and/or equipment modified to eliminate purge or capture purge.
09/14/2016	Environmental Audit Disclosure		Ion Exchange Copolymer (EU89) Environmental - NREPA 55 - No findings specific to only the Copolymer facility; sections of several Notice of Compliance Status Report were found with minor instances of incorrect information, etc.
09/14/2016	Environmental Audit Disclosure	Compliance	Dow Corning Waste Water Contract - No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Title V and MACT Assessment MI Operations Site Wide Assessment - No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Transfer Rack MACT Assessments/MI Operations Site Wide Assessment - NREPA 55 - One transfer rack associated with the THYS/DETS process unit was identified that was initially classified as an exempt transfer rack due to loading only into isotainers. Determined transfer rack Group 2. NOCS updated.
09/14/2016	Environmental Audit Disclosure		941 Bldg Title V emission unit EU11-S1 - NREPA 55 - An audit of the emission calculations used to demonstrate compliance with the EU11-S1.1.1, 3, 10, 14, 15, 16, 28, 40 and 43 permit limits, or where a permit limit has not been established.
09/14/2016	Environmental Audit Disclosure		Environmental Operations tank farm (EUB7) - NREPA 55 - Vent streams from the incineration complex tank farm tanks were vented through the carbon bed during times when the incinerator was operating.

Activity Date	Activity Type	Compliance Status	Comments
09/14/2016	Environmental Audit Disclosure	Compliance	Ag Multi Product Plant Bldg 1 - No NREPA part 55 finding reported
09/14/2016	Environmental Audit Disclosure		Three Findings - DVB/VBC Plant - NREPA 55 - First Finding: The preventive maintenance program for EU94 did not fully address the temperature probes on the top sections of carbon beds V281A and V281B on the pressure swing absorber. Second Finding: Evidence of historic drips (of unknown age) was found below two fugitive components. Third Finding: Listed under "General Group Findings" - Sections of three Notice of Compliance Status Reports were found with minor instances of incorrect information.
09/14/2016	Environmental Audit Disclosure		Two Findings - Saran Resins Plant - NREPA 55 - First Finding: Sampling connection systems in >5% hazardous air pollutant (HAP) service were not uniquely identified as LDAR applicable equipment. Second Finding - Listed under "General Group Findings" - Sections of three Notice of Compliance Status Reports were found with minor instances of incorrect information.
09/14/2016	Environmental Audit Disclosure	Compliance	Aminopyralid and Specialty Intermediates (941) - No NREPA part 55 findings reported.
09/14/2016	Environmental Audit Disclosure	Compliance	Analytical Technology Center (ATC) Labs - No NREPA part 55 findings reported

Activity Date	Activity Type	Compliance Status	Comments
09/14/2016	Environmental Audit Disclosure		<p>Three Findings - Sulfonamides 969/1028 - NREPA 55</p> <p>First Finding: Many insulated valves were monitored in a manner such that the fugitive monitoring contractor needed to insert the monitoring probe through a hole cut in the insulation near the valve stem or through the caulk located around the valve stem so that monitoring was performed at the valve stem, packing gland, and any other potential leak areas associated with the valves.</p> <p>Second Finding: 3 vessels (and associated equipment) were not in OHAP service during required LDAR monitoring.</p> <p>Third Finding: Listed under "General Group Findings" - Sections of three Notice of Compliance Status Reports were found with minor instances of incorrect information.</p>
09/13/2016	Release Reports	Compliance	<p>Tetrachloroethylene, bldg 948, EU12b-S1, 10 min, less than 10 lb, RQ= 100 lb. A vacuum relief event occurred during a process startup. In response, the process was immediately shut down and the vacuum relief disk was replaced. Twelve hours later while starting up the process again, the replaced vacuum relief disk relieved a second time. The process was immediately shut down and not started up again until a reclosing vacuum relief valve was installed. The operating vacuum pressure is relatively close to the relief device set point. During the start up, relatively minor fluctuations in process vacuum occurred which led to these disks breaking even though the relief pressure had not been reached. A total of 10 lb. of perchloroethylene was released for the two events (130 minutes duration total).</p>
09/13/2016	Release Reports	Compliance	<p>Vinylidene chloride, bldg 564, EU35-S1, 237 hours, 60 lb, RQ= 100 lb. While performing plant rounds, operations personnel discovered a leak coming from a nozzle on a tank.</p>

Activity Date	Activity Type	Compliance Status	Comments
09/13/2016	Release Reports	Compliance	Chlorine, bldg 680, EU13-S1, 50 min, less than 10 lbs, RQ= 10 lb. While investigating an in-plant odor, operations personnel discovered a leak coming from a gasket.
09/13/2016	Release Reports		Tetrachloroethylene, bldg 948, EU12a-S1, 22 hrs, 8000 lb, RQ= 100 lb. The process control alarmed, indicating a potential problem with the cooling tower water system. Operations personnel investigated the alarm and discovered that heat transfer fluid had leaked into the cooling tower water system from a failed heat exchanger.
09/13/2016	Release Reports	Compliance	Trimethylamine (reported)/Dimethylamine (actual), bldg 963, EUANION_XCHG-S1, 60 min, 6 lb, RQ= 1000 lb. While investigating an in-plant odor, operations personnel discovered a leak coming from the weep hole on a lined valve.
09/13/2016	Release Reports	Compliance	13-Butadiene, bldg 954, EU91-S1, 35 min, 1 lb, RQ= 10 lb. While performing flammable atmospheric monitoring of the work area in preparation to issue a safe work permit, operations personnel discovered a leak coming from a valve.
09/13/2016	Release Reports	Compliance	Ethyl Ether - Toluene - Ethyl Chloride, bldg. 938, EUB5-S1, 135 min, 7 lb ethyl ether - 80 lb toluene - 30 lb ethyl chloride, RQ = 100 lb ethyl ether - 1,000 lb toluene - 100 lb ethyl chloride. While performing plant rounds, operations personnel discovered a leak coming from the agitator seal on a reactor.
09/13/2016	Release Reports	Compliance	Tetrachloroethylene, bldg 948, EU12b-S1, 30 min, 20 lb, RQ= 100 lb. While performing plant rounds, operations personnel discovered a pinhole leak in a recirculation line.
09/13/2016	Release Reports	Compliance	Tetrachloroethylene, bldg 948, EU12b-S1, 60 min, 90 lb, RQ= 100 lb. While performing plant rounds, operations personnel discovered a ruptured frangible on a process vessel.

Activity Date	Activity Type	Compliance Status	Comments
09/13/2016	Release Reports	Compliance	Chlorine (reported)/Hydrogen Chloride (actual), bldg 1028, EUDCEP-S1, 39 min, 60 lb, RQ=5000 lb. In-plant detection system alarmed, indicating a potential leak. Operations personnel responded to the alarm by investigating the process. During the investigation they discovered a release coming from a process scrubber.
09/13/2016	Release Reports	Compliance	Sulfuric Acid, bldg 458, EU88-S1, 2 min, less than 1 lb, RQ= 1000 lb. Operator was in the process area and recognized an acidic type odor, and quickly identified acid spraying/misting out near the discharge of a pump.
09/13/2016	Release Reports	Compliance	Chlorine, bldg 1028, EUDCEP-S1, 56 min, 6 lb., RQ= 10 lb. A vent valve on a process vessel did not close when the scrubber pump shutdown. This allowed vapor to backup into the scrubber and leak out a hole in a component of the scrubber.
09/13/2016	Release Reports	Compliance	Chlorine, bldg 954, B954-FG290 (chlorine), 112 min, 7 lb, RQ= 10 lb. While performing plant rounds, operations personnel discovered a leak coming from a flange.
09/13/2016	Release Reports	Compliance	Ethylene Dichloride, bldg 458, EUANION_XCHG-S1, 15 min, 15 lb, RQ= 100 lb. In-plant monitor alarmed, indicating a potential leak. Upon investigating the alarm, operations personnel discovered a leak coming from a flange.

Activity Date	Activity Type	Compliance Status	Comments
09/13/2016	Release Reports	Compliance	Tetrachloroethylene, bldg 948, EU12b-S1, 120 min, 10 lb, RQ= 100 lb. A vacuum relief event occurred during a process startup. In response, the process was immediately shut down and the vacuum relief disk was replaced. Twelve hours later while starting up the process again, the replaced vacuum relief disk relieved a second time. The process was immediately shut down and not started up again until a reclosing vacuum relief valve was installed. The operating vacuum pressure is relatively close to the relief device set point. During the start up, relatively minor fluctuations in process vacuum occurred which led to these disks breaking even though the relief pressure had not been reached. A total of 10 lbs. of perchloroethylene was released for the tow events (130 minutes duration total).
09/13/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg 1355, EUANION_XCHG-S1, 62 min, 1 lb, RQ= 10 lb. An in-plant monitoring system alarmed indicating a potential leak. Operations personnel investigated the alarm and discovered a leak coming from a flanged connection on a process column.
09/13/2016	Release Reports	Compliance	Vinylidene Chloride, bldg 564, EU35-S1, 120 min, 6 lb, RQ= 100 lb. A valve handle had broken and was in the closed position. The process control computer showed the valve to be closed, due to the valve handle being in the closed position, which allowed the process to continue, when in fact the valve body was partially open.
09/13/2016	Release Reports	Compliance	Chlorine, bldg 1, EU01-S1, 255 min, 5 lb, RQ=10 lb. In-plant deflection system alarmed, indicating a potential leak. Operations personnel responded to the alarm by investigating the process. During the investigation a leaking manway gasket on a process vessel was discovered.

Activity Date	Activity Type	Compliance Status	Comments
09/13/2016	Release Reports	Compliance	Vinylidene Chloride, bldg 564, EU35-S1, 4 min, 37 lb, RQ= 100 lb. The plant's in-house monitoring system alarmed, indicating a potential leak in the process area. Operations personnel quickly responded to the alarm by investigating the process area where they discovered a leak coming from a failed pressure gauge.
09/13/2016	Release Reports	Compliance	13-Butadiene, bldg 954, EU91-S1, 10 min, less than 1 lb, RQ= 10 lb. Prior to performing preventative maintenance on a compressor, building personnel performed clearance monitoring and detected 1,3-butadiene. Upon further investigation into the source of the leak, it was found that a fitting on a line into the compressor was leaking.
09/13/2016	Release Reports	Compliance	13-Butadiene, bldg 1776, EU N/A, 20 min, less than 2 lb, RQ= 10 lb. R & D personnel were calibrating a piece of laboratory equipment when a valve failure occurred on the calibration gas cylinder.
09/12/2016	Release Reports	Compliance	Tetrachloroethylene, bldg 948, EU12b-S1, 30 min, 7 lb, RQ= 100 lb. While performing plant rounds, operations personnel discovered a leak coming from a process pipeline.
09/12/2016	Release Reports		Benzene, bldg. 1130, EU94-S1, 21 min, 4 lb., RQ=10 lb. While investigating an in-plant odor, operations personnel discovered a leak coming from a nozzle on a tank.
09/12/2016	Release Reports	Compliance	acrylonitrile, bldg. 1350, rail car, 203 min, 22 lb, RQ= 100 lb. After moving a nitrogen padded empty acrylonitrile railcar from an unload spot, a RailServe employee heard a hissing sound coming from the railcar. It was determined that the hissing was coming from the pressure safety device on the railcar. Air monitoring was conducted at the leaking pressure safety device which indicated that acrylonitrile was present in the leaking nitrogen

Activity Date	Activity Type	Compliance Status	Comments
09/12/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg. 1355, EUANION_XCHG-S1, 20 min, <1 lb. , RQ = 10 lb. An in-plant monitoring system alarmed indicating a potential leak. Operations personnel investigated the alarm and discovered a leak coming from a valve body.
09/12/2016	Release Reports	Compliance	Methyl Chloride, bldg. 1131, EUB2-S1, 115 min, 90 lb., RQ=100 lb. While conducting a walk-through of the process, operations personnel discovered a leak coming from a weep hole on a nozzle located on the reactor.
09/12/2016	Release Reports	Compliance	Tetrachloroethylene, bldg. 948, EU12a-S1, 60 min, 20 lb, RQ=100. While performing plant rounds, operations personnel discovered a leak from a hole that had formed in a section of pipe.
09/12/2016	Release Reports	Compliance	224 - Trimethylpentane, bldg.963, EUANION_XCHG-S1, 80 min, 300 lb., RQ=1000 lb. While preparing the plant for maintenance, operations personnel inadvertently opened a valve on the wrong process vessel causing the vessels contents to be released to the onsite waste water treatment plant.
09/12/2016	Release Reports	Compliance	Toluene - diethyl ether - ethyl chloride, bldg. 938, EUB5-S1, 500 min, 10 lb toluene - 4 lb diethyl ether - 20 lb ethyl chloride, RQ=1,000 lb toluene - 100 lb diethyl ether & ethyl chloride. Frangible on knockout pot ruptured, releasing vapors to the air.
09/12/2016	Release Reports	Compliance	Chloromethyl methyl ether, bldg 1355, EUANION_XCHG-S1, 34 min, .5 lb, RQ= 10 lb. An in-plant monitoring system alarmed indicating a potential leak. Operations personnel investigated the alarm and discovered that a process vent came under vacuum pulling material into the on-site sewer system.

Activity Date	Activity Type	Compliance Status	Comments
09/12/2016	Release Reports	Compliance	Tetrachloroethylene, bldg 948, EU12b, 0 minutes, 0 lbs, < RQ, sampling of cooling tower indicted release. Suspect that sample port was not properly flushed & previous event (NRC #1138032) pooled in sample leg. Subsequent sample showed no tetrachloroethylene.
09/12/2016	Release Reports	Compliance	Hydrazine, bldg 969, EU14-S1, 20 min, .5 lb, RQ= 1 lb. While performing plant rounds, operations personnel discovered a leak coming from a valve. The small amount of hydrazine solution released was diluted with water and neutralized. The neutralized solution was then washed down to the onsite wastewater treatment plant.
09/12/2016	Environmental Audit Disclosure	Compliance	Two Findings: Michigan Operations Site Wide Assessment LDAR Self Assessment First finding 12/22/15: Discrepancies in reporting of leak rates Second finding 11/24/15: A total of three open-ended lines without a closure device were discovered on sampling system equipment in > 5% OHAP service at EU35 SARAN Resins. Subpart H periodic reports updated leak rate calcs.
09/12/2016	Scheduled Inspection	Compliance	R290 inspection of EUs at bldg. 1233 Garlon EE MON subject
09/09/2016	Release Reports	Compliance	Sodium Cyanide, bldg. 827, EU02-SI, 45 min, 4 lb, RQ=10 lb. While walking in the plant, operations personnel noticed an elevated reading on an in-plant area monitor and discovered a leak coming from the fitting of a 3-way valve.
09/09/2016	Environmental Audit Disclosure	Compliance	Dursban/Lorsban No Air regulatory findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	R & D, bldg. 1776, No Air regulatory findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	Phenoxy herbicide, EU12a/b, no NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	Energy & utilities - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	Sulfoxaflor EU02 insecticide - No NREPA part 55 findings reported

Activity Date	Activity Type	Compliance Status	Comments
09/09/2016	Environmental Audit Disclosure	Compliance	Health & Environmental Sciences Lab 1803 Building - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	941 Aminopyralid EU10 - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	SARAN Resins EU35 - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	METHOCEL EUB2 - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	858 Dursban insecticide EU15 - No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure		Two FINDINGS: Environmental Operations EUB7, IOS container in PAI MACT Group 1 wastewater
09/09/2016	Environmental Audit Disclosure	Compliance	Midland R & D 845 No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure	Compliance	Emergency Services & Security No NREPA part 55 findings reported
09/09/2016	Environmental Audit Disclosure		Two Findings:1130/588 Specialty Monomers First finding 10/26/15: Facility did not specifically identify each equipment component in >5% OHAP; occurred in EU94 at 1130 building Second finding 10/26/15: Sections of the NOCS Report for EU94 were found with minor instances of incorrect information
09/07/2016	Scheduled Inspection	Compliance	FGHCLMACT
09/07/2016	Scheduled Inspection	Compliance	Building 934 R290
08/29/2016	ROP Tech Review Notes	Compliance	See Excel file w/all changes
08/23/2016	Scheduled Inspection	Non Compliance	EU85-S1; Partial HCL MACT VN sent
08/18/2016	CO/CJ		LDAR 2016 ELP Compliance status report for CO No. 1:11-cv-13330-TLL-CEB
08/02/2016	Scheduled Inspection	Compliance	EU93-S1
08/02/2016	Scheduled Inspection	Compliance	FGRule290 Building 954 chlorine distribution
08/01/2016	Malfunction Abatement Plan	Compliance	EU34-S2
07/27/2016	Scheduled Inspection	Compliance	FGOSWRO
07/27/2016	Scheduled Inspection	Compliance	EUC3-S1 WWTP solids dryer process

Activity Date	Activity Type	Compliance Status	Comments
07/08/2016	MACT (Part 63)	Compliance	RICE MACT (Subpart ZZZZ) - NOCS Report; Performance Test Report; and CPMS Calibration Documentation Sheet. Both engines CO emissions <23 ppmv@15%O2 limit
05/27/2016	MAERS	Compliance	
05/27/2016	MAERS	Compliance	
05/17/2016	Stack Test	Compliance	Boilers 21 & 22 NOx recertification test notification - scheduled for week of June 6th
04/28/2016	ROP SEMI 2 CERT	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Environmental Audit disclosures are also reviewed
04/28/2016	ROP Annual Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Environmental Audit disclosures are also reviewed
04/19/2016	ROP Annual Cert	Compliance	Trinseo semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Of NOTE: several findings reported in ELP compliance report, MAERS reporting corrected for 2014 & 2015.
04/15/2016	ROP Other	Compliance	Fugitive Dust Control - Updated Map
04/15/2016	ROP Other	Compliance	Salzburg landfill fug dust updated map

Activity Date	Activity Type	Compliance Status	Comments
04/12/2016	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP report No excess emissions
04/07/2016	MACT (Part 63)	Compliance	Semi Annual MACT Reports Subpart U, JJJ, and H. MACT U - 2 leaks, 1,84 monitored components; MACT H - 2 leaks, 13,952 monitored. No NOCRS changes, no malfunctions. MACT U monitoring occurred on 8/26/2015. See compliance activity report for details
04/07/2016	MACT (Part 63)	Compliance	semi annual MACT reports U (Group 1 polymer & resins), JJJ (Group IV polymer & resins) & Subpart H. MACT JJJ Section IX had change to control device from only process heaters EU31-S2 & EU32-S2 to include tanks but NOCRS not changed until 9/15/2014 to reflect fixed roof control Now in NOCRS for MACT U. MACT U 0 leaks, 70 components monitored;MACT H for EU-31 (ABS) 5 leaks of 7526 monitored EU-33 reported 3 leaks of 1634monitored. All repaired with allowed timeframe. MACT U inspection/monitoring occurred on 8/23/2014
04/01/2016	Other Non ROP	Compliance	Michigan Operations Fugitive Dust Control Program - Updated Facility Map
04/01/2016	Other Non ROP	Compliance	Salzburg Landfill Fugitive Dust Control Program - Updated MAP
03/30/2016	Stack Test Observation	Compliance	CO emission testing on FGDIVERSIONDIESELS-S1
03/30/2016	Self Initiated Inspection	Compliance	FGDIVERSIONDIESELS -S1. Newly identified existing RICE MACT non-emergency engines >500 HP at a major source of HAPs.
03/28/2016	ROP Other	Compliance	Fourth Quarter 2015 AAMP QC Report. Site 4A had void VOCs on 10-3-2015 due to Programmer failing; Site 5A had void VOCs on 10-21-2015 due to bad pressure gauge which was replaced. % recoveries between 89 & 134.
03/28/2016	ROP Other	Compliance	December 2015 AAMP Summary Data. TSP had 93% to 100% valid data; VOC had 95% -100% valid data

Activity Date	Activity Type	Compliance Status	Comments
03/21/2016	Other	Compliance	40 CFR 63, SUBPART U -SEMI-ANNUAL REPORT AND REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron LLC Michigan Operations. rfo
03/15/2016	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron Michigan Operations. rfo
03/15/2016	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron Michigan Operations. rfo
03/15/2016	MACT (Part 63)	Compliance	Subpart HHHHH - Pre compliance report modification. Added EU04-S1 Dow Automotive.
03/03/2016	Stack Test	Compliance	Notification of performance test and site-specific test plan for 40CFR Part 63 MACT ZZZZ WWTP diversion diesel pump engines A & B (D-200A/B).
02/16/2016	Stack Test	Compliance	EU12B VS-1011/T-1010 Performance Test Report. HCL avg. <0.84 ppmv; max from Run 4 was 2.33 ppmv. limit to show compliance is <20 ppmv. ND Cl.
02/04/2016	ROP Semi 1 Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported Deviations are also reviewed during inspections at the associated emission units.
02/01/2016	Other Non ROP	Compliance	June 2015 AAMP Submittal. All sites have TSP 87% - 00% valid data; 93% - 100% VOC valid data
02/01/2016	ROP Other	Compliance	September 2015 AAMP. All sites have 91% - 100% TSP & VOC valid data
02/01/2016	ROP Other	Compliance	Third quarter 2015 AAMP QC Report. Site 261110961 & 261110960 tubing & flow system parts replaced in September. % recoveries between 93 & 111.
02/01/2016	Environmental Audit Notification	Compliance	Storage Tanks

Activity Date	Activity Type	Compliance Status	Comments
02/01/2016	Environmental Audit Notification	Compliance	Corporate (12) and Larkin (2) facilities. Approx. 1/month 12/21/2015 to 11/4/2016
02/01/2016	ROP Other	Compliance	July AAMP Submittal. All Sites TSP have 88% -100% valid data; VOC 94% - 100% valid data
02/01/2016	ROP Other	Compliance	October 2015 AAMP summary data. all sites have 92% -100% valid data for TSP & VOCs
02/01/2016	ROP Other	Compliance	August 2015 AAMP. All sites have 90% -100% valid data
02/01/2016	Excess Emissions (CEM)	Compliance	Quarterly CEMS/CERMS QA Report for EU32 Incinerator. all gas span ranges less than 15% (0.4 - 5.3 %)
02/01/2016	Excess Emissions (CEM)	Compliance	Quarterly CEMS/CERMS Summary and Excess Emission Report for 32 Incinerator. Total hours operating =2209. 0% CEMS/CERMS downtime for all monitors. 0% excess emissions
02/01/2016	ROP Other	Unknown	November AAMP summary data. Acrylonitrile at site 261110960 on 11/20/2015 was 2.1 ug/m3, in excess of 24 hour ITSL of 2.0 ug/m3. Site 261110961 reported non detect for Acrylonitrile. An investigation is underway. TSP had 93% to 100% valid data; VOC had 95% -100% valid data
02/01/2016	Environmental Audit Notification	Compliance	To assess compliance with federal MACT standards at the Specialty Monomers DVB manufacturing facility, EU94
12/29/2015	CEM RATA	Compliance	EU32INCINERATOR RATA Report. CMS PEP required annual RATA for Flow, CO, O2, NOx, & SO2. All CEM & CERMS met performance specs in EPA test criteria. EU32INCINERATOR operated at >50% of normal operating rate. CEMS1 & CEMs 2 performance results we w/in allowed relative accuracy.

Activity Date	Activity Type	Compliance Status	Comments
12/29/2015	Excess Emissions (CEM)	Compliance	Quarterly CERMS QA report for 32 Incinerator. NOx & SO2 gases passed calibration gas QA. No out of control periods during this quarter due to calibration drift. CO 100ppmv 1 hour rolling average EE events: 1. Unplanned kiln shutdown. 1:36 hrs 7/25/15 range – 100.8 – 259 ppmv 2. Kiln temp reduced during air flow troubleshooting. No waste in kiln 2:32 hrs 8/27/2015, range – 116.3 – 1683 ppmv
12/15/2015	ROP Other	Compliance	Salzburg Landfill fugitive dust control program - updated map
12/09/2015	Stack Test Observation	Compliance	EU12b scrubber test for PAIP MACT
12/07/2015	ROP Other	Compliance	Fugitive Dust Control Plan - Updated facility map
11/18/2015	Stack Test	Compliance	EU12B VS-1010 Notification of Performance Test and Submittal of Site-Specific Test Plan
10/22/2015	Scheduled Inspection	Compliance	EUB7-S1 Incinerator complex tank farm
10/06/2015	Other		dsd
09/30/2015	ROP Annual Cert	Compliance	Dow Chemical's semi-annual Title V deviation report. 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.
09/16/2015	ROP SEMI 2 CERT	Compliance	
09/16/2015	MACT (Part 63)		From Trinseo - Semi Annual MACT report

Activity Date	Activity Type	Compliance Status	Comments
09/16/2015	MACT (Part 63)	Compliance	<p>NOCSR updates, Semi Annual MACT Reports Subpart U, JJJ, and H. MACT JJJ fixed roof added to NOCSR 9/15/2014. Emission suppression requirements met for 8 instances of bypass from tanks & containers. Leak inspections conducted on 12/17 and 12/24/2014. Leaks repaired w/in 5/15 day requirement. MACT H - for EU31 9153 monitored; EU33 (MARS) 3105 monitored, EU33 (Tanks) 351 monitored. 13 leaks all repaired w/in 5/15 requirement. MACT U 3868 monitored. inspection on 8/23/2014. 2 leaks. See compliance activity report for details</p>

Activity Date	Activity Type	Compliance Status	Comments
09/16/2015	ROP Semi 1 Cert	Compliance	<p>Dow Chemical semi-annual Title V deviation report. 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. Of NOTE: EU32INCINERATOR - 8 deviations reported. 6 had AWFCO initiates & SSMP followed, 1 reported but no waste in kiln, 1 reported w/no emission limit exceedances. On two occasions slag fell into the quench chamber pool generating steam and causing the kiln pressure to exceed operating ranges. During one of the events the EVS opened to relieve pressure for 10 seconds. An AWFCO was initiated and the SSMP was followed in both instances. On 2 occasions low kiln temperatures. One due to thermocouple failure resulting in all fuels cut-off, one during monthly test of waste transfer cutoff switch. There were 3 occasions when CO emissions were exceeded during periods of incomplete combustion while in startup and shutdown with no waste in the kiln. On one occasion during start up of a waste feed from a rail car the hourly rolling average CO was greater than 100 ppmv for 61 minutes. The SSMP was followed in response to the waste stream flow. The pH in the Venturi scrubber <7.5 for 4 minutes due to a caustic flow setpoint reset and air flow restriction. AWFCO was initiated and the SSMP was followed, set point reset, and restriction removed. For 1 minute two IWS units shut down due to low voltage while a third IWS was in routine wash step. The low voltage was caused by high water level in the 3rd stage after a water level indicator froze. An AWFCO was initiated and the SSMP followed. A visual water level check was added to plant round expectations</p>

Activity Date	Activity Type	Compliance Status	Comments
09/15/2015	MACT (Part 63)	Compliance	MACT HHHHH and MACT MMM required reporting received on time. Leaks recorded & repaired per requirements. Updated NOCs to reflect components & wastestreams. EPA Performance Test Waiver for PAI received 9/2014; Deviations reported, investigated & corrective action taken. No excess emissions reported but had potential for Dow characterized "insignificant amounts of methanol from WWTP" based on miscibility of methanol in water
09/15/2015	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron Michigan Operations. rfo
09/15/2015	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo 1/19/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo 1/19/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo 1/19/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW. rfo, 1/26/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW. rfo, 1/27/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW. rfo 1/29/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW. rfo, 1/29/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW. rfo, 2/3/16
09/15/2015	Other	Compliance	40 CFR 63, SUBPART DD (OSWRO) - SEMI-ANNUAL REPORT REVIEW. rfo, 2/3/2016
09/15/2015	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW. rfo, 2/3/2016
09/15/2015	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW. rfo 3/8/16

Activity Date	Activity Type	Compliance Status	Comments
09/15/2015	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT REVIEW. This report is from Trinseo LLC - Michigan Operations who operates Dow Chemical Latex Production facility in 743 Bldg. - EUB1. rfo 3/23/16
09/10/2015	ROP SEMI 2 CERT	Compliance	Dow semi-annual and annual Title V deviation report. 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. Of NOTE: EU32INCINERATOR - 5 deviations reported. 2 had AWFCO initiates &/or SSMP followed, 1 CO high reading during SSM reported but no waste in kiln, 2 CEMS circuit board failures that followed SSMP&/or no waste in kiln. The CEMS was unavailable for 9 minutes when a CEMS Unit 2 cooler failed while CEMS Unit 1 had a circuit board failure. The CO CEMS was out of service for 85 minutes due to CEMS 1 circuit board failure and Unit 2 CPU board malfunction when there was no waste in the kiln. On one occasions slag fell into the quench chamber pool generating steam and causing the kiln pressure to exceeded operating range for 8 seconds. An AWFCO was initiated and the SSMP was followed. The pH in the Venturi scrubber <7.5 for 28 minutes due to a caustic flow orifice restriction. AWFCO was initiated and the SSMP was followed & restriction repaired. MACT required reporting received on time. Leaks recorded & repaired per requirements. Updated NOCs to reflect components & wastestreams. EPA Performance Test Waiver for PAI received 9/2014; Deviations reported, investigated & corrective action taken. No excess emissions reported but had potential for Dow characterized "insignificant amounts of methanol from WWTP" based on miscibility of methanol in water

Activity Date	Activity Type	Compliance Status	Comments
09/02/2015	Scheduled Inspection	Compliance	EU32 Hazardous waste incinerator inspection
09/01/2015	ROP Other	Compliance	Fugitive dust control program - updated facility MAP with temporary aggregate piles.
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report. CGA data indicates both NOx & SO2 analysis passed. There were no NOx or SO2 CERMS out of control periods due to calibration drift.
09/01/2015	MACT (Part 63)	Compliance	Notification of Compliance and Comprehensive Test Report. Compliance demonstrated w/emission limits. Established operating parameters including higher waste feed rates were higher for the incinerator, SCC, ash feed, chlorine, SVM, LVM, pumpable LVM, Mercury, & gas flow, lower kiln temperature & water flow to the quench, & higher SCC temperature.
09/01/2015	Excess Emissions (CEM)	Compliance	CEMS/CERMS Quarterly Summary and Excess Emission Report for 32 Incinerator. 0% downtime, 0% excess emissions
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Quarterly CEMS and CERMS Summary & Excess Emission Report SO2, NOx, CO. 0% downtime, 0.50% CO excess emissions for 100ppmv hourly rolling average from 4 events (10.78 hrs/2150 hours) One unplanned shutdown, one during shutdown for planned maintenance, two during startup after planned maintenance, shutdown of kiln for planned maintenance. No waste was in the kiln.
09/01/2015	CEM RATA	Compliance	All CEMS (CO, O2) & CERMS (NOx, SO2) met performance specification test criteria. SO2 = 12% of reference method, NOx = 11% reference method, CO = 3 % emission limit
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report. CGA data indicates both NOx & SO2 analysis passed. There were no NOx or SO2 CERMS out of control periods due to calibration drift.

Activity Date	Activity Type	Compliance Status	Comments
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator CEMS and CERMS Quarterly Summary and Excess Emissions Report. 0% downtime, 0.16% CO excess emissions for 100ppmv hourly rolling average from 3 events (3.15 hrs/1960 hours) Kiln shutdown while Waste Feeds Stop field test taking place; Waste stream flow deviation while start up of waste stream from rail car; cool down cycle during shutdown of kiln for planned maintenance. CEMS1 out of range for CO 31 seconds, CEMS2 out of range for 178 seconds
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Quarterly CEMS and CERMS Summary & Excess Emission Report. 32 Incinerator CEMS and CERMS Quarterly Summary and Excess Emissions Report. 0% downtime, 0.26% CO excess emissions for 100ppmv hourly rolling average from 4 events (7.48 hrs/2899 hours) One unplanned shutdown, one during shutdown for planned maintenance, two during startup after planned maintenance, shutdown of kiln for planned maintenance. No waste was in the kiln during planned maintenance events
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO ₂ , NO _x) QA Report. CGA data indicates both NO _x & SO ₂ analysis passed. There were no NO _x or SO ₂ CERMS out of control periods due to calibration drift.
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator CEMS and CERMS Quarterly Summary and Excess Emissions Report. 0.09% downtime, 0.29% CO excess emissions for 100ppmv hourly rolling average from 2 events (5.02 hrs/1755 hours) during shutdown of kiln for planned maintenance. No waste was in the kiln.
09/01/2015	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO ₂ , NO _x) QA Report. CGA data indicates both NO _x & SO ₂ analysis passed. There were no NO _x or SO ₂ CERMS out of control periods due to calibration drift.

Activity Date	Activity Type	Compliance Status	Comments
09/01/2015	Stack Test	Compliance	Notification of Compliance and Comprehensive Test Report. Compliance demonstrated w/emission limits. Established operating parameters including higher waste feed rates were higher for the incinerator, SCC, ash feed, chlorine, SVM, LVM, pumpable LVM, Mercury, & gas flow, lower kiln temperature & water flow to the quench, & higher SCC temperature. Updated AWFCO limits demonstrated during CPT are listed in Table 1-3 or report "Summary of HWC MACT Operating Parameter Limits". The NOCS updated. A PTI modification application for EU32INCINERATOR will be submitted.
08/11/2015	Stack Test	Compliance	EU32INCINERATOR CPT 2014 report. Updated AWFCO limits demonstrated during CPT are listed in Table 1-3 or report "Summary of HWC MACT Operating Parameter Limits". The NOCS updated. A PTI modification application for EU32INCINERATOR will be submitted.
08/04/2015	Other Non ROP	Compliance	May 2015 AAMP summary data
08/04/2015	Other Non ROP	Compliance	March 2015 AAMP summary data. 3/25/2015 site 261110961 void due to power failure.
08/04/2015	Other Non ROP	Compliance	Jan - March 2015 AAMP QC report. Toluene result variation between Site 261110961 & 261110960 not yet resolved. Still suspect analytical laboratory test performance.
08/04/2015	Other Non ROP	Compliance	April 2015 AAMP summary data. 4/6/2015 site 261110961 void due to GFCI trip. Repaired prior to next sample date. 4/24/2015 site 261110955 elevated 1,2-dichloroethane. likely WWTP. No fence line exceedance
08/03/2015	Environmental Audit Notification	Compliance	EU10 emission limits & MACT Subpart MMM process vent requirements

Activity Date	Activity Type	Compliance Status	Comments
08/03/2015	Environmental Audit Notification	Compliance	MACT applicability of the Dow Automotive Structural Adhesives, SARAN Resins, Ion Exchange, Exchange Copolymer, Specialty Monomers DVB & VBC/BCB. Assess vent emission on equipment for SARAN Resins, & Ion Exchange process represented by FGRULE290 within Section 1 of the Michigan Operations source, A4033
08/03/2015	Environmental Audit Notification	Compliance	emission data input methodology for MAERS . 17 operation areas. Bldg1 Ag Multi-Product Plant, 32 Incinerator, 100 Automotive glass bonding, 1037/304 Automotive BetaMate, 1131 Methocel, 1130/588 Specialty Monomers, 768 1385, 477 AEM Manufacturing, 969/680/1028 Sulfonamides, 827 Ag Multi-Product Plant, 845 Copolymer Plant, 858/934/972 Dursban, 954 Chemical Distribution, 499 Energy & Utilities, 963/458/801 Ion Exchange, 719 Copolymer, 1005 Wastewater Solids
08/03/2015	Environmental Audit Notification	Compliance	EUC3 at 1005 bldg
08/03/2015	Environmental Audit Notification	Compliance	LDAR audit for all emissions in Sec 1 of ROP
08/03/2015	Environmental Audit Notification	Compliance	To assess compliance with EUB2 at the METHOCEL Cellulosics Ether production facility
08/03/2015	Environmental Audit Notification	Compliance	assess emission data for MAERS 941 Specialty intermediates, 948 Phenoxy Herbicides, 298 Ethocel cellulose ethers, 564 Saran resin
07/29/2015	CEMS Test Observation	Compliance	EU 32 Hazardous Waste incinerator RATA.
05/26/2015	MAERS	Compliance	From Trinseo
05/20/2015	MAERS	Compliance	Emission calc basis in PTI development records
05/20/2015	MAERS	Compliance	
05/06/2015	ROP Other	Compliance	January AAMP 100% valid samples. Highest VOC result was for Chloromethane at 28 ug/m3, TSP max of 22

Activity Date	Activity Type	Compliance Status	Comments
05/06/2015	Other Non ROP		February AAMP summary data AIRS site 261110960 had no data collected 2/5 & 2/23 due freezing weather causing solenoid failure. New heater purchased & installed 2/25. Site had elevated acrylonitrile at 2.1 ug/m3 2/17. ITSL = 2.0 ug.m3. Co-located AIRS site 261110961 acrylonitrile result was 0.5ug/m3. Trinseo is only onsite user of acrylonitrile. Max chloromethane of 28 ug/m3, TSP max 38
04/29/2015	Environmental Audit Notification	Compliance	Assess waste water compliance with MACT for all ROP Section 1 emission units
04/27/2015	Environmental Audit Notification	Compliance	Styron MACT Group 1 waste water stream to 3rd party off site disposal facility
04/14/2015	MACT (Part 63)	Compliance	Styron 30 CFR 63, JJJ, U, and H See summary in file
04/14/2015	Other	Compliance	40 CFR 63, SUBPART FFFF MON COMBINED SEMI-ANNUAL REPORT REVIEW. rfo
04/13/2015	Environmental Audit Notification	Compliance	To assess transfer rack provisions within Dow's Michigan Operations under 40 CFR Part 63 NESHAP standard requirements. All ROP Section 1 EUs to be evaluated
04/13/2015	Environmental Audit Notification	Compliance	Original of 3/6/2015 notification to assess transfer rack provisions within Dow's Michigan Operations under 40 CFR Part 63 NESHAP standard requirements. All ROP Section 1 EUs to be evaluated
04/13/2015	Environmental Audit Notification	Compliance	Assess compliance with the applicable Federal MACT standards for process units that are part of EU13 (600 bldg)
04/03/2015	ROP Other	Compliance	December 2014 AAMP. Site 261110955 12/1/2014 reading had elevated 1,2, dichloroethane. No fence line emissions exceeded. Likely WWTP source
04/03/2015	ROP Other	Compliance	Fourth Quarter 2014 AAMP. Toluene variation between Site 261110961 & 261110960. unresolved but suspect analytical lab
04/01/2015	Scheduled Inspection	Compliance	FGBOILERS21&22, FGSITEBOILERS, Associated FGBOILERMACT

Activity Date	Activity Type	Compliance Status	Comments
03/25/2015	Scheduled Inspection	Compliance	EU-Resin_Dryer and B1385-Rule 290- EM MDP Reaction site inspections. Process & records review.
03/17/2015	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
03/17/2015	Other	Compliance	40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW. rfo 8/19/15
03/17/2015	Other	Compliance	40 CFR 63, SUBPART H INCINERATOR OPERATIONS SEMI-ANNUAL REPORT REVIEW. rfo 8/26/2015
03/17/2015	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW. NOCS Attachment 2 for 941 Building T-302 Scrubber Design Evaluation is Attached to This Report. rfo 8/28/15
03/17/2015	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
03/17/2015	Other	Compliance	40 CFR 63 SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW.
03/17/2015	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW
03/17/2015	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
03/17/2015	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
03/17/2015	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW.
03/17/2015	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW. rfo 9/15/15
03/17/2015	Other	Compliance	40 CFR 63, SUBPART FFFF SEMI-ANNUAL REPORT REVIEW. Combined MON report review.
03/16/2015	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT AND REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron LLC Michigan Operations. rfo
03/16/2015	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT AND REVIEW. This is Trinseo LLC's Michigan Operations Semiannual Report, previously was Styron LLC Michigan Operations. rfo

Activity Date	Activity Type	Compliance Status	Comments
03/13/2015	ROP Annual Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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. Reported deviations are also reviewed during inspections at the associated emission units. Environmental Audit disclosures are also reviewed Of Note: EU32INCINERATOR - 8 deviations reported. 6 had AWFCO initiates & SSMP followed, 1 reported but no waste in kiln, 1 reported w/no emission limit exceedances.
03/05/2015	MACT (Part 63)	Compliance	SARAN shut down. 40 CFR63subpart HHHHHHHH Polyvinylchloride & copolymer Production MACT no longer applicable. Initial notification sent 5/7/2012. MACT HHHHHHHH first substantial compliance date is 4/17/2015.
03/05/2015	NESHAP (Part 61)	Compliance	SARAN shut down (EU35). All equipment cleared of material 12/22/2014 including tank from chemical distribution (EU93). Vinyl Chloride NESHAP including emission limits in 40 CFR 61.64 no longer applies.
03/03/2015	ROP Semi 1 Cert	Compliance	Styron semi-annual Title V deviation report. 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.
02/25/2015	MACT (Part 63)	Compliance	Subpart HHHHH - Pre compliance report modification.
02/09/2015	Release Reports	Compliance	Triethylamine CAS #1095975 Bldg 477 Garlon, FGRULE290 Apprx 260 lbs, 15 minutes. While investigating an in-plant odor, operations personnel discovered a leak coming from a scrubber. Operations personnel immediately closed valves, which stopped the leak.

Activity Date	Activity Type	Compliance Status	Comments
02/09/2015	Release Reports	Compliance	Chlorine CAS # 7782505, Bldg. 680 Ag multi product, EU13-S1. 0.5 lb, Apprx 50 minutes, . While investigating an in-plant odor, operations personnel discovered a leak coming from a gasket. The process was immediately shutdown and the gasket was isolated, stopping the leak. Less than RQ of 10 lbs
02/09/2015	Release Reports	Compliance	Monochloroacetic Acid (CAS # 79118). Bldg 941 EU11-S1 Specialty Intermediates. Approx 1 pound. 5 minutes. While troubleshooting a process pump, operations personnel discovered a leak coming from the pump. The process was immediately shutdown and the pump was isolated by closing the pump inlet and outlet valves, stopping the leak. Less tan RQ of 100 pounds
02/09/2015	Release Reports	Compliance	1,3-Butadiene Bldg 954 EU91-S1 Chemical distribution While troubleshooting a compressor, operations personnel discovered that contaminated oil had leaked from the compressor. The process was immediately shutdown and valves around the compressor were closed, isolating the compressor and stopping the leak. Absorbent was applied to the leaked oil and it was cleaned up and containerized for disposal. 126 minutes duration. Approx. 4 lbs released. Less than RQ of 10 pounds
02/09/2015	Release Reports	Compliance	1,3-Butadiene Bldg 954. EU91-S1 Chemical Distribution. Operations personnel discovered a leak coming from a connector. The process was immediately shutdown, the system was purged with nitrogen to an air pollution control device and the connector was replaced, stopping the leak. 8 lbs. estimated release. Less than RQ of 10 lbs.

Activity Date	Activity Type	Compliance Status	Comments
02/09/2015	Release Reports	Compliance	Chloromethyl methyl ether Less than 1 pound. Bldg 963. EUANION_XCHG-S1 In-plant monitoring system alerted operations personnel of a potential leak. Upon investigation, operations personnel discovered a leak coming from a flanged connection. Less than RQ of 10 lbs.
02/09/2015	Release Reports	Compliance	Methyl Chloride CAS # 74-87-3, Bldg 963 Ion exchange CMMC, FGRULE290, Apprx 30 -50 lbs. Start @ apprx 8:30 PM, Apprx 6 hours. Defective O-ring on a vessel man-way associated with a unit operation. Process shut down & venting vessel vapor sent to 963 THROX. O-ring replaced & pressure tested
02/09/2015	Release Reports	Compliance	1,3-Butadiene CAS #106990, Bldg 954, Chemical distribution, EU91-S1, 11:00 AM, Apprx 2 lbs, 180 minutes. Contractors reported a butadiene type odor in the area they were working and reported it to the 954 Building Control Room. Building personnel went to the area with air monitoring equipment and discovered a vapor leak of butadiene coming from a flange on the suction side of a distribution pump. Building personnel covered the area with duct tape to slow the leak down. Emergency Services and Security personnel covered the leaking flange with chemical resistant tape. The tape was then secured with two hose clamps that were placed on the top and bottom of the flange. Facility began an immediate shutdown of the system to prepare for repair/replacement of the flange. Less than RQ of 10 lbs.

Activity Date	Activity Type	Compliance Status	Comments
02/09/2015	Release Reports	Compliance	Ethylene Dichloride CAS #107062, Bldg 458, Ion exchange, EUANION_XCHG-S1, Start 6:00 PM, Apprx 40 Lbs., 20 minutes, Operators received an alarm from the plant air monitoring system. Operations personnel investigated the alarm and discovered material leaking from a valve body on a pipeline to a distillation column. Building personnel immediately isolated the leak by closing manual valves. Less than RQ of 100 lbs.
02/09/2015	Release Reports	Compliance	Chlorpyrifos CAS #2921882, Bldg 934, Chlorpyrifos production, EU15-S1, Start 8:45 AM, <0.05 Lb., apprx 90 minutes. A drum, which had just been filled, had a pin-hole leak near the base of the drum at the seam. The leak was noticed by personnel in the area as it moved along the drum line. Upon discovery of the leak, the drum was removed from the drum line and placed on a portable containment unit. The material remaining in the drum was recovered by pumping it back into the process. Leaked material was absorbed and packaged for disposal. Less than RQ of 1 pound
02/09/2015	Release Reports	Compliance	Pyrrolidine CAS#123751, Bldg 827, Ag multi product plant, EU02-S1, < 1 lb release, Start 1:43 PM, Apprx 69 minutes. While moving a pallet of Pyrrolidine drums. Operations personnel noticed a small puddle under the pallet. They cut the shrink wrap off the drums and inspected each drum for leaks. One of the drums was found to be weeping through the rolled seam on the bottom of the drum. Upon discovery of the leak, the drum was placed on a portable containment unit. The material remaining in the drum was recovered by pumping it to the process holding tank. Info on RQ limited. Less than MSDS listed RQ of 100 lbs.

Activity Date	Activity Type	Compliance Status	Comments
02/09/2015	Release Reports	Compliance	Chlorine CAS#7782505 Apprx 8 lbs, Approx 37 minutes Operators received an alarm from the plant LEL monitoring system. Operations personnel investigated the alarm and discovered material leaking from a vent line inside 1271 building (chlorine offload building). Building personnel immediately isolated the leak by interrupting the transfer blow back and closing valves. The LEL alarms also caused the building doors to close automatically and started the blower system which vented all building air through a scrubber. Less than RQ
02/04/2015	Other Non ROP	Compliance	November 2014 AAMP AIRS#261110960 11/25/2014 VOC void due to solenoid valve failure in low temperatures. AIRS#261110955 11/1/2014 elevated 1,2-dichloroethane w/no fence line limit exceeded. Likely source WWTP
01/30/2015	Other	Compliance	Consent Order #6-2012 Termination request. Bldg #297, EUB5-S1 ethylcellulose. Particulate matter emissions & lack of VE observation. On Feb 11, 2015, Per the LOV log & Dow Chemical ROP semi annual & annual reports there have been no violations since October 31, 2012. Any deviations reported were related to valve or connector leaks & responded to as required by SSM. No deviations were related to particulate emissions or VE observations.
01/15/2015	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report. No batches run. Preparing for shutdown.
01/13/2015	Other Non ROP	Compliance	September AAMP summary data. No #261110955 VOC results due to leaking canister
01/13/2015	Other Non ROP	Compliance	Third quarter 2014 QC report for AAMP. Toluene concentration at #261110961 still typically higher than #261110960 after sampling equipment replaced. Investigating analytical lab data.

Activity Date	Activity Type	Compliance Status	Comments
01/13/2015	Other Non ROP	Compliance	October 2014 AAMP Summary Data. #261110955 10/2/2014 1,2-dichloroethane elevated but not above fence line emission limits. WWTP is suspected source.
01/08/2015	NESHAP (Part 61)	Compliance	Quarterly Vinyl Chloride NESHAP report. Preparing for shutdown of vinyl chloride operations. No batches run

01/02/2015	Environmental Audit Disclosure	Pending	<p>Scope of Audit was to assess process operating parameter monitoring, control & recordkeeping for all Sec.1 ROP. 11 findings w/corrective action. *</p> <p>T-2010 caustic scrubber status change from small control device to large control device based on 2012 emission data. 98% OHAP removal met by 954 TTU. No excess emissions. Performance test waiver approved by EPA 9/15/2014. *EU-12 948 Bldg. HCL found to be present in 2,4D (EU12) process vents from 600 Area. PAI NOCs updated 3/2014 to include T-1001 as HCL vent control device. Performance test 3/26/2014. * EU35 New GC installed for Vinyl train 10/2012. GC point #19 (SARAN Resins) sampled 1/20 mins. v 1/10 mins. All othr points 1/20 mins required but #19 required 1/10 mins. per Vinyl NESHAP. GC installers did not set #19 to sample 2X.cycle as previous GC. GC now reprogrammed. Dow believes 1/20 mins. sampling interval should have identified episodes w/potential to exceed emissions. *</p> <p>EU 35 A-12 A4M makeup tank. Baghouse bypassed when process changed to transfer material directly into tank due to auger plugging. Use of auger system w/baghouse immediately restarted. Any emissions would have been particulate nontoxic food grade material. *EU35 T-0474 Group 1 wastewater operating parameters documentation among 3 reports. Parameters were monitored to demonstrate compliance asn records maintained. No excess emissions. Documentation for all reports updated & resubmitted w/ 9/2014 semi-annual report.</p> <p>*EU54 845 Bldg. Fugitive monitoring of single mechanical seal pumps completed while batch process not in organic HAP service. Fugitive monitoring plan will now coordinate w/batch process while in OHAP service. Updated training for facility & monitoring personnel. *FG290 100 Bldg MX2450 agitator Meth 21 not conducted. MX-2540 mixer in 2009 LDAR program but</p>
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01/02/2015	Environmental Audit Disclosure	Pending	<p>monitoring contractor omitted agitator. Agitator entered into LDAR program & Meth 21 monitoring completed. Agitator was not leaking. Multiple emission units Documentation of design criteria required by MACT for various dual mechanical seal pumps &/or dual seal agitators not found. LDAR program updated w/documentation. EU13, EUANION_XCHG dual mechanical seal pumps &/or dual seal agitators not inspected weekly for barrier seal fluid leaks. LDAR program updated & training provided. EU14, RULE290(1028 Bldg), EU54, EUANION_XCHG dual mechanical seal pumps &/or dual seal agitators not alarmed to indicate potential leak to operators. Increased fugitive monitoring frequency in place of alarms. LDAR program updated & training provided. EU94, RULE290(768 Bldg),EUANION_XCHG single mechanical seal pumps &/or agitators identified as sealless or were absent from fugitive monitoring database. Corrected status & initiated monitoring as required. LDAR program updated & training provided.</p>
12/30/2014	Environmental Audit Notification	Compliance	<p>Starting Dec29, 2014 thru Sept 30, 2015, Dow will conduct environmental audits at 13 facilities including: Midland Solar, Environmental Operations, Chemical Distribution, Midland R&D, Midland Advanced Electronic Materials, Rail & Shipping, Ion Exchange Resin Block, Methocel, Ion Exchange Copolymer & 561 building, & Ethocel. No technical assistance from the DEQ requested.</p>
12/30/2014	Environmental Audit Notification	Compliance	<p>Extension request until July 1, 2015 for Dow Automotive 1037, 304, &100 building, & the Ion exchange Resin manufacturing process. Additional external auditors have been brought in to assist w/numerous processes & complexity of evaluations.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/30/2014	Environmental Audit Disclosure	Compliance	HAP service MACT subparts H & UU, and Part 61 subpart V. LDAR identifying tags not present on various EU sampling connection individual connectors & valves including FGRULE290 (100 Bldg - Primers, 304 Bldg -Brake Fluids, 768 Bldg, 1385 Bldg - EM), EUB5, EU09, EU35, EU82, EU89, EU54, EU93, EUANION_XCHG, EU88, EU94, EUB2, & EU91. Units had been sampled but not labeled w/unique identifying tag. Site wide identification of all applicable sampling connection systems conducted & included as LDAR applicable in Site equipment database per 9/2014 T5 ROP report.
12/30/2014	Environmental Audit Disclosure	Compliance	T-315 scrubber at 1028 bldg. MACT MMM PAIP NOCS incorrect description of control device operating parameter limits. (20 gpm & pH 7). Process control system set & device operated at >40 gpm & pH12. MACT MMM SemiAnnual report of 9/15/2014 contained updated NOCS & design evaluation (>40 gpm & pH 12).
12/30/2014	Environmental Audit Disclosure	Compliance	40 CFR Part 68 audit discovered threshold quantity calculations for Bldg1 facility & distribution system not properly determined. Documented in combined MiOPs site RMP in 9/2014 Deviation report. RMP updated w/applicability of anhydrous HCL & chlorine for Bldg1 & submitted to EPA
12/17/2014	Other	Compliance	Consent Orders 12-1981 and 19-1981
12/09/2014	MACT (Part 63)	Compliance	Request for time extension to submit CPT report & NOC from Nov 18, 2014 to Dec 11, 2014 due to corrections in spiking contractor portion of report. Approval for CPT extension granted per 40 CFR 67(i) & for NOC per 63.1207(j)(4) of MACT EEE

Activity Date	Activity Type	Compliance Status	Comments
11/07/2014	Release Reports	Pending	Methylene Chloride (CAS# 75092). 948 building. 18 Minutes. 2,100 pounds est. release. CERCLA RQ 1,000 pounds. Tank pressure drop due to possible frangible rupture. Elevated temperature of methylene chloride at pumps confirmed loss >original anticipated.
11/07/2014	Release Reports	Compliance	Vinylidene Chloride (CAS#75354) for approximately 1 hour Two frangibles installed in series had blown. Operators responded to process control alarm. Approx 3 pounds released. Permit limit of 10 ppm VINYL CHLORIDE (CAS#75014). No toxics info for Vinylidene in AQD database. No volume information given.
11/05/2014	Other Non ROP	Compliance	June 2014 AAMP summary data. No void samples in June
11/05/2014	Other Non ROP	Compliance	AAMP Second Quarter 2014 QC Report. Continued to have variation in toluene numbers for Site 261110961 261110960. Full data package requested from laboratory performing tests. Investigation will continue.
11/05/2014	Other Non ROP	Compliance	Ambient Air Monitoring Program, May 2014. AIRS# 261110961 had controller function failure & 5/17/2014 VOC samples were voided. Next samples collected per schedule
11/05/2014	Other Non ROP	Compliance	August 2014 AAMP summary data. Styrene plant upset on 7/22/2014 - most likely source for emissions in July. All valid data for August.
09/15/2014	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW. rfo

Activity Date	Activity Type	Compliance Status	Comments
09/15/2014	Other	Compliance	40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63 - SUBPART-U SEMI-ANNUAL REPORT REVIEW of STYRON LLC - MIDLAND S/B LAYTEX FACILITY.
09/15/2014	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW. rfo
09/15/2014	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REVIEW. Incinerator Operations. rfo
09/15/2014	Other	Compliance	40 CFR 63 - SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW OF STYRON LLC - MIDLAND STYRENE ACRYLONITRILE RESIN PRODUCTION & ABS PRODUCTION. rfo
09/03/2014	Release Reports	Compliance	HCL <100 pounds. Initial report of unknown quantity released on 8/31/2014
08/19/2014	Stack Test Observation	Compliance	observation of the Comprehensive Performance test (CPT) on the Dow hazardous waste combustor "EU32INCINERATOR-S1". The CPT is required by the Hazardous Waste Combustor (HWC) MACT 40 CFR Part 63 Subpart EEE (permanent replacement standards for incinerators per 40 CFR 63.1219 as an existing source) and MI-ROPA4033-2011b (EU32INCINERATOR-S1 V.6 -pg 154).
07/29/2014	Environmental Audit Notification	Compliance	Environmental audit notification - Assess Title V and MACT conditions that require data to be gathered or instrumentation to be monitored, in order to populate an environmental management system tool. This will occur at all manufacturing facilities at Dow's Michigan Operations in which there are Title V or MACT requirements. The anticipated start date of the audit is 7/28/14.

Activity Date	Activity Type	Compliance Status	Comments
07/29/2014	MACT (Part 63)	Compliance	Dow Chemical semi-annual MACT consolidated report
07/29/2014	MACT (Part 63)	Compliance	Styron MACT Consolidated Report - Subparts H, U & JJJ
07/15/2014	Environmental Audit Notification	Compliance	EUB7 - Notification of an environmental audit to assess vent emissions on equipment as part of a revised air permit to install application as well as overlapping requirements of RCRA and MACT regulations at the Environmental Operations Tank farm (EUB7).
07/09/2014	MACT (Part 63)	Compliance	EU12b-S1 - 40 CFR Part 63, Subpart MMM - Alternative monitoring request for the T-1001 scrubber - Request to monitor the pH of the scrubber influent as opposed to the scrubber effluent. Request to be reviewed and approved/disapproved by EPA.
07/09/2014	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report - 2nd Quarter 2014
07/01/2014	Release Reports	Compliance	EUB2-S1 - Release of 14 lbs. of methyl chloride from a leaking blind flange gasket off a manual valve. The duration of the release was approx. 15 minutes. No injuries or exposures were reported, no complaints or odors reported, and no emission limits were exceeded as a result of the release.
06/13/2014	MACT (Part 63)	Compliance	40 CFR Part 63, Subpart U - Written report of an exceedance of an emission limit during a malfunction - affirmative defense supporting documentation for a 36.7 lb. release of 1,3-butadiene to the air from a failed gasket on the bottom of a shell and tube condenser at EUB1-S2 on 4/26/14.

Activity Date	Activity Type	Compliance Status	Comments
05/30/2014	Other Non ROP	Compliance	First quarter 2014 QC report for ambient air monitoring program. Continued to show variation between toluene numbers for site 261110961 and 261110960, but site 261110961 is no longer consistently higher than site 261110960. Replacing canister and sampling tubing and equipment for site 261110961 early to mid September appears to have brought the two sites into much closer agreement. Data continues to be under investigation.
05/30/2014	Other Non ROP	Compliance	March Ambient Air Monitoring Program Report
05/29/2014	NESHAP (Part 61)	Compliance	EU35-S1 & EU93-S1 - Updated vinyl chloride NESHAP leak elimination plan approval request. Plan updated due to redefinition of a leak using a portable detector, redefinition of the Chemical Distribution facility closed vent system, and removal of several documentation details that are not required to be included.
05/28/2014	Stack Test		EU12b - HCl/Cl ₂ stack test for scrubber T-1001 under the PAI MACT (40 CFR Part 63, Subpart MMM). Average HCl/Cl ₂ emission concentration from scrubber was 0.6 ppmv. Limit is 20 ppmv. Average scrubber flow rate and pH was 10 gpm and 7.8, respectively.
05/15/2014	Environmental Audit Notification	Compliance	EU89-S1 - Notice of intent to conduct an environmental audit to assess compliance with the federal MACT standard requirements at the Ion Exchange Copolymer manufacturing facility at Dow's Michigan Operations site.
05/15/2014	Excess Emissions (CEM)	Compliance	32 Incinerator - CEMS/CERMS Quarterly Summary & Excess Emission Report - Total duration of excess emissions for SO ₂ , NO _x and O ₂ was 0% of the total source operating time. Total duration of CO excess emissions was 0.27% (5.83 hrs) of the total source operating time due to startup/shutdown of the incinerator. No waste was in the kiln at the time of these events.

Activity Date	Activity Type	Compliance Status	Comments
05/12/2014	MAERS	Compliance	Dow Chemical MAERS report certification. Styron LLC is certified seperately.
05/12/2014	MAERS	Compliance	Styron LLC MAERS report certification.
05/09/2014	MACT (Part 63)	Compliance	EUB2-S1 - Release of 37 lbs. of 1,3-butadiene and 0.5 lbs. of styrene from a failed gasket on a recycle condenser head on 4/16/14. The duration of the release was approx. 30 minutes. This report was immediate notification of an exceedance of an emission limit during a malfunction (affirmative defense - 40 CFR 63, Subpart U - P&R I MACT - 63.480(j)(4)(ii)). According to Dow, the SSMP provisions in subpart U were removed and this notification is required as part of an affirmative defense. Dow said that a violation occurred when they emitted a Group 1 stream to the air without control.
05/09/2014	Release Reports	Compliance	EUB1-S2 - Release of 37 lbs. of 1,3-butadiene and 0.5 lbs. of styrene from a failed gasket on a recycle condenser head on 4/26/14. The duration of the release was approx. 30 minutes. No injuries or exposures were reported, no complaints or odors reported, and no emission limits were exceeded as a result of the release.
05/06/2014	Environmental Audit Notification	Compliance	Notice of intent to conduct an environmental audit. The audit is to evaluate equipment identified as being in HAP service under the federal MACT standards. In particular, Dow will be assessing compliance with 40 CFR Part 63, Subparts H and UU. Dow may also evaluate compliance with 40 CFR Part 61, Supbart V as it pertains to LDAR.
05/05/2014	ROP Qrtly Cert	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report - The CGA data sheets attached to the report for both CEMS1 and CEMS2 units indicate the NOx and SO2 analyzers for both units passed the quarterly CGA.

Activity Date	Activity Type	Compliance Status	Comments
05/05/2014	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - February 2014 - 35 and 37 ug/m ³ of chloromethane reported for samples collected on 2/22/14 at sites 1E and 1W, respectively.
04/28/2014	ROP Annual Cert	Compliance	Dow Chemical's semi-annual Title V deviation report. 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. Regarding the deviation cited for EU13-S1 and FGPESTICIDES-S1 on page 6 or the report, J. Lang (AQD) informed Patty Worden and Kayla Peacock of Dow on 4/25/13 that an alternative monitoring request should be submitted to EPA, Region V for approval for the T-4605 steam stripper at 680 building.
04/28/2014	ROP SEMI 2 CERT	Compliance	Dow Chemical's semi-annual Title V deviation report. 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. Regarding the deviation cited for EU13-S1 and FGPESTICIDES-S1 on page 6 or the report, J. Lang (AQD) informed Patty Worden and Kayla Peacock of Dow on 4/25/13 that an alternative monitoring request should be submitted to EPA, Region V for approval for the T-4605 steam stripper at 680 building.
04/18/2014	MACT (Part 63)	Compliance	40 CFR Part 63, Subpart EEE - Modified Comprehensive Performance Test Plan - 32 Incinerator - This test plan was originally submitted on 6/25/13. Following comments from EPA, Region V on 2/26/14, the test plan was resubmitted. Appendix A and B of the revised test plan were not resubmitted as they did not change from the original plan.

Activity Date	Activity Type	Compliance Status	Comments
04/18/2014	MACT (Part 63)	Compliance	40 CFR Part 63, Subpart EEE - Comprehensive Performance Test Plan - 32 Incinerator - This test plan was not approved. The modified test plan received on 4/10/14 following comments from EPA was approved by the MDEQ-AQD on 4/16/14. Appendix A and B of the modified plan were not resubmitted on 4/10/14 as they did not change from the original plan.
04/16/2014	ROP Annual Cert	Compliance	Styron annual Title V deviation report. 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.
04/16/2014	ROP SEMI 2 CERT	Compliance	Styron - Semi-annual Title V deviation report. 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.
04/09/2014	NESHAP (Part 61)	Compliance	40 CFR 61, Subpart FF - annual benzene NESHAP waste report - Total annual benzene (TAB) quantity in waste for 2013 remains below 10 Mg/yr. Actual TAB quantity in waste in 2013 was 1.39 Mg/yr. The TAB for 2013 is approximately 3.1% less than reported in 2012. This is due to less benzene being received in the Dow Corning pipeline waste stream. 29 new streams were reported for 2013 and 13 streams from the 2012 report were removed. Styron is covered in this report.
04/03/2014	Release Reports	Compliance	EU32INCINERATOR-S1 - Sara Title III Release Notification Follow-up - Based on process knowledge, the release did not contain any vinyl chloride. Upon detection of the emergency vent opening, the process control system immediately shutdown all feeds to the incinerator and initiated a shutdown of the incinerator. No injuries or complaints were reported.

Activity Date	Activity Type	Compliance Status	Comments
04/03/2014	MACT (Part 63)	Compliance	Update to initial notification for 40 CFR Part 63, Subpart DDDDD (Boiler MACT) - Dow removed two units, EU94-G and EU94-H crackers, from the list of affected equipment as it was determined that the Boiler MACT is not applicable. According to the updated initial notification, the G and H crackers are used to convert the raw material to the final product and are therefore part of the MON MCPU (they function to produce the product). Since they are part of the MON MCPU, they are excluded from the Boiler MACT according to 63.7491 (h).
04/02/2014	Release Reports	Compliance	EURULE290-S1 - See comments for methyl chloride release report received on 3/27/14.
04/02/2014	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - January 2014 - VOC analysis on 1/11/14 at site AIRS# 261110961 were void due to sampling equipment failure. Samples were successfully collected on the next scheduled date (1/17/14).
04/01/2014	Environmental Audit Notification	Compliance	EU11-S1 - Environmental Audit Notification - Environmental Audit to assess compliance with Michigan Air Pollution Control Rules.
04/01/2014	Release Reports	Compliance	EU35-S1 - Less than 1/10 lb. of vinyl chloride was emitted from the SARAN TTU following a surge flow increase at the TTU. The event occurred two separate times on 3/5/14 starting at 3 am. The duration of the first event was 7 minutes, and about an hour later, it happened again for approximately 8 minutes. The increase in vinyl chloride emissions was picked up by the TTU exhaust gas emissions monitoring system. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
03/31/2014	ROP Other	Compliance	Michigan Operations fugitive dust control program - updated map - changes noted are updates to multiple temporary aggregate piles.

Activity Date	Activity Type	Compliance Status	Comments
03/31/2014	Environmental Audit Disclosure	Compliance	Styron - Environmental Audit Disclosure - No documentation for one process line audited that meets <300 hrs/yr service exemption from fugitive monitoring. Weekly visual inspection procedure for pumps and agitators with dual mechanical seals did not include required leak criteria information. All inspections completed as required but information within the procedure did not fully meet regulatory requirement. Corrective action submitted with disclosure adequately resolves non-compliance issues. Non-compliance issues were included in Styron's annual Title 5 deviation report.
03/31/2014	Environmental Audit Disclosure	Compliance	EU02-S1, EU13-S1, EU86-S1, EU01-S1, FGRULE290-S1 (1028 Bldg.) & EUB5-S1 - Failed to include certain flex hose fugitive components in MACT LDAR program or failed to document the basis for exemption of flex hose fugitive components from the MACT LDAR program. Flex hoses were added to LDAR program as appropriate. Documentation of exemption has been created for hoses that are exempt from LDAR. Site LDAR program document has been updated to clarify the "in OHAP service <300 hrs/yr" exemption requirements. Corrective action submitted with disclosure adequately resolves non-compliance issue. Non-compliance issue was included in Dow's annual Title 5 deviation report.
03/28/2014	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report - 1st Quarter. All batches of suspension resin produced during the reporting period were stripped in compliance with the conditions of the equivalency agreement granted on 10/28/87.

Activity Date	Activity Type	Compliance Status	Comments
03/28/2014	Release Reports	Compliance	EURULE290-S1 - On 3/17/14, approximately 14 lbs. of methyl chloride was released to the air from two non-routine vents associated with a unit operation. There is also a possibility that some amount may have also volatilized from waste water over an additional period of time, but Dow does not believe that this would materially change the outcome. The duration of the release was approximately 60 minutes. The leak was caused by a manual valve failure (leak through) on the vent line of the storage tank. This allowed methyl chloride to be released into a knock out pot in the vent line which was being washed to sewer during that period of time per standard operation. The process was immediately shut down and manual valves closed isolating the leaking valve to mitigate the event and facilitate repair. The pipe in which the defective valve was located was deemed unnecessary and was isolated from service. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
03/28/2014	ROP Other	Compliance	Salzburg Landfill fugitive dust control program - updated map - No changes were made to the map during the semi-annual period.
03/28/2014	Release Reports	Compliance	EU11-S1 - Dow released approximately 5 lbs. of chloroacetic acid to the air for approximately 180 minutes from a pop valve on an exchanger on 2/24/14. The release was discovered by personnel while doing rounds. Building personnel mitigated release by shutting down the circulation in the exchanger. Material released went to diked containment. Operations washed down the area to onsite WWTP. It is presumed that no emission limits were exceeded as a result of the release. No injuries or complaints were reported.
03/26/2014	Stack Test Observation	Compliance	EU12b-S1 - 40 CFR Part 63, Subpart MMM Stack Test - HCl/Cl2 - T-1001 Scrubber

Activity Date	Activity Type	Compliance Status	Comments
03/17/2014	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW. rfo
03/17/2014	Other	Compliance	40 CFR 63 MON SEMI-ANNUAL REPORT REVIEW. rfo, 1/28/15. Unable to print MON Report in correct format in MACES, see attached report in Word.
03/17/2014	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
03/17/2014	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW. rfo 12/17/14
03/17/2014	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW. RFO 12/22/14
03/17/2014	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW
03/17/2014	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW
03/17/2014	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW. rfo 1/6/15
03/17/2014	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW. rfo 1/5/15
03/17/2014	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW. rfo 1/5/15
03/17/2014	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW. rfo 1/5/2014
03/15/2014	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW

Activity Date	Activity Type	Compliance Status	Comments
03/03/2014	Release Reports	Compliance	SARA Title III Release Notification Follow-Up - On 2/17/14, approximately 6 lbs. of 1,3-butadiene was released to the air for approx. 90 minutes from a partially opened valve on a rail car at the rail shop (EU/FG - not applicable). Upon discovery, the valve was closed and capped which stopped the leak. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
02/27/2014	Other Non ROP	Compliance	Fourth Quarter 2013 Quality Control Report for Ambient Air Monitoring Program - Continued to have larger toluene numbers for Site B than for Site A, although not to the extent noted in the 2nd and 3rd quarters of 2013. Replacing the canister and sampling tubing and equipment for Site B early to mid September appears to have brought the two sites into much closer agreement. Data continues to be under investigation by Dow.
02/27/2014	Release Reports	Compliance	EU94-S1 - Release of 0 lbs. of benzene and 38 lbs. of naphthalene to the air on 2/14/14 for 6 hrs., 28 minutes. Release occurred when a water line on the bottom of an oil/water separator froze, pushing material out of the top of the tank through the vent stack. Liquid was contained in the tank's diked containment area and was vacuumed up and transferred to a tanker truck for recovery. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
02/25/2014	ROP Other	Compliance	Ozone depleting substances annual 2nd party transformation report. Material was purchased for use as a feedstock in chemical manufacturing. The product purchased was 2-Bromo-1,1-Difluoroethane or BDFE.

Activity Date	Activity Type	Compliance Status	Comments
02/25/2014	Stack Test	Compliance	40 CFR 63, Subpart MMM Site-Specific Test Plan - HCl/Cl ₂ performance testing on the T-1001 scrubber at the 948 Bldg. 2,4-D Process Unit (EU12B-S1). This test will be used to establish control device parameter operating limits and to demonstrate compliance with the 20 ppmv outlet concentration limit for HCl/Cl ₂ under the MACT.
02/03/2014	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO ₂ , NO _x) Quality Assurance Report
02/03/2014	Excess Emissions (CEM)	Compliance	CEMS/CERMS Quarterly Summary and Excess Emission Report for 32 Incinerator Complex
02/03/2014	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - November 2013
01/27/2014	Environmental Audit Notification	Compliance	Environmental Audit Notification - Audit to assess compliance at all facilities within Dow's Michigan operations site for control devices that are identified as "small" per the applicable federal MACT standard.
01/27/2014	Environmental Audit Notification	Compliance	Environmental Audit Notification - Audit to assess compliance at all facilities within Dow's MI operations site for RMP applicability due to interconnectivity from process systems per the Federal EPA RMP rule.
01/16/2014	Release Reports	Compliance	EU35-S1 - Approximately 0.1 lbs of vinyl chloride released to the air for approx. 4 hours 33 minutes on 1/2/14 from an agitator seal on a reactor. Release was detected by the in house monitoring system. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
01/02/2014	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - October 2013. Samples collected for VOC analysis on 10/25/13 at site AIRS# 261110961 were void due to sampling equipment failure. Samples were successfully collected on the next scheduled date.

Activity Date	Activity Type	Compliance Status	Comments
12/30/2013	MACT (Part 63)	Compliance	EU12-S1 - 40 CFR Part 63, Subpart MMM - Alternative monitoring request for initial compliance demonstration for process condensers. This request was submitted to EPA for review and approval.
12/30/2013	MACT (Part 63)	Compliance	EU18-S1 - 40 CFR Part 63, Subpart FFFF - Precompliance report and notification of process change. Report revised to include a new formulated product (GF-2687) and to explain that the process will continue to use the engineering assessment method to calculate uncontrolled HAP emissions. No new equipment or vents were installed. Report submitted to EPA for review and approval.
12/26/2013	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report: 4th Quarter 2013
12/19/2013	MACT (Part 63)	Compliance	EU01-S1 - Bldg. 1 40 CFR Part 63, Subpart MMM performance test waiver and request to use prior performance test for compliance. This request was sent to EPA, Region 5 for review and approval.
12/18/2013	Release Reports	Compliance	EU12-S1 - Approximately 1 lb. of 2,4-Dichlorophenol released to the air for approx. 2 hours 45 minutes on 12/1/13 from a ruptured frangible. No emission limits were exceeded as a result of the release. No injuries or complaints were reported.
12/18/2013	Environmental Audit Notification	Compliance	Notice of intent to conduct environmental audits at various plants onsite.
12/04/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - September 2013
12/04/2013	Other Non ROP	Compliance	Third Quarter 2013 Quality Control Report for the Ambient Air Monitoring Program
12/04/2013	Environmental Audit Notification	Compliance	Notice of intent to conduct an environmental audit. The audit will be comprehensive in nature and will focus on the Ion Exchange manufacturing process currently represented by tables EUANION_XCHG, EU88, FG963THROX, and FGRULE290 for CMMC and Fine Mesh Processes.

Activity Date	Activity Type	Compliance Status	Comments
12/02/2013	Release Reports	Compliance	EU91-S1 - Approximately 45 lbs. of 1,3-butadiene was released to the air for approx. 10 minutes on 11/17/13 from a crack in a weld of a pipe on the discharge of a process pump. This pump experienced a similar release event on 10/5/13. The pump has been taken out of service and has been sent to the manufacturer for detailed analysis. Dow believes that something internal to the pump is generating a harmonic which is causing the failure. No injuries or complaints were reported as a result of the release. Table EU91-S1 in the ROP limits 1,3-butadiene emissions from the process to 20 lbs/yr (excluding fugitive emissions).
11/08/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO ₂ , NO _x) QA Report
11/08/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS and CERMS Report
11/08/2013	ROP Qrtly Cert	Compliance	Quarterly NO _x Report for Site Standby Boilers (0401 & 0402)
11/08/2013	Stack Test	Compliance	32 Incinerator RATA Report for CO, O ₂ , NO _x and SO ₂ CEMS
11/07/2013	ROP Semi 1 Cert	Compliance	Dow Chemical semi-annual Title V deviation report. 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.
11/07/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - August 2013

Activity Date	Activity Type	Compliance Status	Comments
11/06/2013	Release Reports	Compliance	EU91-S1 - Approximately 70 lbs. of 1,3-Butadiene released to the atmosphere due to a crack in a weld of a pipe on the discharge of a process pump on 10/15/13. Duration of the release was approximately 10 minutes. Release was picked up by monitors located within the production facility boundaries used to detect flammable substances. No injuries were reported. No complaints were received from the public by the AQD. Table EU91-S1 in the ROP limits 1,3-Butadiene emissions from the process to 20 lbs/yr (excluding fugitive emissions). Dow provided action taken to prevent recurrence in an email dated 10/31/13.
10/29/2013	MACT (Part 63)	Compliance	Dow Chemical - MACT Consolidated Report
10/29/2013	MACT (Part 63)	Compliance	Styron LLC - MACT Consolidated Report
10/24/2013	MACT (Part 63)	Compliance	Styron LLC - consolidated semi-annual MACT report
10/24/2013	MACT (Part 63)	Compliance	Dow Chemical - Consolidated semi-annual MACT report
10/24/2013	Release Reports	Compliance	EU89-S1 - Release of 2,2,4-Trimethylpentane on 10/3/13. Release duration was approximately 25 hours. Approximately 150 - 300 lbs. released to air. No permitted (PTI 190-12) emission limits exceeded. No injuries or complaints reported.
10/24/2013	Release Reports	Compliance	EU12-S1 - Release of 2,4-Dichlorophenol on 10/12/13. <5 lbs. released to air from a diked containment area. Table EU12-S1 in the ROP limits VOC emissions from the process to 40.3 pph. It's assumed that this release did not exceed permitted limits. No complaints or injuries were reported due to the release.

Activity Date	Activity Type	Compliance Status	Comments
10/24/2013	Release Reports	Compliance	EU9-S1 - 2,4-Dichlorophenol (DCP) released to air on 10/14/13. Duration of release approx. 30 minutes. Less than 1 lb. released to air from a diked containment area. Table EU9-S1 in ROP limits emissions from category 5 pollutants with an annual avg. time to 12,000 lbs/yr. and VOC emissions to 1,000 lbs/mo. Therefore, no emission limits were exceeded due to the release. No injuries or complaints were reported.
10/24/2013	ROP Semi 1 Cert	Compliance	STYRON LLC - ROP semi-annual deviation report. 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. It should also be noted that some of the deviations listed in this report were also reported to EPA under the ELP compliance status report.
10/24/2013	ROP Semi 1 Cert	Compliance	STYRON LLC - resubmitted certification form to include correct dates.
10/18/2013	Release Reports	Compliance	Approximately 0.2 lbs. of vinyl chloride was released to the air on 10/9/13 for a maximum of 30 minutes from EU35-S1. The release was from a small, threaded fitting. The equipment was shutdown and the fitting was tightened eliminating the leak. Vinyl chloride emission limits in the ROP for EU35-S1 are vent specific and do not address leaks or fugitive emissions. Therefore, in J. Lang's (AQD) opinion, a violation of the vinyl chloride emission limit did not occur and a violation notice was not issued.
10/16/2013	MACT (Part 63)	Compliance	EU01-S1 - 40 CFR Part 63, Subpart MMM - Precompliance Plan - Alternative monitoring request to monitor the liquid run down temperature of the process condensers instead of the exhaust gas temperature.
10/14/2013	ROP Other	Compliance	Michigan Operations Fugitive Dust Control Program - Updated Facility Map

Activity Date	Activity Type	Compliance Status	Comments
10/14/2013	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report - 3rd Quarter 2013. No leaking valves were found during annual leak monitoring. The total number of valves tested during the period was 499.
10/14/2013	Environmental Audit Disclosure	Compliance	Audit findings reported for Methocel (EUB2-S1), and the Dow Auto Brake Fluid & Beta Plant (Rule 290 Exempt). Findings were minor in nature and have been resolved. As a result, a violation notice was not issued.
10/14/2013	Environmental Audit Notification	Compliance	EU01-S1 - Audit will evaluate compliance with the RMP regulations.
10/14/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - July 2013
10/10/2013	ROP Other	Compliance	Salzburg landfill fugitive dust control program - updated map
09/25/2013	Release Reports	Compliance	EU35-S1 - On 9/13/13 an area monitor alerted for vinyl chloride and Dow reported accordingly. Based on the subsequent investigation, no leak of vinyl chloride could be identified. The monitor alerted ~5 min after a natural gas valve was opened in the vicinity of the monitor and may have responded to transient, extremely low concentrations of natural gas.
09/17/2013	Scheduled Inspection	Non Compliance	Scheduled inspection at Styron of EU33-S2, EUB1-S2, FGRULE290-S2 & FGCOLDCLEANERS-S2
09/16/2013	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT REVIEW. Report submitted by Styron LLC Inc.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW. Report submitted by Styron LLC. Inc.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW
09/16/2013	Other	Compliance	40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW

Activity Date	Activity Type	Compliance Status	Comments
09/16/2013	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW
09/16/2013	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART GGG - SEMI-ANNUAL REPORT REVIEW
09/16/2013	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
09/16/2013	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW
09/16/2013	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW.
09/16/2013	Other	Compliance	40 CFR 63 Consolidated MACT Semi-Annual Report Review.
09/16/2013	Other	Compliance	40 CFR 63, SUBPART MMM(PAI) - NOCS ATTACHMENT #3 Confidential Business Information Supplement received 9/16/2013.
09/13/2013	Complaint Investigation	Compliance	Follow up to complaint no. C-13-01494
09/04/2013	Telephone Notes	Non Compliance	EU01-S1 - PAI MACT non-compliance issue
09/03/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - June 2013
09/03/2013	Other Non ROP	Compliance	Second Quarter 2013 Quality Control Report for Ambient Air Monitoring Program - In table 3 of the report, the toluene numbers for site 261110961 are consistently larger than those for site 261110960. This data is still under investigation by Dow.
08/28/2013	Environmental Audit Disclosure	Compliance	EU11 (CAC Process) - MON violation discovered during an environmental audit from 2/25/12 - 6/30/13. Audit uncovered several errors in identification of MACT storage tanks, vent streams, waste water streams, and heat exchangers. All applicable streams were being controlled as required, therefore no environmental impact occurred.

Activity Date	Activity Type	Compliance Status	Comments
08/28/2013	Environmental Audit Disclosure	Compliance	FGRULE290 (DHEP/DCEP) - 1028 Building - MON violation discovered during an environmental audit from 5/20/13 - 6/30/13. Audit uncovered a wastewater stream listed as V258 siphonate was properly identified as Group 1, and the selected compliance option was to incinerate this wastewater stream. However, due to a misunderstanding at the facility level, a portion of the stream was sent to Dow's wastewater treatment plant rather than incinerated. Dow stated the total emissions would not have exceeded what is allowed by use of the reference control technology. However, emissions would have been smaller if the entire stream were incinerated as intended.
08/28/2013	Environmental Audit Notification	Compliance	FGRULE290 - Dow Automotive Plants (1037, 304 and 100 Buildings) - Intent of audit is to assess compliance with the Michigan Air Pollution Control rules and federal MACT standard requirements at the Dow Automotive Glass Bonding, BETAMATE, and Brake Fluids manufacturing facilities at Dow.
08/28/2013	Release Reports	Compliance	EURULE290 HCl release - 1028/1029 Bldg. - A small HCl leak on the bottom of a process column on 8/1/13 for less than 1 hour. Column isolated and process shutdown to mitigate leak. No injuries or exposures were reported. No complaints or odors were reported. Release originally reported as chlorine. Later it was determined that HCl was released instead of chlorine. As a result, quantity reported (as chlorine) was "none". Spoke with B. Gaudreau of Dow on 8/28/13 and he said that no emission limits were exceeded based on the amount of HCl that was released.

Activity Date	Activity Type	Compliance Status	Comments
08/20/2013	Environmental Audit Disclosure	Compliance	EU11 (CAP) - MON violation discovered during an environmental audit conducted from 5/25/12 through 6/30/13. Audit uncovered errors in applicability and documentation of the rule. The following were not included in the original MON MACT assessment: one group 2 storage tank; two exempt storage tanks; one process condenser; one group 2 batch vent; one group 2 hydrogen halide vent, and several pieces of LDAR affected equipment. According to Dow, all applicable streams were being controlled as required; therefore there was no environmental impact.
08/06/2013	Scheduled Inspection	Compliance	EU11-S1 Schedule Inspection
08/01/2013	Release Reports	Compliance	EU35-S1 - Dow thought they had a vinyl chloride (VC) release on 7/18/13 when an in-house area monitoring system alarmed. Upon further investigation, Dow does not believe VC was released and that it was a false alarm.
08/01/2013	ROP Other	Compliance	Quarterly NOx Report for Site Standby Boilers (0401 & 0402)
07/31/2013	Other Non ROP	Compliance	May 2013 - Ambient Air Monitoring Program Report - The samples collected for VOC analysis on 5/16/13 at sites AIRS# 261110959 and on 5/22/13 at # 261110955 were void due to sampling equipment failures. Samples were successfully collected on the next scheduled dates.
07/31/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report
07/31/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS & CERMS Report - No SO2, NOx or O2 excess emissions or monitor downtime reported. CO excess emissions were 0.38% of the total operating time due to startup/shutdown & no waste was in the kiln at the time of the event. No CO monitor downtime reported.
07/09/2013	Scheduled Inspection	Compliance	EU35-S1 Scheduled Inspection

Activity Date	Activity Type	Compliance Status	Comments
07/08/2013	ROP Annual Cert	Compliance	Dow Chemical annual Title V deviation report. 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.
07/08/2013	ROP SEMI 2 CERT	Compliance	Dow Chemical semi-annual Title V deviation report. 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.
07/01/2013	Environmental Audit Disclosure	Compliance	Voluntary environmental audit disclosure - There were no air related findings in this report.
07/01/2013	ROP Annual Cert	Compliance	Styron LLC - 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.
07/01/2013	ROP SEMI 2 CERT	Compliance	Styron LLC - 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.
06/27/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - April 2013
06/27/2013	Environmental Audit Notification	Compliance	Notice of intent to conduct an environmental audit to assess flex hoses in HAP service for MACT compliance.
06/24/2013	MACT (Part 63)	Compliance	Initial Notification of Applicability - 40 CFR Part 63, Subpart ZZZZ - Engine located at 34 building used for emergency (power loss) purposes.
06/24/2013	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report: 2nd Quarter 2013
06/24/2013	MACT (Part 63)	Compliance	Styron - Initial notification for 40 CFR 63, Subpart DDDDD - Subject emission units are: EU30-S2, EU33-S2 & EU290-1300-S2

Activity Date	Activity Type	Compliance Status	Comments
06/24/2013	MACT (Part 63)	Compliance	40 CFR Part 63, Subpart ZZZZ - Initial Notification - Engine operated by the Energy and Utilities Department, located in 499 Building, and used for emergency (power loss) purposes.
06/24/2013	MACT (Part 63)	Compliance	Initial notification for 40 CFR 63, Subpart DDDDD - Subject emission units are: EUBOILER21-S1, EUBOILER22-S1, EUBOILER200A-S1, EUBOILER200B-S1, EU94-G-S1, EU94-H-S1, & EUR290-1233-S1
06/24/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - March 2013
06/24/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - February 2013
06/24/2013	Other Non ROP	Compliance	First Quarter 2013 Quality Control Report for the Ambient Air Monitoring Program
06/24/2013	Environmental Audit Notification	Compliance	Notice of intent to conduct an environmental audit. The audit will assess compliance with 40 CFR 63, Subpart FFFF at the process unit identified as FG290-1028 Herbicides Plant (DHEP DCEP).
06/24/2013	Environmental Audit Notification	Compliance	Notice of intent to conduct an environmental audit. The audit is to assess process operating parameter monitoring, control, and recordkeeping relative to the ROP requirements. The audit will be comprehensive in nature and will impact all emission units listed within Section 1 of the Michigan Operations source, A4033.
06/24/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO ₂ , NO _x) Quality Assurance Report
06/24/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS and CERMS Report
06/12/2013	Scheduled Inspection	Compliance	EU18-S1 Scheduled Inspection
05/10/2013	MAERS	Compliance	MAERS Report Certification - Styron
05/10/2013	MAERS	Compliance	MAERS Report Certification
05/07/2013	Scheduled Inspection	Compliance	EU15-S1 - Scheduled Inspection
04/24/2013	Scheduled Inspection	Compliance	EUB5-S1 - Scheduled Inspection
04/12/2013	NESHAP (Part 61)	Compliance	Annual Benzene NESHAP Waste Report
04/12/2013	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report: 1st Quarter 2013

Activity Date	Activity Type	Compliance Status	Comments
04/12/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program - January 2013
04/12/2013	ROP Other	Compliance	Salzburg Landfill Fugitive Dust Control Program - Updated Map
04/12/2013	ROP Other	Compliance	Michigan Operations Fugitive Dust Control Program - Updated Facility Map
03/21/2013	Scheduled Inspection	Compliance	EU14-S1 (DEDS Process) - Scheduled Inspection
03/15/2013	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT REVIEW. Report submitted by Styron LLC Inc.
03/15/2013	Other	Compliance	40 CFR 63, SUBPART NNNN - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REVIEW REPORT
03/15/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW.
03/15/2013	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other		40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART HHHH - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART GGG - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART MMM - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART 63 - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other	Compliance	40 CFR 63, SUBPART GGGG - SEMI-ANNUAL REPORT REVIEW
03/15/2013	Other		40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW.
03/15/2013	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT REVIEW. Report submitted by Styron LLC Inc.
03/15/2013	Other	Compliance	40 CFR 63, Subpart FFFF - Combined MON Sem-Annual Report Review for 7/1/13 - 12/31/13 Reporting Period.

Activity Date	Activity Type	Compliance Status	Comments
03/12/2013	Release Reports	Compliance	EU11-S1 - Less than 20 lbs. of monochloroacetic acid was released to the air from a leaking transfer line for less than 1 hr. on 2/28/13. Line was isolated and repaired. Leaked material was contained within the diked area below the line & facility personnel cleaned up the material. No injuries, exposures, complaints or odors were reported. There were no emission limit exceedances as a result of the release.
03/05/2013	Scheduled Inspection	Compliance	EU31-S2 & FGSTYRENICSHTRS -S2 - Scheduled Inspection
02/28/2013	Environmental Audit Disclosure	Compliance	EU89-S1 - Dow discovered during an audit that they were exceeding their lb/mo VOC limit. Dow has since resolved the issue by obtaining a new PTI for the process.
02/28/2013	ROP Other	Compliance	Annual Report of Second-Party Transformation for Ozone Depleting Substances
02/28/2013	Other Non ROP	Compliance	December 2012 Ambient Air Monitoring Program Report
02/28/2013	Other Non ROP	Compliance	4th Quarter 2012 Quality Control Report for the Ambient Air Monitoring Program
02/25/2013	Release Reports	Compliance	EUB1-S2 (Styron LLC) - On 3/3//13, Styron released less than 7 lbs. of 1,3-butadiene to the air from a frangible for approximately 3 minutes. No injuries, exposures, complaints or odors were reported as a result of the event. In addition, no emission limits were exceeded.
02/06/2013	Release Reports	Compliance	EU35-S1 - Two separate releases events from a compressor on 1/27/13 at 3:15 pm and 7 pm. Total vinyl chloride emitted was approx. 3 lbs. The duration of each release event was approx. 30 minutes each. No injuries, exposures, complaints or odors were reported. There were no emission limit exceedances as a result of the release.
02/05/2013	Scheduled Inspection	Non Compliance	Dow Automotive Rule 290 Inspection (Bldg. Nos. 304 & 1037)
02/04/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program - November 2012
02/04/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report

Activity Date	Activity Type	Compliance Status	Comments
02/04/2013	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS and CERMS Report
01/29/2013	Release Reports	Compliance	EU12-S1 - <10 lbs of 2,4-Dichlorophenol released at ~1:48 a.m on 1/18/13 for approximately 12 days. Nitrogen supply to the vessel was shut off and the vessel was isolated to stop the leak. The ruptured frangible was replaced. No injuries, exposures, complaints or odors were reported. There were no emission limit exceedances as a result of the release.
01/24/2013	Release Reports	Compliance	EU35-S1 - < 0.5 lbs. of vinyl chloride released to the air on 1/15/13 for 29 minutes due to a leaking valve. The valve was isolated to stop the leak and the packing nut on the valve was adjusted to repair it. No injuries, exposures, complaints or odors were reported. There were no emission limit exceedances as a result of the release.
01/24/2013	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - October 2012
01/24/2013	Environmental Audit Notification	Compliance	EU12-S1 - Notice of intent to conduct an environmental audit. Conduct a PAI MACT compliance assessment of the 2,4 D process at 948 building.
01/22/2013	Scheduled Inspection	Compliance	B100-FG290-1 (Dow Automotives - Urethanes) & B100-FG290-2 (Dow Automotive - Primers (polar & non-polar)) - Scheduled Inspection
01/15/2013	Telephone Notes	Compliance	vinyl chloride release to air
01/08/2013	Scheduled Inspection	Compliance	EU13-S1 - Scheduled Inspection
01/08/2013	Release Reports	Compliance	EU35-S1 - < 0.5 lbs. of vinyl chloride released to the air on 12/29/12 for approximately 10 minutes due to a leaking gasket. The fasteners on the gasket were tightened as appropriate to stop the leak. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
12/27/2012	MACT (Part 63)	Compliance	STYRON - Semiannual MACT report for Subparts H, U and JJJ
12/27/2012	MACT (Part 63)	Compliance	Dow Chemical Semiannual Consolidated MACT Report
12/27/2012	MACT (Part 63)	Compliance	Semi-annual consolidated MACT report

Activity Date	Activity Type	Compliance Status	Comments
12/26/2012	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report - 4th Quarter 2012
12/19/2012	Release Reports	Compliance	EU12-S1 - <2 lbs of 2,4,6-Trichlorophenol released to the air due to a small pipeline crack on 12/8/12 for approx. 4 hours. The pipeline was cleared of material to stop the leak. Affected section of piping was replaced. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
12/13/2012	Scheduled Inspection	Compliance	FG858TOX-S1 - Scheduled Inspection
12/11/2012	Telephone Notes	Compliance	EU12-S1 (948 Bldg.) - R912 Report
12/04/2012	Environmental Audit Notification	Compliance	EUB5-S1 (Ethocel) - Notice of Intent to Conduct an Environmental Audit
11/28/2012	Scheduled Inspection	Non Compliance	EU89-S1 (Copolymer Process) Scheduled Inspection
11/21/2012	Release Reports	Compliance	EU93-S1 - <0.001 lbs of vinyl chloride released to the air on 11/16/12 for approx. 45 minutes due to a leaking flange connection. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
11/21/2012	Release Reports	Compliance	Spill occurred on 11/8/12 for approx. 30 minutes during a planned transfer between R284 exempt storage tanks. Due to cold temps, a failed impedance heater allowed a section of piping to drop below the freezing point of the sodium hydroxide solution. The frozen material obstruction caused the pump system to fail. The leak was captured and completely contained within the storage tank's secondary containment system which prevented material from escaping to the environment. The material was collected from the containment area and sent to Dow's on-site waste disposal facility. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.

Activity Date	Activity Type	Compliance Status	Comments
11/21/2012	Release Reports	Compliance	EU35-S1 - On 11/10/12, < 0.1 lb of vinyl chloride was released to the air for approx. 10 minutes due to a valve leak. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
11/20/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - September 2012
11/20/2012	Other Non ROP	Compliance	3rd Quarter 2012 Quality Control Report for the Ambient Air Monitoring Program
11/16/2012	Environmental Audit Notification	Compliance	Notice of intent to do an environmental audit for various emission units at Dow.
11/16/2012	Telephone Notes	Compliance	PEAS #5659 - Release vinyl chloride
11/14/2012	Telephone Notes	Compliance	EU89-S1 - Exceedance of lb/mo VOC emission limit
11/07/2012	Scheduled Inspection	Non Compliance	EU02-S1 (Sulfoxaflo) - Scheduled Inspection - Non-Compliance issue has to do with emission limit exceedances due to unplanned events (i.e., loss of primary containment events)
11/05/2012	Environmental Audit Disclosure	Compliance	Environmental Audit Disclosure
11/01/2012	Release Reports	Compliance	~1 lb. of acrylonitrile was released to the air on 10/10/12 from EU33-S2 for approximately 15 minutes when a waste system pump developed a small leak. The material was captured by the system's secondary containment. Absorbent material was applied and the material was removed from secondary containment and sent to on-site waste management facility for disposal. The pump was repaired. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
11/01/2012	Release Reports	Compliance	~10 lbs. of ammonia was released to the air on 10/19/12 for approximately 270 minutes from a chiller at a Rule 290 emission unit due to a small hole that developed as a result of equipment failure. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.

Activity Date	Activity Type	Compliance Status	Comments
11/01/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - August 2012
11/01/2012	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS and CERMS Report
11/01/2012	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) QA Report
11/01/2012	ROP Other	Compliance	Quarterly NOx Report for Site Standby Boilers (Boiler Nos. 0401 and 0402)
11/01/2012	CEM RATA	Compliance	32 Incinerator Complex RATA Report (CO, O2, NOx and SO2 CEMS)
10/15/2012	ROP Semi 1 Cert	Compliance	Dow Chemical Semi-Annual ROP Deviation Report (reporting period 1/1/12 - 6/30/12)
10/15/2012	Other	Compliance	Dow Chemical Title V Semi-Annual Deviation Report (1/1/12-6/30/12)
10/11/2012	Environmental Audit Notification	Compliance	EU54-S1 (Copolymer Pilot Plant) - Audit vent emissions from equipment.
10/11/2012	Environmental Audit Notification	Compliance	EU89-S1 (Copolymer Facility) - Audit vent emissions from equipment.
10/11/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - July 2012
09/26/2012	Scheduled Inspection	Compliance	FGSARANTTU-S1 - scheduled compliance inspection
09/25/2012	ROP Semi 1 Cert	Compliance	Styron LLC - Semi-Annual ROP Deviation Report - No deviations were reported for the reporting period.
09/24/2012	Release Reports	Compliance	EU35-S1 - On 9/6/12, less than 1/2 pound of vinyl chloride was released to the air for approximately 30 minutes from a small vapor leak at a connection on a shot-pot. The leak was stopped by the installation of a new gasket and blind flange. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
09/24/2012	NESHAP (Part 61)	Compliance	Vinyl Chloride NESHAP Report - 3rd Quarter 2012
09/17/2012	Other	Compliance	40 CFR 63, Subpart MMM - Semi-Annual Report Review Report.
09/17/2012	Other	Compliance	40 CFR 63, SUBPART GGGGG - SEMI-ANNUAL REPORT REVIEW

Activity Date	Activity Type	Compliance Status	Comments
09/17/2012	Other	Compliance	40 CFR 63, SUBPART EEE - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63 SUBPART FFFF - SEMI-ANNUAL MON CONSOLIDATED REPORT REVIEW.
09/15/2012	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART DD - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART GGG - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART NNNNN - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW.
09/15/2012	Other	Compliance	40 CFR 63, SUBPART HHHHH - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART UUUU - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW
09/15/2012	Other	Compliance	40 CFR 63, SUBPART G - SEMI-ANNUAL REPORT REVIEW
09/14/2012	Other	Compliance	40 CFR 63, SUBPART JJJ - SEMI-ANNUAL REPORT REVIEW for Styron LLC Inc Michigan Operations.
09/14/2012	Other	Compliance	40 CFR 63, SUBPART U - SEMI-ANNUAL REPORT REVIEW for Styron LLC Inc Michigan Operations.
09/14/2012	Release Reports	Compliance	EUB5-S1 - On 8/29/12 for approximatley 90 minutes, Dow released 10 lbs. of toleue, 14 lbs. of ether, and 7 lbs. of ethyl chloride to the air from a vapor leak at a flanged connection on a reactor. There were no emission limit exceedances as a result of the release. No complaints or injuries were reported.
09/13/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - June 2012

Activity Date	Activity Type	Compliance Status	Comments
09/13/2012	Other Non ROP	Compliance	Second quarter 2012 quality control report for ambient air monitoring program
09/13/2012	MACT (Part 63)	Compliance	Request for alternative monitoring method to comply with 40 CFR Part 63, Subpart HHHHHHH (PVC MACT)
09/12/2012	Scheduled Inspection	Compliance	EU12-S1 (Phenoxy Herbicide Process) Scheduled Inspection
09/06/2012	Telephone Notes		PEAS Incident 5387
08/29/2012	Scheduled Inspection	Compliance	EU86-S1 Scheduled Inspection
08/23/2012	Release Reports	Compliance	EU35-S1 - On 7/31/12 for approximately 5 minutes, Dow released less than 0.7 lbs. of vinyl chloride from a failed gasket on a flanged connection. No ROP emission limits were violated as result of this release. No complaints or injuries were reported due to the release.
08/23/2012	Environmental Audit Disclosure	Compliance	Voluntary Environmental Audit Disclosure
08/23/2012	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CERMS (SO2, NOx) Quality Assurance (QA) Report
08/23/2012	ROP Other	Compliance	Quarterly NOx Report for Site Standby Boilers (boiler nos. 0401 & 0402)
08/23/2012	Release Reports	Compliance	EU12-S1 - Less than 0.5 lbs. of 2,4,6-trichlorophenol released to the atmosphere from a hairline crack in piping on 8/6/12 for approximatley 15 minutes. No complaints were received and no ROP emission limits were exceeded as a result of the release.

Activity Date	Activity Type	Compliance Status	Comments
08/23/2012	Release Reports	Compliance	EUANION_XCHG-S1 - On 8/9/12 for approximately 76 minutes, Dow released approximately 4 lbs. of CMME to the air. The ROP limits VOC emissions from this emission unit to 4.3 lbs/hr. It's unknown as to whether or not this emission limit was exceeded, but it's assumed it was. The release occurred from two separate locations (i.e., location #1 was a leaking pipe, location #2 was a leaking flange). No complaints were reported due to the release. A violation notice for this event was not written as the release quantity was small, and the event itself does not appear to be a recurring situation for the emission unit.
08/15/2012	Scheduled Inspection	Compliance	EU10-S1 - Scheduled Inspection
08/01/2012	Scheduled Inspection	Compliance	EU82-S1 (VBC/BCB Process) - Scheduled Inspection
07/31/2012	Excess Emissions (CEM)	Compliance	32 Incinerator Complex Quarterly CEMS & CERMS Report
07/31/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program - May 2012
07/19/2012	Release Reports	Compliance	<30 lbs of CMME was released to the atmosphere from EUANION_XCHG-S1 on 6/20/12 for approximately 10 minutes. The ROP limits VOC emissions from this process to 4.3 lbs/hr. No complaints were received from the public regarding the release. In Ms. Lang's opinion, this is not a recurring release event. This release event was discussed with Chris Hare (AQD Supervisor). It was determined that a VN would not be written for the release at this time.
07/17/2012	Scheduled Inspection	Compliance	EU09-S1 - Scheduled Inspection
07/03/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - April 2012
06/27/2012	Scheduled Inspection	Non Compliance	EU54-S1 - Scheduled Inspection
06/18/2012	MACT (Part 63)	Compliance	Eu18-S1 - 40 CFR Part 63, Subpart FFFF - Request to use alternative group 2 batch vent recordkeeping.
06/18/2012	NESHAP (Part 61)	Compliance	Quarterly Vinyl Chloride NESHAP Report - 2nd Quarter 2012
06/11/2012	Scheduled Inspection	Compliance	FG954THROX-S1 & FG963THROX-S1 Scheduled Inspection

Activity Date	Activity Type	Compliance Status	Comments
06/07/2012	Environmental Audit Notification	Compliance	Notice of intent to do an environmental audit at EU11-S1 with regard to 40 CFR Part 63, Subpart FFFF.
06/07/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program - March 2012
06/07/2012	Other Non ROP	Compliance	First Quarter 2012 Quality Control Report for Ambient Air Monitoring Program
05/24/2012	Scheduled Inspection	Compliance	EU01-S1 - Scheduled Inspection
05/16/2012	Excess Emissions (CEM)	Compliance	32 Incinerator CEMS/CERMS Report
05/15/2012	MAERS	Compliance	Electronic notification received - MAERS 2011 Report (Dow Chemical & Styron)
05/14/2012	Release Reports	Compliance	<0.7 lbs of vinyl chloride was released to the air due to failed gaskets associated with knockout pot level transmitter flange connections. It does not appear that Dow exceeded any air emission limits as a result of the release. No complaints were reported as a result of the release.
05/14/2012	MACT (Part 63)	Compliance	Initial Notification - 40 CFR Part 63, Subpart HHHHHHH (Polyvinyl Chloride and Copolymers Production)
05/14/2012	Excess Emissions (CEM)	Compliance	32 Incinerator CERMS (NOx, SO2) QA Report
05/08/2012	Release Reports	Compliance	< 2 lbs. of phosgene released to the air when a flanged connection on the process vent line used to transport off-gas from the process unit to the thermal oxidizer developed a small leak. It does not appear that Dow exceeded any air emission limits as a result of the release. No complaints were reported as a result of the release.
05/08/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - February 2012
04/26/2012	Telephone Notes		PEAS call.
04/26/2012	Telephone Notes		
04/18/2012	Scheduled Inspection	Compliance	Scheduled inspection of EUANION_XCHG-S1 (Anion), FG963THROX-S1 (963 THROX) & EU88-S1 (Cation)
04/11/2012	NESHAP (Part 61)	Compliance	Annual Benzene NESHAP Waste Report

Activity Date	Activity Type	Compliance Status	Comments
04/10/2012	ROP SEMI 2 CERT	Compliance	Dow Chemical semi-annual Title V deviation report. 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.
04/10/2012	ROP Annual Cert	Compliance	Dow Chemical annual Title V deviation report. 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.
04/10/2012	Other	Compliance	Dow Chemical Title V Annual Deviation Report
04/04/2012	MACT (Part 63)	Compliance	Precompliance Report - 40 CFR 63, Subpart HHHHH - 100 Building
04/02/2012	Other Non ROP	Compliance	Ambient Air Monitoring Program Report - January 2012

Name: 

Date: 5/7/2017

Supervisor: 