

DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> MARATHON PETROLEUM COMPANY LP	<b>SRN :</b> A9831
<b>Location :</b> 1001 S Oakwood	<b>District :</b> Detroit
	<b>County :</b> WAYNE
<b>City :</b> DETROIT <b>State:</b> MI <b>Zip Code :</b> 48217	<b>Compliance Status :</b> Non Compliance
<b>Source Class :</b> MEGASITE	<b>Staff :</b> Jorge Acevedo
<b>FCE Begin Date :</b> 09/14/2014	<b>FCE Completion Date :</b> 9/14/2017
<b>Comments :</b> Violation Notice due September 28, 2017.	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
09/14/2017	Stack Test Observation	Compliance	
09/14/2017	Scheduled Inspection	Compliance	North SRU
09/08/2017	Stack Test	Compliance	<p>Marathon performed stack testing a RATA on the Vacuum 2 Heater stack on June 5-6, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : PM, PM10, H2S04, O2, and NOx</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0006----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)----- -0.0021----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)----- 0.00062----- no limit</p> <p>RATA Results:</p> <p>O2 (%dv)----- 0.09-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)----- 6.2-----less than 10% of standard</p> <p>All results were below permit limits</p>

Activity Date	Activity Type	Compliance Status	Comments
09/08/2017	CEM RATA	Compliance	<p>Marathon performed stack testing and a RATA on the Vacuum 2 Heater stack on June 5-6, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : PM, PM10, H2S04, O2, and NOx</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) -----  -0.0006----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)-----  -0.0021----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)-----  0.00062----- no limit</p> <p>RATA Results:</p> <p>O2 (%dv)-----  0.09-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)-----  6.2-----less than 10% of standard</p> <p>All results were below permit limits</p>

Activity Date	Activity Type	Compliance Status	Comments
09/08/2017	Stack Test	Compliance	<p>Marathon performed stack testing and a RATA on the GOHT Heater stack on July 25-26, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were PM10, H2S04, VOC, O2, and NOx</p> <p>Test Results were:  PM10 (lb/MMBTU)-----  -0.0028----- below limit of  0.0076  H2S04(lb/MMBTU)-----  0.0002----- no limit  VOC (lb/MMBTU)-----  &lt;.0007-----below limit of  0.0055</p> <p>RATA Results:  O2 (%dv)-----  0.17-----less than  +/- 1.0%  NOx(ppm @0%O2)-----  12.2-----less than  20% of RM</p> <p>All results were below permit limits</p>

Activity Date	Activity Type	Compliance Status	Comments
09/08/2017	CEM RATA	Compliance	<p>Marathon performed stack testing and a RATA on the GOHT Heater stack on July 25-26, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were PM10, H2S04, VOC, O2, and NOx</p> <p>Test Results were:  PM10 (lb/MMBTU)-----  -0.0028----- below limit of 0.0076  H2S04(lb/MMBTU)-----  0.0002----- no limit  VOC (lb/MMBTU)-----  &lt;.0007-----below limit of 0.0055  RATA Results:  O2 (%dv)-----  0.17-----less than +/- 1.0%  NOx(ppm @0%O2)-----  12.2-----less than 20% of RM</p> <p>All results were below permit limits</p>
09/08/2017	Stack Test	Compliance	<p>Marathon performed stack testing on the NHT Stripper/Reboiler on May 16-17, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were PM, PM10, H2S04, and CO</p> <p>Test Results were:  PM (lb/MMBTU)-----  0.0010----- below limit of 0.0019  PM10 (lb/MMBTU)-----  -0.0019----- below limit of 0.0076  H2S04(lb/MMBTU)-----  0.0041----- no limit  CO (lb/MMBTU)-----  &lt;.0004-----below limit of 0.02</p> <p>All results were below permit limits</p>

Activity Date	Activity Type	Compliance Status	Comments
09/07/2017	CEM RATA	Compliance	<p>Marathon performed stack testing and a RATA on the Crude Heater/ Vacuum Heater stack on June 7-8, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, VOC, and NOX</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) -----  -0.0021----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)-----  -0.0036----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)-----  0.0012----- no limit</p> <p>VOC (lb/MMBTU)-----  &lt;.0019-----below limit of 0.0055</p> <p>RATA Results:</p> <p>O2 (%dv)-----  0.1-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)-----  5.8-----less than 20% RM</p> <p>NOx(lb/MMBTU)-----  9.0----- less than 20% RM</p> <p>All test results were below permit limits except for the PM limit. Results were 0.0021 lb/mmBTU, which exceeded the limit of 0.0019lb/mmBTU. A VN was issued on September 8, 2017.</p>

Activity Date	Activity Type	Compliance Status	Comments
09/07/2017	Stack Test	Non Compliance	<p>Marathon performed stack testing and a RATA on the Crude Heater/ Vacuum Heater stack on June 7-8, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, VOC, and NOX</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) -----  -0.0021----- above limit of 0.0019</p> <p>PM10 (lb/MMBTU)-----  -0.0036----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)-----  0.0012----- no limit</p> <p>VOC (lb/MMBTU)-----  &lt;.0019-----below limit of 0.0055</p> <p>RATA Results:</p> <p>O2 (%dv)-----  0.1-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)-----  5.8-----less than 20% RM</p> <p>NOx(lb/MMBTU)-----  9.0----- less than 20% RM</p> <p>All test results were below permit limits except for the PM limit. Results were 0.0021 lb/mmBTU, which exceeded the limit of 0.0019lb/mmBTU. A VN was issued on September 8, 2017.</p>
09/05/2017	Odor Evaluation	Compliance	September 2017 - Odor Surveillance

Activity Date	Activity Type	Compliance Status	Comments
08/31/2017	Stack Test	Compliance	<p>Marathon performed stack testing on the KHT Heater stack on May 22-23, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, CO, and NOX</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0013----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)----- -0.0028----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)----- 0.00082----- no limit</p> <p>NOx(lb/MMBTU)----- 0.15----- below limit of 0.20</p> <p>CO (lb/MMBTU)----- &lt;.0004-----below limit of 0.02</p>
08/31/2017	Stack Test	Compliance	<p>Marathon performed stack testing on the NHT Heater stack on May 24-25, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, and CO</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0011----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)----- -0.0024----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)----- 0.00074----- no limit</p> <p>CO (lb/MMBTU)----- &lt;.0004-----below limit of 0.02</p>

Activity Date	Activity Type	Compliance Status	Comments
08/29/2017	Stack Test	Compliance	<p>Marathon performed stack testing and a RATA on the CCR Interheater stack on June 28 through June 29, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, and NOX</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0008----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)----- -0.0019----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)----- 0.00064----- no limit</p> <p>RATA Results:</p> <p>O2 (%dv)----- 0.21-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)----- 2.3%-----less than 20% RM</p> <p>All test results were below permit limits.</p>



Activity Date	Activity Type	Compliance Status	Comments
08/29/2017	Stack Test	Compliance	<p>Marathon performed stack testing and a RATA on the CCR Charge Heater stack on June 26 through June 27, 2017, to comply with ROP MI-ROP-A9831-2012c, which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM, PM10, H2S04, and NOX</p> <p>Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0012----- below limit of 0.0019</p> <p>PM10 (lb/MMBTU)----- -0.0031----- below limit of 0.0076</p> <p>H2S04(lb/MMBTU)----- 0.00083----- no limit</p> <p>RATA Results:</p> <p>O2 (%dv)----- 0.41-----less than +/- 1.0%</p> <p>NOx(ppm @0%O2)----- 2.9%-----less than 20% RM</p>
08/25/2017	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 2nd Quarter 2017 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on July 31, 2017 and is required pursuant to 40 CFR 60.7 (d).</p> <p>52 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 2nd Quarter.</p>
08/22/2017	Excess Emissions (CEM)	Compliance	<p>2nd Quarter 2017 CEMS Excess Emissions Report- For all three pollutants no excess emissions were reported. Downtime was reported as less than 5%.</p>
08/22/2017	NSPS (Part 60)	Compliance	<p>Quarterly cylinder gas audits done for 2nd Quarter 2017- All performance tests passed their respective criteria.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/22/2017	CEM RATA	Compliance	Marathon submitted results of a RATA of the CEMS at the Light Products Terminal.  Results showed the monitor has passed the required 10% relative accuracy
08/15/2017	Odor Evaluation	Compliance	August 2017 - Odor Surveillance
07/25/2017	Stack Test Observation	Compliance	
07/25/2017	Scheduled Inspection	Compliance	GOHT Charge Heater Inspection
06/22/2017	Other Non ROP	Compliance	Annual emission report and RATA results. Verification of Fd was within 2% of the 2013 process simulation.
06/22/2017	Excess Emissions (CEM)	Compliance	1st Quarter 2017 CEMS Report- No excess emissions reported
06/21/2017	Stack Test	Compliance	Marathon Petroleum performed a stack test and RATA on the Zurn Boiler on April 5-7, 2017 to comply with MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum. Pollutants tested were : PM, H2SO4, and VOC  Test Results were: PM (lb/MMBTU)-----0.0012 ----- -- less than 0.0019 VOC (lb/MMBTU)----- <0.00072----- less than 0.0055 Sulfuric Acid Mist( ppmv)----- -----0.015----- no limit Sulfuric Acid Mist( lb/MMBTU)----- -----0.000047----- no limit  RATA results:  O2 (%dv)-----0.27%----- --- less than +/- 1% NOx(lb/MMBTU)-----3.8-- -----less than 20% of RM  Results were below permit limits.

Activity Date	Activity Type	Compliance Status	Comments
06/21/2017	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the B&amp;W Boiler on April 3-5, 2017 to comply with MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were : PM, H2SO4, and VOC</p> <p>Test Results were:</p> <p>PM (lb/MMBTU)----0.0012 -----  -- less than 0.0019</p> <p>VOC (lb/MMBTU)-----  &lt;0.00072----- less than 0.0055</p> <p>Sulfuric Acid Mist( ppmv)-----  -----0.1----- no limit</p> <p>Sulfuric Acid Mist( lb/MMBTU)-----  -----0.00065----- no limit</p> <p>RATA results:</p> <p>O2 (%dv)-----0.06%-----  --- less than +/- 1%</p> <p>NOx(lb/MMBTU)-----4.7--  -----less than 10% of RM</p> <p>Results were below permit limits.</p>
06/15/2017	MACT (Part 63)	Compliance	Updated SSMP for Detroit Hydrogen Plant submitted.

Activity Date	Activity Type	Compliance Status	Comments
06/15/2017	Stack Test	Compliance	<p>Marathon performed stack testing on the Chlorsorb System, which controls emissions from the Continuous Catalytic Regeneration Platformer Catalyst Regeneration stack on March 15-16, 2017 to comply with PTI 63-08E, which was issued on June 10, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : HCL</p> <p>Test Results were:  HCL Reduction Efficiency (%) -----  -----95-----  above limit of 97%  HCL (ppmdv @ 3% O2) -----  -----5.9----- less  than 10</p> <p>40 CFR 63 Subpart requires the uncontrolled emissions of hydrogen chloride by 97% by weight or to a concentration of 100 ppmv(dry basis), corrected to 3% oxygen, based on 3 one-hour tests.  All test results were below permit limits.</p>
06/13/2017	Complaint Investigation	Compliance	June 13, 2017 Complaint Investigation
06/08/2017	MAERS	Compliance	Emission calculations appeared to be correct. There were some changes based on emails from the company. Follow up will occur but review was pushed to pass for fee purposes. Overall, emissions were less than the previous year.

Activity Date	Activity Type	Compliance Status	Comments
05/26/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the backup CEMS for the FCCU Regenerator on December 20, 2016 to comply with ROP Permit No: MI-ROP-A9831-2012c. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum. The analyzers were on site from December 16, 2016 to February 6, 2017 while maintenance was performed on the permanent FCCU Regenerator CEMS.</p> <p>Pollutants tested were : O2, CO2, SO2, NOx, and CO.</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.04  ===== less than +/-  1.0% dv  CO2(%dv)=====0.2  =====less than +/-  1.0% dv  SO2 (ppm @0%O2)=====  3.8 % =====less than  10% of Standard  NOx (ppm @0%O2)  =====2.8 %  =====less than 10% of  Standard  CO(ppm @0%O2)=====  0.7=====less than 5% of  standard.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/26/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the FCCU Regenerator on March 14, 2017 to comply with ROP Permit No: MI-ROP-A9831-2012c. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were : O2, CO2, SO2, NOx, and CO.</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.38  ===== less than +/-  1.0% dv  CO2(%dv)=====0.06  =====less than +/-  1.0% dv  SO2 (ppm @0%O2)=====  3.5 % =====less than  10% of Standard  NOx (ppm @0%O2)  =====6.3 %  =====less than 10% of  Standard  CO(ppm @0%O2)=====  0.71=====less than 5% of  standard.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/26/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Alky Reboiler Heater on November 2, 2016 to comply with ROP Permit No: MI-ROP-A9831-2012c TRC was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were NOx and O2.</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.01  ===== less than +/-  1.0% dv  NOx( lb/mmBTU)  =====0.00%  =====less than 20% of  Reference Method  NOx (ppm @0%O2)  =====  0.55=====less than 20%  of Reference Method.</p>
05/26/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Distillate Hydrotreater Heater on November 2, 2016 to comply with ROP Permit No: MI-ROP-A9831-2012c TRC was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were NOx and O2.</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.26  ===== less than +/-  1.0% dv  NOx( lb/mmBTU)  =====9.87%  =====less than 20% of  Reference Method  NOx (ppm @0%O2)  =====  10.13=====less than 20%  of Reference Method.</p>
05/25/2017	Other Non ROP	Compliance	Revised Fugitive Dust Plan.
05/25/2017	ROP Annual Cert	Compliance	
05/25/2017	ROP SEMI 2 CERT	Compliance	

Activity Date	Activity Type	Compliance Status	Comments
05/25/2017	ROP Annual Cert	Compliance	
05/25/2017	ROP SEMI 2 CERT	Compliance	
05/18/2017	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 1st Quarter 2017 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on April 28, 2017 and is required pursuant to 40 CFR 60.7 (d).</p> <p>52 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 1st Quarter.</p>
05/18/2017	Other Non ROP	Compliance	<p>AQD reviewed the annual emission summary submitted by Marathon Petroleum. The submittal is a requirement of PTI 63-08D. The emissions appear correct and show that there was no significant net increase as a result of the DHOUP project.</p>
05/18/2017	NSPS (Part 60)	Compliance	<p>Air Products submitted their Semi-Annual Report for QQQ, ,CC, and GGGa/VVa reporting.</p> <p>For QQQ, visual inspections were conducted which verified that junction box covers were in place with a tight seal around the edge and that water levels were appropriate.</p> <p>For Subpart CC, Two heat exchangers are operated by Air Products. Monitoring for leaks indicated that the heat exchangers were operating below a 6.2 ppm VOC reading.</p> <p>For Subpart GGGa/VVa, two valves were added in July 2016 and no valves were removed in. 7 connectors added in July 2016 and 2 connectors added in October 2016. No components were put on Delay of Repair. 622 components were monitored. 2 were leaking and fixed within 15 time frame with exception to the components placed on Delay of Repair.</p>



Activity Date	Activity Type	Compliance Status	Comments
05/17/2017	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test on the FCCU Regenerator Stack on February 28 and March 1, 2017 to comply with MI-ROP-A9831-2012c, which was issued on September 12, 2016. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were : PM, PM10, VOC, NH3, H2SO4, and VOC</p> <p>Test Results were:  PM (lb/Mlb coke)----0.2 -----  less than 0.8  PM10 (lb/Mlb coke)---- 0.8 -----  ---- less than 1.1  Ammonia (lb/Mlb coke)-----  0.13----- no limit  VOC (Ton/yr)-----5.4-----  ----- less than 21  VOC (lb/Mlb coke)-----  ----0.05----- no limit  Sulfuric Acid Mist( lb/Mlb coke)----  -----0.0093----- no  limit  Both ESPS were running during the time of the test. Coke Burn Rate was 24,666 lb/hr. Feed Rate was 40,998 bpd. Aqueous Ammonia Injection rate was 31 lb/hr.</p> <p>Cyclone Inlet Velocity was 61-67 ft/sec during February 28-March 1, 2017.  Results were below permit limits.</p>
05/17/2017	NSPS (Part 60)	Compliance	<p>Air Products submitted quarterly report for 1st Quarter 2017. No excess emissions were reported for the period.</p>
05/17/2017	Other Non ROP	Compliance	<p>Air Products Startup Shutdown, and Malfunction Plan - update.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/17/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the East and West Plant Fuel Gas Line on March 14 and 17, 2017. to comply with MI-ROP-A931-2012c , which was issued on September 12, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :H2S</p> <p>RATA Results were:</p> <p>East Plant Fuel Gas Line</p> <p>H2S(ppmdv)-----4.93%---- ----- less than 10% of Standard</p> <p>West Plant Fuel Gas Line</p> <p>H2S(ppmdv)-----2.36%---- ----- less than 10% of Standard</p> <p>Results were below permit limits.</p>
05/16/2017	Stack Test Observation	Compliance	ALKY STRIPREBOILER

Activity Date	Activity Type	Compliance Status	Comments
05/15/2017	Stack Test	Compliance	<p>Air Products performed a CEMS RATA on the Hydrogen Plant Heater's O2, NOx and CO CEMS on March 14 to 16, 2017 to comply with PTI 63-08D, which was issued on May 15, 2014. Also, Air Products performed stack testing as well on the following pollutants: PM,PM10, H2SO4, NOx, CO, and VOC. Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Test Results were:</p> <p>O2- 0.02%dv - within +/- 1.0%dv  NOx( ppm) 2.4% -- within 20% of RM  NOx (lb/mmBTU)-9.1%--- within 10% of standard  CO (ppm)—0.4 ppm--- within +/- 5 ppm  CO (lb/hr)--- 0.4% ---- within 5% of standard  NOx(ppm @0%O2) ---- 2.2% of RM- within 20% of RM</p> <p>PM- .0017 lb/mmBTU - below limit of .0034 lb/mmBTU  PM10- .0035 lb/mmBTU - below limit of .01 lb/mmBTU  H2SO4 - 0.000090 lb/mmBTU- No limit  VOC- .00071 lb/mmBTU - below limit of .0055 lb/mmBTU  NOx- .0066 lb/mmBTU- below .013 lb/mmBTU  NOx--- 6.1 ppm --- below 60 ppm  CO - &lt;1.0 TPY- below 13TPY</p> <p>All results were within permit limits.</p>
05/11/2017	ROP Annual Cert	Compliance	<p>Deviations were reported for downtime of the CEMs. NOx CEMS had 64 hours of downtime during the reporting period. CO CEMS had 22 hours of downtime during the reporting period.</p>
03/31/2017	Complaint Investigation	Compliance	<p>Investigation of odor complaint.</p>
03/14/2017	CEMS Test Observation	Compliance	<p>FCCU RATA</p>

Activity Date	Activity Type	Compliance Status	Comments
03/02/2017	NSPS (Part 60)	Compliance	AQD reviewed Marathon's 4th Quarter 2016 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on January 27, 2017 and is required pursuant to 40 CFR 60.7(d).  52 analyzers were included in this report. Marathon reported that excess emissions were below 1% for all CEMS during the 4th Quarter except the FCCU Regenerator CO CEMS, which had slightly above 1% for the quarter.
03/01/2017	NSPS (Part 60)	Compliance	30 day notification for tank inspection. Tanks 48 and 135 will have their internal floating roof tank primary seals and fittings inspected. The inspections are scheduled to take place sometime after March 13, 2017.
02/28/2017	Odor Evaluation	Compliance	Odor Surveillance
02/28/2017	Stack Test Observation	Compliance	FCCU Stack Test
02/22/2017	Other	Compliance	Review of 4th Quarter 2016 LDAR, Benzene Waste NESHAP, and QQQ Report.
02/22/2017	Other Non ROP	Compliance	4th Quarter LDAR, Benzene Waste NESHAP, and QQQ Report. See Activity Report CA_A983138695.
02/22/2017	MACT (Part 63)	Compliance	Summary Report- Gaseous and Opacity Excess Emission & Continuous Monitoring System Performance  The CMS downtime did not exceed 5% of the total operating time. No equipment leaks for which the initial repair or replacement exceeded 15 days.
02/16/2017	ROP Other	Compliance	Responsible Official Notification- William Hammarstrom, Vice President
02/16/2017	NSPS (Part 60)	Compliance	Report summarizing Quarterly cylinder gas audit. Audit was performed December 29, 2016.
02/16/2017	Excess Emissions (CEM)	Compliance	4th Quarter CEMS Report- No excess emissions reported.
02/09/2017	MACT (Part 63)	Compliance	MACT Semi-Annual Report. See Activity Report CA_A983138623

Activity Date	Activity Type	Compliance Status	Comments
02/09/2017	NSPS (Part 60)	Compliance	Notice provided for inspection of external floating roof tank primary and secondary seals.
02/02/2017	MACT (Part 63)	Compliance	Boiler MACT Annual Compliance Report
02/02/2017	NSPS (Part 60)	Compliance	Air products submitted quarterly RATA and CGA performance testing. Fourth quarterly CGA was performed December 29, 2016. Audits passed.
02/02/2017	NSPS (Part 60)	Compliance	Air Products submitted quarterly report for 4th Quarter 2016. No excess emissions were reported for the period.
02/02/2017	Other	Compliance	Review of MACT Semi-Annual Report
01/31/2017	Release Reports	Compliance	Contractors accidentally struck an electric line near the coker unit, which caused an unexpected power loss in the North Plant. The power loss caused a shutdown of the Air Products Hydrogen Plant and upsets in several of the refinery's unit the loss of the hydrogen plant caused an upset in the Gasoil Hydrotreater, which resulted in flaring at the Unifiner flare. 1364 pounds of SO2 was released in 7.8 hours.

Activity Date	Activity Type	Compliance Status	Comments
01/31/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Alky and Crude Flares on November 29-30, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :H2S</p> <p>RATA Results were:</p> <p>Alky Flare</p> <p>H2S(ppmdv)-----0.2%----- ----- less than 10% of Standard</p> <p>Crude Flare</p> <p>H2S(ppmdv)-----3.6%----- ----- less than 10% of Standard</p> <p>Results were below permit limits.</p>
01/26/2017	CO/CJ	Compliance	<p>Consent Decree Progress Report- See Activity Report CA_A983138421</p> <p>Termination request was filed on November 29, 2016.</p>
01/26/2017	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 2nd Quarter 2016 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on August 2, 2016and is required pursuant to 40 CFR 60.7(d).</p> <p>51 analyzers were included in this report. Marathon reported that excess emissions were below 1% for all CEMS during the 1st Quarter except the FCCU Regenerator for CO. 4.72 % due to Startup/Shutdown. Will evaluate in the next quarter to see if a trend continues.</p>
01/26/2017	Other	Compliance	<p>Review of Consent Decree Progress Report.</p>

Activity Date	Activity Type	Compliance Status	Comments
01/17/2017	NSPS (Part 60)	Compliance	Tank 4T23, an internal roof tank in refiner slop oil storage scheduled to have its primary seal and fittings inspected sometime after October 7, 2016. Notification is provided under 40 CFR 63.655(h)(2)(i).
01/13/2017	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Complex 2 SRU Incinerator and GOHT Charge Heater on September 14 and 15, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>TRC was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :O2 and NOx for the GOHT Heater and SO2 and O2 for the SRU Incinerator</p> <p>Test Results were:</p> <p>Complex 2 SRU Incinerator</p> <p>O2(%dv)-----0.09----- less than +/- 1.0% dv SO2 (ppm@0%O2) ----- -----7.15 ----- less than 10% of Standard</p> <p>GOHT Charge Heater</p> <p>O2(%dv)-----0.11----- less than +/- 1.0% dv NOx(lb/mmBTU) ----- ---2.13% ----- less than 20% of RM.</p> <p>Results were below permit limits.</p>
01/13/2017	MACT (Part 63)	Compliance	Notification of Compliance Status for MACT Subpart CC and UUU.

Activity Date	Activity Type	Compliance Status	Comments
01/12/2017	NSPS (Part 60)	Compliance	Notification of Ja Applicability for Refinery Flares  Revised Flare Consent Decree entered September 15, 2016. Includes revised deadlines for NSPS Ja Compliance for Refinery Flares:  Crude Flare- December 31, 2015 Alkylation Flare- December 31, 2015 Coker Flare- December 31, 2015 Unifiner Flare- June 30, 2016 CP Flare- December 31, 2018.
01/12/2017	NSPS (Part 60)	Compliance	Floating roofs for Tanks 109, 110, and 116 to have floating roof seals and fittings visually inspected on or after October 29, 2016.
01/12/2017	Other Non ROP	Compliance	3rd Quarter LDAR, BWON Report See Activity Report CA_A983138285
01/12/2017	Other	Compliance	Review of 3rd Quarter 2016 LDAR, Benzene Wastewater NESHAP Report
01/11/2017	Rule 912	Non Compliance	On October 31, 2016, the FCCU main air blower tripped offline due to a loss of vibration signal caused by a failed speed input card. A shutdown of the entire FCCU including the ESP occurred. The FCCU regenerator exceeded the 500 ppm limit 1 hour average CO limit for 27 hours, the 20% 6 minute average Opacity limit for 18.5 hours.  The CP Flare exceeded the 20% 6 minute average Opacity limit for 3.3 hours. The ESP on the FCCU Regenerator exhaust were down for 3 hours resulting in potential exceedences of the 3 hour average PM and PM-10 limits.
01/11/2017	NESHAP (Part 61)	Compliance	Annual BWON Report- Annual TAB - 51.21, 6BQ- 3.91.
01/10/2017	Other Non ROP	Compliance	2nd Quarter 2016 LDAR, Benzene Waste NESHAP, and QQQ Report. See Activity Report CA_A983138251.
01/10/2017	ROP SEMI 2 CERT	Compliance	see Activity Report CA_A983138257
01/10/2017	Other	Compliance	Review of 2nd Quarter 2016 LDAR, Benzene Waste NESHAP, and QQQ Report.



Activity Date	Activity Type	Compliance Status	Comments
01/10/2017	Other	Compliance	Review of ROP Annual and Semi-Annual Compliance Certification submitted February 23, 2016.
01/05/2017	Rule 912	Non Compliance	On November 28, 2016, electrical testing was being conducted at the East Plant Area. Upon placing the relay back into service, it unexpectedly activated a lockout trip on the breaker. A power failure occurred and shutdown of several process units including the Amine Regeneration Unit. The ARU removes H2S from off-gasses that are directed to the East Plant fuel gas system. The H2S concentration in the East Plant exceeded the 160 ppm (3 hour average) limit for four hours.
01/05/2017	NSPS (Part 60)	Compliance	AQD reviewed Marathon's 3rd Quarter 2016 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on October 31, 2016 and is required pursuant to 40 CFR 60.7(d).  52 analyzers were included in this report. Marathon reported that excess emissions were below 1% for all CEMS during the 3rd Quarter.
01/05/2017	Release Reports	Compliance	RETRACTION- Substation tripped unexpectedly on May 17, 2016. At the same time a larger power outage occurred which impacted the North Plant and Hydrogen Plant, leading to a refinery-wide shutdown. Flaring occurred at the Crude, Unifiner, Cracking Plant and Coker Flares. After further review, Marathon concluded that an RQ release of H2S did not occur. A SO2 release of 3480 pounds did occur.
01/04/2017	MACT (Part 63)	Compliance	Notification of Compliance Status Storage Vessel Provisions Required by 40 CFR 63 Subpart CC.
01/04/2017	Other Non ROP	Compliance	Notification of Temporary Boiler Removal

Activity Date	Activity Type	Compliance Status	Comments
01/04/2017	Rule 912	Non Compliance	<p>Rule 912- Due to explosion and fire occurring at nearby DTE Energy facility- which provides natural gas to Marathon- unplanned shutdown occurred which resulted in the following exceedances:</p> <p>East Plant Fuel Gas exceeded the 160 ppm 3 hour average H2S limit for 5 hours. West Plant Fuel Gas exceeded the 160 ppm 3 hour average H2S limit for 4 hours.</p>
01/04/2017	ROP Semi 1 Cert	Compliance	<p>Detroit Light Product and Asphalt Terminals MPLX Terminals (April 1, 2016 - June 30, 2016) No deviations reported.</p>
01/04/2017	MACT (Part 63)	Compliance	<p>Amendment to 1st Half 2016 MACT Periodic Report Subpart CC. Tank 113 had its annual external floating roof seal gap inspection on June 10, 2016. Gaps in the secondary seals were found, and this deficiency was not reported.</p>
12/29/2016	Release Reports	Compliance	<p>On July 2, 2016 an explosion and fire occurred at a nearby DTE Energy facility which provides natural gas to MRD. Loss of natural gas to the facility occurred which resulted in unplanned shutdown of several units. As a result of the shutdowns, flaring occurred at the Unifiner and Coker Flares. Material flared contained sulfur and SO2 was formed in the flares upon combustion. It was initially believed to exceed the 100 pounds for H2S but after further review, Marathon concluded that a reportable release of H2S did not occur.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/28/2016	NSPS (Part 60)	Compliance	<p>Air Products submitted their Semi-Annual Report for QQQ, CC, and GGGa/VVa reporting.</p> <p>For QQQ, visual inspections were conducted which verified that junction box covers were in place with a tight seal around the edge.</p> <p>For Subpart CC, Two heat exchangers are operated by Air Products. Monitoring for leaks indicated that the heat exchangers were operating below a 6.2 ppm VOC reading.</p> <p>For Subpart GGGa/VVa, three valves were added in April 2016. 4 valves were removed in January 2016 and 1 valve removed in April 2016. 4 connectors removed in January 2016. 8 connectors added in April 2016 and 4 connectors removed in April 2016. 612 components were monitored. 2 were leaking and fixed within 15 time frame.</p>
12/28/2016	MACT (Part 63)	Compliance	<p>Air Products submitted their Semi-Annual Report for QQQ, CC, and GGGa/VVa reporting.</p> <p>For QQQ, visual inspections were conducted which verified that junction box covers were in place with a tight seal around the edge.</p> <p>For Subpart CC, Two heat exchangers are operated by Air Products. Monitoring for leaks indicated that the heat exchangers were operating below a 6.2 ppm VOC reading.</p> <p>For Subpart GGGa/VVa, three valves were added in April 2016. 4 valves were removed in January 2016 and 1 valve removed in April 2016. 4 connectors removed in January 2016. 8 connectors added in April 2016 and 4 connectors removed in April 2016. 612 components were monitored. 2 were leaking and fixed within 15 time frame.</p>
12/22/2016	MACT (Part 63)	Compliance	MACT Periodic Report See Activity Report CA_A983138153

Activity Date	Activity Type	Compliance Status	Comments
12/22/2016	NSPS (Part 60)	Compliance	Notice of external floating roof tank secondary seal inspection for API separator.
12/22/2016	Other	Compliance	Review of MACT Periodic Report.
12/02/2016	Stack Test	Compliance	<p>Marathon Petroleum performed a RATA on the Complex 6 SRU on September 14, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :O2, SO2</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.10----- less than +/- 1.0% dv SO2(ppm@0%O2) ----- ----1.5 ----- less than 10% of standard.</p> <p>Results were below permit limits.</p>
11/16/2016	Stack Test	Compliance	<p>Marathon performed a Stack Test on the Delayed Coker Unit on June 24, 2016 to June 26, 2016 to comply with PTI 63-08D, which was issued on May 12, 2014. AECOM was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : VOC, H2S, PM</p> <p>Test Results were: H2S- 1.27 1lb/cycle – VOC- 1.19 lb/cycle- PM- .02 lb/cycle</p> <p>Based on the stack test results and limit of 487 cycles in the PTI, emissions should stay below permit limits.</p>
11/16/2016	MACT (Part 63)	Compliance	Summary Report- Gaseous and Opacity Excess Emission & Continuous Monitoring System Performance
11/03/2016	NSPS (Part 60)	Compliance	30 day notice of external floating roof tank 108 and 128 secondary seal inspections.

Activity Date	Activity Type	Compliance Status	Comments
11/02/2016	CEM RATA	Compliance	<p>Marathon submitted results of a RATA of the CEMS at the Light Products Terminal.</p> <p>Results showed the monitor has passed the required 10% relative accuracy</p>
11/02/2016	CO/CJ	Compliance	<p>A letter dated September 6 2016 from Marathon Petroleum Company was sent to the Michigan Department of Environmental Quality, Air Quality Division. The letter was in regards to the Sulfur Recovery Unit PMO Plans. An annual update is provided to the appropriate state and federal environmental agencies. The plans describe activities for enhanced maintenance and operation of each Refinery's Sulfur Recovery Plant, the Tail Gas Unit(s), and supplemental control devices, and the appropriate upstream process units.</p> <p>This is a requirement from the First Revised Consent Decree, as revised by the First Modification to the November 2005 First Revised Consent Decree, where applicable, United States of America et. al. v. Marathon Ashland Petroleum LLC (presently known as Marathon Petroleum Company LLC "MPC").</p>
11/01/2016	NSPS (Part 60)	Compliance	<p>Air Products submitted quarterly report for 3rd quarter 2016.</p> <p>No excess emissions were reported for the period.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/01/2016	Stack Test	Compliance	<p>Marathon performed stack testing on the Crude/Vacuum Heater stack on August 23, 2016 to comply with PTI 63-08E, which was issued on June 10, 2016.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were : PM Test Results were:</p> <p>PM (lb/MMBTU) ----- -0.0011----- below limit of 0.0019 All test results were below permit limits.</p>
10/25/2016	Stack Test	Compliance	<p>Marathon Petroleum performed a RATA on the CCR Heater and CCR Interheater on July 12-14, 2016 to comply with PTI 63-08D, which was issued on May 12, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were : NOx, PM</p> <p>Stack Test Results were: CCR Charge Heater PM (lb/MMBTU)----0.0015 ---- -- less than 0.0019 CCR Interheater PM (lb/MMBTU)----0.0015 ---- -- less than 0.0019</p> <p>RATA results were: CCR Charge Heater NOx(lb/MMBTU)----2.8% ----- - less than 20% of RM O2(%dv)---- .17% ----- less than +/- 1% dv CCR Interheater NOx(lb/MMBTU)---- 0.009 ----- - less than +/- 0.02 lb/ MMBTU O2(%dv)----- .50%----- less than +/- 1% dv NOx average- .03 lb/mmBTU --- -- less than .05lb/mmBTU</p> <p>Results were below permit limits.</p>
09/07/2016	Scheduled Inspection	Compliance	MBR
09/07/2016	Scheduled Inspection	Compliance	Tanks 133 & 134

Activity Date	Activity Type	Compliance Status	Comments
09/01/2016	Stack Test	Non Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Crude/Vacuum Heater and Vacuum Heater 2 on June 14-15, 2016, to comply with PTI 63-08D, which was issued on May 15, 2014. Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : PM , NOx, O2, CO2, VOC.</p> <p>Test Results were:</p> <p>Crude/Vacuum Heater:</p> <p>PM (lb/mmBTU)-----0.0020 -- more than 0.0019  VOC (lb/mmBTU)----- &lt;0.00072---- -- less than 0.0055</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.01  ===== less than +/- 1.0% dv  NOx(lb/mmBTU) ----- 11.2 -----less than 20% of Standard  NOx(ppm@0%O2)-----5.9-- -----less than 20% of Standard</p> <p>Vacuum Heater 2:</p> <p>RATA Results were:</p> <p>O2(%dv)===== 0.2  ===== less than +/- 1.0% dv  NOx(ppm@0%O2)-----9.4-- -----less than 20% of Standard</p> <p>Results were below permit limits except for the PM limit for the Crude/Vacuum Heater. A Violation Notice was issued on September 6, 2016.</p>
08/23/2016	Stack Test Observation	Compliance	Retest of Crude/Vac Heater

Activity Date	Activity Type	Compliance Status	Comments
08/04/2016	Release Reports	Compliance	A copy of Marathon's SO2 and H2S release report was sent to the AQD Detroit Office on August 10, 2016 from the Detroit Office of Homeland Security. AQD tried calling Homeland Security staff but could not reach the contact so a message was left.
07/21/2016	Release Reports	Compliance	RETRACTION- June 10, 2016 Flaring incident as a result of DHT overpressuring. After further review, Marathon concluded that a Reportable Quantity release of SO2 did not occur.
07/21/2016	Other Non ROP	Compliance	Notification of Temporary Boiler Placement. Portable Boiler was permitted under PTI 18-12B. Placement of Boiler occurred on June 17, 2016.
07/21/2016	NSPS (Part 60)	Compliance	Air Products submitted quarterly report for 2nd quarter 2016.  No excess emissions were reported for the period.
07/21/2016	NSPS (Part 60)	Compliance	Air products submitted quarterly RATA and CGA performance testing. Second quarterly CGA was performed June 30, 2016. Audits passed.
06/24/2016	Complaint Investigation	Compliance	
06/23/2016	MACT (Part 63)	Compliance	Boiler MACT Notification of Compliance Status
06/22/2016	Complaint Investigation	Compliance	



Activity Date	Activity Type	Compliance Status	Comments
06/17/2016	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Zurn Boiler on April 13-14, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were :PM, H2SO4, VOC, and NOx</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)-----  --0.0008 -----less than  0.0019</p> <p>H2SO4 (ppm)-----  0.0136 -----No Limit</p> <p>H2SO4(lb/MMBTU)-----  -5.4E-05-----No Limit</p> <p>VOC (lb/mmBTU)-----  ---&lt;0.0006 -----less  than 0.0055</p> <p>NOx (lb/mmBTU)-----  ---0.18 -----less than  0.20</p> <p>CO (lb/MMBTU)-----  0.03-----less than  0.10</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.14-----  less than +/- 1.0% dv</p> <p>NOx (lb/mmBTU)-----  ----0.00-----less than  20% of RM</p> <p>CO(lb/mmBTU) -----  ----0.00-----less than 10%  of RM</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
06/17/2016	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Zurn Boiler on April 13-14, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were :PM, H2SO4, VOC, and NOx</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)-----  --0.0008 -----less than  0.0019</p> <p>H2SO4 (ppm)-----  0.0136 -----No Limit</p> <p>H2SO4(lb/MMBTU)-----  -5.4E-05-----No Limit</p> <p>VOC (lb/mmBTU)-----  ---&lt;0.0006 -----less  than 0.0055</p> <p>NOx (lb/mmBTU)-----  --0.18 -----less than  0.20</p> <p>CO (lb/MMBTU)-----  0.03-----less than  0.10</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.14-----  less than +/- 1.0% dv</p> <p>NOx (lb/mmBTU)-----  ----0.00-----less than  20% of RM</p> <p>CO(lb/mmBTU) -----  ----0.00-----less than 10%  of RM</p> <p>Results were below permit limits.</p>
06/16/2016	Complaint Investigation	Compliance	PEAS No. 14776 and 14777 Complaint Investigation
06/16/2016	Complaint Investigation	Compliance	
06/14/2016	CEMS Test Observation	Compliance	Vac 2 NOx RATA
06/10/2016	Complaint Investigation	Compliance	Complaint Investigation- Flaring

Activity Date	Activity Type	Compliance Status	Comments
06/09/2016	NSPS (Part 60)	Compliance	Notification provided for Tank 52 Inspection of its primary seals and fittings. Inspection to take place sometime on or after May 16, 2016.
06/08/2016	NSPS (Part 60)	Compliance	Seal Inspection for external floating roof tanks.
06/08/2016	NSPS (Part 60)	Compliance	AQD reviewed Air Products 1st Quarter 2016 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on April 20, 2016and is required pursuant to 40 CFR 60.7 (d).  No excess emissions were reported.
06/08/2016	NSPS (Part 60)	Compliance	30 day notice of tank 128 external floating roof tank seal inspections.
06/07/2016	Stack Test	Compliance	Marathon Petroleum performed a stack test on the GOHT Heater on March 30, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.  Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :PM  Test Results were:  PM (lb/mmBTU) ----- 0.0005 -- less than 0.0019
06/06/2016	Other Non ROP	Compliance	1st Quarter LDAR, BWON, Wastewater Report. See Activity Report- CA_A983134866
06/06/2016	Other	Compliance	Review of 1st Quarter 2016 LDAR, BWON, Wastewater Report

Activity Date	Activity Type	Compliance Status	Comments
06/02/2016	Rule 912	Non Compliance	<p>Power outage led to refinery wide shutdown on May 17, 2016. The following permit limits were exceeded:</p> <p>East Plant Fuel Gas exceeded the 160 ppm 3 hour average H2S limit for 4 hours  West Plant Fuel Gas exceeded the 160 ppm 3 hour average H2S limit for 17 hours  North Plant SRU exceeded the 250 ppm 12 hour average SO2 limit for 27 hours  FCCU exceeded the 500 ppm 1 hour average CO limit for 36 hours  The ESPs were down for 34 hours resulting in potential exceedences of the 3 hour average PM and PM-10 limit of 0.8 lb/1000 lb coke burn .</p>
06/02/2016	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 1st Quarter 2016 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on April 29, 2016and is required pursuant to 40 CFR 60.7 (d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 1st Quarter.</p>
06/02/2016	Other Non ROP	Compliance	<p>Rule 616 Notification.</p> <p>Refinery to undergo Turnaround from May 4, 2016 to May 29, 2016.</p>
06/02/2016	CO/CJ	Compliance	2015 Heater and Boiler NOx Control Plan Annual Update.
06/01/2016	MAERS	Compliance	<p>AQD staff reviewed the MAERS submittal. Many of the emissions were reduced from the previous year. Staff performed spot checks on several emission units and the calculations appeared accurate. No evaluation was done on determining compliance with emission limits but will be done when performing full compliance evaluation.</p>
06/01/2016	Other	Compliance	Review of MAERS

Activity Date	Activity Type	Compliance Status	Comments
05/19/2016	Release Reports	Compliance	Follow up Report for HCN release. Based on 2012 Stack test of FCCU. Reportable quantity is 10 pounds over 24 hour period.
05/19/2016	MACT (Part 63)	Compliance	Boiler MACT Notification of Compliance Status
05/16/2016	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the FCCU Regenerator on March 23, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :O2, CO2, SO2, NOx, CO</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.4----- less than +/- 1.0% dv CO2(%dv)----- 0.2----- less than +/- 1.0% dv SO2( ppm @0%O2)----- 7.2 -----less than 10% of Standard NOx(ppm@0%O2) ----- ----2.1 ----- less than 10% of Standard. CO (ppm @0%O2)----- -----0.1-----less than 5% of Standard</p> <p>Results were below permit limits.</p>
05/16/2016	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Coker Flare on March 23, 2016 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :H2S</p> <p>RATA Results were:</p> <p>H2S()-----5.3----- less than 10% of Standard</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/16/2016	Rule 912	Non Compliance	<p>Rule 912 Report</p> <p>On April 20, 2016, the FCCU's the lube oil pumps on the main air blower were inadvertently shutdown. This caused the FCCU to shutdown. During this time the following limits were exceeded:</p> <p>CO for 6 hours above 500 ppm; Opacity for 2.2 hours above 20%, and PM for 9 hours above 0.8 lbs/1000 lbs coke burn.</p>
05/16/2016	Stack Test	Compliance	<p>Air Products performed a CEMS RATA on the Hydrogen Plant Heater's O2, NOx and CO CEMS on March 15 to 18, 2016 to comply with PTI 63-08D, which was issued on My 15, 2014. Also, Air Products performed stack testing as well on the following pollutants: PM,PM10, H2SO4, NOx, CO, and VOC. Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Test Results were:</p> <p>O2- 0.1%dv - within +/- 1.0%dv NOx( ppm) 2.2% -- within 20% of RM NOx (lb/mmBTU)-13.8%--- within 10% of standard CO (ppm)—0.4 ppm--- within +/- 5 ppm CO (lb/hr)--- 0.4% ---- within 5% of standard NOx(ppm @0%O2) ---- 1.9% of RM- within 20% of RM</p> <p>PM- .00068 lb/mmBTU - below limit of .0034 lb/mmBTU PM10- .0025 lb/mmBTU - below limit of .01 lb/mmBTU H2SO4 - 0.00011 lb/mmBTU- No limit VOC- .000779 lb/mmBTU - below limit of .0055 lb/mmBTU NOx- .0073 lb/mmBTU- below .013 lb/mmBTU NOx--- 6.0 ppm --- below 60 ppm CO - &lt;1.1 TPY- below 13TPY</p> <p>All results were within permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/13/2016	Complaint Investigation	Non Compliance	
05/12/2016	Other Non ROP	Compliance	AQD reviewed the annual emission summary submitted by Marathon Petroleum. The submittal is a requirement of PTI 63-08D. The emissions appear correct and show that there was no significant net increase as a result of the DHOUP project.
05/12/2016	MACT (Part 63)	Compliance	Boiler MACT Notification of Compliance Status
05/11/2016	Complaint Investigation	Non Compliance	
05/09/2016	CEM RATA	Compliance	<p>Marathon Petroleum performed RATAs on the Hydrogen Sulfide CEMS on the East and West Plant Fuel Gas Lines on March 15 and 16, 2016 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>TRC was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : H2S</p> <p>RATA results were:  East Plant Fuel Gas Line  H2S-----0.81% ----- less than  10% of applicable standard</p> <p>West Plant Fuel Gas Line  H2S----- 1.06% ----- less than  10% of applicable standard</p> <p>Results were below permit limits.</p>
04/13/2016	Stack Test Observation	Compliance	
04/11/2016	Stack Test Observation	Compliance	B&W Boiler
03/31/2016	CO/CJ	Compliance	Revised Consent Decree Progress Report .  See Activity Report CA_A983133905
03/25/2016	CO/CJ	Compliance	Revised End of Line Benzene Quantification Plan  Revised due to decommissioning of the sandfilter system and implementation of Membrane Biological Reactor.
03/25/2016	NESHAP (Part 61)	Compliance	Annual BWON Report- Annual TAB - 67.9, 6BQ- 5.68.

Activity Date	Activity Type	Compliance Status	Comments
03/24/2016	Excess Emissions (CEM)	Compliance	Air Products submitted quarterly report for 4th quarter 2015.  No excess emissions were reported for the period.
03/24/2016	NSPS (Part 60)	Compliance	Air Products submitted their Semi-Annual Report for QQQ, ,CC, and GGGa/VVa reporting.  For QQQ, visual inspections were conducted which verified that junction box covers were in place with a tight seal around the edge.  For Subpart CC, Two heat exchangers are operated by Air Products. Monitoring for leaks indicated that the heat exchangers were operating below a 6.2 ppm VOC reading.  For Subpart GGGa/VVa, five valves were added and 7 valves were removed in October 2015. 7 valves added in November. 9 valves were added and 6 valves removed in December 2015. 1 PRV added in December 2015. 13 connectors removed in October 2015. 3 connectors added in October 2015. 13 connectors added and 9 connectors removed in December 2015. 3 valves were added to the delay of repair list. 622 components were monitored. 6 were leaking and fixed within 15 time frame with exception to the components placed on Delay of Repair.
03/24/2016	NSPS (Part 60)	Compliance	Notice provided for Seal inspections for tank 128 to occur sometime after Feb 13, 2016
03/24/2016	Other	Compliance	Consent Decree Progress Report - Period Covering July 1, 2015 through December 31, 2015.
03/23/2016	NSPS (Part 60)	Compliance	Notice provided for upcoming Inspection of Tanks 19 and 61. Primary Seal and Fittings are going to be evaluated during the inspection, which will take place sometime after April 11, 2016.
03/23/2016	Release Reports	Compliance	SO2 Release Report- Approximately 11:50PM on December 10, 2015, an internal leak was discovered in a heat exchanger in the DHT. 9924 lbs of SO2 were released in 25 hours.



Activity Date	Activity Type	Compliance Status	Comments
03/23/2016	Release Reports	Compliance	SO2 Release Report- January 5, 2016- a leak was discovered in a heat exchanger in the DHT. 4400 pounds was released in 19 hours.
03/17/2016	Other Non ROP	Compliance	4th Quarter LDAR VOC, BWON, and QQQ Report. See Activity Report . CA_A983133852.
03/17/2016	Other	Compliance	Review of 4th Quarter 2015-LDAR VOC, Benzene Waste NESHAP and QQQ Report
03/16/2016	Stack Test Observation	Compliance	
03/14/2016	Other Non ROP	Compliance	Quarterly Cylinder Gas Audit results. Audits were performed September 23, 2015.
03/14/2016	NSPS (Part 60)	Compliance	Primary and Secondary Seal Inspection of Tank 127 and Primary Seal and Fittings Inspection of Tank 120. Seal inspections are scheduled to take place sometime after March 19, 2016.
03/14/2016	Release Reports	Compliance	RETRACTION- December 15, 2015 incident- After further review, Refinery concluded that an RQ release of H2S did not occur.
03/14/2016	Other Non ROP	Compliance	Update on Incident Reports 42330, 42360, 42392- Incident Date- March 12, 2012.
03/14/2016	NSPS (Part 60)	Compliance	Air Products submitted quarterly report for 4th quarter 2015.  No excess emissions were reported for the period.
03/11/2016	Other Non ROP	Compliance	FCCU Stack Opacity Annual Audit. Monitor was within the allowable calibration error limits.
03/11/2016	MACT (Part 63)	Compliance	Summary Report- Gaseous and Opacity Excess Emission & Continuous Monitoring System Performance  For the reporting period , no excess emissions or exceedances occurred. The CMS downtime did not exceed 5% of the total operating time.  Equipment Leaks for which the initial repair attempts exceeded 5 days and there were no equipment leaks for which repair or replacement exceeded 15 days.

Activity Date	Activity Type	Compliance Status	Comments
03/10/2016	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 4th Quarter 2015 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on January 29, 2016 and is required pursuant to 40 CFR 60.7(d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 4th Quarter.</p>
03/10/2016	MACT (Part 63)	Compliance	See Activity Report CA_A983133659.
03/10/2016	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the Alky DIB Reboiler Heater on November 10, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :O2, NOx</p> <p>Test Results were:</p> <p>NOx(ppm @0%O2)-----27 -- less than 40</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.14----- less than +/- 1.0% dv  NOx(ppm@0%O2) ----- less than  -----3.4 ----- less than 20% of RM.</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
03/10/2016	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the DHT Heater on November 11, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :O2, NOx, CO</p> <p>Test Results were:</p> <p>NOx(ppm @0%O2)-----27 -- less than 40  CO( lb/MMBTU)-----&lt;0.0004- less than 0.02</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.02----- less than +/- 1.0% dv  NOx(ppm@0%O2) ----- less than 0.5 ----- less than 20% of RM.  CO (lb/MMBTU) ----- less than 0.0-----less than 5% of Standard</p> <p>Results were below permit limits.</p>
03/10/2016	Other	Compliance	Review of MACT Periodic Report.
01/12/2016	Complaint Investigation	Compliance	PEAS No. 13912 Complaint Investigation

Activity Date	Activity Type	Compliance Status	Comments
01/08/2016	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Coker Heater on September 17-19, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were :CO, SO2</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)----- --0.0011 -----less than 0.0019 PM10(lb/mmBTU) ----- ----0.0023 -----less than 0.0076 VOC (lb/mmBTU)----- ----&lt;6.9E-04 -----less than 0.0055 NOx (lb/mmBTU)----- ---0.03 -----less than 0.05 NOx (ppm @0%O2)----- -----32 -----less than 60 CO (lb/mmBTU)----- -&lt;4.2E-04-----less than 0.01</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.14----- less than +/- 1.0% dv NOx(ppdv)----- 3.1% ----- less than 20% of RM NOx(lb/MMBTU) ----- ---0.0 ----- less than 20% of RM CO (lb/MMBtu)----- 0.0-----less than 5% of Standard</p> <p>Results were below permit limits.</p>
12/19/2015	Release Reports	Unknown	<p>Update to Continuous Release of Hydrogen Cyanide- 93 lbs/24hours is considered representative of plant operations. 10 lbs over 24 hours is the threshold which should be reported.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/17/2015	Rule 912	Non Compliance	On October 29, 2015, during startup of the FCCU, the ESPS were offline per procedure for safety reasons, the following emission limits were exceeded:  CO for 17 hours above the 500 ppm limit Opacity for 5 hours above the 20% limit.
12/17/2015	Excess Emissions (CEM)	Compliance	Air Products submitted quarterly report for 3quarter 2015.  No excess emissions were reported for the period.
12/16/2015	CEMS Test Observation	Compliance	Alky Flare RATA
12/10/2015	MACT (Part 63)	Compliance	Reviewed Revised Operations Maintenance Plan. New update included ESP serving FCCU.
12/09/2015	Release Reports	Compliance	RETRACTION- On October 30, 2015, the FCCU was in process of starting up from a maintenance shutdown. The FCC startup procedure calls for Naphtha Hydrotreater Stripper offgas to be directed to the FCC in order to load the FCC compressor for startup. A portion of the NHT Stripper offgas was subsequently directed to the Cracking Plant Flare. The material directed to the flare was light hydrocarbon that contained sulfur. After further review, it appears that a Reportable Quantity release of SO2 did not occur.
12/07/2015	Release Reports	Compliance	RETRACTION- On October 21, 2015, startup of the DHT was initiated. During the afternoon and evening of October 22, 2015, the H2S content of the gases going to the Coker flare began to increase. A leaking valve was discovered. After further review, it was concluded that a Reportable release of SO2 did not occur.
12/07/2015	MACT (Part 63)	Compliance	Amendment to MACT Periodic Report because certain calculations were not submitted with the previous report.

Activity Date	Activity Type	Compliance Status	Comments
12/07/2015	MAERS	Compliance	Revision to several storage tank emissions based on updated information. Will review calculations in next years MAERS submittal.
12/03/2015	CO/CJ	Compliance	Consent Decree Progress Report. See Activity Report CA_A983132390
12/03/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the GOHT Heater Stack on September 22, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were :NOxCO, O2, and CO2</p> <p>Test Results were:</p> <p>CO (lb/mmBTU)-----&lt;0.0004----- less than 0.02 NOX (lb/mmBTU) -----0.03 ----- less than 0.05</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.04----- less than +/- 1.0% dv NOx(lb/mmBTU)----- 0.0----- less than 20% of RM CO(lb/mmBTU) ----- --0.0 ----- less than 5% of App. Std.</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/03/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Complex 2 SRU Incinerator Stack on September 23-24, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were :H2SO4, SO2</p> <p>Test Results were:</p> <p>SO2 (ppm@0%O2)-----113 -----  -- less than 250  H2SO4(ppmdv)-----1.9 -  ----- no permit limit</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.02-----  less than +/- 1.0% dv  SO2(ppmdv @0%O2)-----  ----2.2----- less than 10% of  App. Std.</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
12/03/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Complex 6 SRU Incinerator Stack on September 16, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were :H2SO4, SO2</p> <p>Test Results were:</p> <p>SO2 (ppm@0%O2)-----66 ----- - less than 250 H2SO4(ppmdv)-----1.7 - ----- no permit limit</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.12----- less than +/- 1.0% dv SO2(ppmdv @0%O2)----- ----3.4----- less than 10% of App. Std.</p> <p>Results were below permit limits.</p>
12/03/2015	Other	Compliance	Review of Consent Decree Progress Report
12/02/2015	Complaint Investigation	Compliance	
11/22/2015	Complaint Investigation	Compliance	PEAS No. 13746 Complaint Investigation
11/19/2015	Other	Compliance	Semi-Annual ROP Certification Review.
11/19/2015	NSPS (Part 60)	Compliance	Quarterly CEMS Excess Emissions and Monitoring System Report. No excess emissions were reported for the quarter.
11/19/2015	Rule 912	Non Compliance	<p>Planned shutdown of North Plant Recovery Unit- During this event, the following permit limits were exceeded:</p> <p>SO2 for 17 hours above 250 ppm (12 hour average) limit.</p>
11/19/2015	ROP Semi 1 Cert	Compliance	Semi Annual Review documented in Activity Report CA_A983132314
11/18/2015	Rule 912	Non Compliance	



Activity Date	Activity Type	Compliance Status	Comments
11/16/2015	Rule 912	Non Compliance	<p>On October 14, 2015, the FCCU was shut down for planned maintenance work. Upon shut down, the plan was to maintain heat and liquid levels in the units downstream of the FCCU. However, on October 17-18, 2015, liquid levels and pressures in the downstream units became imbalance. H2S containing material was inadvertently sent to the fuel gas amine treating system.</p> <p>West Plant Fuel Gas system exceeded H2S limit( 160 ppm on 3 hour average) for 5 hours.</p>
11/05/2015	Release Reports	Compliance	<p>RETRACTION- SO2 Release. On May 30, 2015 during shutdown of the North Plant Sulfur Recovery Unit B train, the tail gas from SRU B was diverted to the thermal oxidizer to prevent catalyst damage in the tail gas reactor. After further review and calculation, MPC has determined that an RQ release of SO2 did not occur</p>
11/05/2015	NSPS (Part 60)	Compliance	<p>Notification of Temporary Boiler Removal. Required by Permit to Install No. 18-12B, Condition VII.1.</p> <p>Date of Removal was October 29, 2015.</p>
11/05/2015	Release Reports	Compliance	<p>RETRACTION- On April 9, 2015 the Refinery experienced two separate flaring events. The first flaring event occurred at approximately 12:48PM, when an upset occurred in the Saturated Gas Unit. Material flared was hydrocarbons containing hydrogen sulfide. After further review and calculation, MPC concluded that a Reportable Quantity was not released.</p>

Activity Date	Activity Type	Compliance Status	Comments
11/05/2015	Rule 912	Non Compliance	<p>FCCU - FCCU flue gas cooler developed a leak. The ESPs were taken offline. The following permit limits were exceeded:</p> <p>CO- 2 hours above 500 ppm Opacity- 4 hours above 20%</p> <p>The FCC Regenerator COM showed high opacity readings on 10/13/15 . Initially thought to be steam. Investigation detected a dirty analyzer lens.</p> <p>On October 14, 2015, the FCC was shutdown to repair the flue gas cooler. ESPs were taken offline. As a result of the shutdown, the following permit limits were exceeded:</p> <p>CO for 12 hours above the 500 ppm limit(1 hour) Opacity for 2 hours above the 20% limit(6 minute average).</p> <p>An investigation is ongoing to determine what the cause of the leak.</p>
11/05/2015	ROP SEMI 2 CERT	Non Compliance	See Activity Report CA_A983132070
11/05/2015	Other	Non Compliance	Semi-Annual ROP Certification Review.
11/04/2015	Complaint Investigation	Compliance	November 4, 2015 Complaint Investigation

Activity Date	Activity Type	Compliance Status	Comments
10/31/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test on the FCCU Regenerator Stack on August 11-12, 2015 and September 1, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014. Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : PM , PM10, Sulfuric Acid, ammonia, and VOC.</p> <p>Test Results were:</p> <p>PM (lb/Mlb coke)----0.285 -----  - less than 0.8  PM10 (lb/Mlb coke)---- 0.7 -----  ---- less than 1.1  Ammonia (lb/Mlb coke)-----  0.0972----- no limit  VOC (Ton/yr)-----4.80----  ----- less than 21  VOC (lb/Mlb coke)-----  ----0.048----- no limit  Sulfuric Acid Mist( lb/Mlb coke)----  -----0.011----- no  limit</p> <p>Following run 3 of the PM testing, the contractors rinsed the front half of the Method 5F filter holder into a sample container which already contained probe liner rinse from the NH3 sample train. Also they found a piece of glass in rinse 3. A retest was scheduled but even with the additional weight of the glass, the PM limits were below the emission limits for PM and PM10.</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/30/2015	Stack Test	Compliance	<p>Marathon performed a Stack Test on the Delayed Coker Unit on June 24, 2015 to June 26, 2015 to comply with PTI 63-08D, which was issued on May 12, 2014. AECOM was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : VOC, H2S, PM</p> <p>Test Results were:  H2S- .781lb/cycle –  VOC- 3.6 lb/cycle-  PM- .013 lb/cycle</p> <p>Based on the stack test results and limit of 487 cycles in the PTI, emissions should stay below emis</p>
10/29/2015	Other Non ROP	Compliance	Review of 2nd Quarter '15 LDAR, BWON, and QQQ Quarterly Report. See Activity Report CA_A983131987
10/29/2015	Other Non ROP	Compliance	Review of 3rd Quarter '15 LDAR, BWON, and QQQ Quarterly Report. See Activity Report CA_A983131988

Activity Date	Activity Type	Compliance Status	Comments
10/29/2015	MACT (Part 63)	Compliance	<p>Air Products submitted their semiannual reports for:</p> <p>NSPS Subpart QQQ NSPS Subpart GGGa/VVa</p> <p>MACT Subpart CC</p> <p>40 CFR 60 Subpart QQQ- Air Products conducted all of the inspections required under 40 CFR 60 Subpart QQQ of process drains and junction boxes have been carried out and completed.</p> <p>40 CFR 60 Subpart GGGa/VVa- 3211 components were monitored during the reporting period. Leaks were repaired during the required timeframe.</p> <p>40 CFR 63 Subpart CC- Air products operates two heat exchangers subject to Subpart CC. The cooling tower supplying water to these exchangers are owned and operated by Marathon. Cooling water is monitored monthly for VOC leaks and recorded in accordance with Subpart CC. No leaks were identified in the cooling water servicing the Heat Exchangers.</p>
10/29/2015	NSPS (Part 60)	Compliance	Air products submitted quarterly RATA and CGA performance testing. Second quarterly CGA was performed June 17, 2015. Audits passed.
10/29/2015	MACT (Part 63)	Compliance	
10/29/2015	MACT (Part 63)	Compliance	Review of MACT Periodic Report. See Activity Report CA_A983131998
10/29/2015	Other	Compliance	Review of 2nd Quarter '15 LDAR, BWON, and QQQ Quarterly Report.
10/29/2015	Other	Compliance	Review of 3rd Quarter '15 LDAR, BWON, and QQQ Quarterly Report.
10/29/2015	Other	Compliance	Review of MACT Periodic Report

Activity Date	Activity Type	Compliance Status	Comments
10/28/2015	MACT (Part 63)	Compliance	<p>Summary Report- Gaseous and Opacity Excess Emission &amp; Continuous Monitoring System Performance</p> <p>For the reporting period , no excess emissions or exceedances occurred. The CMS downtime did not exceed 5% of the total operating time.</p> <p>There were no equipment leaks for which the initial repair attempts exceeded 5 days and there were no equipment leaks for which repair or replacement exceeded 15 days.</p>
10/28/2015	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 3rd Quarter 2015 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on October 16, 2015 and is required pursuant to 40 CFR 60.7(d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 3rd Quarter.</p>
10/27/2015	Release Reports	Compliance	<p>Internal leak discovered in a heat exchanger in the DHT on September 29, 2015. The leak in the exchanger caused the Distillate Product Stripper Vessel to vent to the Coker Flare. The DHT was depressured to the Coker Flare and shut down.</p> <p>8096 of SO2 was released at the flare in 2.8 hours.</p>
10/22/2015	Release Reports	Compliance	<p>RETRACTION</p> <p>After further review, a SO2 release did not occur on August 18-19, 2015.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/22/2015	CO/CJ	Compliance	<p>A letter dated September 1, 2012 from Marathon Petroleum Company was sent to the Michigan Department of Environmental Quality, Air Quality Division. The letter was in regards to the Sulfur Recovery Unit PMO Plans. An annual update is provided to the appropriate state and federal environmental agencies. The plans describe activities for enhanced maintenance and operation of each Refinery's Sulfur Recovery Plant, the Tail Gas Unit(s), and supplemental control devices, and the appropriate upstream process units.</p> <p>This is a requirement from the First Revised Consent Decree, as revised by the First Modification to the November 2005 First Revised Consent Decree, where applicable, United States of America et. al. v. Marathon Ashland Petroleum LLC (presently known as Marathon Petroleum Company LLC "MPC").</p>
10/22/2015	Rule 912	Non Compliance	<p>8/18/15-8/19/15</p> <p>On August 18, 2015 at approximately 5:15PM, work was being done to the membrane bio-reactor project. During this work, unexpected power loss which resulted in the shutdown of several process units in the East Plant.</p> <p>Sudden loss of feed to the East Plant SRU resulting in a unit upset and an exceedance of the 12 hour average for SO2 limit for 10 hours.</p> <p>East Plant SRU</p> <p>10 hours of SO2 above limit(250 ppm 12 hour limit)</p> <p>East Plant Fuel Gas</p> <p>3 hours of H2S above limit (160 ppm 3 hour limit)</p>

Activity Date	Activity Type	Compliance Status	Comments
10/22/2015	Release Reports	Compliance	<p>August 17, 2015, Marathon detected a leak in a heat exchanger in the GOHT. GOHT charge was cut and leaking exchanger was isolated. The exchanger was subsequently removed from the process and bypassed.</p> <p>Amount of H2S- 303 lbs over 1.1 hours.</p>
10/22/2015	NSPS (Part 60)	Compliance	<p>Seal Inspection of API Separator- Inspected sometime after September 30, 2015. API separator is due for its next seal inspection in January 2016.</p>
10/22/2015	ROP Semi 1 Cert	Compliance	<p>ROP Certification received for Terminal- 0 deviations.</p>
10/14/2015	Other Non ROP	Compliance	<p>Rule 616 Notification</p> <p>Refinery planning turnaround-- Process units include:</p> <p>Crude Unit, Alyklation Unit, Gas Oil Hydrotreater, Naphtha Hydrotreater, Kerosene Hydrotreater, Coker Unit and Coker Unit Sulfur Facilities. Air Products will have the Hydrogen Plant offline as well.</p>
10/14/2015	Other Non ROP	Compliance	<p>Revised DHOUP Annual Emissions and Net Actual Emissions Increase Summary for 2014.</p> <p>Revisions were to Air Products Hydrogen Plant. Emission calculations show that net increase was below PSD significance thresholds.</p>
10/08/2015	Other Non ROP	Unknown	<p>Additional Response to May 29, 2015 VN</p>



Activity Date	Activity Type	Compliance Status	Comments
10/08/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the FCCU Charge Heater on September 4-5, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : PM , VOC, CO.</p> <p>For purposes of compliance- PM was tested firing refinery fuel gas. Disulfide gas was fired and an emission factor was developed.</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)-----0.0015 -- less than 0.0019 Burning Refinery Fuel Gas</p> <p>PM (lb/mmBTU)---- .0027 ---- no limit while burning disulfide off gas but emission factor calculated</p> <p>CO (lb/mmBTU)----&lt;0.0004----- ---- less than 0.02- Burning Refinery gas and Disulfide</p> <p>RATA Results were</p> <p>O2(%dv)===== 0.3 ===== less than +/- 1.0% dv</p> <p>CO(lb/mmBTU)===== 0.0=====less than 5% of standard.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/01/2015	Stack Test	Non Compliance	<p>Marathon Petroleum performed a stack test and RATA on the CCR Charge Heater on July 21-22, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :PM, VOC, NOx, and CO</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)----- 0.0021--- greater than 0.0019 PM (lb/mmBTU) - tested on July 28- 0.0018 less than 0.0019 VOC (lb/mmBTU)----- &gt;7.1E- 04 less than 0.0055 NOx (lb/mmBTU)-----0.04 ----- less than 0.05 CO (lb/mmBTU)-----&lt;4.6E-04 -- less than 0.13</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.06----- less than +/- 1.0% dv NOx(lb/mmBTU)----0.0----- less than 20%of RM O2(%dv)-----0.2-- -----less than +/- 1.0% CO (lb/mmBTU) ----- 0.0----- ----- less than 5% of Standard</p> <p>Results were below permit limits except for PM. A violation notice was sent on October 14, 2015</p>

Activity Date	Activity Type	Compliance Status	Comments
10/01/2015	Stack Test	Non Compliance	<p>Marathon Petroleum performed a stack test and RATA on the CCR InterHeater on July 23-24, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon. Pollutants tested were :PM, VOC, NOx, and CO</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)----- 0.0033--- greater than 0.0019 PM (lb/mmBTU) - tested on July 29- 0.0011 less than 0.0019 VOC (lb/mmBTU)----- &lt;6.0E- 04 less than 0.0055 NOx (lb/mmBTU)-----0.03 ----- less than 0.05 CO (lb/mmBTU)-----&lt;3.9.E-04 -- less than 0.13</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.4----- less than +/- 1.0% dv NOx(lb/mmBTU)-----0.0----- less than 20%of RM CO (lb/mmBTU) ----- 0.0----- ----- less than 5% of Standard</p> <p>Results were below permit limits except for PM. A violation notice was sent on October 14, 2015</p>
09/16/2015	Stack Test Observation	Compliance	
09/15/2015	Complaint Investigation	Compliance	September 15, 2015 Complaint Investigation
08/27/2015	NSPS (Part 60)	Compliance	I reviewed the 2nd Quarter CEMS quarterly report for Air Products. No excess emissions were reported the 2nd Quarter.

Activity Date	Activity Type	Compliance Status	Comments
08/25/2015	Stack Test	Compliance	<p>Marathon performed a stack test on the Vacuum2 Heater and Crude Vacuum Heater June 17-18, 2015 to comply with PTI 63-08D, which was issued on May 12, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were: PM(only Crude/Vac Htr), CO, NOx, and VOC.</p> <p>Test Results were:</p> <p>Vacuum 2 Heater  CO- &lt;3.7E-04 lb/mmBTU - below limit of .02 lb/mmBTU  VOC- 6.2E-05 lb/mmBTU - below limit of .0055 lb/mmBTU  NOx--- 26 ppm ----- below limit of 40 ppm</p> <p>Crude/Vac Heater  PM- .0012 lb/mmBTU - below limit of .0019 lb/mmBTU  VOC- 3.1E-04 lb/mmBTU - below limit of .0055 lb/mmBTU  NOx--- .03 lb/mmBTU----- below limit of 0.05 lb/mmBTU  NOx—35 ppm----- below limit of 40 ppm  CO- &lt;4.4E-04 lb/mmBTU - below limit of .01 lb/mmBTU</p>
08/20/2015	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 2ND Quarter 2015 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on July 23, 2015 and is required pursuant to 40 CFR 60.7 (d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 2nd Quarter.</p>

Activity Date	Activity Type	Compliance Status	Comments
08/20/2015	NSPS (Part 60)	Compliance	<p>Air Products submitted their semiannual reports for:</p> <p>NSPS Subpart QQQ NSPS Subpart GGg/VVa</p> <p>MACT Subpart CC</p> <p>40 CFR 60 Subpart QQQ- Air Products conducted all of the inspections required under 40 60 Subpart QQQ of process drains and junction boxes have been carried out and completed.</p> <p>40 CFR 60 Subpart GGGa/VVa- 1635 components were monitored during the reporting period. Leaks were repaired during the required timeframe.</p> <p>40 CFR 63 Subpart CC- Air products operates two heat exchangers subject to Subpart CC. The cooling tower supplying water to these exchangers are owned and operated by Marathon. Cooling water is monitored monthly for VOC leaks and recorded in accordance with Subpart CC. No leaks were identified in the cooling water servicing the Heat Exchangers.</p>
08/13/2015	CEM RATA	Compliance	<p>The RATA test report was received on June 16, 2015. Results showed the CEM passed the required 10% relative accuracy.</p>
08/03/2015	ROP Annual Cert	Compliance	<p>Deviation was resolved following issuance of PTI 52-15</p>
07/21/2015	Stack Test Observation	Pending	<p>CCR Charge Heater Stack Test and RATA</p>

Activity Date	Activity Type	Compliance Status	Comments
07/20/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test on the NHT Stripper/Reboiler and NHT Charge Heater on May 12-13, 2015 to comply with PTI 63-08C, which was issued on January 11, 2012. Results were used to demonstrate compliance.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were : NOx and O2</p> <p>Test Results were: NHT Stripper/Reboiler NOx(lb/mmBTU)----- 0.12 -----less than 0.20</p> <p>NHT Charge Heater(lb/mmBTU)--- -----0.15 -----less than 0.20</p> <p>Results were below permit limits.</p>
07/20/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test on the NHT Stripper/Reboiler and NHT Charge Heater on June 16, 2015 to comply with PTI 63-08C, which was issued on January 11, 2012. Results were used to demonstrate compliance.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were : NOx and O2</p> <p>Test Results were: NHT Stripper/Reboiler NOx(lb/mmBTU)----- 0.13 -----less than 0.20</p> <p>NHT Charge Heater(lb/mmBTU)--- -----0.16 -----less than 0.20</p> <p>Results were below permit limits.</p>
07/20/2015	Release Reports	Compliance	Reportable Incident Report-Update for actions taken to prevent incident which occurred in January 2014.

Activity Date	Activity Type	Compliance Status	Comments
07/20/2015	Release Reports	Compliance	<p>May 9, 2015- Gas Con Unit's debutanizer began to experience unstable pressures resulting from accumulation of non-condensable gas in the overhead system. In response to the pressure fluctuations, the unit charge rate was cut back and the debutanizer overhead gas was directed to the CP Flare for three hours.</p> <p>SO2 released- 1512 lbs in 3.1 hours.</p>
07/20/2015	Rule 912	Non Compliance	<p>Rule 912- North Plant SRU had spike in SO2.</p> <p>SO2 for 11 hours above 250 ppm (12 hour average)</p>
06/29/2015	Release Reports	Compliance	<p>SO2 Release Report- On 5/9/15, the Gas Concentration Unit's debutanizer experienced unstable pressures resulting from accumulation of non-condensable gas in the overhead system. Flaring occurred from 14:04 to 17:10 at the CP Flare. 1512 pounds of SO2 were released in 3.1 hours.</p>
06/29/2015	Rule 912	Non Compliance	<p>On May 30, 2015, the DHT had an unplanned shutdown due to loss of hydrogen from Air Products. During startup, the high pressure absorber bypass was inadvertently left open too long which resulted in H2s build-up in the unit and in the fuel gas system. Once the issue was identified, MPC closed the absorber bypass and increased amine circulation rate.</p> <p>The following emission limits were exceed:</p> <p>East Plant Fuel Gas- H2S(160 ppm/3 hour average) - for 2 hours and 30 minutes above limit.</p>
06/23/2015	Stack Test Observation	Compliance	Delayed Coker Stack Test

Activity Date	Activity Type	Compliance Status	Comments
06/19/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the Zurn Boiler on April 15-16, 2015 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were :PM, H2SO4, VOC, and NOx</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)-----  --0.0008 -----less than  0.0019</p> <p>H2SO4 (ppm)-----  0.005 -----No Limit</p> <p>H2SO4(lb/MMBTU)-----  -1.3E-05-----No Limit</p> <p>VOC (lb/mmBTU)-----  ---&lt;0.0005 -----less  than 0.0055</p> <p>NOx (lb/mmBTU)-----  ---0.18 -----0.20</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.14-----  less than +/- 1.0% dv</p> <p>NOx(ppdv)-----  0.2% ----- less than 20% of  RM</p> <p>NOx(ppdv@0%O2) -----  -----3.9 ----- less than  20% of RM</p> <p>NOx (lb/mmBTU)-----  -----3.9-----less than 20%  of RM</p> <p>Results were below permit limits.</p>



Activity Date	Activity Type	Compliance Status	Comments
06/16/2015	Stack Test	Compliance	<p>Marathon performed a stack test on the B&amp;W Boiler on April 13-15, 2015 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon Petroleum.</p> <p>Pollutants tested were: PM, H2SO4, NOx, and VOC.</p> <p>Test Results were:</p> <p>PM- .0007 lb/mmBTU - below limit of .0019 lb/mmBTU  H2SO4 - .02 ppm and 0.0000542 lb/mmBTU- No limit  VOC- .0006 lb/mmBTU - below limit of .0055 lb/mmBTU  NOx--- .07 lb/mmBTU-----  below limit of 0.20 lb/mmBTU  All results were within permit limits.</p>
06/16/2015	Stack Test Observation	Compliance	NHT Reboiler Stack Test
06/16/2015	Complaint Investigation	Compliance	PEAS Complaint Investigation
06/15/2015	Other	Compliance	4th Quarter '14 LDAR, BWON and QQQ Report
06/15/2015	Other	Compliance	Review of 1st Quarter '15 LDAR, BWON, and QQQ Quarterly Report.
06/15/2015	Rule 912	Non Compliance	<p>May 28, 2015- North Plant Incinerator experienced a loss of flame when an air flow meter on SRU A had a programming download which caused a decrease and then increase in air.</p> <p>The following excess emissions occurred:</p> <p>H2S for 2 hours above 160 ppm(3 hour average).</p>
06/15/2015	Other Non ROP	Compliance	Review of 4th Quarter '14 LDAR, BWON, and QQQ Quarterly Report. See Activity Report CA_A983129799
06/15/2015	Other Non ROP	Compliance	Review of 1st Quarter '15 LDAR, BWON, and QQQ Quarterly Report. See Activity Report CA_A983129800
06/08/2015	Scheduled Inspection	Compliance	BWON Inspection.

Activity Date	Activity Type	Compliance Status	Comments
05/27/2015	Stack Test	Compliance	<p>Air Products performed a CEMS RATA on the Hydrogen Plant Heater's O2, NOx and CO CEMS on March 17, 2015 to March 19, 2015 to comply with PTI 63-08C, which was issued on January 11, 2012. Also, Air Products performed stack testing as well on the following pollutants: PM, PM10, H2SO4, NOx, CO, and VOC</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : O2, NOx, CO, PM, PM10, H2SO4, VOC, NOx, CO</p> <p>Test Results were:</p> <p>O2- 0.2%dv - within +/- 1.0%dv  NOx( ppm) 2.2% -- within 20% of RM  NOx (lb/mmBTU)- 5.0%--- within 10% of standard  CO (ppm)-- 0.4 ppm--- within +/- 5 ppm  CO (lb/hr)--- 0.2% ---- within 5% of standard  NOx-(ppm @0%O2) 1.1% of RM- within 20% of RM  CO- .5 ppm - within +/- 5 ppmdv</p> <p>PM- .0020 lb/mmBTU - below limit of .0034 lb/mmBTU  PM10- .0034 lb/mmBTU - below limit of .01 lb/mmBTU  H2SO4 - .02 ppm and 0.0001 lb/mmBTU- No limit  VOC- &lt;7.30E-04 lb/mmBTU - below limit of .0055 lb/mmBTU  NOx- .010 lb/mmBTU- below .013 lb/mmBTU  NOx--- 9.1 ppm --- below 60 ppm  CO - &lt;.71 TPY- below 13TPY</p> <p>All results were within permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/27/2015	CEM RATA	Compliance	<p>Marathon Performed a H2S RATA on 3 of its 5 flares from November 10-13, 2014.</p> <p>Alky Flare- (H2S ppm)----- 0.6%  ----- less than 10% of Standard  Crude Flare- (H2S ppm)-----  7.1% ----- less than 10% of Standard  DHT Flare ( H2S ppm) -----  3.8% ----less than 10% of Standard</p>
05/27/2015	CEM RATA	Compliance	<p>Marathon performed a CEMS RATA on the East and West Plant H2S CEMS on March 12, 2015- March 13, 2015. Clean Air Engineering was the stack testing contractor performing the RATA Pollutants tested were : H2S</p> <p>Test Results were:</p> <p>H2S</p> <p>East Plant H2S 1.3% RA---- less than 10% of Standard  West Plant H2S --- 2.6% RA---- less than 10% of Standard</p> <p>All results were within permit limits.</p>
05/27/2015	CEM RATA	Compliance	<p>RATA was performed on March 17-19, 2015 at Air Products. A process simulation to determine the purge gas fuel composition and Fd was done. The calculated Fd did not vary by more than 5% from the value determined by the March 2013 initial performance test and process simulation.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/27/2015	CEM RATA	Compliance	<p>Marathon Petroleum contracted Clean Air Engineering to perform a RATA on the CEMS serving the FCCU Regenerator Stack. The RATA occurred on March 25, 2015. The emissions tested were Oxygen, CO<sub>2</sub>, SO<sub>2</sub>, NO<sub>x</sub>, and CO.</p> <p>Results were:</p> <p>O<sub>2</sub> (%dv)----- .10 below +/- 1.0%dv  CO<sub>2</sub>(%dv)-----0.10 – below +/- 1.0%dv  SO<sub>2</sub>(ppm @0%O<sub>2</sub>)----- 0.3% STD ----- below 10% of Std.  NO<sub>x</sub>(ppm @0%O<sub>2</sub>)----- 5.9% STD ----- below 10% of Std.  CO (ppm @ 0%O<sub>2</sub>) ----- 0.8% of STD ---- below 5% of STD.</p> <p>SO<sub>2</sub> (ppm @ 0%O<sub>2</sub>)----- &lt;0.51 ppm ----- less than 50 ppm  NO<sub>x</sub> (ppm @ 0%O<sub>2</sub>)----- 25.2 ppm ----- less than 80 ppm  CO (ppm @0%O<sub>2</sub>)----- 107 ppm ----- less than 500 ppm  The RATA showed compliance with limits.</p>
05/16/2015	Complaint Investigation	Compliance	PEAS No. 12676 Complaint Investigation
05/15/2015	Release Reports	Compliance	<p>On April 9, 2015, the Refinery experienced two separate flaring events. The first event occurred at approximately 12:48PM, when an upset occurred in the Saturated Gas Unit. The depropanizer experienced an increase in pressure due to a blockage in the overhead condenser. MPC flared the overhead condenser to the Cracking Plant Flare to clear the blockage. The second event, which was unrelated occurred at approximately 7:06PM. The debutanizer in the Fluid Catalytic Conversion Unit (FCC) overpressured and relieved to the Cracking Plant Flare from approximately 7:06PM to 9:59PM. All Flaring ended by 9:59PM. After further review, MPC concluded that a release of SO<sub>2</sub> did not occur.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/12/2015	Stack Test Observation	Compliance	NHT Reboiler Stack Test
05/09/2015	Complaint Investigation	Non Compliance	May 9, 2015 Complaint Investigation
05/06/2015	Rule 912	Non Compliance	Rule 912 - Cracking Plant Flare-Incident on April 9, 2015  Opacity at Cracking Plant Flare-exceeded 20% on a 6 minute average for 1 hour.
05/05/2015	NSPS (Part 60)	Compliance	AQD reviewed Marathon's 1st Quarter 2015 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on April 27, 2015 and is required pursuant to 40 CFR 60.7 (d).  48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 1st Quarter.
05/04/2015	NSPS (Part 60)	Compliance	Air products submitted CEMS quarterly report. No excess emissions were reported. There were no CEMS that had downtime in excess of 5% for the quarter.
04/30/2015	CO/CJ	Compliance	Revised Consent Decree Progress Report .  See Activity Report CA_A983129282
04/30/2015	NSPS (Part 60)	Compliance	Reviewed the 1st Quarter 2015 CEMS quarterly report for Air Products. No excess emissions were reported in the 1st Quarter.
04/30/2015	Other	Compliance	Revised Consent Decree Progress Report
04/22/2015	Scheduled Inspection	Compliance	Light Products Terminal
04/20/2015	NSPS (Part 60)	Compliance	Semi Annual Reports for 40 CFR 60 Subparts QQQ and GGGa/VVa Semi Annual Report for 40 CFR 63 Subpart CC.  It appears that the requirements were met.

Activity Date	Activity Type	Compliance Status	Comments
04/20/2015	Stack Test	Compliance	<p>Marathon performed stack testing on the FCCU Regenerator on November 18, 2014 through November 20, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack testing services for Marathon.</p> <p>Pollutants tested were: PM, PM10, and NH3</p> <p>Test Results were:</p> <p>PM- .132 lb/1000 lb coke burn--- below limit of 0.8 lb/1000 lb coke burn</p> <p>PM10- .519 lb/ 1000 lb coke burn ---- below limit of 1.1 lb/1000 lb coke burn</p> <p>NH3- .123 lb/1000 lb coke burn-- - N/A</p>
04/17/2015	NSPS (Part 60)	Compliance	Air Products - QQQ and GGGa/VVa Periodic Reports. Along with 63 Subpart CC report No issues were identified.
04/17/2015	NSPS (Part 60)	Compliance	Notification for start up of Tank 51. Tank is subject to NSPS Subpart Kb.
04/15/2015	Complaint Investigation	Compliance	Complaint Investigation
04/09/2015	Release Reports	Compliance	RETRACTION- H2S Release. On April 9, 2015, a pinhole leak was discovered on a heat exchanger serving the GOHT. The exchanger was isolated and the leak was stopped at 11:15PM. After further review and calculation, MPC has determined that an RQ release of H2S did not occur
04/09/2015	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 4th Quarter 2014 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on January 30, 2015 and is required pursuant to 40 CFR 60.7(d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 4th Quarter</p>

Activity Date	Activity Type	Compliance Status	Comments
04/03/2015	Release Reports	Compliance	RETRACTION- Report submitted regarding January 17, 2015 incident indicated that after further review, the release was below the Reportable Quantity threshold.
04/01/2015	MACT (Part 63)	Compliance	See Activity Report CA_A983129001
04/01/2015	Rule 912	Non Compliance	During the evening of February 22, 2015, the hydrogen sulfide in the West Plant fuel gas increased above the 160 ppm limit due to insufficient steam injection rate to the North Plant amine regenerator. As a result, the H2S in the West Plant fuel gas exceeded the 160 ppm limit for 3 hours. An incident investigation will be conducted to prevent future occurrences.
04/01/2015	Rule 912	Non Compliance	On January 9, 2015 the overhead pressure transmitter on the Unit 7 Amine Stripper froze and as a result gave an artificially low pressure indication. This caused the stripper to pressure up, and the rich amine to not be effectively regenerated. The circulating amine solution was then too rich to remove hydrogen sulfide in the fuel gas absorber, resulting in high H2S in the East Plant fuel gas system for 5 hours.
04/01/2015	CO/CJ	Compliance	Pursuant to Paragraph 18 of November 2005 First Revised Consent Decree, Marathon submitted BWN Lab Audit Report. The audits occurred in 2014 at Pace Analytical Service, serving the Canton Refinery, on June 5 and June 12 at Accutest which serves Catlettsburg Refinery, and Pace Analytical Services, serving the Robinson Refinery, on June 16-18, 2014. There were several findings at each lab with responses received.
04/01/2015	CO/CJ	Compliance	2014 Heater and Boiler NOx Control Plan Annual Update.

Activity Date	Activity Type	Compliance Status	Comments
04/01/2015	CEM RATA	Compliance	<p>Marathon Petroleum contracted Clean Air Engineering to perform a RATA on the CEMS serving the Alky DIB Reboiler Heater Stack. The RATA occurred on November 13, 2014. The emissions tested were NOx and O2.</p> <p>Results were:</p> <p>O2 (%dv)----- .10 below +/- 1.0%dv  NOx(ppmdv) ----- 7.1 below 20% of RM  NOx (ppm @ 0%O2)----- 6.4 below 20% of RM</p> <p>Nox (ppm @0%O2) -- emission average 33.8 below 40 ppm limit.</p> <p>The RATA showed compliance with limits.</p>
04/01/2015	Other	Compliance	Review of MACT Periodic Report.
03/31/2015	Excess Emissions (CEM)	Compliance	I reviewed the 4th Quarter CEMS quarterly report for Air Products. No excess emissions were reported the 4th Quarter.
03/31/2015	NSPS (Part 60)	Compliance	
03/31/2015	NSPS (Part 60)	Compliance	Notice of external floating roof tank primary and secondary seals. The inspections will take place sometime after April 1,2015.
03/31/2015	Release Reports	Compliance	On January 17, 2015, at 3:30AM Marathon discovered a split in a 3-inch line that carries disulfide of-gas to the flare. The line was not in service as disulfide off-gas is normally directed to the FCCU heater. Notifications were sent out as the leaking material could have contained H2S and the leak quantity was unknown a the time. After further review, MPC determined that an RQ release of H2S did not occur.



Activity Date	Activity Type	Compliance Status	Comments
03/31/2015	Rule 912	Non Compliance	<p>On March 3, 2015, maintenance were in progress on the SRU. The valve that isolates the device from the interior of the thermal reactor did not achieve a tight seal and material from the thermal reactor was released from the instrument port.</p> <p>East Plant SRU Total duration of Incident -- 4.5 hours Type of excess emissions-- SO2 for 3 hours above 250 ppm limit.</p>
03/31/2015	MACT (Part 63)	Compliance	<p>On January 30, 2015 , Marathon Petroleum Company(MPC) submitted a report which detailed the Detroit Terminal's monitoring summary as required by 40 CFR63.10(e)(3)(v)-(vi) and 40 CFR 63.428(h). This was for the period July 1– December 31, 2014.</p> <p>Because the total duration of excess emissions or process or control system parameter exceedances for the reporting period was less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period was less than 5 percent of the total operating time for the reporting period, MPC only had to submit the summary report. MPC reported 0% excess emissions and 0.16% CMS downtime.</p> <p>The relevant standard for the 6 bay loading rack using a vapor recovery unit as the primary emissions control device and a vapor combustion unit as the secondary emission control device is .084 lbs/1000 gallons (10mg/l) of gasoline loaded, average per six hours during which at least 300,000 liters of gasoline are loaded.</p> <p>A listing of equipment in gasoline service was included in the report.</p> <p>There were no significant issues reported.</p>

Activity Date	Activity Type	Compliance Status	Comments
03/19/2015	NSPS (Part 60)	Compliance	Notice of inspection of primary and secondary seals for storage tanks.
03/19/2015	NSPS (Part 60)	Compliance	Notice for Floating Roof Inspection for Tanks 47 and 49- Sometime after April 1, 2015.
03/19/2015	Other Non ROP	Compliance	Marathon submitted emission documentation to show that their emissions complied with PTI 63-08D and to show that the project did not result in a significant net emission increase.
03/10/2015	Complaint Investigation	Compliance	PEAS Nos. 12411, 12414, and 12415; crude oil spill
03/05/2015	NSPS (Part 60)	Compliance	Report on COMS Audit. The FCCU opacity monitor was audited. The test calibration error was less than 3% for all three ranges- Low, Mid, and High.
02/26/2015	Release Reports	Compliance	RETRACTION- SO2 Release.  On January 28, 2015, Marathon experienced an unplanned shutdown of the Vacuum Unit's off gas compressors. As a result, the Vacuum Unit's seal drum relieved to the Crude Flare for approximately 49 minutes. Material flared did contain hydrogen sulfide. However, after further review, it was determined that a release did not occur.
02/24/2015	Complaint Investigation	Compliance	
02/06/2015	Other	Non Compliance	Review of 9-15-14 ROP Certification.
01/26/2015	Complaint Investigation	Compliance	January 26, 2015 Complaint Investigation

Activity Date	Activity Type	Compliance Status	Comments
01/12/2015	Stack Test	Compliance	<p>Marathon performed a RATA on the DHT New Heater Stack on November 4, 2014 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : CO<sub>2</sub>, NO<sub>x</sub>, O<sub>2</sub></p> <p>Test Results were:  O<sub>2</sub>- --- 0.3%dv - within +/- 1.0% dv  NO<sub>x</sub> (ppm-----0.52 -----  --within 20%of RM  NO<sub>x</sub>(ppm @0%O<sub>2</sub>)-----0.87%  ----- within 20% of RM</p> <p>NO<sub>x</sub>-----(ppm@ 0%O<sub>2</sub>) -----  24 ppm ----- less than 40 ppm limit  NO<sub>x</sub> (lb/mmBTU) -----  0.02 ----- NA</p>
01/12/2015	Stack Test	Compliance	<p>Marathon Petroleum performed stack testing on the FCCU Regenerator on October 28 through October 29, 2014 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : VOC, Sulfuric Acid Mist, and Ammonia</p> <p>Test Results were:</p> <p>H<sub>2</sub>S<sub>04</sub> (lb/M1b coke burn) - .064  lb/1000 lb coke burn ----- No limit  VOC (lb/M1b coke burn)---.030  lb/1000 lb coke burn----- No limit  VOC (TPY) 2.7 TPY ---- below limit of 21 TPY  NH<sub>3</sub> (lb/M1b coke burn)----- 0.10  lb/1000 lb coke burn-----No limit</p> <p>Results were below permit limits.</p>
01/09/2015	Other Non ROP	Compliance	<p>Receipt of Exemption Demonstration- Parts Washer. Analysis performed by facility. No formal review done, however, it appears equipment meets Rule 290. Further verification will occur during facility inspection.</p>

Activity Date	Activity Type	Compliance Status	Comments
01/08/2015	Stack Test	Compliance	<p>On May8, 2014, Marathon, Light Products Terminal conducted a performance test of the portable thermal oxidizer. The emission limit, 10mg/L, is on a 6 hour average. The actual emission rate for the six hour test period was 0.63 mg/l.</p> <p>An optimal operating temperature was determined during to test comply with 40 CFR 63 Subpart R. Marathon requested a minimum operating temperature for the portable combustion unit of 595 degrees Fahrenheit. The request will be submitted through a minor modification of the ROP.</p>
01/08/2015	NSPS (Part 60)	Compliance	<p>I reviewed the 3rd Quarter CEMS quarterly report for Air Products. No excess emissions were reported the 3rd Quarter.</p>
01/08/2015	Stack Test	Compliance	<p>Marathon Petroleum performed a stack test and RATA on the SRU Complex 6 Alncinerator on October 9, 2014 to comply with PTI 63-08D, which was issued on May 15, 2014.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were :CO, SO2</p> <p>Test Results were:</p> <p>CO (lb/mmBTU)-----0.02 -- less than 0.04 SO2 (ppm @0%O2) -----28 ----- - less than 250</p> <p>RATA Results were:</p> <p>O2(%dv)-----0.05----- less than +/- 1.0% dv SO2(ppdv@0%O2) ----- -----0.69 ----- less than 10% of App. Std.</p> <p>Results were below permit limits.</p>

Activity Date	Activity Type	Compliance Status	Comments
01/08/2015	Other Non ROP	Compliance	Notification pursuant to 63-08D. DHOUP construction is substantially complete, with new and modified emission units having commenced trial operation in November 2012.
12/04/2014	Release Reports	Compliance	RETRACTION- After further review of incident on October 7, 2014, it was determined that a release did not occur.
12/04/2014	Release Reports	Compliance	RETRACTION- After further review of incident on October 15-16, 2014, it was determined that a release did not occur.
12/04/2014	Rule 912	Non Compliance	On October 14, 2014 at approximately 11PM, the FCCU experienced an unplanned shutdown. During this time, the ESP were shut down due to higher levels of CO. CO was exceeded for 16 hrs(500ppm) and PM was exceeded for 19 hours (.8 lbPM/1000lb coke burn)
12/04/2014	Relocation Notification	Compliance	Per Condition VII.1 of PTI 18-12B, Notice was provided for removal of the Temporary, Portable Boiler. Date of removal was November 14, 2014.
12/04/2014	NSPS (Part 60)	Compliance	NSPS GGGa/VVa Semi Annual Report- Period Covering 04/01/2014 thru 09/30/2014.  Leaks appeared to be repaired within 15 days of detection as required by rule.
12/04/2014	NSPS (Part 60)	Compliance	Cylinder Gas Audit performed on September 9, 2014.
12/04/2014	Other Non ROP	Compliance	Violation response. Unplanned shutdown occurred at Hydrogen Plant. Flaring occurred- as a result. Did not have enough steam capacity to keep opacity down. Started up boiler for additional steam production. Future actions- develop refinery-wide communication regarding opacity/visible emissions Future training on switching from automatic control to manual control during large flaring events and adding steam to prevent smoking.

Activity Date	Activity Type	Compliance Status	Comments
11/20/2014	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 3rd Quarter 2014 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on October 30, 2014 and is required pursuant to 40 CFR 60.7(d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 3rd Quarter</p>
11/20/2014	MACT (Part 63)	Compliance	<p>Semi-annual report for MACT Subpart CC.</p> <p>No deficiencies were noted.</p>
11/20/2014	CEM RATA	Compliance	<p>Marathon Petroleum performed a RATA on the CCR Heater and CCR Interheater on August 5-6, 2014 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : NOx</p> <p>RATA results were:  CCR Heater  NOx----1.8% ----- less than 20% of RM  O2---- .202% ----- less than +/- 1% dv  NOx average---- .02 lb/mmBTU---  -----less than .05 lb/mmBTU</p> <p>CCR Interheater  NOx---- 4.3% ----- less than 20% of RM  O2----- .067%----- less than +/- 1% dv  NOx average- .03 lb/mmBTU ---  -- less than .05lb/mmBTU</p> <p>Results were below permit limits.</p>
11/13/2014	Other Non ROP	Compliance	<p>Review of 3rd Quarter 2014 LDAR, Wastewater VOC, Benzene Waste NESHAP Report. See Activity Report CA_A983127768</p>
11/13/2014	Other	Compliance	<p>Review of 3rd Quarter 2014 LDAR, Wastewater VOC Benzene Waste NESHAP Report</p>
11/10/2014	Complaint Investigation	Compliance	

Activity Date	Activity Type	Compliance Status	Comments
11/07/2014	Release Reports	Compliance	RETRACTION- After further review of October 25, 2014 incident, it was determined that a H2S and SO2 release did not occur.
11/06/2014	NESHAP (Part 61)	Compliance	Total annual benzed in waste for the reporting period is105.3 Mega-grams. Marathon's 6 Mg uncontrolled bezene quantity has been calculated to be 5.42 MG.
11/06/2014	Stack Test	Compliance	<p>Marathon performed a Stack Test on the Delayed Coker Unit on July 7, 2014 to July 9, 2014 to comply with PTI 63-08C, which was issued on January 11, 2012. URS was the stack testing contractor performing the stack services for Marathon.</p> <p>Pollutants tested were : VOC, H2S, PM</p> <p>Test Results were:  H2S- .382 lb/cycle –  VOC- 18.03 lb/cycle-  PM- .05 lb/cycle</p> <p>Based on the stack test results and limit of 487 cycles in the PTI, emissions should stay below emission limits.</p>

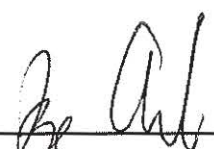
Activity Date	Activity Type	Compliance Status	Comments
11/06/2014	Stack Test	Compliance	<p>Received: October 30, 2014 Processed: November 6, 2014</p> <p>Marathon Petroleum performed a stack test on the FCCU Charge Heater on September 3-4, 2014 to comply with PTI 63-08D, which was issued on May 15, 2014. Clean Air Engineering was the stack testing contractor performing the stack services for Air Products. Pollutants tested were : PM , PM10, SO2</p> <p>For purposes of compliance- PM was tested firing refinery fuel gas. Disulfide gas was fired and an emission factor was developed.</p> <p>Test Results were:</p> <p>PM (lb/mmBTU)-----0.0015 -- less than 0.0019 Burning Refinery Fuel Gas PM (lb/mmBTU)---- .0032 ---- no limit while burning disulfide off gas but emission factor calculated PM10 (lb/mmBTU) ----- .0062----- - .0076 less than limit- burning with disulfide gas SO2 (lb/mmBTU) ----- .07 ----- no limit</p> <p>Results were below permit limits.</p>
10/28/2014	Stack Test Observation	Compliance	October 28, 2014 FCCU Stack Test Observation - VOCs, ammonia, and sulfuric acid
10/23/2014	Other	Compliance	Review of 2nd Quarter 2014 LDAR, Wastewater VOC Benzene Waste NESHAP Report
10/23/2014	Other Non ROP	Compliance	<p>Review of 2nd Quarter 2014 LDAR, Wastewater VOC, Benzene Waste NESHAP Report.</p> <p>See Activity Report CA_A983127577</p>
10/20/2014	Malfunction Abatement Plan	Compliance	Updated Malfunction Abatement Plan.
10/20/2014	Release Reports	Compliance	RETRACTION- Marathon reported that after further review, incident on September 17, 2014 involving a leak in a heat exchanger located in the Gas Oil Hydrotreater, did not result in reportable quantity release of H2S.



Activity Date	Activity Type	Compliance Status	Comments
10/17/2014	NSPS (Part 60)	Compliance	Notification of inspection of external floating roof tank secondary seal inspection of the API separator.
10/15/2014	Complaint Investigation	Compliance	Odor Surveillance
10/14/2014	Release Reports	Compliance	RETRACTION- After further review, Marathon determined that incident on September 17, 2014 did not result in a release of more than 500 lbs.
10/14/2014	Rule 912	Non Compliance	On September 27, 2014, a gasket leak in the North Plant incinerator steam drum was found. An attempt was made to reduce acid gas loading the the North Plant SRU. An upset occurred in the East Plant Low Pressure Absorber. The upset resulted in high hydrogen sulfide (H2S) in the East Plant Fuel Gas system for 4 hours.  EAST Plant Fuel Gas exceeded H2S limit (160 ppm 3 hour average )for four hours.
10/13/2014	NSPS (Part 60)	Compliance	Floating Roof in Tank No. 22T110 Available for Inspection. Sometime after October 17, 2014.
10/03/2014	Telephone Notes	Compliance	Re- July 8-2014 submittal of Test Results for Portable Vapor Combustion Unit. Marathon proposing temperature parameters for VCU. Per MACT, Marathon will need to monitor and ensure temperature is above proposed minimum temperature of 595. Will go through Minor Mod process to have the parameter in the permit.
09/29/2014	Other	Compliance	Review of 1st Quarter LDAR, Wastewater VOC Benzene Waste NESHAP Report
09/29/2014	Other	Compliance	Review of 2nd Quarter LDAR, Wastewater VOC Benzene Waste NESHAP Report
09/29/2014	Other Non ROP	Compliance	Review of 1st Quarter 2014 LDAR, Wastewater VOC, Benzene Waste NESHAP Report.  See Activity Report CA_A983127306

Activity Date	Activity Type	Compliance Status	Comments
09/29/2014	ROP Semi 1 Cert	Non Compliance	Deviations included requirements from Consent Decree. Over 110 hours of downtime occurred for some flare monitoring equipment. Further review will occur next Fiscal year. See Activity Report CA_A983129025.
09/29/2014	ROP Semi 1 Cert	Non Compliance	Deviations noted. Further review will occur next Fiscal year. Temperature monitoring was not performed because minimum temperature was not established. Back up combustor was tested and showed VOC emissions less than 10 mg/L limit. Back up combustor is not used frequently and previously, facility was monitoring for flame presence.
09/26/2014	CEM RATA	Compliance	<p>Received September 9, 2014 Processed: September 26, 2014</p> <p>Marathon Petroleum performed a RATA on the GOHT Heater. The RATA was performed on July 15, 2014 to comply with PTI 63-08C, which was issued on January 11, 2012.</p> <p>Clean Air Engineering was the stack testing contractor performing the stack services for Air Products.</p> <p>Pollutants tested were : NOx and O2</p> <p>RATA results were:</p> <p>NOx (ppm)-----3.9% ----- less than 20% of RM O2----- 0.2% ----- less than +/- 1% dv</p> <p>NOx results were: .03 lb/mmBTU &lt; .05 lb/mmBTU Results were below permit limits.</p>
09/26/2014	NSPS (Part 60)	Compliance	<p>AQD reviewed Marathon's 2nd Quarter 2014 report for their Continuous Emissions Monitoring System(CEMS). The report was submitted on July 30, 2014 and is required pursuant to 40 CFR 60.7 (d).</p> <p>48 analyzers were included in this report. Marathon reported that excess emissions were below 1% the quarter for all CEMS during the 2nd Quarter.</p>

Activity Date	Activity Type	Compliance Status	Comments
09/26/2014	Other Non ROP	Compliance	Revised DHOUP Annual Emissions and Net Actual Emissions Increase Summary for 2013.
09/26/2014	Complaint Investigation	Compliance	
09/18/2014	MAERS	Compliance	Company resubmitted updated MAERS report.  Review was done. Original submittal did not have background calculations. Calculations were submitted on 9/2/14. As a result of the tardy submittal, a full review was not completed. Several of the higher emitting emission units were reviewed and it appeared that calculations were done correctly. Through future inspections and further review, emission calculations will be reviewed as necessary.
09/17/2014	Odor Evaluation	Compliance	Odor Surveillance

Name:  Date: 9-14-17 Supervisor: W.M.  
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