

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION

**FCE Summary Report**

<b>Facility :</b> Consumers Energy Karn-Weadock Facility	<b>SRN :</b> B2840
<b>Location :</b> 2742 N. Weadock Hwy.	<b>District :</b> Saginaw Bay
	<b>County :</b> BAY
<b>City :</b> ESSEXVILLE <b>State:</b> MI <b>Zip Code :</b> 48732	<b>Compliance Status :</b> Compliance
<b>Source Class :</b> MAJOR	<b>Staff :</b> Sharon LeBlanc
<b>FCE Begin Date :</b> 4/1/2014	<b>FCE Completion Date :</b> 2/4/2016
<b>Comments :</b> 2016 FCE consisted of two inspection dates and supplemental information review. sgl	

**List of Partial Compliance Evaluations :**

Activity Date	Activity Type	Compliance Status	Comments
02/01/2016	MACT (Part 63)	Compliance	Notification of Compliance Status (NOCS), Subpart DDDDD for EUTANKFARMBLR3. EUTANKFARMBLR4, EUAUXBLRA-S2 and EUAUXBLRB-S2. sgl

02/01/2016	Excess Emissions (CEM)	Non Compliance	<p>4th Quarter Excess emissions reports for Karn Units 1 &amp; 2, for Opacity and SO2. Note that the facility reported no excess emissions for Karn 1 for the 4th quarter of 2015. However, they did report 36 minutes of monitor downtime (0.07% operating time) for Karn 1 on 10/02/2015 and 10/29/2015. Reasons for downtime were reported to be a loss of communication for the logger which resulted in a logger restart and cleaning of lenses and stack port, respectively.</p> <p>The facility reported no SO2 CEMS downtime or excess emissions for the units associated with Karn 1 boiler for the period.</p> <p>Opacity COMS for Karn 2 reported no excess emissions for the period, but did report 132 minutes of monitor downtime (0.10 % of operating time). 96 of the 132 minutes were reported to be for QA/QC activities. 30 minutes were reported as non monitor equipment malfunction (0.02 % operating time) and consisted of repair/replacement of blower flow switch on 10/21/2015 and a logger maintenance restart on 11/17/2015.</p> <p>For the 4th quarter of 2015, the facility reported no excess emissions of SO2 for Karn2. However, the facility did report 19 hours (0.86% of total operating time) of downtime for the SO2 CEMS. This occurred on 11/9, 11/12, 11/15, 11/19, 12/08 and 12/15/2015 when maintenance on the CO2 monitor, probe maintenance, operations tagged out the instrument air to the CEMS, replacement of critical orifice, replacement of the CEMS probe and SO2 monitor maintenance was conducted, respectively.</p> <p>Based on information proved in the quarterly report, the COMS and CEMS units combined reported a total of ten dates when one or more units had downtime.</p> <p>sgl</p>
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02/01/2016	Excess Emissions (CEM)	Non Compliance	<p>4th Quarterly excess emissions report for Weadock Plant Boilers 7 &amp; 8. Submittal included quarterly opacity, SO2 and CO data, CO 30-day rolling averages excess emission data and CO lb/mmbtu monitoring systems data assessment report.</p> <p>The 30 day rolling CO average for Weadock 7 was reported well below the 0.14 lb/MMBTU limit. Monitor downtime for the period reported 16 hours (0.72% operating time) total, and was reported to be due to equipment malfunction. These malfunctions were reported for 6 different days during the quarter.</p> <p>Weadock 8 reported CO CEMS downtime of 34 hours (1.6% of operating time) for the period due to equipment malfunction. Records provided indicated that this occurred over 12 days during the period. The 30 day rolling average detail report for Unit 8 reported 4 days in which the unit was offline (10/11-14/15) daily average exceedances for five different dates reflect internal flags for when the daily average exceeds the 0.14 lb/MMBTU limit, though the 30-day rolling average for the period were under the permit limit of 0.14 lb/MMBTU.</p> <p>No Excess emissions of SO2 or CO in (lb/mmbtu) were reported for the boilers. The SO2 CEMS (measures both 7&amp;8) was reported to be down for 6 hours of operating time (0.27% of operating time). 5 hours of which was reported to be monitoring equipment malfunction on 10/21 and 10/29/15.</p> <p>Opacity data for the two units, reported excess emission for 348 minutes (0.26 % of operating time) for the period. 162 minutes were reported to be resulting from boiler problems,(20 dates) 36 minutes were reported to be the result of electrostatic precipitator issues (3 dates), and 108 were reported to be unknown causes (11 dates).</p> <p>The Data Assessment Report for</p>
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02/01/2016	Excess Emissions (CEM)	Non Compliance	Units 7&8 indicated that with the exceptions of the out of control periods for the referenced CO CEMS the units met RATA and other assessment requirements. CEMS issues identified as part of the quarterly report preparation has been reported corrected. sgl
02/01/2016	Excess Emissions (CEM)	Non Compliance	<p>4th Quarterly Excess Emissions Reports for Karn Units 3 &amp; 4. submittal included quarterly reports for Opacity, SO2 and NOx for the referenced units.</p> <p>The Karn 34 NOx CEMS performance summary indicated that the unit was down for 13.48 hours, or 100 % of the operation period. Per the company, the Karn34 Boilers didn't run, only the Aux Boilers, but the DCS installation failed to complete the initial calibrations and the issue was not identified until the limited operations were over. Aux boilers A and B (EUAUXBLRA and EUAUXBLRB) are twin 300 mmbtu natural gas fired boilers that are basically used as pre-heaters to warm up the dual-fuel Karn boilers # 3&amp;4. The facility reported that the aux boilers were used to produce steam to augment Karn 12 during an outage. The issue has since been corrected.</p> <p>The Karn 34 COMs and SO2 CEMs both reported no downtime or excess emissions for the reporting period.sgl</p>
01/12/2016	Scheduled Inspection	Compliance	FCE Evaluation as a result of site inspection activities conducted on 1/12/2016 and 2/4/2016. sgl

Activity Date	Activity Type	Compliance Status	Comments
11/24/2015	CEM RATA	Compliance	<p>Weadock Units 7 &amp; 8 - Annual RATA for SO<sub>2</sub>, CO<sub>2</sub>, and NO<sub>x</sub> Gas Data (combined) and individual unit testing for NO<sub>x</sub> and CO gas data.</p> <p>No testing protocol deviations were reported, though the report did identify recorded 1-minute CO concentration averages for Unit 8 exceeded the span gas value. However, the exceedances did not result in an average run concentration higher than the calibration span gas concentration and are allowable under the Method 7E QA criteria.</p> <p>RATA results were reported within the required performance standards for CO<sub>2</sub>, SO<sub>2</sub> and NO<sub>x</sub>. A bias of 1.025 was applied to the SO<sub>2</sub>, CO and common stack flow RATA results were also reported to meet required performance standards. sgl</p>
11/09/2015	CEM RATA	Compliance	<p>Mercury CEMS Certification Test Report for Karn#1. RATA was submitted in April 2015 to meet the submittal requirements. Report indicated that the Mercury CEMS passed all testing requirements. sgl.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/30/2015	Excess Emissions (CEM)	Compliance	<p>3rd Quarterly reports for opacity, SO2 and CO, CO 30-day rolling average excess emissions data and JC Weadock CO lb/mmbtu monitoring systems data assessment report.</p> <p>The Opacity performance summary for the Weadock plant reported 666 minutes (0.5 percent of operating time) of excess emissions, Boiler problems (210 minutes) and Other known causes (234 minutes) were listed as the dominant causes. COMS downtime for the period was reported to be 126 minutes (0.10 percent of operating time) and was reported to be the result of QA/QC activities.</p> <p>No SO2 excess emissions or CEMS downtime was reported for the period. Average emissions for SO2/MM#/MMBTU for year is 0.782.</p> <p>CO reporting for the period indicated that for Weadock7, the no excess emissions occurred. CO CEMS downtime for the period totaled 13 hours (0.63 percent of operating time). 10 hours of which were the result of monitoring equipment malfunctions in which staff performed adjustments and reran tests (7/11, 15 and 17/2015). 30-day rolling average for CO for the Weadock7 ranged from 0.029 to 0.050 #/MM.</p> <p>CO CEMS for Weadock8 reported no excess emissions for period. CO CEMS unit for Weadock 8 reported 10.2 hours (0.50 percent of operating time) of downtime due to equipment malfunction (7 hrs) and QA/QC (3.2 hrs). The 30 day rolling CO average for unit 8 ranged from 0.037 to 0.060 CO#/MM.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/30/2015	Excess Emissions (CEM)	Compliance	<p>Quarterly reports for opacity, SO2 and NOx for KARN 3 &amp; 4. Excess opacity emissions for the units was reported for 43 minutes (0.73 percent operating time) during unit startup on 7/15/15 and shutdown on 8/5/15.... Boiler parameter adjustments were reported for all associated 6 minute intervals.</p> <p>No COMS downtime was reported. No NOX or SO2 excess emissions were reported and no CEMS downtime was reported for either the NOx or SO2 CEMS for the period. sgl</p>
10/30/2015	Excess Emissions (CEM)	Compliance	<p>3rd Quarter reports for opacity and SO2. No excess emissions were reported for either Karn 1 or 2 for period.</p> <p>Downtime for Karn1 SO2 CEMS was reported for 2 hrs (0.11 percent operating time). Downtime was reported to be due to contractor breaking a sample line. Downtime for Karn1 COMS was reported to be 120 minutes (0.10 percent operating time). 108 minutes of which was for QAQC activities.</p> <p>Karn2 SO2 CEMS reported no downtime for period. Karn2 COMS reported downtime of 294 minutes (0.23 percent of total operating time). 210 minutes of which was for QAQC purposes 72 minutes were reported to be for repair of a faulty blower (9/1 &amp; 2/2015). sgl</p>
10/30/2015	Other Non ROP	Compliance	<p>Planned venting in the morning per Mitch. Note follow up correspondence with facility indicated that the venting was due to #4 going into a periodic extended outage, and line venting was required. sgl</p>
10/08/2015	CEM RATA		<p>RATA for Gas flow, SO2, CO2 and Nox four Units 3 &amp; 4. Report summary indicated that with the exception of a redundant flow monitor which failed testing, all other monitors passed with results within acceptable ranges. The redundant flow monitor will be retested at a later date.</p>

Activity Date	Activity Type	Compliance Status	Comments
10/06/2015	CEM RATA	Compliance	Unit 2 PM CEMS Correlation testing conducted 8/4-6/2015. sgl
10/02/2015	CEM RATA	Compliance	HG CEMS certification testing for Karn #2. Document reported that unit passed all tests and was submitted within 60 days. Approval letter by TPU was issued on Jan 11, 2016.
09/29/2015	CEM RATA	Compliance	Unit 1 PM CEMS certification report - testing determined correlation co-efficient etal for PM CEMS
09/24/2015	ROP Semi 1 Cert	Compliance	EUCOMBTURB has been "mothballed" per last inspection report the units have not been operated since 2011.
09/24/2015	ROP Semi 1 Cert	Non Compliance	Facility is in the process of preparing and submitting MAP for EUKARN 1 & EUKARN 2 SCR. Document requirement was added in the most recent ROP Renewal, and was identified as being late as part of internal audit.
09/24/2015	CAM Excursions/Exceedances	Compliance	No excursions or exceedances reported by Facility for period.
09/24/2015	CAM monitor downtime	Compliance	Facility reports CAM monitor downtime has occurred for opacity monitors for EU KARN 1 & EUKARN 2. Note that these deviations/downtime periods are reported quarterly by facility.
09/24/2015	ROP Semi 1 Cert	Compliance	During the first Qtr, no exceedances of opacity were reported, nor was any COMS downtime reported. 2nd Quarterly reports for opacity indicated Opacity exceedances for the period were limited to 5 deviations associated with unit startup/shutdown, boiler problems or adjustment of operating parameters. Opacity exceedances were limited to 60 minutes, and <1.5 % of operating time.
09/24/2015	ROP Semi 1 Cert	Compliance	Deviations reported are summarized in the appropriate submittals for Section 3, and consist of Opacity monitor down time or excess emissions.



Activity Date	Activity Type	Compliance Status	Comments
09/24/2015	CAM Excursions/Exceedances	Compliance	<p>First Quarter - COMs reporting for Weadock, reported excess opacity emissions for a total of 330 minutes (0.25% of operating time), 216 of which were due to boiler problems and 42 of which were startup/shut down. The COMs was reported down for a total of 36 minutes (0.03% of operating time)for QA/QC activities.</p> <p>Second Quarter - Opacity Excess emissions for period were reported to be 0.36% of operating time ( 63 events, 474 minutes over 24 days). Coms was reported down for QA/QC activities and other known causes 0.03% of operating time (7 events).</p>
09/24/2015	CAM monitor downtime	Compliance	<p>First quarter COMs reporting for Weadock, reported the COMs was reported down for a total of 36 minutes (0.03% of operating time) for QA/QC activities.</p> <p>Second Quarter - Coms was reported down for QA/QC activities and other known causes 0.03% of operating time (7 events).</p>
09/24/2015	ROP Semi 1 Cert	Compliance	<p>Previously unreported deviations included 7 occasions (4% of available days) in January, February and April 2015 in which environmental checklist rounds which include multiple required monitoring points were not completed. Co. has added new position as well as relocated offices for supervisory staff to fuel handling area to make sure required checks are being completed.</p>
09/24/2015	CAM Excursions/Exceedances	Compliance	No CAM excursions or exceedances reported for the period.
09/24/2015	CAM monitor downtime	Compliance	No monitor downtime reported for the period.
09/24/2015	ROP Other	Compliance	Formal notification of completion of installation - Karn 2 SDA. Note that District was informed electronically of initial startup on 5/20/2015.
08/18/2015	CEM RATA	Compliance	notice to EPA of CEMS RATA testing for Weadock Units 7&8. sgl

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08/13/2015	CEM RATA	Compliance	RATA Karn 1 RATA conducted 6/22 and 6/23/2015. Document reported that the NOX, CO, SO2 and flow for the appropriate CEMS units were within required performance ranges.
08/13/2015	CEM RATA	Compliance	Replacement pages (Revision #1) for KARN 2 RATA tested May 27-28, 2015. Note that per company, a data input error was noted in the document, and the replacement pages reflect the correction of that error. Corrections still show the NOx and SO2 CEMS to be operating within appropriate ranges.
08/07/2015	Excess Emissions (CEM)	Compliance	Quarterly reports for Opacity, SO2 - Downtime for CEMS for Karn #1 was <0.2% and was for either unit reboots or probe replacement. Downtime for CEMS for Karn #2 was <0.3% and was predominantly for equipment calibration or maintenance. No excess emissions were reported for the period.
08/07/2015	Excess Emissions (CEM)	Compliance	Quarterly reports for opacity, SO2 and NOx for Karn #3 &4. Opacity exceedances for the period were limited to 5 deviations associated with unit startup/shutdown, boiler problems or adjustment of operating parameters. Opacity exceedances were limited to 60 minutes, and <1.5 % of operating time. SO2 and NOx reported no exceedances or CEMS downtime for the period.

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08/07/2015	Excess Emissions (CEM)	Compliance	<p>Quarterly reports for opacity, SO2 and CO; monitoring systems data assessment report; CO 30-day rolling average excess emissions data; Actual sulfur dioxide annual emissions report</p> <p>Opacity Excess emissions for period were reported to be 0.36% of operating time ( 63 events, 474 minutes over 24 days). Coms was reported down for QA/QC activities and other known causes 0.03% of operating time (7 events).</p> <p>The SO2 CEMS was reported down for 2 hrs ( 2 events on same day) during the operating period for equipment malfunction. No excess emissions were reported for the period. Monthly average emissions are reported well below permit limits for each unit.</p> <p>No excess CO was reported for the period for units 7&amp;8, and no CEMS downtime was reported for Weadock #7 for the period. CO CEMS for Weadock #8 reported 5 hours (5 events) of equipment downtime due to monitor equipment malfunctions that recorded recalibration. A data assessment Report for the CO monitoring systems for both units was included in the submittal, and appeared to indicate that the CEMS met their certification requirements, and reported emissions below projected numbers.</p>
08/07/2015	CEM RATA	Compliance	Opacity CEMS annual calibration testing/audit for Karn #1 &2. Note testing was conducted on July 17, 2015 for Karn #1 and 2. Both units were reported to pass their audit, and testing filter certifications had not expired.
08/07/2015	CEM RATA	Compliance	Opacity CEMS Calibration Testing for 2015 for Karn 3&4 no testing issues were noted and the unit passed the testing.
08/07/2015	CEM RATA	Compliance	July 17, 2015 Opacity Calibration testing/audit for opacity CEMS used for Weadock 7&8. Unit passed calibration tests.

Activity Date	Activity Type	Compliance Status	Comments
08/05/2015	CEMS Test Observation	Compliance	Site visit to confirm that PM CEMS correlation testing for Karn 2 was ongoing, and that Karn 3&4 CEMS RATA was underway.
07/29/2015	CEMS Test Observation	Compliance	Mercury CEMS Testing for Karn #2 and PM CEMS correlation testing was being conducted for Karn #1
07/06/2015	CEM RATA	Compliance	Nox, So2, CO2 and Flow RATA testing for calendar year 2015 for Karn 2. With exception of Bias for NOx and flow, all other parameters and test requirements were met.
06/16/2015	MACT (Part 63)		Received request from company for 1 year extension of all pending Industrial Boiler Maximum Achievable Control Technology (IB MACT) deadlines for the JC Weadock Facility in Essexville.

Activity Date	Activity Type	Compliance Status	Comments
05/11/2015	Excess Emissions (CEM)	Compliance	<p>Quarterly Reports for Opacity, SO<sub>2</sub>, and CO for Weadock 7&amp;8. As well as 30-day rolling average CO excess emissions data and a JC Weadock CO Monitoring systems data assessment report for the quarter.</p> <p>COMs reporting for Weadock, reported excess opacity emissions for a total of 330 minutes (0.25% of operating time), 216 of which were due to boiler problems and 42 of which were startup/shut down. The COMs was reported down for a total of 36 minutes (0.03% of operating time) for QA/QC activities.</p> <p>The SO<sub>2</sub> CEMS for the quarter did not report any excess emissions or monitor downtime. Cumulative emissions were reported to be 0.685 #/MMBTU.</p> <p>The CO CEMS for Weadock #7, reported no excess emissions and only 9 hours of downtime (0.44 %) due to monitoring equipment malfunction. The 30 day rolling average for CO for #7 reported 2 CO exceedances (1/10 and 1/12/2015) to the 0.14 #CO/MMBTU standard limit. CO emissions for the quarter was 83.836 # CO/MMBTU</p> <p>The CO CEMS for Unit #8 reported no excess emissions and 24.62 hours (1.25% of operating time) downtime due to monitoring equipment malfunction. The 30 day rolling CO average reported 3 exceedances of the 0.14 standard limit (1/5/2015 and 3/20 &amp; 3/21/2015). The cumulative CO total for Unit #8 was 138.314 # CO/MMBTU.</p>

Activity Date	Activity Type	Compliance Status	Comments
05/11/2015	Excess Emissions (CEM)	Compliance	<p>Quarterly Reports for Opacity, SO<sub>2</sub>, NO<sub>x</sub> for Karn 3&amp;4. Note no exceedances of opacity were reported, nor was any COMS downtime reported. With respect to the NO<sub>x</sub> CEMS, no exceedances were reported, and the unit was reported down for 0.35% due to monitoring equipment malfunction (CO<sub>2</sub> monitor). The SO<sub>2</sub> CEMS reported no emission exceedances nor monitor downtime for the quarter.</p>
05/11/2015	Excess Emissions (CEM)	Compliance	<p>Quarterly Reports for Opacity, SO<sub>2</sub>. Note the facility reported excess emissions for 0% of operating time for Karn 1 COMs and 0.27% downtime for quarter for QA/QC or other know causes much of which was CEMS computer maintenance activities for the same unit. The SO<sub>2</sub> CEMS for Karn 1 was reported to have had no excess emissions, and operation downtime of 4.13% for non-monitor equipment malfunction. Clarification as to what the malfunction was (2/7-2/9-2015) has been requested.</p> <p>For Karn 2, The facility reported no exceedances with respect to Opacity, and reported that the COMS was down 0.05% of the operating time for the quarter. This downtime appears to be the result of CEMS Computer Maintenance. The SO<sub>2</sub> CEMS for the same boiler reported no excess emissions and 0.43% downtime for CEMS due to other known causes.</p>
04/29/2015	MAERS	Compliance	<p>Maers cert form received 3/13/2015 for all five sections.</p>
04/17/2015	ROP Annual Cert	Compliance	<p>Facility reported opacity excess emissions for 3rd and 4th quarters of 2014. July 9th, 2014 opacity issues were reported to be the result of adjustments to the boiler operating parameters. Other was for QA/QC activities. Also reported failure to properly inspect three oil guns which could not be removed during the March 2014 MMAP inspections.</p>

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04/17/2015	ROP SEMI 2 CERT	Compliance	Facility reported opacity excess emissions for 3rd and 4th quarters of 2014. July 9th, 2014 opacity issues were reported to be the result of adjustments to the boiler operating parameters. Other was for QA/QC activities.
04/17/2015	ROP Annual Cert	Compliance	One deviation (excess opacity) reported to have occurred when the "d-field" in the precipitator for unit 8 failed in October 2014. Other issues included startup-shutdown and associated boiler issues (rapid load changes, etc) reported in July, August and December 2014.
04/17/2015	ROP SEMI 2 CERT	Compliance	One deviation (excess opacity) reported to have occurred when the "d-field" in the precipitator for unit 8 failed in October 2014. Other issues included startup-shutdown and associated boiler issues (rapid load changes, etc) reported in July, August and December 2014.
04/17/2015	CAM Excursions/Exceedances	Compliance	Facility reported CAM excursions to have occurred when the "d-field" in the precipitator for unit 8 failed in October 2014 and at unit 8 startup-shutdown in December 2014.
04/17/2015	CAM monitor downtime	Compliance	Quarterly Reports identified maintenance periods totaling <0.5% of operation time for COMs units for 3rd and 4th quarters.
04/17/2015	ROP Annual Cert	Compliance	No deviations reported for year for coal handling system.
04/17/2015	ROP SEMI 2 CERT	Compliance	no deviations reported for second half of 2014
04/17/2015	CAM Excursions/Exceedances	Compliance	no excursions or exceedances reported for 2cnd half of year.
04/17/2015	CAM monitor downtime	Compliance	No monitor downtime was reported for coal handling system
04/17/2015	ROP Annual Cert	Compliance	no deviations reported for period
04/17/2015	ROP SEMI 2 CERT	Compliance	no deviations, excursions, exceedances or CAM monitor downtime reported.
04/17/2015	CEM RATA		Data acquisition system was not functioning properly during the 2/17 & 18/2015 Mercury CEMs RATA- will retest in June 2015.

Activity Date	Activity Type	Compliance Status	Comments
04/16/2015	ROP Annual Cert	Compliance	COMs for unit(s) reported downtime of less than 0.5% for maintenance activities during 3rd and 4th quarter reports. No other deviations nor excess emissions were reported for Section 1 EUs.
04/16/2015	ROP SEMI 2 CERT	Compliance	Some downtime for COMS reported for maintenance and QA during 3rd and 4th quarters. No exceedances or deviations reported. sgl
04/16/2015	CAM Excursions/Exceedances	Compliance	No excursions or exceedances were reported for third or 4th quarters. COMs was reported to be down for limited periods for maintenance or QA/QC. sgl
04/16/2015	CAM monitor downtime	Compliance	Opacity monitor downtime reported for 3rd and fourth quarters due to maintenance and QA/QC. No excursion/deviation reported. sgl
02/10/2015	Excess Emissions (CEM)	Compliance	Quarterly reports for Opacity, SO2 for stacks of both Karn 1 & Karn 2 units. all downtime the result of equipment activities, no exceedances/excess emissions reported. sgl
02/10/2015	Excess Emissions (CEM)	Compliance	Quarterly reports for Opacity, SO2 and CO for Units 3&4
02/10/2015	Excess Emissions (CEM)	Compliance	Quarterly reports for Opacity (no exceedances reported), SO2, and CO (2 exceedance days noted in December)- No NOx data included with submittal. Will check with company.
02/10/2015	Malfunction Abatement Plan	Compliance	Revised SDA-MMAP
02/05/2015	ROP Other	Compliance	Test Plan/protocol for the Mercury CEMS on D.E. Karn Unit 2- resubmittal of 9/29/2014 protocol due to delays in testing Karn 2.
12/26/2014	ROP Other	Non Compliance	Karn 1 and 2 SDA MAP- review letter to go out 12/29/2014. sgl
11/24/2014	Stack Test	Compliance	Nov 3 & 4, 2014 PM Stack Testing for Weadock Units 7&8. Note that Unit 8 was not operated at as full of a load for testing as normally would have due to north-half of precipitator field being out of service. Lower operational load was approved by District Staff prior to testing. Testing is anticipated to be conducted again in 2015.



Activity Date	Activity Type	Compliance Status	Comments
11/10/2014	ROP Other	Compliance	30-Notification of installation of K1 SDA on 10/20/2014- Note per 12/16/2014 e-mail this document also covers all of the Karn 1 associated equipment (lime prep, BP recycle and BP Disposal). sgl
11/10/2014	ROP Other	Compliance	2014 Karn 2 Boiler Chemical Clean Notification
11/03/2014	Stack Test Observation	Compliance	PM testing for Weadock #7- sgl
10/31/2014	Excess Emissions (CEM)	Compliance	Weadock 7 & 8 SO2, opacity, CO and the RATA report summary. Opacity excess emissions reported on 35 days, 522 minutes, 0.39% of operating time. sgl
10/31/2014	Excess Emissions (CEM)	Compliance	Karn 3&4- Opacity, SO2 and NOx quarterly reports. COMs excess emissions reported for 2 dates totaling 42 minutes.sgl
10/31/2014	Excess Emissions (CEM)	Compliance	Karn 1&2 opacity and SO2 excess emissions reports. Karn 1 reported 23 dates with downtimes, Karn 2 reported 12 dates with downtimes- most all were QA calibration or maintenance activities. sgl
10/30/2014	CEM RATA	Compliance	
10/15/2014	CEM RATA	Compliance	40 CFR 63, Subpart UUUUU, Mercury CEMS certification test protocol - approved by TPU on 10/3/2014
10/15/2014	Stack Test	Compliance	Karn Units 1 & 2 - 2014 Particulate Matter Test Results. Results reported PM emission levels well below Permit limits for both units.
10/15/2014	ROP Other	Compliance	Test Plan for Particulate testing for 2014- TPU approval letter issued on 10/10/2014.
09/24/2014	CEM RATA	Compliance	KARN 3&4 Rata, CO2, NOx and gas flow. SO2 determined to meet exemption requirements for 2014 annual RATA.
09/18/2014	ROP Semi 1 Cert	Compliance	karn 1& 2
09/18/2014	CAM Excursions/Exceedances	Compliance	Karn 1&2
09/18/2014	CAM monitor downtime	Compliance	Karn 1&2- only com monitor downtime reported.
09/18/2014	ROP Semi 1 Cert	Compliance	Karn 3&4
09/18/2014	ROP Semi 1 Cert	Compliance	Weadock 7&8

Activity Date	Activity Type	Compliance Status	Comments
09/18/2014	CAM Excursions/Exceedances	Compliance	Weadock 7&8
09/18/2014	CAM monitor downtime	Compliance	Weadock 7&8
09/18/2014	ROP Semi 1 Cert	Compliance	Coal Handling Operations
09/18/2014	CAM Excursions/Exceedances	Compliance	Coal Handling Operations
09/18/2014	CAM monitor downtime	Compliance	Coal Handling Operations
09/18/2014	Excess Emissions (CEM)	Non Compliance	Revised 2014 Q1 Quarterly Report to account for CO rolling average excess emission data - 30 day rolling average shows boiler 8 exceeding CO limit for 12 day period 3/25-4/5/2014.
09/18/2014	Excess Emissions (CEM)	Non Compliance	Revised 2014 Q1 Quarterly Report to account for CO rolling average excess emission data - 30 day rolling average shows boiler 8 exceeding CO limit for 12 day period 3/25-4/5/2014.
09/18/2014	ROP Semi 1 Cert	Compliance	Natural Gas Fired Combustion Turbine
09/03/2014	Stack Test Observation		
08/25/2014	CEM RATA	Compliance	RATA for the Karn 1 CEMS. sgl
07/31/2014	Excess Emissions (CEM)	Compliance	Quarterly Report for Opacity, SO2 - Karn 1&2. opacity monitor rata conducted during quarter. Note 30 minutes opacity excess reported for karn 2 during quarter equated to 0.02 % operating time- sgl
07/31/2014	Excess Emissions (CEM)	Compliance	Quarterly Report for Opacity, SO2 and NOx - Karn 3&4. Note that the opacity rata was conducted this quarter. sgl
07/31/2014	Excess Emissions (CEM)	Compliance	Quarterly Report for Opacity, SO2 and CO - JC Weadock Plant
07/31/2014	ROP Other	Compliance	Actual Sulfur Dioxide Annual Emissions Report JC Weadock 7&8
07/09/2014	Other	Compliance	COMs audit for Weadock 7&8. sgl
05/22/2014	MAERS	Compliance	MAERS Annual Report and report certification received 3/14/2014

Activity Date	Activity Type	Compliance Status	Comments
05/02/2014	Excess Emissions (CEM)	Compliance	Karn 1&2 - quarterly reports for opacity and SO2. KARN 1 SO2 CEMs reported no downtime. KARN 2 SO2 CEMs down 0.21% operating time - COM down 0.28 % operating time for calibration check or comp. maintenance...KARN2 COM down 0.19 % operating time for calibration check or computer maintenance.sgl
05/02/2014	Excess Emissions (CEM)		Karn 3&4 - quarterly reports for opacity, SO2 and NOx. KARN 3&4 SO2 CEMs reported 0 hrs downtime and no excess emissions. NOx CEMs reported 6.09% operational downtime due to monitor recalibration issues on 6 separate dates. No excess NOx emissions. COMs reported 0 hrs downtime and one exceedance during startup-shutdown.
05/02/2014	Excess Emissions (CEM)	Compliance	Weadock - quarterly reports for opacity, SO2 and CO #7 CO Monitor - 1.45% downtime over 6 dates for QAQC activities, #8 CO Monitor down 1.54% over 8 days for QAQC activities...SO2 monitor for weadock reported 0.35% downtime (2 days) for QAQC activities. COMs for Weadock reported downtime of 0.01 and excess emissions of 0.37% operating time. Excess emissions reported to be due to rapid load changes, blowing water lances and soot blows for units. Quarterly data assesment for monitoring systems appeared to be in order. sgl

Name: Sharon A. Blane Date: 4/22/16 Supervisor: C. Hare