

**Major Facility Review (Title V)
Semi-Annual Monitoring Report**

for

**East Bay Municipal Utility District
Main Wastewater Treatment Plant
Facility #A0591**

Reporting Period: July - December 2012

Note: This report was revised on March 14, 2013. Changes to the report are evident by the use of strikethrough text for deletions and italics for additions. The updated information is in condition 20651, item 13.

Source	Monitoring Requirement	Limit	Monitoring Results
S-55 Boiler	Condition 20651 2. Shall not operate S-55 boiler when more than two of the three cogen engines S-37, S-38, or S-39 are operating 3. Shall not exceed 20.41 million BTU/hr 5a. NOx emission from boiler 5b. CO emission from boiler 18. Daily records of hours of operation, fuel consumption 19. Annual performance test for emission limits in 5	30ppm 50ppm	Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data. Condition met. Boiler operated from 9.4-12.8 BTU/hr in period. See Attachment 3. See 19 for test results if annual tests run in monitoring period Refer to Attachment 1 – Engine and Boiler Air Permit Data. Source test conducted 11/27/12 and limits met. Refer to Attachment 2 – Boiler Source Test Results.
S-37, S-38, S-39 Cogeneration Engines	Condition 20651 Emission limits – 6. NOx emissions from S-38 7. POC emissions from S-38 8. CO emissions from S-38 9. Filterable particulate emissions from S-38 10. NOx emissions from S-37 & S-39 11. CO emissions from S-37 & S-39 13. Thermal throughput per engine 14. Combined hours of operation for S-37, S-38, and S-39 15. Combined diesel consumption for S-37, S-38, and S-39 18. Daily records of hours of operation, fuel consumption 19. Annual performance test for emission limits in 6-11	1.25 g/hp-hr 0.6 g/hp-hr 3.0 g/hp-hr 0.085 g/hp-hr 70 ppmvd 2000 ppmvd 25 MMBtu/hr 25,316 hours in any rolling 365 day period 150,000 gallons in any rolling 365 day period	For items 6-11 see 19 for test results if annual tests run in monitoring period Limit exceeded in October 2012 on Engines 2 and 3. Condition met. Refer to Attachment 3 for details. Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data. Condition met. Refer to Attachment 1 – Engine and Boiler Air Permit Data. Refer to Attachment 1 – Engine and Boiler Air Permit Data. Performance tests conducted in May 2012. All results met limits. Results submitted with Jan-June 2012 report.

Source	Monitoring Requirement	Limit	Monitoring Results
S-48 Gasoline Dispensing Facility	Condition 25107 The Static Pressure Performance Test (Leak Test) ST-38 shall be successfully conducted at least once in each twelve consecutive month period.		Completed on 9/18/12. Refer to Attachment 4 for test results.
	Condition 21663 Annual gasoline throughput	334,000 gal per year	Condition met. Refer to Attachment 5 for gasoline throughput table.
S-49 Diesel Engine Back-up Generator	Condition 19058 (BAAQMD permit) 4. Diesel fuel – sulfur content	<0.5% by weight	See Attachment 6 for sulfur content on diesel deliveries in period – but the generator was not used in this time period.
	5. Hours of operation		Generator not used July-Dec 2012. Refer to Attachment 7.
S-50 Diesel Engine Back-up Generator	Condition 22830 1. Hours of operation	30 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-51 Diesel Engine Back-up Generator	Condition 22850 1. Hours of operation	50 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-52 Diesel Engine Back-up Generator	Condition 22820 1. Hours of operation.	20 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
	Condition 19184 (BAAQMD permit) 2. Diesel fuel – sulfur content	<0.005% by weight	
S-53 Diesel Engine Back-up Generator	Condition 22830 1. Hours of operation	30 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.
S-54 Diesel Engine Back-up Generator	Condition 22850 1. Hours of operation	50 hours/year reliability-related hours	Generator reliability-related hours are less than permit limit. Refer to Attachment 7.

Source	Monitoring Requirement	Limit	Monitoring Results
S-56 Turbine	Condition 24050 2. Total combined heat input 3. NOx emission limit 4. CO emission limit 5. SO2 emission limit 7. Annual turbine source test 8. Monthly NOx and CO test	389,820 MMBtu in any 12-month period 23 ppm (15-min) 100 ppm (15-min) 150 ppmv	Condition met. See Attachment 3 for July-Dec summary. Last source test results in compliance with these limits. Refer to Attachment 8 for January 9, 2013 results. December test missed and made up January 9, 2013. Test completed during months when turbine was in use. Refer to Attachment 8 for monthly test results. Note that turbine was down for repairs during three testing months.
S-100 Municipal Wastewater Treatment Plant	Condition 21759 1. Total wastewater flow	120 MGD monthly dry weather average 325 MGD monthly wet weather average	Condition met. See Attachment 9 showing flow rates below these levels in period.
S-110 Headworks A-461 & A-462 Carbon Bed Scrubbers	Condition 17335 3. Inlet and outlet H2S concentrations of carbon beds, as well as any other appropriate operating parameters shall be continuously monitored and reviewed on a daily basis to determine when carbon adsorption bed breakthrough is imminent or has been reached.		Monitoring results for the carbon beds are in Attachment 10. Maintenance records on the carbon beds are in Attachment 11.
S-170 Sludge handling	Condition 18006 1. Monitor and record on a daily basis the activated sewage sludge throughput through S-170.		Activated sludge throughput data are in Attachment 12. Maintenance records are in Attachment 11.

Source	Monitoring Requirement	Limit	Monitoring Results
S-180 Anaerobic Digesters	Condition 18860 2. Monthly inspection of digesters 3. Sulfur content of digester gas 4. Weekly sampling and testing of digester gas for H2S 5. Hours of flaring per day	 < 340 ppmv	Inspections conducted by Operations. Gas releases noted in reporting period are listed on cover letter for July-Dec 2012. Condition met. Digester gas sampling results from July-Dec 2012 are in Attachment 13. Recorded in Attachment 14 – Flare Use Air Permit Data.

Attachment Index:

- 1 Engine and Boiler Air Permit Data
- 2 Boiler Source Test Results
- 3 Cogeneration Engines and Turbine Power/Equipment Summary
- 4 The Static Pressure Performance Test (Leak Test) ST-38 Results
- 5 Gasoline Facility Throughput
- 6 Diesel Deliveries with Sulfur Content Certifications
- 7 Hours of Operation for Stand-by Emergency Generators
- 8 Turbine Source Test and Monthly Test Results
- 9 Monthly/Annual Wastewater Summary 2012
- 10 IPS Carbon Bed Inlet/Outlet H2S Readings
- 11 Odor Scrubber Maintenance Records for S-170 and S-110
- 12 Activated Sludge Throughput for S-170
- 13 Digester Gas H2S Sampling
- 14 Flare Use Air Permit Data