EAST BAY
MUNICIPAL UTILITY DISTRICT

AMIT MUTSUDDY
DIRECTOR OF WASTEWATER
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TV Tracking #1314 (Semi-Annual)

1. ☐ RECEIVED IN ENFORCEMENT: 01/30/2026

Mr. Jeff Gove
Director of Compliance and Enforcement
Bay Area Air District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn. Title V Reports
Transmitted by e-mail to compliance@baaqmd.gov

RE: Semiannual Major Facility Review (Title V) Monitoring Report for the East Bay Municipal Utility District (EBMUD) Main Wastewater Treatment Plant (Facility #A0591)

Dear Mr. Gove:

Attached is the semiannual monitoring report for the EBMUD Main Wastewater Treatment Plant (Facility #A0591) as required under Section I.F of the facilities Major Facility Review Permit issued November 7, 2019. The report covers the period from July 1, 2025 to December 31, 2025.

A few minor permit deviations were identified and further described below.

One deviation relates to source 48 (S-48), the gasoline dispensing facility (GDF). The GDF was recently upgraded and new permit conditions in the Permit to Operate are in effect but have not been added to the Title V permit. Two of the four required annual tests on the GDF in Permit to Operate condition 100074 were not completed in time to meet the annual test requirement. The Dynamic Back Pressure Test CARB TP201.4 and the Liquid Removal Test were due on July 17, 2025, but the annual tests were not conducted until August 7, 2025. The Bay Area Air District (Air District) issued Notice of Violation A64949 for the late testing. The cause of this oversight was confusion about the timing of the new tests added to the updated permit condition. All four required tests on the GDF are now on the same annual cycle to prevent scheduling issues.

Equipment issues with the turbine (S-56) led to testing delays. First, the annual source test required in permit condition 24050-7 was not conducted within a year. The turbine gas compressor failed the day of the scheduled source test on December 1, 2025, and the turbine could not be tested. Unfortunately, the turbine could not be repaired in time to test it again before the one-year point, December 3, 2025. The turbine was shut down until the next source test was scheduled on December 9, 2025. However, when starting the turbine for the December 9, 2025 source test, a transformer in the upstream substation at the Main Wastewater Treatment Plant failed and the source test could not be conducted the second time. The turbine remains out of service through the end of January 2026 while a replacement transformer is being manufactured. Deviation letters required in Section I.F in the Title V permit were submitted to the Air District

describing the late source test issue. Second, the December monthly emissions check required in permit condition 24050-8 on the turbine could not be conducted since the equipment was out of service during the allowed monthly test period of 25 to 35 days after the previous test.

The third minor issue found during the preparation of this semi-annual report occurred when the boiler ran for two minutes when all three cogeneration engines were running. On December 9, 2025, at 4:20am-4:21am, the boiler was manually started before cogeneration engine #3 was shut down, deviating from the requirement in permit condition 20651-2 that does not allow the boiler to run when all three cogeneration engines are running. This occurred on a busy night when the turbine failed upon start to prepare for the scheduled source test noted in the previous paragraph. Staff most likely forgot to shut down engine #3 prior to starting the boiler and were busy maintaining heat and power at the plant and troubleshooting the transformer failure in the substation for the turbine. The corrective action for this deviation is to remind all staff about this requirement.

A permit renewal application for Title V Permit A0591 was submitted to the Air District on April 30, 2024. The permit application is currently listed as Complete – Application Under Evaluation in the Air District My Air Online system. EBMUD is currently operating under the permit issued November 7, 2019, which continues to be in force after November 6, 2024, the expiration date of that permit.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this report are true, accurate and complete.

If you have any questions about this report, please call Chris Dembiczak at (510) 287-0509.

Sincerely,

Amit Mutsuddy, P.E.

AM:CD:sak

Attachment

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

for

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

Reporting Period: July 1, 2025 – December 31, 2025

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		One two-minute period occurred when the boiler ran with all three engines on 12/9/2025. See Attachment 1 for boiler and engine data.
	3. Boiler gross heat input	20.41 MMBtu/hr	Condition met. See Attachment 2.
	5a. NOx emission from boiler 5b. CO emission from boiler	30ppm 50ppm	Condition met. Emission limits met in last source test (see item 19).
	18. Daily records of hours of operation, fuel consumption		See Attachment 1 for hours and gas consumption.
	19. Annual performance test for emission limits in 5		Condition met. Results included in Attachment 3. Annual performance test was completed on 10/27/2025.
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	 1.25 g/hp-hr 0.6 g/hp-hr 3.0 g/hp-hr 0.085 g/hp-hr 70 ppmvd 2000 ppmvd	 Condition met. All emission limits met in the last source tests (see item 19).
	13. Thermal throughput per engine	25 MMBtu/hr	Condition met. See Attachment 2 for values.
	14. Combined hours of operation for S-37, S-38, and S-39	25,316 hours in any rolling 365 day period	Condition met. 16,458 hours in last year. See Attachment 2. Jan-Jun 2025: 8,093 hours Jul-Dec 2025: 8,365 hours
	15. Combined diesel consumption for S-37, S-38, and S-39	150,000 gallons in any rolling 365 day period	Condition met. 28,496 gallons in last year. See Attachment 2. Jan-Jun 2025: 13,786 gallons Jul-Dec 2025: 14,710 gallons

Source	Monitoring Requirement	Limit	Monitoring Results
S-37, S-38, S-39 Cogeneration Engines **(continued)**	18. Daily records of hours of operation, fuel consumption 19. Annual performance test for emission limits in 6-11		Condition met. See Attachment 1 for records. Condition met. Results included in Attachment 3. Annual source tests completed for Engines 1 and 3 on 8/13/2025 and Engine 2 on 8/14/2025 and 9/25/2025.
S-48 Gasoline Dispensing Facility	**Condition 25723 (now PTO 26550)** The Static Pressure Performance Test (CARB TP 201.3B) shall be successfully conducted at least once in each 12-month period.		Condition met. Completed on 9/17/2025. Results plus new tests required in Condition 26550 are in Attachment 4a. See note in cover letter about late testing for two new tests that are not in the Title V permit.
	Condition 21663 (now PTO 23006) Annual gasoline throughput (received/delivered to tank)	150,000 gal per year	Condition met. 32,991 gal in last year. See Attachment 4b. Jan-June 2025: 15,846 gal July-Dec 2025: 17,145 gal
S-53 Diesel Engine Back-up Generator	**Condition 22830** 1. Hours of operation	30 hours/year reliability-related hours	Condition met. 2.1 reliability-related hours in last 12 months. Refer to Attachment 5.
S-54 Diesel Engine Back-up Generator	**Condition 22850** 1. Hours of operation	50 hours/year reliability-related hours	Condition met. Generator out of service currently, 0 hours. Refer to Attachment 5.

Source	Monitoring Requirement	Limit	Monitoring Results
S-56 Turbine	**Condition 24050**		
	2. Total combined heat input	389,820 MMBtu in any 12-month period	Condition met. 280,762 MMBtu in last 12 months. Refer to Attachment 2. Jan-Jun 2025: 144,304 MMBtu Jul-Dec 2025: 136,458 MMBtu
	3. NOx emission limits	23 ppm (15-min) 34,400 lb (12-mo)	Emission limits met. Refer to Attachments 2 and 6. Annual mass emission: 8,598 lb
	4. CO emission limit and monitoring	100 ppm (15-min) 92,200 lb (12-mo)	Emission limits met. Refer to Attachments 2 and 6. Annual mass emission: 1,389 lb
	5. Daily monitoring of H2S to demonstrate compliance with SO2 limits	Daily monitoring per 40 CFR 60.4370	See Attachment 12 for readings.
	5. SO2 emission limit	150 ppmv	Emission limit met. Refer to Attachments 2 and 6.
	7. Annual turbine source test		Annual source test not completed within 365 days of prior test due to equipment failure.
	8. Monthly NOx and CO test		Intermittent compliance, December 2025 test not completed due to equipment failure. Monthly test results are in Attachment 6.
S-58 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. 0.4 reliability-related hours in last 12 months. Refer to Attachment 5.
S-59 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. 2.9 reliability-related hours in last 12 months. Refer to Attachment 5.
S-60 Diesel Engine Back-up Generator	**Condition 22850**		
	1. Hours of operation	50 hours/year reliability-related hours	Condition met. 7.6 reliability-related hours in last 12 months. Refer to Attachment 5.

Source	Monitoring Requirement	Limit	Monitoring Results
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. Maximum wet weather monthly flow in period was 88 MGD influent. Maximum dry weather monthly flow was 52 MGD. See Attachment 7.
S-110 Headworks A-462 Carbon Scrubber A-463/A-464 Biotrickling Filters/Carbon 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 inlet and outlet H2S and any noted outages are in Attachment 8. Maintenance records related to outages for the odor control units are in Attachment 9.
S-170 Sludge handling A-7/A-8 Atomized Mist Scrubbers	**Condition 18006** 1. Monitor and record on a daily basis the activated sewage sludge throughput through S-170. 4a/b. Maintenance and inspection records for all outages and malfunctions of A-7 and A-8.		Sludge throughput is recorded in Attachment 10. Maintenance and outage records for the scrubbers are in Attachments 9 and 10.
S-172 Pre-Digestion Blend Tanks A-9 Iron Oxide A-10 Biofilter A-11 Activated Carbon	**Condition 25919** 1. Throughput of waste shall not exceed 2,100,000 gallons during any day. 4. POC emissions shall not exceed 2.02 lb/calendar day and 20.3 ppm total carbon on a daily basis. 6. Quarterly POC readings at outlet of A11		Condition met. See Attachment 11 for record of daily throughput. See item 6 for test results. Condition met. POC readings in this reporting period were less than 1 ppm.

Source	Monitoring Requirement	Limit	Monitoring Results
S-180 Anaerobic Digesters Note: A-194, A-195 are enclosed flares A-190, A-191, A-192, and A-193 are older "candlestick" flares	**Condition 18860** 2. Monthly inspection of digesters and gas management/venting prevention		Inspections conducted by Operations on at least weekly on rounds.
	2./11. Venting of digester gas only allowed under listed exceptions.	0.70 lb/hour from PRV	Condition met.
	3. Sulfur content of digester gas	<200 ppmv annual average	Condition met. Refer to Attachment 12 for the H2S gas sampling records.
	4. Combined digester gas flow rate to combustion sources	<3,400 scfm annual average	Condition met. See Attachment 13 for combined digester gas flow rates.
	6. Gas flow to A-194, A-195	<3,000 cfm, 1-hr average	Condition met. See Attachment 2 for max flow to flares.
	7. Source testing of A-194, A-195 (every 8,760 hours of use or 5 years)		Condition met. Source test last conducted 8/8/2024.
	Emission limits for A-194, A-195 9. NOx limit 10. CO limit 11a. H2S limit	 0.12 lb/MMBtu 0.20 lb/MMBtu 0.032 lb/hour	 Condition met. Source test last conducted 8/8/2024.
	12. Daily sampling and testing of digester gas for H2S		Condition met. Refer to Attachment 12.
	13. Hours of flaring per day		Refer to Attachment 1 for the hours of flaring per day.

Attachment Index:

1 Combustion Source Air Permit Data
2 Combustion Summaries – Boiler, Engines, Turbine, Flares
3 Annual Source Test Results
4a Gasoline Dispensing Facility Test Results including Static Pressure Performance Test Report
4b Gasoline Facility Throughput
5 Hours of Operation for Stand-by Emergency Generators
6 Turbine Monthly Test Results
7 Monthly Wastewater Summary
8 IPS Carbon Bed Inlet/Outlet H2S Readings
9 Odor Scrubber Maintenance Records for S-170 and S-110
10 Activated Sludge Throughput for S-170
11 Blend Tank Throughput Records
12 Digester Gas H2S Sampling
13 Combined Digester Gas Combustion Volumes

ATTACHMENT 1

COMBUSTION SOURCE AIR PERMIT DATA

(engines, turbine, boiler, flares)

DAILY REPORTS
JULY – DECEMBER 2025

July - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	0	24	24	48	0	32	42	73	0	871,001	876,077	1,747,078	0	1,440	1,440	1,440	0
2nd	0	24	24	48	0	57	66	123	0	871,546	876,379	1,747,925	0	1,440	1,440	1,440	0
3rd	0	24	24	48	0	35	43	77	0	769,005	773,159	1,542,164	0	1,440	1,440	573	0
4th	0	24	24	48	0	47	54	100	0	840,646	845,595	1,686,241	0	1,440	1,440	0	0
5th	0	24	6	30	0	35	14	49	0	683,079	103,920	786,999	0	1,307	224	0	0
6th	0	1.0	0	1.0	0	7	0	7	0	15,593	0	15,593	0	37	0	0	0
7th	0	22	14	36	0	33	59	92	0	825,257	533,528	1,358,785	0	1,440	934	0	0
8th	0	24	23	47	0	44	46	89	0	865,808	869,437	1,735,245	0	1,440	1,440	0	0
9th	1.0	24	24	49	69	34	36	139	9,250	867,863	870,969	1,748,082	27	1,440	1,440	650	0
10th	0	24	24	48	0	43	52	95	0	829,377	833,462	1,662,839	0	1,440	1,440	678	0
11th	0	21	21	42	0	38	43	81	0	667,298	712,036	1,379,334	0	1,173	1,266	0	0
12th	0	23	6	29	0	45	15	60	0	688,403	113,045	801,448	0	1,314	237	495	0
13th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	777	0
14th	0	16	14	30	0	31	81	112	0	654,263	569,664	1,223,927	0	1,133	969	310	0
15th	0	24	15	39	0	41	42	83	0	848,354	490,440	1,338,794	0	1,440	841	347	0
16th	0	24	24	48	0	40	47	86	0	826,024	831,573	1,657,597	0	1,440	1,440	0	0
17th	0	24	20	44	0	101	61	162	0	718,593	574,490	1,293,083	0	1,440	1,189	0	0
18th	0	24	24	48	0	39	43	82	0	844,961	850,317	1,695,278	0	1,440	1,440	0	0
19th	0	24	24	48	0	41	47	88	0	839,726	767,230	1,606,956	0	1,440	1,310	0	0
20th	0	17	0	17	0	25	0	25	0	456,169	0	456,169	0	864	0	764	0
21st	0	21	13	34	0	32	30	63	0	779,637	544,173	1,323,810	0	1,344	903	107	0
22nd	0	23	24	47	0	52	51	103	0	837,447	880,822	1,718,269	0	1,382	1,440	53	0
23rd	0	17	19	36	0	24	43	67	0	517,044	584,514	1,101,558	0	895	1,016	391	0
24th	0	18	10	28	0	45	36	81	0	634,339	352,724	987,063	0	1,085	616	561	0
25th	0	22	5	27	0	36	30	65	0	864,944	193,826	1,058,770	0	1,440	326	534	0
26th	0	24	23	47	0	34	42	76	0	861,395	866,612	1,728,007	0	1,440	1,440	0	0
27th	0	24	16	40	0	46	38	84	0	734,795	430,187	1,164,982	0	1,440	854	0	0
28th	0	24	19	43	0	36	48	84	0	847,547	730,841	1,578,388	0	1,440	1,244	0	0
29th	0	24	21	45	0	19	37	56	0	818,711	639,989	1,458,700	0	1,440	1,148	0	0
30th	0	24	17	41	0	43	54	97	0	783,733	540,405	1,324,138	0	1,440	1,002	0	0
31st	0	24	8	32	0	33	27	60	0	782,303	309,639	1,091,942	0	1,440	594	0	0
Totals	1.0	657	510	1,168	69	1,165	1,227	2,461	9,250	22,444,861	17,565,053	40,019,164	27	39,334	30,513	9,119	0
		Sum of Engines	1,168			Sum of Engines	2,461			Sum of Engines	40,019,164						

July - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	0	0	24	2,418,144	2,083	0	0	24	319,243
2nd	6	324,198	20	1,793,129	2,336	0	0	24	332,421
3rd	10	406,879	10	951,256	1,726	14	962,908	10	138,893
4th	16	652,529	0	0	0	24	1,601,813	0	0
5th	5	94,542	0	0	0	24	1,466,402	0	0
6th	4	68,636	0	0	0	24	1,553,313	0	0
7th	2	34,594	0	2,355	39	24	1,609,057	0	0
8th	13	346,861	5	383,346	1,452	24	1,646,149	0	0
9th	13	435,303	9	888,267	2,110	10	698,533	11	152,647
10th	9	422,272	9	805,206	2,043	12	756,048	11	150,890
11th	9	186,408	0	115	2	24	1,582,212	0	0
12th	3	47,577	0	0	0	24	1,414,641	8	112,439
13th	1.2	12,984	0	0	0	24	1,552,393	13	140,276
14th	5	95,749	0	0	0	24	1,646,370	5	54,675
15th	5	170,092	0	0	0	23	1,594,060	6	63,852
16th	11	336,975	0	0	0	24	1,620,891	0	0
17th	8	230,292	4	263,666	1,636	24	1,504,930	0	0
18th	12	156,831	0	0	0	24	1,607,833	0	0
19th	15	456,403	2	99,822	826	24	1,591,239	0	0
20th	4	53,080	0	0	0	24	1,468,612	13	158,703
21st	10	157,105	4	280,778	1,394	21	1,391,273	2	19,620
22nd	14	438,752	8	567,357	1,857	24	1,650,031	0.9	14,070
23rd	10	161,304	0	0	0	24	1,575,522	7	78,332
24th	13	340,941	0.7	19,952	304	24	1,587,191	9	103,677
25th	13	244,984	0	0	0	24	1,651,957	9	104,447
26th	7	137,041	13	1,087,051	1,988	24	1,629,178	0	0
27th	1.1	10,265	0	0	0	24	1,467,691	0	0
28th	11	182,323	0	0	0	24	1,606,492	0	0
29th	9	189,290	0	0	0	24	1,525,256	0	0
30th	5	95,845	0	0	0	24	1,568,954	0	0
31st	5	132,996	0	0	0	24	1,504,904	0	0
Totals	249	6,623,051	108	9,560,444		657	43,035,853	152	1,944,185
				Maximum	2,336				

August - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	0	24	24	48	0	32	35	68	0	877,249	882,278	1,759,527	0	1,440	1,440	0	0
2nd	0	22	8	30	0	39	22	62	0	746,248	242,470	988,718	0	1,334	470	794	0
3rd	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,440	0
4th	0	11	2	13	0	30	31	61	0	364,631	59,154	423,785	0	613	119	574	0
5th	9	22	13	44	72	33	40	145	301,967	786,745	451,816	1,540,528	513	1,335	780	0	0
6th	24	8	16	48	45	16	42	103	854,645	264,899	587,652	1,707,196	1,440	471	973	0	0
7th	24	10	14	48	42	20	29	91	858,732	357,779	495,770	1,712,281	1,440	607	837	0	0
8th	24	24	0	48	102	44	0	146	855,069	848,891	0	1,703,960	1,440	1,440	0	0	0
9th	20	21	0	41	40	31	0	71	711,728	746,283	0	1,458,011	1,202	1,276	0	131	0
10th	0.4	9	8	18	0	13	25	37	9,816	312,419	300,936	623,171	23	527	500	1,245	0
11th	17	24	21	62	66	70	50	186	607,382	857,843	768,825	2,234,050	1,007	1,419	1,263	513	0
12th	22	23	21	66	170	188	56	414	760,542	767,637	719,110	2,247,289	1,318	1,343	1,223	0	0
13th	20	13	17	49	59	40	45	143	694,750	448,794	616,641	1,760,185	1,172	764	1,040	652	0
14th	16	24	16	56	42	37	31	110	555,445	846,265	556,256	1,957,966	941	1,440	942	485	0
15th	15	24	24	63	32	32	49	113	524,393	859,549	867,555	2,251,497	872	1,440	1,440	0	0
16th	10	24	24	58	22	34	38	94	336,596	840,081	848,663	2,025,340	560	1,440	1,440	0	0
17th	0	13	4	17	0	37	11	48	0	398,857	104,284	503,141	0	801	217	0	0
18th	18	24	3	45	42	29	15	87	653,493	866,871	102,924	1,623,288	1,067	1,440	172	0	0
19th	24	24	0	48	45	35	0	80	857,098	851,469	0	1,708,567	1,440	1,440	0	0	0
20th	24	24	0	48	49	37	0	86	848,159	842,799	0	1,690,958	1,440	1,440	0	0	0
21st	9	24	13	46	28	49	32	109	268,795	746,237	428,875	1,443,907	553	1,440	792	0	0
22nd	0	24	24	48	0	42	41	83	0	857,730	864,276	1,722,006	0	1,440	1,440	0	0
23rd	0	24	22	46	0	32	44	77	0	800,780	747,702	1,548,482	0	1,440	1,312	0	0
24th	0	24	5	29	0	34	33	66	0	768,682	175,705	944,387	0	1,423	297	0	0
25th	18	19	2	39	41	45	16	102	617,079	642,533	52,577	1,312,189	1,071	1,137	106	0	0
26th	24	23	0	47	45	35	0	80	861,879	831,856	0	1,693,735	1,440	1,401	0	0	0
27th	24	24	0	48	49	41	0	90	845,020	838,448	0	1,683,468	1,440	1,440	0	0	0
28th	24	24	0	48	44	30	0	74	852,771	845,167	0	1,697,938	1,440	1,440	0	0	0
29th	24	24	0	48	48	38	0	87	850,658	844,223	0	1,694,881	1,440	1,440	0	0	0
30th	21	24	0	45	43	33	0	76	735,518	804,111	0	1,539,629	1,274	1,440	0	0	0
31st	0	16	0	16	0	25	0	25	0	510,402	0	510,402	0	971	0	0	0
Totals	410	619	281	1,310	1,126	1,200	686	3,011	14,461,535	21,375,478	9,873,469	45,710,482	24,533	37,022	16,803	5,834	0
		Sum of Engines	1,310			Sum of Engines	3,012			Sum of Engines	45,710,482						

August - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	9	200,146	4	216,087	1,264	24	1,636,560	0	0
2nd	0.9	11,778	0	0	0	24	1,537,406	13	188,053
3rd	0.1	381	0	0	0	24	1,433,709	24	418,799
4th	2	41,613	0	0	0	24	1,585,016	10	165,940
5th	8	190,589	7	584,146	1,428	24	1,609,615	0	0
6th	11	512,858	6	352,244	972	23	1,502,831	0	0
7th	11	297,356	7	617,310	1,578	24	1,594,783	0	0
8th	15	643,909	2	143,159	1,130	24	1,607,950	0	0
9th	0.4	4,214	0	0	0	24	1,591,792	2	27,032
10th	2	42,414	0	0	0	18	1,230,867	21	283,334
11th	3	79,871	17	937,455	1,371	0	0	9	148,344
12th	13	688,463	12	656,674	1,407	0	0	0	0
13th	20	1,015,862	14	1,444,383	2,209	0	0	11	219,162
14th	8	278,329	19	1,597,399	1,937	0	0	8	154,406
15th	18	557,068	5	411,008	1,553	5	278,583	0	0
16th	3	109,961	15	1,241,337	1,800	13	809,793	0	0
17th	0.2	6,654	0.2	7,218	120	24	1,454,196	0	0
18th	9	341,854	11	858,088	1,782	19	1,183,133	0	0
19th	9	206,742	4	175,611	955	24	1,580,838	0	0
20th	11	480,510	13	1,095,149	1,909	24	1,558,117	0	0
21st	15	568,576	14	1,180,226	1,824	24	1,467,812	0	0
22nd	13	214,701	1.1	45,316	720	24	1,595,429	0	0
23rd	8	189,042	0	0	0	24	1,572,147	0	0
24th	0.2	3,202	0	0	0	24	1,378,253	0	0
25th	3	68,104	0.6	14,625	244	19	1,111,341	0	0
26th	6	253,708	15	1,194,145	1,652	22	1,465,689	0	0
27th	21	469,495	2	75,638	953	24	1,587,357	0	0
28th	13	372,410	4	245,870	1,093	24	1,603,565	0	0
29th	1.2	14,160	0	0	0	24	1,600,538	0	0
30th	13	241,340	0	0	0	24	1,550,559	0	0
31st	0	0	0	0	0	24	1,373,839	0	0
Totals	245	8,105,310	173	13,093,088		599	38,501,718	97	1,605,070
				Maximum	2,209				

September - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	16	14	0	30	38	20	0	59	567,613	498,812	0	1,066,425	946	844	0	0	0
2nd	18	24	0	42	36	31	0	67	631,474	858,442	0	1,489,916	1,060	1,440	0	0	0
3rd	24	24	0	48	37	25	0	62	851,614	845,883	0	1,697,497	1,440	1,440	0	0	0
4th	24	24	0	48	40	32	0	71	855,689	850,261	0	1,705,950	1,440	1,440	0	0	0
5th	24	24	0	48	39	28	0	66	866,972	860,704	0	1,727,676	1,440	1,440	0	0	0
6th	18	24	0	42	32	29	0	61	630,700	798,733	0	1,429,433	1,098	1,440	0	0	0
7th	0	19	0	19	0	30	0	30	0	697,614	0	697,614	0	1,163	0	0	0
8th	15	19	0	34	44	23	0	68	540,450	686,981	0	1,227,431	895	1,136	0	0	0
9th	24	24	0	48	36	24	0	60	875,719	869,050	0	1,744,769	1,440	1,440	0	0	0
10th	24	24	0	48	40	32	0	73	860,209	853,911	0	1,714,120	1,440	1,440	0	0	0
11th	24	24	0	48	38	25	0	63	854,014	847,944	0	1,701,958	1,440	1,440	0	0	0
12th	24	24	0	48	40	31	0	72	879,461	873,836	0	1,753,297	1,440	1,440	0	0	0
13th	21	24	0	45	39	28	0	67	715,143	810,260	0	1,525,403	1,277	1,440	0	0	0
14th	0	17	0	17	0	22	0	22	0	582,512	0	582,512	0	1,013	0	0	0
15th	0	4	0	4	0	7	0	7	0	147,525	0	147,525	0	252	0	927	0
16th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	382	0
17th	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,424	0
18th	6	6	1.0	14	16	19	81	116	260,471	249,366	25,354	535,191	388	376	51	1,352	0
19th	14	18	1.2	33	35	43	19	97	503,509	627,463	37,742	1,168,714	850	1,069	74	705	0
20th	0	8	23	31	0	23	37	61	0	262,920	825,651	1,088,571	0	492	1,440	0	0
21st	0	8	24	32	0	15	37	51	0	215,424	825,125	1,040,549	0	456	1,440	0	0
22nd	0	21	24	45	0	32	38	71	0	791,546	894,828	1,686,374	0	1,284	1,440	0	0
23rd	0	11	14	25	0	17	18	35	0	402,632	470,051	872,683	0	687	825	0	0
24th	0	9	9	17	0	11	8	20	0	335,164	320,299	655,463	0	530	515	721	0
25th	0	24	14	38	0	34	33	67	0	869,933	483,017	1,352,950	0	1,440	798	827	0
26th	0	24	24	48	0	25	32	57	0	806,670	813,079	1,619,749	0	1,440	1,440	542	0
27th	0	24	24	48	0	32	33	65	0	819,085	826,473	1,645,558	0	1,440	1,440	0	0
28th	0	24	2	26	0	28	5	33	0	715,727	59,568	775,295	0	1,440	119	0	0
29th	0	24	14	38	0	25	35	60	0	839,582	525,287	1,364,869	0	1,440	844	0	0
30th	0	24	24	48	0	29	30	59	0	879,061	886,028	1,765,089	0	1,440	1,440	0	0
Totals	277	539	198	1,014	511	722	407	1,640	9,893,038	18,897,041	6,992,502	35,782,581	16,594	32,342	11,866	6,880	0
		Sum of Engines	1,014			Sum of Engines	1,640			Sum of Engines	35,782,581						

September - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	2	20,069	0	0	0	24	1,612,055	0	0
2nd	9	279,786	0	0	0	23	1,530,404	0	0
3rd	7	262,005	12	594,972	1,425	24	1,615,043	0	0
4th	5	109,082	14	782,230	1,289	24	1,614,973	0	0
5th	5	65,948	0	0	0	24	1,624,411	0	0
6th	0	0	0	0	0	24	1,559,983	0	0
7th	0	0	0	0	0	24	1,607,251	0	0
8th	0.5	7,888	0	0	0	24	1,600,899	0	0
9th	0.9	7,404	20	929,999	1,210	24	1,626,012	0	0
10th	11	534,444	13	849,885	1,611	24	1,607,910	0	0
11th	18	482,404	1.0	57,410	558	24	1,600,665	0	0
12th	19	803,525	0	0	0	24	1,646,733	0	0
13th	1.2	11,880	0	0	0	24	1,509,525	0	0
14th	0	0	0	0	0	24	1,488,350	0	0
15th	18	1,121,967	3	109,281	770	24	1,620,208	15	175,383
16th	11	769,728	18	1,572,200	2,439	24	1,622,643	6	78,541
17th	11	578,126	24	2,725,827	2,509	24	1,602,068	24	284,534
18th	1.5	57,109	23	2,742,847	2,622	16	1,072,890	23	324,047
19th	5	226,896	4	224,858	1,498	15	979,753	12	204,502
20th	2	15,923	0	1,646	27	24	1,597,199	0	0
21st	0.7	9,703	0	0	0	24	1,590,731	0	0
22nd	13	474,848	0.3	5,571	93	24	1,643,600	0	0
23rd	2	36,161	0	0	0	24	1,446,715	0	0
24th	4	83,456	0.5	20,121	223	12	730,291	12	273,078
25th	17	978,707	8.8	919,137	1,881	15	998,520	14	257,181
26th	16	501,725	5	304,016	1,766	15	956,263	9	200,491
27th	5	68,469	0	0	0	24	1,502,155	0	0
28th	0	0	0	0	0	24	1,144,637	0	0
29th	0.02	162	0.8	21,006	206	24	1,485,111	0	0
30th	3	55,863	0	0	0	24	1,597,842	0	0
Totals	189	7,563,278	148	11,861,006		672	43,834,840	114	1,797,757
				Maximum	2,622				

October - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	0	24	24	48	0	32	76	108	0	846,646	855,729	1,702,375	0	1,417	1,424	0	0
2nd	0	24	24	48	0	23	31	54	0	857,750	864,079	1,721,829	0	1,440	1,440	0	0
3rd	0	24	24	48	0	27	31	58	0	859,085	864,966	1,724,051	0	1,440	1,440	0	0
4th	0	24	19	43	0	27	25	53	0	846,618	684,977	1,531,595	0	1,440	1,163	0	0
5th	0	17	0	17	0	28	0	28	0	556,285	0	556,285	0	1,046	0	0	0
6th	0	16	16	32	0	25	45	70	0	584,226	549,293	1,133,519	0	989	928	0	0
7th	0	23	20	43	0	28	27	55	0	854,471	723,609	1,578,080	0	1,440	1,201	0	0
8th	0	24	24	48	0	22	33	55	0	875,938	881,849	1,757,787	0	1,440	1,440	0	0
9th	0	24	24	48	3	24	25	53	0	872,602	878,436	1,751,038	0	1,440	1,440	0	0
10th	7	24	18	48	33	44	29	107	233,655	849,497	655,681	1,738,833	394	1,421	1,086	0	0
11th	24	24	0	48	33	21	0	54	857,793	849,555	0	1,707,348	1,440	1,440	0	0	0
12th	22	13	0	35	37	21	0	59	711,985	391,366	0	1,103,351	1,298	797	0	0	0
13th	15	17	0	32	32	29	0	61	555,745	635,426	0	1,191,171	895	1,034	0	0	0
14th	24	23	1.2	48	38	28	3	69	872,553	816,247	42,555	1,731,355	1,440	1,361	72	0	0
15th	24	0	23	47	34	0	25	59	881,802	0	878,303	1,760,105	1,440	0	1,440	0	0
16th	20	0	24	44	38	0	37	75	728,784	0	869,211	1,597,995	1,206	0	1,440	312	0
17th	24	0	24	48	35	0	30	64	844,520	0	843,027	1,687,547	1,440	0	1,440	581	0
18th	24	0	24	48	37	0	29	66	846,211	0	845,687	1,691,898	1,440	0	1,440	0	0
19th	24	0	24	48	39	0	31	70	760,879	0	763,248	1,524,127	1,436	0	1,440	0	0
20th	24	0	24	48	37	0	26	63	854,206	0	855,813	1,710,019	1,440	0	1,440	0	0
21st	24	0	24	48	36	0	33	69	878,558	0	880,874	1,759,432	1,440	0	1,440	0	0
22nd	24	0	24	48	34	0	25	59	857,251	0	858,914	1,716,165	1,440	0	1,440	0	0
23rd	24	0	24	48	35	0	35	70	857,750	0	859,497	1,717,247	1,440	0	1,440	0	0
24th	24	0	24	48	35	0	27	62	858,587	0	861,294	1,719,881	1,440	0	1,440	0	0
25th	24	0	24	48	39	0	33	72	797,804	0	800,221	1,598,025	1,440	0	1,440	0	0
26th	24	0	18	42	36	0	29	65	742,102	0	552,651	1,294,753	1,440	0	1,079	0	0
27th	24	0	11	35	37	0	28	65	857,321	0	415,251	1,272,572	1,440	0	675	453	0
28th	24	0	24	48	34	0	33	67	859,958	0	861,944	1,721,902	1,440	0	1,440	0	0
29th	24	0	24	48	34	0	22	56	858,242	0	860,790	1,719,032	1,440	0	1,440	0	0
30th	24	0	24	48	37	0	36	72	858,854	0	861,137	1,719,991	1,440	0	1,440	0	0
31st	24	0	24	48	30	0	25	55	842,075	0	843,618	1,685,693	1,440	0	1,440	0	0
Totals	495	302	583	1,379	781	380	831	1,992	17,416,635	10,695,712	20,712,654	48,825,001	29,709	18,145	34,988	1,346	0
		Sum of Engines	1,379			Sum of Engines	1,992			Sum of Engines	48,825,001						

October - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	1.0	22,791	7	386,492	981	24	1,610,868	0	0
2nd	8	248,353	12	593,548	1,204	24	1,594,795	0	0
3rd	5	202,964	19	1,038,938	1,224	24	1,603,720	0	0
4th	5	55,677	0	1,868	31	24	1,603,643	0	0
5th	0	0	0	0	0	24	1,530,623	0	0
6th	0	66	0.03	298	5	24	1,581,042	0	0
7th	0	0	0.7	33,863	564	24	1,577,338	0	0
8th	6	158,360	0.1	638	11	23	1,535,986	0	0
9th	9	224,007	13	1,435,116	2,493	24	1,606,955	0	0
10th	0.8	9,875	0	0	0	24	1,624,935	0	0
11th	15	509,760	0	0	0	24	1,631,106	0	0
12th	0	0	0	0	0	24	1,511,704	0	0
13th	0.8	16,330	7	945,825	2,468	23	1,620,451	0	0
14th	6	341,545	9	898,596	2,078	24	1,670,421	0	0
15th	19	1,211,131	5	427,633	1,532	24	1,677,536	0	0
16th	6	278,741	18	2,175,834	2,499	19	1,265,681	5	97,090
17th	17	625,640	2	98,647	1,223	14	989,156	10	204,302
18th	10	464,958	0	0	0	24	1,606,091	0	0
19th	0	0	0	0	0	24	1,518,864	0	0
20th	0	0	0	0	0	24	1,615,852	0	0
21st	3	102,685	12	1,624,755	2,617	24	1,647,563	0	0
22nd	13	408,842	9	934,257	1,794	24	1,609,302	0	0
23rd	24	1,009,571	0	0	0	24	1,619,820	0	0
24th	12	532,037	10	1,070,961	1,904	24	1,614,102	0	0
25th	11	328,818	0	0	0	24	1,514,466	0	0
26th	0	0	0	0	0	24	1,453,263	0	0
27th	0	0	0	0	0	24	1,609,818	8	132,442
28th	16	685,607	3	201,579	1,553	24	1,621,587	0	0
29th	9	226,435	8	560,631	1,426	24	1,597,296	0	0
30th	12	299,065	0	0	0	24	1,611,018	0	0
31st	13	498,923	0	0	0	24	1,608,565	0	0
Totals	220	8,462,181	135	12,429,479		728	48,483,567	22	433,834
				Maximum	2,617				

November - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	24	0	24	48	47	0	38	86	783,515	0	785,416	1,568,931	1,440	0	1,440	0	0
2nd	3	0	21	24	8	0	35	43	82,780	0	681,507	764,287	173	0	1,241	0	0
3rd	17	0	24	41	58	0	45	103	631,355	0	876,228	1,507,583	1,033	0	1,430	0	0
4th	10	0	24	34	31	0	32	63	356,747	0	776,925	1,133,672	606	0	1,440	0	0
5th	24	0	24	48	41	0	39	80	844,589	0	844,351	1,688,940	1,440	0	1,440	0	0
6th	24	0	24	48	45	0	36	81	861,596	0	861,410	1,723,006	1,440	0	1,440	0	0
7th	24	0	24	48	38	0	37	75	868,948	0	869,150	1,738,098	1,440	0	1,440	0	0
8th	20	0	24	44	41	0	38	79	725,804	0	830,942	1,556,746	1,212	0	1,440	0	0
9th	0	0	16	16	0	0	23	23	0	0	478,487	478,487	0	0	949	0	0
10th	17	0	18	35	49	0	60	109	646,667	0	663,128	1,309,795	1,037	0	1,092	155	0
11th	24	0	24	48	37	0	32	69	864,826	0	865,245	1,730,071	1,440	0	1,440	0	0
12th	24	1.0	24	49	43	11	38	91	861,275	19,038	860,424	1,740,737	1,440	42	1,440	0	0
13th	24	1.0	24	49	42	40	38	120	852,616	29,317	848,341	1,730,274	1,440	69	1,440	0	0
14th	24	0	24	48	42	0	38	80	862,483	0	861,731	1,724,214	1,440	0	1,440	0	0
15th	21	0	24	45	41	0	32	73	741,058	0	822,868	1,563,926	1,261	0	1,440	0	0
16th	17	0	5	22	38	0	8	46	636,668	0	151,320	787,988	1,025	0	324	0	0
17th	24	17	0	41	42	52	0	93	873,088	599,391	0	1,472,479	1,440	1,007	0	0	0
18th	24	24	0	48	63	52	0	115	853,208	848,361	0	1,701,569	1,439	1,440	0	0	0
19th	24	24	0	48	41	35	0	76	856,013	850,221	0	1,706,234	1,440	1,440	0	0	0
20th	12	23	12	47	23	29	32	85	429,440	854,459	431,976	1,715,875	722	1,440	728	0	0
21st	0.1	24	24	48	8	27	31	67	0	857,346	863,977	1,721,323	0	1,440	1,440	0	0
22nd	0	24	24	48	0	36	41	77	0	855,340	860,309	1,715,649	0	1,440	1,440	0	0
23rd	0	24	24	48	0	28	36	64	0	837,418	843,319	1,680,737	0	1,440	1,440	0	0
24th	11	24	19	54	26	41	47	114	402,541	799,707	674,931	1,877,179	648	1,440	1,172	143	0
25th	24	24	24	72	41	28	33	102	871,851	867,472	873,017	2,612,340	1,440	1,440	1,440	0	0
26th	23	23	16	62	20	36	32	88	810,799	797,309	573,237	2,181,345	1,384	1,352	959	81	0
27th	24	24	24	72	41	30	38	110	856,115	851,199	857,826	2,565,140	1,440	1,440	1,440	0	0
28th	24	24	24	72	42	28	30	100	791,970	787,208	787,743	2,366,921	1,440	1,440	1,440	0	0
29th	24	24	24	72	42	33	38	114	863,157	858,017	858,017	2,579,191	1,440	1,440	1,440	0	0
30th	24	24	24	72	40	27	35	102	745,582	740,954	746,793	2,233,329	1,440	1,440	1,440	0	0
Totals	536	329	587	1,452	1,029	535	962	2,527	18,974,691	11,452,757	20,448,618	50,876,066	32,140	19,750	35,255	379	0
		Sum of Engines	1,452			Sum of Engines	2,526			Sum of Engines	50,876,066						

November - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	2	28,063	0	0	0	24	1,522,188	0	0
2nd	0	0	0	0	0	25	1,522,501	0	0
3rd	0.1	484	0	0	0	24	1,564,071	0	0
4th	0	0	0	0	0	24	1,455,646	0	0
5th	0	0	0	0	0	24	1,577,145	0	0
6th	10	423,046	0	0	0	24	1,628,141	0	0
7th	7	172,506	0	0	0	24	1,630,164	0	0
8th	0	0	0	0	0	24	1,542,188	0	0
9th	0	0	0	0	0	24	1,301,787	0	0
10th	11	347,960	0	0	0	24	1,609,917	3	41,642
11th	20	662,651	1.5	54,282	500	24	1,627,373	0	0
12th	0.3	1,649	11	781,783	1,473	24	1,605,877	0	0
13th	0	0	14	627,814	873	24	1,591,511	0	0
14th	5	84,401	2	71,937	733	24	1,615,394	0	0
15th	0	0	0	0	0	24	1,545,514	0	0
16th	0	0	0	0	0	24	1,569,305	0	0
17th	0.2	1,768	0	0	0	24	1,640,778	0	0
18th	0.2	5,275	0	0	0	24	1,632,696	0	0
19th	7	237,892	0	0	0	24	1,648,519	0	0
20th	19	985,389	0	0	0	24	1,664,056	0	0
21st	21	1,031,297	0	0	0	24	1,654,272	0	0
22nd	16	639,448	0	0	0	24	1,660,471	0	0
23rd	7	220,178	0	0	0	24	1,596,955	0	0
24th	0.1	1,332	0	0	0	9	520,301	2	49,756
25th	4	215,345	10	1,042,724	2,112	0	0	0	0
26th	4	202,141	14	700,847	1,542	6	328,704	1.3	19,761
27th	15	538,522	8	313,880	628	0	0	0	0
28th	2	80,406	0	0	0	0	0	0	0
29th	10	491,088	11	1,079,848	2,086	0	0	0	0
30th	0	0	0	0	0	0	0	0	0
Totals	157	6,370,841	71	4,673,115		568	37,255,474	6	111,159
				Maximum	2,112				

December - 2025

Daily Data for Air Permit

Elmer E. Ross Power Station

Date	Run Time, Hours				Fuel Oil Used, gal				Gas, Roots Meter, cu ft				Run Time, Minutes				
	Eng 1	Eng 2	Eng 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng. 1	Eng. 2	Eng. 3	Total	Eng 1	Eng 2	Eng 3	Boiler	Overlap
1st	24	24	24	72	41	33	36	111	876,122	871,123	879,115	2,626,360	1,440	1,440	1,440	0	0
2nd	23	24	24	71	41	33	38	111	807,430	828,912	830,381	2,466,723	1,382	1,440	1,436	0	0
3rd	14	1	19	34	35	0	34	69	496,809	13,355	633,737	1,143,901	849	30	1,155	321	0
4th	24	16	24	64	37	32	30	98	873,782	589,517	869,513	2,332,812	1,440	980	1,434	0	0
5th	23	24	24	71	20	27	51	99	855,159	849,554	844,381	2,549,094	1,440	1,440	1,427	0	0
6th	24	24	24	72	39	25	27	91	867,374	860,685	866,769	2,594,828	1,440	1,440	1,440	0	0
7th	24	24	24	72	35	33	40	108	863,161	856,258	862,024	2,581,443	1,440	1,440	1,440	0	0
8th	24	24	24	72	44	25	34	102	883,180	876,376	873,401	2,632,957	1,440	1,440	1,429	0	0
9th	24	24	20	68	38	35	71	144	868,265	862,545	710,367	2,441,177	1,440	1,440	1,180	186	2
10th	24	24	24	72	41	25	35	101	876,041	871,013	877,111	2,624,165	1,440	1,440	1,440	0	0
11th	21	24	24	69	46	28	32	106	763,896	860,690	865,928	2,490,514	1,273	1,440	1,440	141	0
12th	12	24	24	60	20	33	37	90	452,245	888,036	891,773	2,232,054	731	1,440	1,440	702	0
13th	0	24	24	48	0	24	27	51	0	859,473	864,113	1,723,586	0	1,440	1,440	1,440	0
14th	0	24	24	48	0	34	46	80	0	855,353	856,371	1,711,724	0	1,440	1,433	1,440	0
15th	12	24	24	60	30	24	42	95	422,794	874,126	875,884	2,172,804	697	1,440	1,436	736	0
16th	9	24	24	56	21	26	47	94	317,555	860,625	849,581	2,027,761	529	1,440	1,417	897	0
17th	14	24	24	62	30	32	32	94	512,349	867,625	874,821	2,254,795	848	1,440	1,440	584	0
18th	24	24	24	72	41	28	39	107	863,697	856,364	864,684	2,584,745	1,440	1,440	1,440	0	0
19th	24	24	24	72	43	25	31	99	852,692	845,748	854,292	2,552,732	1,440	1,440	1,440	0	0
20th	24	24	24	72	20	31	35	85	792,641	785,701	793,206	2,371,548	1,440	1,440	1,440	0	0
21st	24	24	21	69	45	26	34	106	840,075	833,464	743,446	2,416,985	1,440	1,440	1,244	0	0
22nd	24	24	19	67	34	29	29	92	901,167	895,650	704,956	2,501,773	1,440	1,440	1,136	0	0
23rd	24	24	24	72	41	29	35	105	888,858	881,780	890,046	2,660,684	1,440	1,440	1,440	0	0
24th	24	24	24	72	37	25	28	90	882,588	875,354	883,803	2,641,745	1,440	1,440	1,440	0	0
25th	24	24	24	72	41	32	39	111	800,037	793,159	800,888	2,394,084	1,440	1,440	1,440	0	0
26th	24	24	24	72	37	26	32	94	829,924	823,431	827,711	2,481,066	1,440	1,440	1,440	0	0
27th	24	24	24	72	39	32	37	109	833,668	826,716	835,065	2,495,449	1,440	1,440	1,440	0	0
28th	24	24	17	65	40	28	31	99	750,442	743,970	523,405	2,017,817	1,440	1,440	1,034	34	0
29th	24	24	8	56	36	25	21	82	836,987	829,631	258,715	1,925,333	1,440	1,440	489	504	0
30th	24	24	18	66	44	31	84	159	878,180	870,804	653,227	2,402,211	1,440	1,440	1,086	300	0
31st	24	24	24	72	37	25	34	95	865,226	857,933	865,468	2,588,627	1,440	1,440	1,440	0	0
Totals	632	713	697	2,042	1,053	860	1,166	3,079	22,552,344	25,264,971	24,824,182	72,641,497	37,989	42,770	41,816	7,285	2
		Sum of Engines	2,042			Sum of Engines	3,079			Sum of Engines	72,641,497						

December - 2025

Daily Data for Air Permit

SD1 Flare Burners, Turbine, and Boiler

Date	Flares A-190,191,192,193		Flares A-194,195			Turbine		Boiler	
	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft	Peak 1-hr Flow, SCFM	Run Time Hrs	Gas cu ft	Run Time Hrs	Gas cu ft
1st	14	494,064	6	455,302	1,522	0	0	0	0
2nd	2	69,959	9	778,033	1,676	0	0	0	0
3rd	0.02	91	0	0	0	9	644,750	5	107,342
4th	1.2	46,261	18	1,948,417	2,157	8	531,598	0	0
5th	5	110,123	19	1,574,003	1,914	0	0	0	0
6th	23	596,842	0	0	0	0	0	0	0
7th	4	52,416	0	0	0	0	0	0	0
8th	18	687,162	0	0	0	0	0	0	0
9th	18	641,334	7	445,655	1,399	0	0	3	65,665
10th	12	688,056	14	1,900,679	2,577	0	0	0	0
11th	0	0	20	1,613,492	2,554	0	0	2	37,310
12th	5	224,716	13	1,278,688	1,911	0	0	12	263,730
13th	0	0	24	2,379,109	2,147	0	0	24	534,990
14th	4	59,324	14	920,051	1,652	0	0	24	515,556
15th	16	761,057	5	285,635	1,277	0	0	12	279,904
16th	6	436,467	19	1,695,016	2,021	0	0	15	307,479
17th	0.1	1,198	23	2,104,667	2,139	0	0	10	205,470
18th	0	0	14	1,002,342	1,432	0	0	0	0
19th	0	0	10	735,343	1,394	0	0	0	0
20th	0	0	0	0	0	0	0	0	0
21st	0.02	80	6	362,359	1,337	0	0	0	0
22nd	0	0	11	565,159	1,399	0	0	0	0
23rd	0	0	17	1,059,325	1,393	0	0	0	0
24th	0	0	23	1,780,181	1,888	0	0	0	0
25th	0	0	0	0	0	0	0	0	0
26th	0	0	0	0	0	0	0	0	0
27th	0	0	0	0	0	0	0	0	0
28th	0	0	0	0	0	0	0	0.5	13,051
29th	0	0	0	0	0	0	0	8	193,011
30th	0.2	1,380	6	337,801	958	0	0	5	99,486
31st	0	0	10	969,911	2,036	0	0	0	0
Totals	129	4,870,530	288	24,191,168		17	1,176,348	121	2,622,994
				Maximum	2,577				

Attachment 2 - Combustion Device Summaries **EBMUD Main Wastewater Plant** **July 1 - December 31, 2025**

Turbine Operation			Data Source	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Semi-annual Totals	Limits	
Run Time	Total	hrs	metered	657	599	672	728	568	17	3,241		
Digester Gas	Total	cu ft	metered	43,035,853	38,501,718	43,834,840	48,483,567	37,255,474	1,176,348	212,287,800		
Thermal Throughput[3]	Total	MMBTU		27,832	24,713	28,154	31,116	23,885	756	136,458	389,820	MMBTU HHV per 12-Month period
	Total	MMBTU/hr		42.3	41.2	41.9	42.8	42.1	44.9	x		
Nitrogen Oxide[4]	Max	ppm	sampled	10	6	6	7	8	-	x	23	ppm at any time
Carbon Monoxide[4]	Max	ppm	sampled	0	0	1	1	1	-	x	100	
Sulfur Dioxide[4]	Max	ppm	sampled	0	1	0	8	3	-	x	150	
Nitrogen Oxide	Total	lbs	calc'd	Based on last annual source test mass load rate (1.3 lbs/hr) x run time (3,373 hrs+3,241hrs)-->						8,598	34,400	lbs per 12-Month period
Carbon Monoxide	Total	lbs	calc'd	Based on last annual source test mass load rate (0.21 lbs/hr) x run time (3,373hrs+3,241hrs)-->						1,389	92,200	
Engine Operation												
Run Time	Eng #1	hrs	metered	1	410	277	495	536	632	2,351		
	Eng #2	hrs	metered	657	619	539	302	329	713	3,159		
	Eng #3	hrs	metered	510	281	198	583	587	697	2,855		
	Total	hrs	sum	1,168	1,310	1,014	1,379	1,452	2,042	8,365	25,316	hr/365 days
Diesel Fuel[1]	Eng #1	gal	calc'd	69	1,126	511	781	1,029	1,053	4,569		
	Eng #2	gal	calc'd	1,165	1,200	722	380	535	860	4,862		
	Eng #3	gal	calc'd	1,227	686	407	831	962	1,166	5,279		
	Total	gal	sum	2,461	3,012	1,640	1,992	2,526	3,079	14,710	150,000	gal/365 days
Digester Gas[2]	Eng #1	cu ft	metered	9,250	14,461,535	9,893,038	17,416,635	18,974,691	22,552,344	83,307,493		
	Eng #2	cu ft	metered	22,444,861	21,375,478	18,897,041	10,695,712	11,452,757	25,264,971	110,130,820		
	Eng #3	cu ft	metered	17,565,053	9,873,469	6,992,502	20,712,654	20,448,618	24,824,182	100,416,478		
	Total	cu ft	sum	40,019,164	45,710,482	35,782,581	48,825,001	50,876,066	72,641,497	293,854,791		
Thermal Throughput[3]	Eng #1	MMBTU/hr		15.6	23.0	23.2	22.8	23.0	23.2	x	25	MMBTU/hr
	Eng #2	MMBTU/hr		22.3	22.4	22.7	22.9	22.6	22.9	x	25	MMBTU/hr
	Eng #3	MMBTU/hr		22.6	22.9	23.0	23.0	22.6	23.1	x	25	MMBTU/hr
Natural Gas	Total	cu ft	metered	-	-	-	-	-	-	-		
Boiler Operation												
Run Time	Boiler	hrs	metered	152	97	114	22	6	121	513		
Digester Gas	Boiler	cu ft	metered	1,944,185	1,605,070	1,797,757	433,834	111,159	2,622,994	8,514,999		
Thermal Thruput[3]	Boiler	MMBTU/hr		8.3	10.6	10.1	12.4	11.4	13.9	x	20.41	MMBTU/hr
Flare Operation (A-190,191,192,193)												
Run Time	Flares	hrs	metered	249	245	189	220	157	129	1,189		
Digester Gas	Flares	cu ft	metered	6,623,051	8,105,310	7,563,278	8,462,181	6,370,841	4,870,530	41,995,191		
Thermal Thruput[3]	Flares	MMBTU/hr		17.2	21.2	25.7	24.7	26.1	24.3	x		
Flare Operation (A-194,195)												
Run Time	Flares	hrs	metered	108	173	148	135	71	288	922		
Digester Gas	Flares	cu ft	metered	9,560,444	13,093,088	11,861,006	12,429,479	4,673,115	24,191,168	75,808,300		
Thermal Thruput[3]	Flares	MMBTU/hr		57.4	48.6	51.6	59.2	42.0	54.1	x		
Max Total Flow	Flares	scfm	metered	2,336	2,209	2,622	2,617	2,112	2,577	x	3,000	scfm/1 hr avg
Digester Gas HHV	12-mo Avg	BTU/scf	sampled	647	642	642	642	641	643	x	12-month rolling avg	

(1) Diesel use per engine (gal) **=** diesel withdrawn from common storage tank daily (gal) **x** ratio of fuel used per engine (single day tank level / sum of all day tanks)

(2) Digester gas usage (cf) = DCS/PI flow data from common engine line meter (scfm) x minutes of gas flow x (engine hours/sum of engine hours)

(3) Thermal Throughput is estimated using the 12-month HHV average and monthly digester gas flow volumes combined with similar diesel fuel data..

(4) Monthly turbine exhaust check - ppm corrected to 15% O2.

ATTACHMENT 3

ANNUAL SOURCE TEST RESULTS

Engine #1, Blue Sky Environmental, 8/13/2025
Engine #2, Blue Sky Environmental, 8/14/2025 and 9/25/2025
Engine #3, Blue Sky Environmental, 8/13/2025
Boiler, Blue Sky Environmental, 10/27/2025

TABLE 1

East Bay Municipal Utility District
Engine #1 (S-37)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Location	Outlet	Outlet	Outlet	--	
Test Date	8/13/25	8/13/25	8/13/25	--	
Test Time	0948-1054	1118-1222	1249-1354	--	
Standard Temperature, °F	70	70	70	--	
Process Parameters:					
Engine Rating, kW	2,222	2,222	2,222	--	
Operating Load, kW	2,152	2,152	2,151	2,152	
Engine BHP	2,886	2,886	2,884	2,885	
% Capacity	97%	97%	97%	97%	
Fuel:					
Fuel Flow Rate, SCFM	589	590	590	590	
Fuel F_d @ T_{std}	9,098	9,098	9,098	9,098	
Fuel Heat Input, MMBtu/hr	22.6	22.6	22.6	22.6	
Stack Gas:					
Flow Rate, DSCFM (EPA Method 19)	9,121	8,924	9,029	9,025	
Oxygen (O_2), % volume dry	13.1	12.9	13.0	13.0	
Carbon Dioxide (CO_2), % volume dry	5.9	6.1	6.1	6.0	
NO_X Emissions:					
NO_X, ppmvd	27.9	30.4	28.4	28.9	
NO_X, ppmvd @ 15% O_2	21.0	22.4	21.1	21.5	70
NO_X, lb/MMBtu	0.0808	0.0860	0.0812	0.0826	
NO_X, lb/hr	1.82	1.94	1.83	1.86	
NO_X, g/bhp-hr	0.286	0.305	0.288	0.293	
CO Emissions:					
CO, ppmvd	340	352	347	346	
CO, ppmvd @ 15% O_2	256	259	258	258	2,000
CO, lb/MMBtu	0.598	0.605	0.603	0.602	
CO, lb/hr	13.5	13.6	13.6	13.6	
CO, g/bhp-hr	2.11	2.14	2.14	2.13	
Total Reduced Sulfurs (ASTM D5504)					
Total Reduced Sulfurs as H_2S, ppmv in Fuel	180	180	180	180	
Sulfur Dioxide Emissions, ppmvd	11.6	11.9	11.8	11.8	

WHERE:

ppmvd = parts per million concentration by volume expressed on a dry gas basis

lb/hr = pound per hour emission rate

lb/MMBtu = pound per million Btu emission rate

Tstd. = standard temperature (°R = °F+460)

MW = molecular weight

DSCFM = dry standard cubic foot per minute

NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)

CO = carbon monoxide (MW = 28)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)

lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R

lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)

Fd = 8,710 (EPA F-factor for natural gas)

< value = 2% of analyzer range

TABLE 2

East Bay Municipal Utility District
Engine #2 (S-38)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Location	Outlet	Outlet	Outlet	--	
Test Date	8/14/25	8/14/25	8/14/25	--	
Test Time	0936-1042	1128-1239	1319-1423	--	
Standard Temperature, °F	70	70	70	--	
Process Parameters:					
Engine Rating, kW	2,222	2,222	2,222	--	
Operating Load, kW	2,131	2,133	2,133	2,132	
Engine BHP	2,858	2,860	2,860	2,859	
% Capacity	96%	96%	96%	96%	
Fuel:					
Fuel Flow Rate, SCFM	584.0	588.0	593.0	588.3	
Fuel F_d @ T_{std}	9,112	9,112	9,112	9,112	
Fuel Heat Input, MMBtu/hr	22.5	22.7	22.9	22.7	
Stack Gas:					
Flow Rate, DSCFM (EPA Method 19)	8,646	8,621	8,622	8,630	
Oxygen (O_2), % volume dry	12.6	12.5	12.5	12.6	
Carbon Dioxide (CO_2), % volume dry	6.3	6.4	6.4	6.4	
Moisture (H_2O) - Method 5	10.7	8.6	9.2	9.5	
NO_X Emissions:					
NO_X, ppmvd	33.2	35.1	34.0	34.1	
NO_X, ppmvd @ 15% O_2	23.7	24.8	23.8	24.1	
NO_X, lb/MMBtu	0.0911	0.0952	0.0917	0.0927	
NO_X, lb/hr	2.05	2.16	2.09	2.10	
NO_X, g/bhp-hr	0.325	0.342	0.332	0.333	1.25
CO Emissions:					
CO, ppmvd	346	342	340	342	
CO, ppmvd @ 15% O_2	246	241	238	242	
CO, lb/MMBtu	0.577	0.565	0.557	0.566	
CO, lb/hr	13.0	12.8	12.7	12.8	
CO, g/bhp-hr	2.06	2.03	2.02	2.04	3.0
Total Reduced Sulfurs (ASTM D5504)					
Total Reduced Sulfurs as H_2S, ppmv in Fuel	154	154	154	154	
Sulfur Dioxide Emissions, ppmvd	10.4	10.5	10.6	10.5	
Methane (CH_4) Emissions					
Methane, ppmv wet (EPA Method 25A)	1,859	1,758	1,738	1,785	
CH_4, ppmvd	2,082	1,922	1,914	1,973	
CH_4, lb/hr	44.7	41.1	41.0	42.3	
NMOC Emissions (as CH_4)					
NMOC, ppmv wet (EPA Method 25A)	51.8	33.2	26.5	37.1	
NMOC, ppmvd	58.0	36.3	29.2	41.1	
NMOC, ppmvd @ 15% O_2	41.3	25.6	20.4	29.1	
NMOC, lb/hr	1.24	0.78	0.62	0.88	
NMOC, g/BHP	0.197	0.123	0.099	0.140	0.6

WHERE:

ppmvd = parts per million concentration by volume expressed on a dry gas basis
lb/hr = pound per hour emission rate
lb/MMBtu = pound per million Btu emission rate
Tstd. = standard temperature (°R = °F+460)
MW = molecular weight
DSCFM = dry standard cubic foot per minute
NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)
CO = carbon monoxide (MW = 28)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)
lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R
lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)

Fd = 8,710 (EPA F-factor for natural gas)
< value = 2% of analyzer range

TABLE 3
Total Particulate Results

East Bay Municipal Utility District
Engine #2 (S-38)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	08/14/25	08/14/25	08/14/25	--	
Test Time	0930-1043	1128-1241	1318-1425	--	
Standard Temperature, °F	70	70	70	--	
Sample Volume, DSCF	30.88	31.94	31.12	31.31	
Process Parameters:					
Engine (Generator) kW	2,131	2,133	2,133	2,132	
Engine BHp	2,858	2,860	2,860	2,859	
Isokinetic, %	105.8	101.0	100.8	102.5	
Duct Temperature, °F	433.2	446.5	450.5	443.4	
Velocity, ft/sec	91.5	98.2	97.0	95.6	
Stack Gas:					
Exhaust Flow Rate, ACFM	15,836	17,004	16,785	16,542	
Exhaust Flow Rate, DSCFM	8,403	9,106	8,888	8,799	
Moisture (H_2O), % volume	10.7	8.6	9.2	9.5	
Oxygen (O_2), % volume dry	12.6	12.5	12.5	12.6	
Carbon Dioxide (CO_2), % volume dry	6.3	6.4	6.4	6.4	
Filterable Particulate Emissions:					
Filterable Particulate, mg	7.79	0.10	5.07	4.32	
Filterable Particulate, gr/DSCF	0.00389	0.0000483	0.00251	0.00215	
Filterable Particulate, lb/hr	0.280	0.00377	0.191	0.158	
Filterable Particulate, g/bhp-hr	0.0445	0.000598	0.0304	0.0251	0.085

Note: One sample was broken in transit. As a result, sample runs 1, 2, and 3 were designated arbitarily by the laboratory. See discussion in Section 3.11 of the report for details.

Make-up test done on 9/25/2025.

WHERE:

DSCF = sample volume in dry standard cubic foot
DSCFM = dry standard cubic foot per minute
ACFM = actual cubic foot per minute
H_2O, volume % = stack gas percent water vapor
gr/DSCF = particulate concentration in grains per DSCF

CALCULATIONS:

lb/hr emission rate = 0.00857 · gr/DSCF · DSCFM
Correction to 12% CO_2 = gr/DSCF · 12% / Actual CO_2%
MMBtu/hr = Btu/CF · $DSCFM_{fuel}$ · 60 min/hr · 10^{-6}
g/BHp/hr = lb/hr · 453.6 / BHp

TABLE 1
Total Particulate Results

East Bay Municipal Utility District
Engine #2 (S-38)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Date	09/25/25	09/25/25	09/25/25	--	
Test Time	1310-1418	1501-1606	1638-1742	--	
Process Parameters:					
Engine (Generator) kW	2,141	2,134	2,142	2,139	
Engine bhp	2,869	2,860	2,870	2,866	
Isokinetic, %	97.9	100.8	102.6	100.4	
Exhaust Temperature, °F	440.9	440.1	439.7	440.2	
Velocity, ft/sec	91.5	93.5	93.0	92.7	
Fuel:					
Fuel Flow Rate, SCFM	597	607	606	603	
Fuel Fd @ Tstd	9,177	9,177	9,177	9,177	
Fuel Heat Input, MMBtu/hr	22.5	22.9	22.9	22.8	
Stack Gas:					
Exhaust Flow Rate, ACFM	16,188	16,545	16,450	16,395	
Exhaust Flow Rate, DSCFM	9,014	8,917	8,882	8,938	
Moisture (H_2O), % volume	5.40	8.52	8.39	7.44	
Oxygen (O_2), % volume dry	12.50	12.63	12.84	12.66	
Carbon Dioxide (CO_2), % volume dry	6.30	6.57	6.48	6.45	
Filterable Particulate Emissions:					
Filterable Particulate, mg	3.71	7.11	6.53	5.78	
Filterable Particulate, gr/DSCF	0.00171	0.00321	0.00291	0.00261	
Filterable Particulate, lb/hr	0.132	0.246	0.222	0.200	
Filterable Particulate, g/bhp-hr	0.0209	0.0390	0.0350	0.0316	0.085

WHERE:
DSCF = sample volume in dry standard cubic foot
DSCFM = dry standard cubic foot per minute
ACFM = actual cubic foot per minute
H_2O, volume % = stack gas percent water vapor
gr/DSCF = particulate concentration in grains per DSCF

CALCULATIONS:
lb/hr emission rate = 0.00857 · gr/DSCF · DSCFM
g/bhp-hr = lbs/hr · 453.6 / bhp

TABLE 4

East Bay Municipal Utility District
Engine #3 (S-39)

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Location	Outlet	Outlet	Outlet	--	
Test Date	8/13/25	8/13/25	8/13/25	--	
Test Time	1432-1537	1555-1654	1714-1813	--	
Standard Temperature, °F	70	70	70	--	
Process Parameters:					
Engine Rating, kW	2,222	2,222	2,222	--	
Operating Load, kW	2,154	2,146	2,156	2,152	
Engine BHP	2,889	2,878	2,891	2,886	
% Capacity	97%	97%	97%	97%	
Fuel:					
Fuel Flow Rate, SCFM	615.0	617.0	620.0	617.3	
Fuel F_d at T_{std}	9,127	9,127	9,127	9,127	
Fuel Heat Input, MMBtu/hr	23.9	24.0	24.1	24.0	
Stack Gas:					
Flow Rate, DSCFM (EPA Method 19)	9,157	9,165	9,224	9,182	
Oxygen (O_2), % volume dry	12.6	12.6	12.6	12.6	
Carbon Dioxide (CO_2), % volume dry	6.5	6.3	6.3	6.4	
NO_X Emissions:					
NO_X, ppmvd	43.3	43.9	42.3	43.2	
NO_X, ppmvd @ 15% O_2	30.8	31.2	30.1	30.7	70
NO_X, lb/MMBtu	0.119	0.120	0.116	0.118	
NO_X, lb/hr	2.83	2.87	2.79	2.83	
NO_X, g/bhp-hr	0.444	0.453	0.437	0.445	
CO Emissions:					
CO, ppmvd	363	360	362	362	
CO, ppmvd @ 15% O_2	258	256	258	257	2,000
CO, lb/MMBtu	0.605	0.599	0.604	0.603	
CO, lb/hr	14.4	14.3	14.5	14.4	
CO, g/bhp-hr	2.27	2.26	2.28	2.27	
Total Reduced Sulfurs (ASTM D5504)					
Total Reduced Sulfurs as H_2S, ppmv in Fuel	63.5	63.5	63.5	63.5	
Sulfur Dioxide Emissions, ppmvd	4.26	4.27	4.27	4.27	

WHERE:

ppmvd = parts per million concentration by volume expressed on a dry gas basis

lb/hr = pound per hour emission rate

lb/MMBtu = pound per million Btu emission rate

Tstd. = standard temperature (°R = °F+460)

MW = molecular weight

DSCFM = dry standard cubic foot per minute

NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)

CO = carbon monoxide (MW = 28)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)

lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R

lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)

Fd = 8,710 (EPA F-factor for natural gas)

< value = 2% of analyzer range

Table #1

EBMUD
Boiler S-55

Parameter	Run 1	Run 2	Run 3	Average Results	Permit Limits
Test Location	Outlet	Outlet	Outlet	--	
Test Date	10/27/25	10/27/25	10/27/25	--	
Test Time	0914-0947	1028-1101	1115-1147	--	
Standard Temperature, °F	70	70	70	--	
Process Parameters:					
Fuel Flow Rate, Estimated, scfm	234.0	245.0	268.6	249.2	
Fuel F-Factor, at T_{std}*	9,147	9,147	9,147	9,147	
Process Parameters:					
Boiler Rating, MMBtu/hr	20.46	20.46	20.46	--	
Operating Load, MMBtu/hr (EPA Method 2)	8.7	9.1	10.0	9.3	
Firing Rate, % Capacity	42%	44%	49%	45%	
Stack Gas:					
Flow Rate, DSCFM (EPA Method 2)	2,053	2,095	2,304	2,151	
Oxygen (O_2), % volume dry	7.5	7.1	7.2	7.2	
Carbon Dioxide (CO_2), % volume dry	11.1	11.3	11.4	11.3	
Moisture (H2O), % volume (EPA Method 4)	9.5	13.5	9.6	11.5	
NO_X Emissions:					
NO_X, ppmvd	12.2	15.1	14.0	13.8	
NO_X, ppmvd @ 3% O_2	16.2	19.6	18.3	18.0	30
NO_X, lb/MMBtu	0.0206	0.0249	0.0232	0.0229	
NO_X, lb/hr	0.178	0.225	0.230	0.211	
CO Emissions:					
CO, ppmvd	10.0	< 5.0	8.4	< 7.8	
CO, ppmvd @ 3% O_2	13.3	< 6.5	10.9	< 10.2	50
CO, lb/MMBtu	0.0103	< 0.0050	0.0084	< 0.0079	
CO, lb/hr	0.089	< 0.046	0.084	< 0.073	

Note: *F-Factor determined from 2024 digester gas analysis. See discussion in Section 3.6 for details.

WHERE:

ppmvd = parts per million concentration by volume expressed on a dry gas basis

lb/hr = pound per hour emission rate

lb/MMBtu = pound per million Btu emission rate

Tstd. = standard temperature (°R = °F+460)

MW = molecular weight

DSCFM = dry standard cubic foot per minute

NO_X = oxides of nitrogen, reported as NO_2 (MW = 46)

CO = carbon monoxide (MW = 28)

CALCULATIONS:

ppm @ 3% O_2 = ppm · 17.9 / (20.9 - %O_2)

lb/hr = ppm · 8.223 E-05 · DSCFM · MW / Tstd. °R

lb/MMBtu = Fd · MW · ppm · 2.59E-9 · 20.9/(20.9 - %O_2)

< value = 2% of analyzer range

ATTACHMENT 4a

ANNUAL TESTS RESULTS FOR GASOLINE DISPENSING FACILITY (GDF), SOURCE 48 (S-48)

Nor-Cal Tank Testing, 9/17/2025

TP-206.3
AST Static Pressure Performance Test Report Form

DATE 9-17/2025		Test Company: NOR-CAL TANK TESTING	
EAST BAY MUNICIPAL UTILITY DIST		Technician: DAVID WINKLER	
2020 WAKE AVE		Certification Number	
OAKLAND CA		District: BAA	

TEST INFORMATION			
Total number of nozzles: 4		Are the tanks manifolded? X No	
PHASE 2			VR-501
	X Direct-fill Remote-fill		
Nitrogen introduction point	X Phase I vapor coupler	☐ Phase I vent line	☐ Phase II vapor riser
Pressure measuring device	X digital manometer		
Calibration date for pressure measuring device (must be within 180 days of the test)			8/1/25
Ending value for digital manometer drift test if applicable (must be 0.01 in. w.c. or less)			0
Nitrogen introduction flow rate, F (must be between 1 and 5 CFM)			2
Number of hoses with over 100 ml (balance hoses must be drained prior to testing)			0

TANK INFORMATION					
Tank No.	1	2	3	4	ALL
Product grade	87				
Actual tank capacity (gallons)	3000				
Gasoline volume (gallons)	1521				
Ullage (gallons)[1]	1479				
If tanks are not manifolded, number of nozzles	4				

2 IN. W.C. STATIC PRESSURE TEST					
Test No.	1	2	3	4	5
Start time	230PM				
Initial Pressure, inches of water column (in. w.c.)	2.0				
Pressure at one minute, in. w.c.	2.0				
Pressure at two minutes, in. w.c.	1.98				
Pressure at three minutes, in. w.c.	1.98				
Pressure at four minutes, in. w.c.	1.97				
Pressure at five minutes, in. w.c.	1.97				
Allowable minimum pressure, in. w.c.	**1.97**				
Pass / Fail	**PASS**				

NOTE: [1]The minimum ullage shall be 25 percent and the maximum shall be 75% of the tank capacity.

I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in this document are true, accurate, and complete.

Signature of Technician: _____ _____ Date: 9/17/2025____

TABLE 1
TP-206.3

Leak Rate Criteria

ULLAGE (GALLONS)	MINIMUM PRESSURE AFTER 5 MINUTES, (INCHES OF WATER COLUMN)
100	**0.21**
150	0.45
200	**0.65**
250	0.82
300	**0.95**
350	1.05
400	**1.14**
450	1.22
500	**1.28**
550	1.33
600	**1.38**
650	1.42
700	**1.45**
750	1.48
800	**1.51**
850	1.54
900	**1.56**
950	1.58
1,000	**1.60**
1,200	1.66
1,400	**1.70**
1,600	1.74
1,800	**1.77**
2,000	1.79
2,200	**1.81**
2,400	1.82
2,600	**1.83**
2,800	1.85
3,000	**1.86**
3,500	1.88
4,000	**1.89**
4,500	1.90
5,000	**1.91**
6,000	1.93
7,000	**1.94**
8,000	1.94
9,000	**1.95**
10,000	1.96
15,000	**1.97**
20,000	1.98

NOTE: [1]The minimum ullage shall be 25 percent and the maximum shall be 75% of the tank capacity.

NORCAL TANK TESTING	877 BATEMAN WAY GALT CA 95632

TP-201.4
Dynamic Back Pressure Test Report Form

DATE 9/17/2025		Test Company: NORCAL TESTING	
EAST BAY MUNICIPAL UTILITY DIST		Technician: David Winkler	
2020 WAKE AVE		Certification Number	
OAKLAND CA		District: BAY	

TEST INFORMATION			
Phase II vapor recovery system executive order (as referenced on Permit to Operate)			VR-501
Pressure measuring device		X mechanical gauge	
Calibration date for pressure measuring device (must be within 90 days of the test)			8/1/25
Ending value for digital manometer drift test if applicable (must be 0.01 in. w.c. or less)			0
Back pressure test assembly leak check (must decay < 0.2 in. w.c. in 5 min. at 50% of the scale of the assembly's highest range)			☒ Pass ☐ Fail

BACK PRESSURE LIMITS (in. w.c.) BY EXECUTIVE ORDER FOR PRE-PHASE II EVR SYSTEMS			
G-70-52 (balance for AST & UST) & G-70-139 (Hirt VCS-200)	0.15 @ 20 CFH	0.45 @ 60 CFH	0.95 @ 100 CFH
G-70-177 & 181 (Hirt VCS-400)		0.50 @ 60 CFH	
G-70-191 (Healy ORVR)		0.50 @ 60 CFH	
BACK PRESSURE LIMITS (in. w.c.) BY EXECUTIVE ORDER FOR PHASE II EVR SYSTEMS			
VR-201 & 202 (Healy Phase II EVR1		0.50 @ 60 CFH	
VR-203 (VST balance Phase II EVR)		0.35 @ 60 CFH	0.62 @ 80 CFH

Nozzle Number	Fuel Grade	20 CFH	60 CFH	80 CFH	100 CFH
1			**.21**	**.37**	
2			**.27**	**.38**	
7			**.22**	**.41**	
8			**.22**	**.39**	

I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in this document are true, accurate, and complete.

Signature of Technician: 9/17/2025

Dispenser Number	Fuel Grade	20 CFH	60 CFH	80 CFH	100 CFH

I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in this document are true, accurate, and complete.

Signature of Technician:

E.O. VR-203/204/501
HIRT VCS-100 Processor Operability Test

DATE 9-17-2025		Test Company: **NOR-CAL TANK TESTING**	
EAST BAY MUNICIPAL UTILITY DIST		Technician: **DAVID WINKLER**	
2020 WAKE AVE		Certification Number	Expiration Date
OAKLAND CA		District: BAA	**3/31/26**
		Hirt: **263-A**	**4/11/26**

Pre-Test Parameters						Test Result
Was TP-201.3 (Included Exhibit 4) conducted in last 24 hours?						NO
Was TP-201.4 (Including Exhibit 6) conducted in last 24 hours?						NO
Was Exhibit 5 conducted in last 24 hours?						NO
Was there a fuel delivery with last 3 hours?						NO
Total Storage Capacity of Tank(s):	3000	Total Ullage:	1479	Ullage must be ≤ 70% of all tanks:		49.3

Hirt VCS 100 Processor Test1	Test Result
Is Power Switch lit?	YES
Is PROCESESSING lamp on? If "Yes", test cannot be performed until lamp goes out!	NO
Time for PROCESSOR lamp to light (minutes):	1SEC
Did PROCESSING lamp light within three (3) minutes?	YES
Time for OVERPRSSURE lamp to light (minutes):	59 MIN
Did OVERPRESSURE lamp light within sixty-two (62) minutes?	YES

NOTES: **[1]A certified HIRT technician must perform this test.**
[2]Turn 3-way valve handle back down to Normal Operation - open to ullage space.
[3]Turn power to processor back on.

I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in this document are true, accurate, and complete.

Signature of Technician: _____ _____ Date: __9/17/2025_____

TP-201.6C *Or* EVR Liquid Removal Test
Liquid Removal Rate Report Form

DATE 9/17/2025		Test Company: NOR-CAL TANK TESTING	
EAST BAY MUNICIPAL UTILITY DIST		Technician: DAVID WINKLER	
2020 WAKE AVE		Certification Number:	
OAKLAND CA		District: BAY	
		VST (if applicable): A-11856	5/4/27

TEST INFORMATION

Phase II vapor recovery system executive order: ☐ G-70-52 (Pre-Phase II EVR balance for AST & UST) X VR-203/204 (VST Phase II EVR balance)

Nozzle Number	Fuel Grade	EVR Short Version **	SEIAL	G	T	Dispensing Rate	VF	Wi	Wr	VW	VI – VW –VF / G	Pass / Fail
		Volume of Gas drained from hose (ml)	NUMBER	Gallons dispensed	Time to dispense (sec.)	G x 60 / T	Gas drained after dispensing	Gas introduced after dispensing (150 – 175 ml)	Gas recovered	Wi - Wr	Liquid removal rate (ml/gal)	
1	ALL	0	C646131									PASS
2	ALL	0	C646130									PASS
7	ALL	0	C646136									PASS
8	ALL	0	C623859									PASS

I declare, under penalty of perjury under the laws of the state of California that based on information and belief formed after reasonable inquiry, the statements and information provided in this document are true, accurate, and complete.

Signature of Technician: _____ Date: _9/17/2025_____

** **NOTE:** For EVR systems – Prior to the Leak Decay Test, if the liquid drained from the hose is <25 ml, record the amount in the EVR short version column**,** mark the test as pass, and no further testing is required.

Attachment 4b
Gasoline Facility Throughput (S-48)

MAIN WASTEWATER TREATMENT PLANT
GASOLINE DISPENSING FACILITY
Maintenance Center (3,000 gallon gasoline compartment)
Year: 2025
As of December 31, 2025

MONTH	GALLONS RECEIVED	RECEIVED YR-TO-DATE	GALLONS ISSUED	ISSUED YR-TO-DATE	COMMENTS
JAN	2954	2954	2486	2486	
FEB	2911	5865	2555	5041	
MAR	2505	8370	1824	6865	
APR	2816	11186	2633	9498	
MAY	2360	13546	2508	12006	
JUN	2300	15846	2481	14487	
JUL	3139	18985	5540	20027	
AUG	2402	21387	2368	22395	
SEP	3400	24787	3233	25628	
OCT	2506	27293	3026	28654	
NOV	2521	29814	1843	30497	
DEC	3177	32991	2438	32935	
Total					

ATTACHMENT 5

Hours of Operation for Standby Emergency Generators

July 1, 2025 – December 31, 2025

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	139.7	140.9	0	1.2	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	21.3	0	0.4	50
S-59	North of PGS	35.3	36.8	0	1.5	50
S-60	Dechlorination	41.7	44.6	0.1	2.8	50

**S-54 is currently out of service and fuel tank is empty*

January 1, 2025 – June 30, 2025

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	138.8	139.7	0	0.9	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	20.9	0	0	50
S-59	North of PGS	33.9	35.3	0	1.4	50
S-60	Dechlorination	36.5	41.7	0.4	4.8	50

**S-54 is currently out of service and fuel tank is empty*

January 1, 2025– December 31, 2025 (last 12 months total)

Source	Location	Hours Meter Begin	Hours Meter End	Emergency Use Hours	Reliability-related Hours	Limit on reliability-related Hours
S-53	West of Admin Bldg	138.8	140.9	0	2.1	30
S-54	East Bayshore RWP*	37	37	0	0	50
S-58	North of Maintenance	20.9	21.3	0	0.4	50
S-59	North of PGS	33.9	36.8	0	2.9	50
S-60	Dechlorination	36.5	44.6	0.5	7.6	50

**S-54 is currently out of service and fuel tank is empty*

ATTACHMENT 6

TURBINE MONTHLY TEST RESULTS

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	7/3/25	--
Test Start Time	14:00:59	--
Test End Time	14:15:00	--
PGS Turbine, kW	3750	--
PGS Turbine Digester Gas Flow Rate, DSCFM		--
Oxygen, O2 %	17.37	--
NOx, ppm	~~10~~	--
NOx, ppm @ 15% O2	10	**23**
CO, ppm		--
CO, ppm @ 15% O2	~~0~~	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	~~0~~	**150**
Sampler (name)	JOSI CRALENS	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	8/6/25	--
Test Start Time	09:38:06	--
Test End Time	09:52:07	--
PGS Turbine, kW	3980	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1198	--
Oxygen, O2 %	15.96	--
NOx, ppm		--
NOx, ppm @ 15% O2	6	**23**
CO, ppm		--
CO, ppm @ 15% O2	0	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	1	**150**
Sampler (name)	JORGE CABRERA	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

EBMUD
Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	9/8/25	--
Test Start Time	08:33:09	--
Test End Time	08:47:10	--
PGS Turbine, kW	3886	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1182	--
Oxygen, O2 %	15.80	--
NOx, ppm		--
NOx, ppm @ 15% O2	6	**23**
CO, ppm		--
CO, ppm @ 15% O2	1	**100**
SO2, ppm		--
SO2, ppm @ 15% O2	~~0~~	**150**
Sampler (name)	JODI CRAVENS	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y ☐ N ☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

TABLE # 1

EBMUD-OCTOBER
DG TURBINE #1 (S-56)

RUN	1	LIMITS
Test Date	10/9/25	
Test Time	1430-1445	
Oxygen, O_2, %	16.2	
NOx, ppm	5.9	
NOx, ppm @ 15% O_2	**7.4**	**23**
CO, ppm	0.7	
CO, ppm @ 15% O_2	**0.9**	**100**
SO_2, ppm	6.4	
SO_2, ppm @ 15% O_2	**8.0**	**150**

WHERE,

ppm = Parts Per Million Concentration

NOx = Oxides of Nitrogen as NO_2 (MW = 46)

CO = Carbon Monoxide (MW = 28)

SO_2 = Sulfur Dioxide (MW= 64)

CALCULATIONS,

PPM @ 15% O_2 = ppm * 5.9 / (20.9 - %O_2)

EBMUD

Turbine Monthly Emissions Check (15 min)

Turbine	Data	Limits
Test Date	11/11/25	--
Test Start Time	09:42:27	--
Test End Time	09:56:28	--
PGS Turbine, kW	3873	--
PGS Turbine Digester Gas Flow Rate, DSCFM	1130	--
Oxygen, O2 %	16.38	--
NOx, ppm		--
NOx, ppm @ 15% O2	8	**23**
CO, ppm		--
CO, ppm @ 15% O2		**100**
SO2, ppm		--
SO2, ppm @ 15% O2	3	**150**
Sampler (name)	Brett Fansler	--

Analyzer
Ecom EN3
S/N 5258

Alternate Analyzer Used? Y☐ N☒ If yes, record info below.
Make/Model
Serial Number

Abbreviations
kW=kilowatts
DCSM=dry standard cubic feet per minute
PPM=parts per million
NOx=Oxides of nitrogen (NO ppm + NO2 ppm)
CO=Carbon Monoxide

Calculations (done by ecom EN3)
ppm@15% O2 = ppm * 5.9 / (20.9-%O2)

ATTACHMENT 7

MAIN WASTEWATER TREATMENT PLANT FLOWS

East Bay Municipal Utility District
ANNUAL WASTEWATER MONITORING SUMMARY 2025

STATION: WWTP INFLUENT - INF-001
STATION: WWTP EFFLUENT - EFF-001/EFF-001B
FLOWS & CONVENTIONAL POLLUTANTS (R2-2020-0024)

	INF (MGD)				EFF (MGD)			CBOD						TSS					
	Mo. Avg	Max Daily Avg	Min Daily Avg	3-mo Dry Season Avg	Mo. Avg	Max Daily Avg	Min Daily Avg	Inf (INF-001) mg/L Month Avg	Eff mg/L Month Avg	Eff mg/L Max Week Avg	# excs/ # of Analyses Mo.	Week Avg	% Removal Month Avg	Inf mg/L Month Avg	Eff mg/L Month Avg	Eff mg/L Max Week Avg	# excs/ # of Analyses Mo.	Week Avg	% Removal Month Avg
Limits:				**120**					**25**	**40**			**Min 85**		**30**	**45**			**Min 85**
Jan	55	64	50		51	61	46	311	6	6	0/ 1	0/ 4	98.2%	386	7	7	0/ 1	0/ 4	97.5%
Feb	88	181	58		83	183	54	252	9	12	0/ 1	0/ 4	96.4%	432	13	17	0/ 1	0/ 4	97.0%
Mar	59	74	46		55	72	55	344	5	7	0/ 1	0/ 5	98.6%	545	6	10	0/ 1	0/ 5	98.9%
Apr	52	58	46		49	56	46	377	5	6	0/ 1	0/ 4	98.7%	561	9	9	0/ 1	0/ 4	98.5%
May	47	50	43		46	48	42	393	6	7	0/ 1	0/ 5	98.5%	511	9	10	0/ 1	0/ 5	98.2%
Jun	45	52	43		44	49	42	342	5	5	0/ 1	0/ 4	98.5%	568	9	10	0/ 1	0/ 4	98.5%
Jul	46	51	43		43	46	40	350	5	6	0/ 1	0/ 4	98.5%	490	9	10	0/ 1	0/ 4	98.2%
Aug	47	50	43	46	43	47	41	346	6	7	0/ 1	0/ 5	98.3%	471	11	12	0/ 1	0/ 5	97.8%
Sep	48	56	39		44	49	35	363	7	8	0/ 1	0/ 4	98.1%	568	12	14	0/ 1	0/ 4	98.0%
Oct	52	81	40		46	73	37	342	6	7	0/ 1	0/ 4	98.3%	581	9	11	0/ 1	0/ 4	98.4%
Nov	58	103	49		51	97	42	368	7	7	0/ 1	0/ 5	98.2%	732	9	10	0/ 1	0/ 5	98.8%
Dec	69	148	49		62	141	42	367	6	5	0/ 1	*0/ 3	98.4%	590	9	10	0/ 1	0/ 4	98.5%
Avg	56	81	46		51	77	44	346	6	7			98%	536	9	11			98%
Max	88	181	58		83	183	55	393	9	12			99%	732	13	17			99%
Min	45	50	39		43	46	35	252	5	5			96%	386	6	7			97%
Exc/Analyses											0/ 12	0/ 51	0/12				0/ 12	0/ 52	0/12

Exc / Analyses = number of exceedances / number of analyses

*No cBOD data week of 12/21-12/27

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

(A-462 is Fine Screen Room Scrubber, A-463,A-464 are Course Screen Room/IPS Scrubbers)

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Jul-25	0.1	0.0	0.0	0.0	4.3	0.0	0.0	0.0
02-Jul-25	0.2	0.0	0.0	0.0	2.0	0.0	0.0	0.0
03-Jul-25	0.4	0.0	0.0	0.0	6.4	0.0	0.0	0.0
04-Jul-25	0.1	0.0	0.0	0.0	2.0	0.0	0.0	0.0
05-Jul-25	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
06-Jul-25	0.1	0.0	0.0	0.0	4.3	0.0	0.0	0.0
07-Jul-25	0.6	0.0	0.0	0.0	5.2	0.0	0.0	0.0
08-Jul-25	0.6	0.0	0.0	0.0	11.3	0.0	0.0	0.0
09-Jul-25	0.5	0.0	0.0	0.0	5.8	0.0	0.0	0.0
10-Jul-25	1.7	0.0	0.0	0.0	5.9	0.0	0.0	0.0
11-Jul-25	1.2	0.0	0.0	0.0	13.0	0.0	0.0	0.0
12-Jul-25	1.2	0.0	0.0	0.0	6.5	0.0	0.0	0.0
13-Jul-25	1.1	0.0	0.0	0.0	4.0	0.0	0.0	0.0
14-Jul-25	1.9	0.0	0.0	0.0	7.4	0.0	0.0	0.0
15-Jul-25	0.7	0.0	0.0	0.0	5.3	0.0	0.0	0.0
16-Jul-25	1.6	0.0	0.0	0.0	7.5	0.0	0.0	0.0
17-Jul-25	1.5	0.0	0.0	0.0	10.3	0.0	0.0	0.0
18-Jul-25	2.1	0.0	0.0	0.0	8.3	0.0	0.0	0.0
19-Jul-25	2.9	0.0	0.0	0.0	7.0	0.0	0.0	0.0
20-Jul-25	2.4	0.0	0.0	0.0	8.2	0.0	0.0	0.0
21-Jul-25	2.1	0.0	0.0	0.0	11.0	0.0	0.0	0.0
22-Jul-25	2.6	0.0	0.0	0.0	8.3	0.0	0.0	0.0
23-Jul-25	2.1	0.0	0.0	0.0	9.4	0.0	0.0	0.0
24-Jul-25	2.5	0.0	0.0	0.0	11.9	0.0	0.0	0.3
25-Jul-25	3.1	0.0	0.0	0.0	6.5	0.0	0.0	0.0
26-Jul-25	2.6	0.0	0.0	0.0	6.5	0.0	0.0	0.0
27-Jul-25	3.3	0.0	0.0	0.0	9.3	0.0	0.0	0.0
28-Jul-25	3.1	0.0	0.0	0.0	8.8	0.0	0.0	0.0
29-Jul-25	3.1	0.0	0.0	0.0	6.9	0.0	0.0	0.0
30-Jul-25	2.2	0.0	0.0	0.0	6.3	0.0	0.0	0.0
31-Jul-25	2.1	0.0	0.0	0.0	6.1	0.0	0.0	0.0
Monthly Avg	1.6	0.0	0.0	0.0				
Monthly Max					13.0	0.0	0.0	0.3

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Aug-25	2.9	0.0	0.0	0.0	8.0	0.0	0.0	0.3
02-Aug-25	3.3	0.0	0.0	0.0	16.2	0.0	0.0	0.0
03-Aug-25	3.8	0.0	0.0	0.0	16.9	0.0	0.0	0.0
04-Aug-25	3.1	0.0	0.0	0.0	8.7	0.0	0.0	0.0
05-Aug-25	3.5	0.0	0.0	0.0	14.4	0.0	0.0	0.0
06-Aug-25	1.1	0.0	0.0	0.0	18.4	0.0	0.0	0.0
07-Aug-25	3.2	0.0	0.0	0.0	9.8	0.0	0.0	0.0
08-Aug-25	3.4	0.0	0.0	0.0	12.9	0.0	0.0	0.0
09-Aug-25	2.0	0.0	0.0	0.0	6.2	0.0	0.0	0.0
10-Aug-25	1.6	0.0	0.0	0.0	4.9	0.0	0.0	0.0
11-Aug-25	2.8	0.0	0.0	0.0	7.3	0.0	0.0	0.0
12-Aug-25	2.2	0.0	0.0	0.0	7.8	0.0	0.0	0.0
13-Aug-25	3.0	0.0	0.0	0.0	13.2	0.0	0.0	0.0
14-Aug-25	1.5	0.0	0.0	0.0	5.3	0.0	0.0	0.0
15-Aug-25	3.1	0.0	0.0	0.0	11.0	0.0	0.0	0.0
16-Aug-25	2.4	0.0	0.0	0.0	7.3	0.0	0.0	0.0
17-Aug-25	3.1	0.0	0.0	0.0	6.6	0.0	0.0	0.0
18-Aug-25	3.9	0.0	0.0	0.0	9.8	0.0	0.0	0.0
19-Aug-25	6.4	0.0	0.0	0.0	14.1	0.0	1.5	0.0
20-Aug-25	2.8	0.0	0.0	0.0	7.1	0.0	0.0	0.0
21-Aug-25	3.8	0.0	0.0	0.0	8.7	0.0	0.0	0.3
22-Aug-25	3.4	0.0	0.0	0.0	10.5	0.0	0.0	0.0
23-Aug-25	3.9	0.0	0.0	0.0	7.1	0.0	0.0	0.0
24-Aug-25	4.7	0.0	0.0	0.0	9.6	0.0	0.0	0.0
25-Aug-25	3.1	0.0	0.0	0.0	7.8	0.0	0.0	0.0
26-Aug-25	1.1	0.0	0.0	0.0	5.1	0.0	0.0	0.0
27-Aug-25	2.3	0.0	0.0	0.0	6.1	0.0	0.0	0.0
28-Aug-25	2.7	0.0	0.0	0.0	6.8	0.0	0.0	0.0
29-Aug-25	3.7	0.0	0.0	0.0	12.8	0.0	0.0	0.0
30-Aug-25	3.0	0.0	0.0	0.0	6.8	0.0	0.0	0.0
31-Aug-25	3.5	0.0	0.0	0.0	12.6	0.0	0.0	0.0
Monthly Avg	3.1	0.0	0.0	0.0				
Monthly Max					18.4	0.0	1.5	0.3

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Sep-25	2.3	0.0	0.0	0.0	5.5	0.0	0.0	0.0
02-Sep-25	5.2	0.0	0.0	0.0	10.2	0.0	0.0	0.0
03-Sep-25	5.2	0.0	0.0	0.0	8.5	0.0	0.0	0.0
04-Sep-25	4.0	0.0	0.0	0.0	10.9	0.0	0.0	0.0
05-Sep-25	4.2	0.0	0.0	0.0	17.1	0.0	0.0	0.0
06-Sep-25	3.1	0.0	0.0	0.0	9.5	0.0	0.0	0.0
07-Sep-25	5.4	0.0	0.0	0.0	19.7	0.0	0.0	0.0
08-Sep-25	3.3	0.0	0.0	0.0	13.3	0.0	0.0	0.0
09-Sep-25	3.0	0.0	0.0	0.0	12.7	0.0	0.0	0.0
10-Sep-25	2.7	0.0	0.0	0.0	7.5	0.0	0.0	0.0
11-Sep-25	1.8	0.0	0.0	0.0	6.8	0.0	0.0	0.0
12-Sep-25	1.5	0.0	0.0	0.0	5.9	0.0	0.0	0.0
13-Sep-25	0.8	0.0	0.0	0.0	3.0	0.0	0.0	0.0
14-Sep-25	0.6	0.0	0.0	0.0	2.6	0.0	0.0	0.0
15-Sep-25	1.0	0.0	0.0	0.0	4.2	0.0	0.0	0.0
16-Sep-25	0.1	0.0	0.0	0.0	6.1	0.0	0.0	0.0
17-Sep-25	0.1	0.0	0.0	0.0	3.1	0.0	0.0	0.0
18-Sep-25	1.0	0.0	0.0	0.0	7.7	0.0	0.0	0.0
19-Sep-25	0.1	0.0	0.0	0.0	6.8	0.0	4.5	0.0
20-Sep-25	0.9	0.0	0.0	0.0	2.9	0.0	5.2	0.0
21-Sep-25	0.5	0.0	0.0	0.0	5.1	0.0	0.0	0.0
22-Sep-25	0.1	0.0	0.0	0.0	2.6	0.0	0.0	0.0
23-Sep-25	0.3	0.0	0.0	0.0	9.4	0.0	0.0	0.0
24-Sep-25	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
25-Sep-25	1.2	0.0	0.0	0.0	8.2	0.0	0.0	0.0
26-Sep-25	0.1	0.0	0.0	0.0	4.2	0.0	0.0	0.0
27-Sep-25	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0
28-Sep-25	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
29-Sep-25	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
30-Sep-25	0.0	0.0	0.0	0.0	4.3	0.0	7.0	0.0
Monthly Avg	1.6	0.0	0.0	0.0				
Monthly Max					19.7	0.0	7.0	0.0

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Oct-25	0.0	0.0	0.0	0.0	1.6	0.0	1.7	0.0
02-Oct-25	0.0	0.0	0.0	0.0	2.4	0.0	0.0	0.0
03-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
04-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
05-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
06-Oct-25	0.0	0.0	0.0	0.0	2.1	0.0	1.7	0.0
07-Oct-25	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0
08-Oct-25	0.6	0.0	0.0	0.0	4.0	0.0	2.2	0.0
09-Oct-25	0.3	0.0	0.0	0.0	5.1	0.0	0.0	0.0
10-Oct-25	0.8	0.0	0.0	0.0	7.3	0.0	0.0	0.0
11-Oct-25	1.7	0.0	0.0	0.0	6.1	0.0	2.0	0.0
12-Oct-25	2.9	0.0	0.0	0.0	12.6	0.0	0.0	0.0
13-Oct-25	1.1	0.0	0.0	0.0	6.9	0.0	1.6	0.0
14-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
15-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Oct-25	0.0	0.0	0.0	0.0	8.7	0.0	13.9	0.3
17-Oct-25	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0
18-Oct-25	0.8	0.1	0.0	0.0	5.0	0.5	0.0	0.0
19-Oct-25	0.0	0.1	0.0	0.0	1.7	0.6	0.0	0.0
20-Oct-25	0.2	0.1	0.0	0.0	4.9	1.2	0.0	0.0
21-Oct-25	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
22-Oct-25	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
23-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Oct-25	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0
25-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Oct-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Oct-25	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0
28-Oct-25	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
29-Oct-25	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0
30-Oct-25	1.9	0.0	0.0	0.0	25.8	0.0	0.0	0.0
31-Oct-25	3.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0
Monthly Avg	0.4	0.0	0.0	0.0				
Monthly Max					25.8	1.2	13.9	0.3

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings, ppm

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Nov-25	3.0	0.0	0.0	0.0	5.6	0.0	0.0	0.0
02-Nov-25	2.6	0.0	0.0	0.0	4.3	0.0	0.0	0.0
03-Nov-25	2.9	0.0	0.0	0.0	6.7	0.3	0.0	0.0
04-Nov-25	2.6	0.0	0.0	0.0	6.6	0.0	0.0	0.0
05-Nov-25	3.9	0.0	0.0	0.0	8.4	0.0	3.3	0.0
06-Nov-25	3.6	0.0	0.1	0.0	10.8	0.0	13.0	0.3
07-Nov-25	4.1	0.0	0.0	0.0	8.3	0.0	0.0	0.0
08-Nov-25	4.7	0.0	0.0	0.0	8.4	0.0	0.0	0.0
09-Nov-25	5.3	0.0	0.0	0.0	7.9	0.0	0.0	0.0
10-Nov-25	3.3	0.0	0.0	0.0	7.6	0.0	0.0	0.0
11-Nov-25	3.4	0.0	0.0	0.0	6.8	0.0	0.0	0.0
12-Nov-25	6.5	0.0	0.0	0.0	18.0	0.0	1.5	0.0
13-Nov-25	3.6	0.0	0.0	0.0	12.5	0.0	1.8	0.0
14-Nov-25	0.0	0.0	0.0	0.0	3.6	0.0	0.0	0.0
15-Nov-25	2.1	0.0	0.0	0.0	3.5	0.0	0.0	0.0
16-Nov-25	3.5	0.0	0.0	0.0	4.7	0.0	0.0	0.0
17-Nov-25	0.8	0.0	0.0	0.0	6.8	0.0	0.0	0.0
18-Nov-25	0.7	0.0	0.0	0.0	1.8	0.0	0.0	0.0
19-Nov-25	1.7	0.0	0.0	0.0	3.5	0.0	0.0	0.0
20-Nov-25	1.1	0.0	0.0	0.0	3.1	0.0	0.0	0.0
21-Nov-25	1.7	0.0	0.0	0.0	3.8	0.0	0.0	0.0
22-Nov-25	2.2	0.0	0.0	0.0	4.3	0.0	0.0	0.0
23-Nov-25	2.3	0.0	0.0	0.0	4.4	0.0	0.0	0.0
24-Nov-25	1.8	0.0	0.0	0.0	5.2	0.0	0.0	0.0
25-Nov-25	2.3	0.0	0.0	0.0	4.8	0.0	0.0	0.0
26-Nov-25	2.7	0.0	0.0	0.0	5.7	0.0	0.0	0.0
27-Nov-25	3.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0
28-Nov-25	3.2	0.0	0.0	0.0	6.6	0.0	0.0	0.0
29-Nov-25	2.4	0.0	0.0	0.0	4.6	0.0	10.2	0.0
30-Nov-25	2.1	0.0	0.0	0.0	5.5	0.0	0.0	0.0
Monthly Avg	2.8	0.0	0.0	0.0				
Monthly Max					18.0	0.3	13.0	0.3

	Coarse Scrubber		Fine Scrubber		Coarse Scrubber		Fine Scrubber	
	Inlet Avg	Outlet Avg	Inlet Avg	Outlet Avg	Inlet Max	Outlet Max	Inlet Max	Outlet Max
01-Dec-25	2.5	0.0	0.0	0.0	5.4	0.0	0.0	0.0
02-Dec-25	0.8	0.0	0.0	0.0	5.6	0.0	0.0	0.0
03-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
04-Dec-25	0.0	0.0	0.1	0.0	0.0	0.0	5.3	0.4
05-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
06-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
07-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	1.7	0.0
08-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
09-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	5.7	0.3
10-Dec-25	0.0	0.0	0.3	0.0	0.0	0.0	1.9	0.3
11-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	5.6	0.4
12-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16-Dec-25	0.0	0.0	0.2	0.0	0.0	0.0	22.7	0.9
17-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0
18-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
26-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
31-Dec-25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Monthly Avg	0.1	0.0	0.0	0.0				
Monthly Max					5.6	0.0	22.7	0.9

ATTACHMENT 8 -- IPS Scrubber Inlet and Outlet H2S Readings - Related Outages

Influent Pump Station Odor Scrubber Outage Table

Start	Finish	Duration	Reason
19-Sep-25 08:13	19-Sep-25 08:26	0:13	Plant shutdown, BTF started after plant flow startup
29-Nov-25 18:26	29-Nov-25 18:44	0:18	A463, A464 offline until reset after power glitch
29-Nov-25 13:11	29-Nov-25 13:20	0:09	Power glitch, BTF started after plant flow startup
22-Dec-25 07:39	22-Dec-25 09:09	1:30	A463 lost power, A464 would not start until reset
23-Dec-25 08:16	23-Dec-25 08:59	0:43	Troubleshooting prior day's A463 power issue, A464 off for safety
	Total Down Time	2:53	

Attachment 9

Odor Scrubber Mainteance Records for S-110 (IPS, W-12) and S-170 (Dewatering Building, W-25/W-30)

Area	Wonum	Description	Assetnum	Req Dept	Resp Dept	Status	Type	Reported By	Report Date
W-12 Headworks: IPS, Barscreens (S-110)									
W-12	2025104154	Carbon oder control unit in alarm "Dialog Table Reading Impossible". Not cycling and can't reset.	W-12-OCU-002	PO	IN	COMP	BD	DPERILLO	9/16/2025
W-12	2025128851	Midpoint H2S sensor on BTF in error state "Head Fail"	W-12-FA-AIT-002	PO	IN	COMP	BD	ESTOPETE	11/4/2025
W-12	2025128976	SF-12 Supply fan malfunction	W-12-FAN-SF2-01	PO	MEN	DONE	BD	ESTOPETE	11/14/2025
W-12	2025141510	EF-09 & EF-10 will not start in remote or local. Fine Screen Odor Scrubber Fans	W-12-MISC-000-00	PO	ELM	DONE	BD	DPERILLO	12/22/2025
W-30 Sludge Handling; Dewatering Building (S-170)									
W-30	2025116741	There is a leak from the hypo feed line between the two cabinets	W-30-TKS-301-00	PO	MEN	COMP	CM	LSONG	10/6/2025
W-25	2025128925	Minor 2W leak inside south side hypo cabinet (foul air scrubber)	W-25-MISC-000-00	PO	MEN	APPR**	CM	CRQUINTA	11/11/2025

**Work is scheduled the week of 2/2-2/6.

ATTACHMENT 10 -- S-170 Waste Activated Sludge Throughput

2025 July - December Gravity Belt Thickener Summary Flow Table

Note: Kgal=1,000 gallons

Daily Flows	July Kgal	August Kgal	September Kgal	October Kgal	November Kgal	December Kgal
1st	1,728	1,190	1,911	1,147	1,347	1,311
2nd	1,059	1,207	1,879	697	1,244	905
3rd	1,161	1,229	1,423	686	1,173	1,087
4th	1,699	1,234	1,476	693	1,238	1,506
5th	1,821	682	1,373	655	1,338	1,359
6th	1,794	951	1,213	619	1,601	1,293
7th	1,828	1,099	1,365	731	1,879	1,265
8th	1,824	1,163	1,397	631	1,992	1,314
9th	1,826	1,141	1,727	1,287	1,995	1,233
10th	1,811	1,157	1,779	1,512	1,907	1,840
11th	1,309	1,199	1,333	1,553	1,623	2,158
12th	1,451	1,160	1,300	1,556	1,847	2,038
13th	1,332	1,206	1,215	1,773	2,243	1,373
14th	1,322	1,200	1,282	1,764	2,229	1,184
15th	2,560	1,290	1,332	1,551	2,072	1,271
16th	395	1,313	1,343	1,592	2,122	1,694
17th	1,268	1,402	1,356	479	1,713	2,104
18th	1,263	1,431	1,326	1,306	1,435	1,701
19th	1,216	1,466	687	1,129	1,449	1,727
20th	1,290	1,490	1,202	1,379	1,532	1,447
21st	1,311	1,363	1,424	1,258	1,543	1,220
22nd	1,312	1,391	1,373	1,205	1,560	1,104
23rd	1,191	1,421	1,062	1,159	1,552	1,012
24th	1,170	1,417	647	1,094	1,590	1,135
25th	1,158	1,398	912	1,046	1,564	1,039
26th	1,185	1,408	1,250	1,008	1,247	1,007
27th	1,221	1,543	1,727	1,112	1,332	1,202
28th	1,210	1,678	1,376	1,113	1,281	1,337
29th	1,198	1,816	1,302	1,181	1,370	1,728
30th	1,228	1,805	758	1,553	1,351	2,377
31st	1,211	1,809		1,925		2,044
Monthly Total	43,350	41,259	39,748	36,391	48,368	45,011
Semi-Annual Total	254,127					

Gravity Belt Thickener and Dewatering Centrifuge Odor Scrubber Outage Table

Start	Finish	Duration	Reason
Total Down Time, DWB		0:00	
16-Jul-25 08:00	16-Jul-25 11:45	3:45	Hypo leak repair
17-Jul-25 07:20	17-Jul-25 10:30	3:10	Hypo pipe break at previous day's site, resealed
Total Down Time, THK		6:55	

ATTACHMENT 11

2025 July - December Blend Tank Summary Flow Table

Daily Flows	July Kgal	August Kgal	September Kgal	October Kgal	November Kgal	December Kgal
1st	663	731	562	688	698	668
2nd	619	655	641	685	591	253
3rd	723	631	727	666	672	618
4th	668	615	809	560	674	836
5th	500	583	805	399	809	672
6th	416	749	691	628	756	685
7th	688	630	606	696	727	584
8th	711	641	786	618	626	739
9th	665	523	911	867	544	734
10th	747	518	960	929	747	1,135
11th	640	496	794	751	747	1,040
12th	636	481	833	485	763	978
13th	467	666	717	829	978	744
14th	613	661	570	954	888	605
15th	620	720	810	860	619	795
16th	726	635	820	802	534	712
17th	633	494	819	437	632	813
18th	575	638	796	749	661	778
19th	570	690	440	618	622	835
20th	417	646	661	758	678	667
21st	526	668	625	779	756	655
22nd	567	626	855	720	615	814
23rd	547	627	288	729	488	752
24th	518	463	502	719	573	847
25th	599	549	976	576	666	618
26th	609	730	616	517	722	703
27th	513	661	679	693	588	589
28th	500	658	514	708	542	493
29th	648	713	600	702	563	581
30th	696	558	614	809	448	920
31st	699	583		932		859
Monthly Total	18,719	19,238	21,029	21,863	19,928	22,720
Semi-Annual Total	123,496					

ATTACHMENT 12 - DIGESTER GAS SAMPLING DATA

EBMUD Biogas H2S
July - December 2025

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
7/1/2025	170	175
7/2/2025	143	175
7/3/2025	1	175
7/4/2025	2	175
7/5/2025	102	175
7/6/2025	189	175
7/7/2025	213	175
7/8/2025	218	175
7/9/2025	201	175
7/10/2025	147	175
7/11/2025	184	175
7/12/2025	147	175
7/13/2025	197	175
7/14/2025	198	175
7/15/2025	212	175
7/16/2025	206	175
7/17/2025	168	175
7/18/2025	131	175
7/19/2025	125	175
7/20/2025	130	175
7/21/2025	229	175
7/22/2025	122	175
7/23/2025	142	175
7/24/2025	133	175
7/25/2025	161	175
7/26/2025	198	175
7/27/2025	167	175
7/28/2025	187	175
7/29/2025	251	175
7/30/2025	230	175
7/31/2025	280	175
8/1/2025	148	175
8/2/2025	120	174
8/3/2025	128	173
8/4/2025	150	173
8/5/2025	231	173
8/6/2025	167	173
8/7/2025	159	173
8/8/2025	218	173
8/9/2025	175	172
8/10/2025	220	172
8/11/2025	167	172
8/12/2025	135	172
8/13/2025	203	172
8/14/2025	129	172
8/15/2025	159	171
8/16/2025	169	171
8/17/2025	248	171
8/18/2025	281	171
8/19/2025	207	171
8/20/2025	176	171
8/21/2025	160	171
8/22/2025	206	171
8/23/2025	325	171
8/24/2025	262	171
8/25/2025	178	171
8/26/2025	213	172
8/27/2025	176	172
8/28/2025	232	172
8/29/2025	146	172
8/30/2025	191	172
8/31/2025	182	171

Rolling 365-Day limit: 200 ppm

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
9/1/2025	276	172
9/2/2025	234	172
9/3/2025	262	172
9/4/2025	269	172
9/5/2025	190	171
9/6/2025	147	171
9/7/2025	138	171
9/8/2025	153	170
9/9/2025	161	170
9/10/2025	184	170
9/11/2025	197	170
9/12/2025	146	170
9/13/2025	180	170
9/14/2025	178	169
9/15/2025	224	169
9/16/2025	168	169
9/17/2025	184	169
9/18/2025	179	169
9/19/2025	188	169
9/20/2025	202	169
9/21/2025	318	170
9/22/2025	319	170
9/23/2025	140	170
9/24/2025	102	169
9/25/2025	242	169
9/26/2025	276	169
9/27/2025	364	169
9/28/2025	310	170
9/29/2025	208	170
9/30/2025	363	170
10/1/2025	109	170
10/2/2025	195	170
10/3/2025	266	170
10/4/2025	283	170
10/5/2025	318	170
10/6/2025	300	171
10/7/2025	233	171
10/8/2025	216	171
10/9/2025	440	171
10/10/2025	184	171
10/11/2025	422	172
10/12/2025	270	172
10/13/2025	204	172
10/14/2025	161	173
10/15/2025	141	172
10/16/2025	328	172
10/17/2025	230	173
10/18/2025	513	173
10/19/2025	230	174
10/20/2025	184	174
10/21/2025	199	174
10/22/2025	209	174
10/23/2025	190	174
10/24/2025	183	174
10/25/2025	263	174
10/26/2025	260	174
10/27/2025	126	174
10/28/2025	128	173
10/29/2025	128	173
10/30/2025	142	173
10/31/2025	117	173

Media replacment 7/1 - 7/2
resulting in minimal detect 7/3 - 7/4

2025	Cogen Feed H2S (ppm)	365 Day Avg H2S (ppm)
11/1/2025	201	173
11/2/2025	126	173
11/3/2025	221	174
11/4/2025	164	174
11/5/2025	108	174
11/6/2025	215	174
11/7/2025	115	174
11/8/2025	190	174
11/9/2025	135	174
11/10/2025	171	173
11/11/2025	134	173
11/12/2025	116	173
11/13/2025	182	173
11/14/2025	100	173
11/15/2025	141	173
11/16/2025	147	173
11/17/2025	111	173
11/18/2025	138	173
11/19/2025	103	173
11/20/2025	122	173
11/21/2025	137	173
11/22/2025	125	173
11/23/2025	156	173
11/24/2025	148	172
11/25/2025	161	172
11/26/2025	112	172
11/27/2025	1	172
11/28/2025	5	171
11/29/2025	32	171
11/30/2025	50	170
12/1/2025	139	170
12/2/2025	130	170
12/3/2025	68	170
12/4/2025	134	170
12/5/2025	120	170
12/6/2025	148	170
12/7/2025	119	170
12/8/2025	122	170
12/9/2025	135	170
12/10/2025	188	170
12/11/2025	193	169
12/12/2025	189	169
12/13/2025	239	169
12/14/2025	164	169
12/15/2025	138	169
12/16/2025	128	169
12/17/2025	132	169
12/18/2025	213	169
12/19/2025	264	169
12/20/2025	155	169
12/21/2025	188	170
12/22/2025	186	170
12/23/2025	239	170
12/24/2025	213	170
12/25/2025	224	170
12/26/2025	159	170
12/27/2025	156	170
12/28/2025	114	169
12/29/2025	102	169
12/30/2025	110	168
12/31/2025	102	168

Media replacment 11/25 - 11/26
resulting in minimal detect 11/27 - 11/28

ATTACHMENT 13 - TOTAL DIGESTER GAS COMBUSTION

EBMUD Biogas to Combustion Devices
July - December 2025

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
7/1/2025	3,842	3,115	2,526
7/2/2025	4,345	2,915	2,532
7/3/2025	4,694	2,783	2,536
7/4/2025	3,710	2,737	2,537
7/5/2025	2,248	1,631	2,535
7/6/2025	1,778	1,137	2,533
7/7/2025	3,412	2,087	2,534
7/8/2025	4,086	2,855	2,538
7/9/2025	4,519	2,725	2,541
7/10/2025	3,972	2,638	2,542
7/11/2025	3,112	2,186	2,541
7/12/2025	2,554	1,650	2,538
7/13/2025	1,562	1,184	2,536
7/14/2025	2,982	2,098	2,537
7/15/2025	3,114	2,199	2,540
7/16/2025	3,318	2,511	2,542
7/17/2025	4,064	2,289	2,543
7/18/2025	2,926	2,403	2,539
7/19/2025	3,867	2,608	2,540
7/20/2025	2,400	1,484	2,540
7/21/2025	4,073	2,203	2,541
7/22/2025	4,371	3,048	2,546
7/23/2025	2,837	2,026	2,546
7/24/2025	3,282	2,111	2,545
7/25/2025	2,996	2,125	2,540
7/26/2025	4,524	3,182	2,542
7/27/2025	2,513	1,835	2,539
7/28/2025	3,051	2,338	2,539
7/29/2025	3,012	2,204	2,541
7/30/2025	2,662	2,076	2,542
7/31/2025	2,757	1,896	2,541
8/1/2025	4,798	2,648	2,542
8/2/2025	2,454	1,893	2,538
8/3/2025	1,507	1,287	2,534
8/4/2025	2,405	1,539	2,534
8/5/2025	4,091	2,726	2,537
8/6/2025	3,714	2,830	2,540
8/7/2025	4,318	2,932	2,541
8/8/2025	4,108	2,847	2,539
8/9/2025	2,712	2,140	2,536
8/10/2025	2,405	1,514	2,533
8/11/2025	3,642	2,361	2,532
8/12/2025	3,356	2,496	2,534
8/13/2025	4,752	3,084	2,538
8/14/2025	3,992	2,771	2,540
8/15/2025	3,984	2,429	2,537
8/16/2025	4,221	2,908	2,536
8/17/2025	2,337	1,370	2,533
8/18/2025	4,772	2,783	2,535
8/19/2025	3,398	2,550	2,536
8/20/2025	4,873	3,351	2,536
8/21/2025	4,661	3,238	2,536
8/22/2025	3,178	2,485	2,532
8/23/2025	3,051	2,299	2,529
8/24/2025	2,347	1,616	2,523
8/25/2025	2,483	1,741	2,519
8/26/2025	4,467	3,200	2,521
8/27/2025	3,429	2,650	2,520
8/28/2025	4,307	2,723	2,521
8/29/2025	2,694	2,298	2,520
8/30/2025	2,939	2,314	2,518
8/31/2025	1,693	1,309	2,514

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
9/1/2025	2,527	1,874	2,513
9/2/2025	3,180	2,291	2,514
9/3/2025	3,985	2,896	2,517
9/4/2025	4,088	2,926	2,519
9/5/2025	2,815	2,374	2,518
9/6/2025	2,349	2,076	2,517
9/7/2025	1,765	1,601	2,514
9/8/2025	2,511	1,970	2,513
9/9/2025	3,945	2,992	2,516
9/10/2025	4,572	3,269	2,517
9/11/2025	3,722	2,669	2,516
9/12/2025	3,638	2,920	2,516
9/13/2025	2,638	2,116	2,516
9/14/2025	1,777	1,439	2,513
9/15/2025	3,104	2,204	2,513
9/16/2025	3,937	2,808	2,516
9/17/2025	4,623	3,606	2,520
9/18/2025	4,142	3,287	2,522
9/19/2025	3,375	1,948	2,516
9/20/2025	2,808	1,877	2,511
9/21/2025	2,362	1,834	2,507
9/22/2025	3,282	2,646	2,508
9/23/2025	3,030	1,636	2,508
9/24/2025	3,073	1,236	2,504
9/25/2025	4,863	3,130	2,505
9/26/2025	3,555	2,488	2,504
9/27/2025	2,826	2,234	2,502
9/28/2025	1,801	1,333	2,498
9/29/2025	3,323	1,994	2,497
9/30/2025	3,071	2,374	2,499
10/1/2025	3,660	2,585	2,500
10/2/2025	4,702	2,888	2,500
10/3/2025	4,223	3,174	2,501
10/4/2025	2,811	2,217	2,500
10/5/2025	1,743	1,450	2,495
10/6/2025	2,457	1,885	2,495
10/7/2025	3,266	2,215	2,498
10/8/2025	3,103	2,397	2,499
10/9/2025	5,089	3,485	2,502
10/10/2025	2,725	2,343	2,499
10/11/2025	3,210	2,673	2,499
10/12/2025	2,253	1,816	2,497
10/13/2025	4,999	2,621	2,500
10/14/2025	4,833	3,223	2,505
10/15/2025	4,968	3,526	2,509
10/16/2025	4,925	3,761	2,513
10/17/2025	3,839	2,504	2,510
10/18/2025	3,619	2,613	2,508
10/19/2025	2,408	2,113	2,504
10/20/2025	2,394	2,310	2,506
10/21/2025	5,052	3,566	2,512
10/22/2025	4,140	3,243	2,516
10/23/2025	3,701	3,019	2,517
10/24/2025	4,585	3,430	2,518
10/25/2025	3,130	2,390	2,514
10/26/2025	2,323	1,908	2,511
10/27/2025	2,415	2,094	2,511
10/28/2025	4,379	2,939	2,516
10/29/2025	4,084	2,850	2,519
10/30/2025	3,085	2,521	2,517
10/31/2025	3,434	2,634	2,514

3,400 Annual Average Limit

2025	Total Combustion, SCFM		
	Daily Max	Daily Avg	365-Day Avg
11/1/2025	2,827	2,166	2,510
11/2/2025	1,862	1,541	2,507
11/3/2025	2,429	2,133	2,505
11/4/2025	2,381	1,798	2,504
11/5/2025	2,362	2,268	2,504
11/6/2025	3,529	2,621	2,504
11/7/2025	3,197	2,459	2,500
11/8/2025	2,423	2,152	2,496
11/9/2025	1,434	1,237	2,493
11/10/2025	3,222	2,298	2,493
11/11/2025	3,818	2,830	2,496
11/12/2025	3,838	2,869	2,498
11/13/2025	3,355	2,743	2,496
11/14/2025	3,204	2,428	2,493
11/15/2025	2,371	2,159	2,490
11/16/2025	1,789	1,637	2,485
11/17/2025	2,469	2,163	2,483
11/18/2025	2,390	2,319	2,485
11/19/2025	3,502	2,494	2,486
11/20/2025	3,656	3,032	2,486
11/21/2025	3,831	3,061	2,485
11/22/2025	3,621	2,789	2,484
11/23/2025	3,163	2,429	2,482
11/24/2025	2,433	1,700	2,481
11/25/2025	4,120	2,688	2,483
11/26/2025	3,534	2,384	2,483
11/27/2025	3,656	2,374	2,481
11/28/2025	2,805	1,699	2,478
11/29/2025	4,448	2,883	2,480
11/30/2025	1,864	1,551	2,478
12/1/2025	4,050	2,483	2,480
12/2/2025	3,901	2,302	2,483
12/3/2025	2,419	1,333	2,481
12/4/2025	4,562	3,374	2,483
12/5/2025	3,859	2,941	2,481
12/6/2025	2,955	2,217	2,477
12/7/2025	2,153	1,829	2,472
12/8/2025	2,987	2,305	2,469
12/9/2025	3,535	2,496	2,471
12/10/2025	4,502	3,620	2,476
12/11/2025	4,401	2,877	2,475
12/12/2025	4,446	2,777	2,474
12/13/2025	3,995	3,221	2,475
12/14/2025	3,360	2,228	2,474
12/15/2025	3,428	2,430	2,476
12/16/2025	4,095	3,102	2,480
12/17/2025	3,827	3,171	2,483
12/18/2025	3,267	2,492	2,482
12/19/2025	3,254	2,284	2,481
12/20/2025	1,863	1,647	2,478
12/21/2025	3,188	1,930	2,477
12/22/2025	3,318	2,129	2,475
12/23/2025	3,283	2,583	2,477
12/24/2025	3,779	3,072	2,479
12/25/2025	1,834	1,663	2,476
12/26/2025	1,904	1,723	2,476
12/27/2025	1,885	1,733	2,474
12/28/2025	1,878	1,410	2,470
12/29/2025	1,826	1,471	2,467
12/30/2025	2,828	1,973	2,466
12/31/2025	3,970	2,471	2,465