



OFFICE OF THE VICE CHANCELLOR FOR RESEARCH
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Via email to compliance@baaqmd.gov and hard copy sent via U.S. Postal Service

April 28, 2022

Director of Compliance and Enforcement
Bay Area Air Quality Management District
375 Beale Street, Suite 600
San Francisco, CA 94105
Attn: Title V Reports

TV Tracking #: 446

1. RECEIVED IN 04/29/2022
ENFORCEMENT: _____

RE: UC Berkeley, Facility #A0059 – Semi-Annual Monitoring Report for the Title V Operating Permit, October 1, 2021 – March 31, 2022

Dear Director of Compliance and Enforcement:

This monitoring report satisfies the semi-annual reporting requirements for the University of California, Berkeley (Facility #A0059), for the reporting period of **October 1, 2021 – March 31, 2022**.

Enclosed are the Tables of Applicable Emission Limits and Compliance Monitoring Requirements referenced in the Title V Operating Permit, issued April 05, 2022.

Below is the summary of DAS system events, CEMS system events and other events as previously submitted in our monthly emission reports during this time period:

Summary of DAS System Events

- **10/09/2021 (04:00-13:00):** BAD data was recorded for both stacks due to plant shutdown.
- **11/04/2021 (13:00-17:00):** BAD data was recorded for both stacks due to plant shutdown.
- **11/06/2021 – 11/08/2021:** BAD data was recorded for the bypass stack due to a scheduled shutdown.
- **11/06/2021 (01:00) -11/11/2021 (13:00):** BAD data was recorded for the main stack due to a scheduled shutdown.
- **11/09/2021 – 12/21/2021 (12:00):** No bypass stack data recorded for NO_x and CO parameters in DAS due to inoperative monitor.
- **12/10/2021 (12:00-14:00):** BAD data was recorded for the main stack due to CEMS troubleshooting.
- **12/15/2021 (14:00-16:00):** BAD data was recorded for the main stack due to CEMS troubleshooting.
- **12/20/2021 (14:00-16:00):** BAD data was recorded for the main stack due to CEMS troubleshooting.

- **12/21/2021 (10:00-12:00):** BAD data was recorded for the main stack due to CEMS troubleshooting.
- **01/15/2022 (18:00-19:00):** BAD data was recorded for both stacks due to gas turbine offline.
- **01/17/2022 (01:00-04:00, 19:00-21:00):** BAD data was recorded for both stacks due to gas turbine offline.
- **01/20/2022 (22:00-24:00):** BAD data was recorded for both stacks due to gas turbine offline.
- **01/21/2022 (01:00-02:00):** BAD data was recorded for both stacks due to gas turbine offline.
- **01/22/2022 (08:00-19:00):** BAD data was recorded for both stacks due to gas turbine offline.
- **01/28/2022 (10:00-11:00):** BAD data was recorded for both stacks due to training on CEMS equipment.
- **02/01/2022-02/28/2022:** Data marked invalid due to bypass stack offline with the exception of 02/03/2022 (02:00-15:00).
- **02/03/2022 (02:00-15:00):** Data marked invalid due to main stack offline due to feedwater leak
- **03/01/2022-03/31/2022:** Bypass stack was offline and data were marked invalid.
- **03/08/2022 (10:00-11:00):** BAD data was recorded in the main stack due to maintenance.
- **03/13/2022 (08:00-09:00):** BAD data was recorded in the main stack due to the gas turbine offline.
- **03/23/2022 (01:00-16:00):** BAD data was recorded in the main stack due to the gas turbine offline.

Summary of CEMS System Events

- **11/09/2021-12/21/2021 (12:00):** UC Berkeley filed a Reportable Compliance Activity (RCA) Form on November 10, 2021 (Reference ID# 08D45) due to an inoperative CO/O₂ monitor on the bypass stack. All repairs were completed and CEMS equipment for the bypass stack was back online 12:00 December 21, 2021.
- **12/22/2021-02/28/2022:** UC Berkeley filed a RCA Form (Reference #08E40) for an inoperative monitor on December 27, 2022 after a review of NO_x and CO levels from the bypass stack appeared to be erratic when the bypass stack was offline. UC Berkeley has determined that the monitor is not inoperative; however, the data reported are known to be inaccurate due to very high, near ambient, levels of O₂ because the process is offline. These O₂ values are used to correct the raw NO_x and CO data, and as O₂ approaches ambient concentrations (20.9%), this leads to distorted corrections. After ongoing discussions with BAAQMD on how best to report these data, UC Berkeley agreed upon marking data invalid when the process is offline.

Summary of Other Events

- **11/09/2021-11/10/2021:** The bypass stack O₂ analyzer failed.
- **11/11/2021-11/30/2021:** No bypass stack calibration was recorded due to inoperative monitor.
- **12/01/2021-12/20/2021:** No bypass stack calibration was recorded due to inoperative monitor.
- **12/15/2021:** NO_x and O₂ analyzer failed calibration at 14:06. O₂ analyzer failed again at 14:54 and 15:02. Analyzers were re-tested and successfully passed at 15:24.
- **12/16/2021:** O₂ analyzer failed calibration at 14:06. Analyzer was re-tested and successfully passed at 14:14.

Schedule of Compliance Status Updates / Deviations

- **NOV A58847:** On September 9, 2021 UC Berkeley received a notice of violation due to an unpermitted Diesel Fire Pump of > 50bhp which requires a Permit to Operate. The Diesel Fire Pump permit application and application fee was submitted on July 8, 2021. The Permit to

Operate was issued on December 23, 2021 for the Diesel Fire Pump as Source 203. UC Berkeley is currently running this equipment in compliance with the permit conditions.

- **NOV A58848:** On September 9, 2021 UC Berkeley received a notice of violation for an emergency generator at the Valley Life Sciences building that exceeded the 20 hrs/yr testing limit. UC Berkeley temporarily reduced the reliability run schedule for the next following months (in normal operation, the emergency generator is tested twice a month for approximately 30 minutes). The generator run-time hours fell below the limit and read 8.3 hrs/yr for the 12-month period of 12/2/2020 – 12/1/2021. UC Berkeley has since resumed normal preventative maintenance operations. The Air District was notified on December 3, 2021 for Source 106 return to compliance.

If you have any questions regarding the enclosed information, please contact Alicia Bihler at abihler@berkeley.edu.

Based upon the information and belief formed after a reasonable inquiry, I, as the Responsible Official, certify the information contained in this report as accurate and true to the best of my knowledge.

Sincerely,



Katherine Yelick
Vice Chancellor for Research

Enclosures

cc Grace Leung, BAAQMD Inspector
Norris Herrington, UC Berkeley
Alicia Bihler, UC Berkeley
Patrick Goff, UC Berkeley
Diane Coppini, UC Berkeley

**Table VII-A
Applicable Limits and Compliance Monitoring Requirements
S2, S3, S4, Boilers**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
NOx	BAAQMD 9-7-112.2	N		30 ppmvd @ 3% O2, dry	Condition 14330, Part 5	P/every calendar year of operation starting date of renewal of Title V permit in 2019	Portable monitor	X	
NOx	SIP 9-7-301.1	Y		30 ppmv @ 3% O2, dry, when operating on gaseous fuels	Condition 14330, Part 5	P/every calendar year of operation starting date of renewal of Title V permit in 2019	Portable monitor	X	
NOx	SIP 9-302.1	Y		40 ppmv @ 3% O2, dry, when operating on non-gaseous fuels		N		X	
NOx	SIP 9-7-303	Y		Weighted average of 9-7-301.1 and 9-7-302.1	BAAQMD 9-7-501	C	Non-resettable fuel meters	X	
NOx	SIP 9-7-305.1	Y		150 ppmv @ 3% O2, dry, when operating on non-gaseous fuels during natural gas curtailment		N		X	
NOx	SIP 9-7-306.1	Y		150 ppmv @ 3% O2, dry, when operating on non-gaseous fuels for equipment testing		N		X	
CO	BAAQMD 9-7-112.2	N		400 ppmvd @ 3% O2	Condition 14330, Part 5	P/every calendar year of operation starting date of renewal of Title V permit in 2019	Portable monitor	X	
CO	SIP 9-7-301.2	Y		400 ppmv @ 3% O2, dry	Condition 14330, Part 5	P/every calendar year of operation starting date of renewal of Title V permit in 2019	Portable monitor	X	
CO	SIP 9-7-302.2	Y		400 ppmv @ 3% O2, dry		N		X	
CO	SIP 9-7-303	Y		400 ppmv @ 3% O2, dry		N		X	
CO	SIP 9-7-305.2	Y		400 ppmv @ 3% O2, dry		N		X	

Opacity	BAAQMD Regulation 6-1-301	N		>Ringelmann 1.0 for < 3 minutes in any hour	Condition 14330, Part 6	P/E, after firing for 200 hours on fuel oil	Visible emission inspection	X	
Opacity	SIP Regulation 6-301	Y		>Ringelmann 1.0 for <3 minutes in any hour	Condition 14330, Part 6	P/E, after firing for 200 hrs on fuel oil	Visible emission inspection	X	
FP	BAAQMD Regulation 6-1-310.3	N		0.15 gr/dscf @ 6% O2		N		X	
FP	SIP Regulation 6-310.3	Y		0.15 gr/dscf @ 6% O2		N		X	
SO2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: < 0.5 ppm for 3 minutes and < 0.25 ppm for 60 min and <0.05 ppm for 24 hours	None	N	N/A	X	
	BAAQMD 9-1-302	Y		300 ppm when burning gaseous fuels				X	
	BAAQMD 9-1-304	Y		0.5% wt Sulfur in liquid fuel		N		X	
Heat input limit	BAAQMD 9-7-112.2	N		< 120,012 MMBtu/any consecutive 12-month period for each boiler	BAAQMD 9-7-504	C	Non-resettable fuel meters for each fuel for each boiler within one year of renewal of Major Facility Review permit	X	

**Table VII-B
Applicable Limits and Compliance Monitoring Requirements**

S62, S63, S64, S65, S105, S106, S107, S108, S109, S110, S111, S112, S113, S114, S115, S116, S117, S118, S120, S121, S122, S123, S125, S126, S128, S129, S130, S131, S132, S133, S142, S143, S144, S145, S200, In-use Emergency Diesel Engine Generators

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
Opacity	BAAQMD Regulation 6-1-303.1	N		>=Ringlemann 2.0 for no more than 3 minutes in any hour.		N		X	
Opacity	SIP Regulation 6-303.1	Y		>=Ringleman 2.0 for no more than 3 minutes in any hour		N		X	
FP	BAAQMD Regulation 6-1-310.1	N		0.15 gr/dscf		N		X	
FP	SIP Regulation 6-310	Y		0.15 gr/dscf		N		X	
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground level limits: <=0.5 ppm for 3 minutes and <= 0.25 ppm for 60 min. and <= 0.05 ppm for 24 hours.	None	N	N/A	X	
SO ₂	BAAQMD 9-1-304	Y		0.5% wt. Sulfur in liquid fuel		N		X	
	CARB ATCM 93115.5(a)(1)	N		Sulfur content of diesel fuel ≤ 15 ppmw		N		X	
Hours of Operation	BAAQMD 9-8-330.1	N		Unlimited hours for emergencies	BAAQMD 9-8-530.2	C P/M	Hour Meter, Records of Operating Hours	X	

Hours of Operation	BAAQMD 9-8-330.3	N	1/1/2012	50 hours per calendar year or permit limit whichever is lower for reliability-related activities	BAAQMD 9-8-530	C P/M	Hour Meter, Records of Operating Hours	X	
	BAAQMD Condition #22728 Part 2	Y		Applies to S145 Unlimited hours for emergencies	BAAQMD Condition 22728, Part 5	C P/M	Hour Meter, Record Keeping	X	
	BAAQMD Condition #22728 Part 1	Y		Applies to S145 ≤ 26 hours per year for reliability-related activities	BAAQMD Condition # 22728, Part 5	C P/M	Hour Meter, Record Keeping	X	
Hours of Operation	BAAQMD Condition # 22820, Part 2	Y		Applies to S105, S106, S107, S108, S111, S112, S113, S114, S115, S117, S120, S121, S122, S123, S125, S126, S128, S129, and S200 Unlimited hours for emergencies	BAAQMD Condition # 22820, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
	BAAQMD Condition # 22820, Part 1	Y		Applies to S105, S106, S107, S108, S111, S112, S113, S114, S115, S117, S120, S121, S122, S123, S125, S126, S128, S129, and S200 ≤20 hours per year for reliability-related activities	BAAQMD Condition # 22820, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
	BAAQMD Condition # 22826, Part 2	Y		Applies to S62, S63, S64, S65, S133, S142, S143, S144, and S146 Unlimited hours for emergencies	BAAQMD Condition # 22826, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
Hours of Operation	BAAQMD Condition # 22826, Part 1	Y		Applies to S62, S63, S64, S65, S133, S142, S143, S144, and S146 ≤ 26 hours per year for reliability-related activities	BAAQMD Condition # 22826, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
	BAAQMD Condition # 22830, Part 2	Y		Applies to S109, S110, and S118 Unlimited hours for emergencies	BAAQMD Condition # 22830, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
	BAAQMD Condition # 22830, Part 1	Y		Applies to S109, S110, and S118 ≤ 30 hours per year for reliability-related activities	BAAQMD Condition # 22830, Parts 3 and 4	C P/M	Hour meter, record keeping	X	
	BAAQMD Condition # 22850, Part 2	Y		Applies to S130, S131, and S132 Unlimited hours for emergencies	BAAQMD Condition # 22850, Parts 3 and 4	C P/M	Hour meter, Record keeping	X	
	BAAQMD Condition # 22850, Part 1	Y		Applies to S130, S131, and S132 ≤ 50 hours per year for reliability-related activities	BAAQMD Condition # 22850, Parts 3 and 4	C P/M	Hour meter, Record keeping	X	

**Table VII-C
Applicable Limits and Compliance Monitoring Requirements
S148, S149, S150, S152, S153, S154, S155, S156, S157, S158, S160, S162, S163, S164
New Emergency Diesel Engine Generators**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
Opacity	BAAQMD Regulation 6-1-303.1	N		>Ringlemann 2.0 for < 3 minutes in any hour.		N		X	
Opacity	SIP Regulation 6-303.1	Y		>Ringlemann 2.0 for < 3 minutes in any hour		N		X	
FP	BAAQMD Regulation 6-1-310	N		0.15 gr/dscf		N		X	
FP	SIP Regulation 6-310	Y		0.15 gr/dscf		N		X	
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground level limits: <0.5 ppm for 3 minutes and < 0.25 ppm for 60 min. and < 0.05 ppm for 24 hours.	None	N	N/A	X	
SO ₂	BAAQMD 9-1-304	Y		0.5% wt. Sulfur in liquid fuel		N		X	
	CARB ATCM 93115.5(a)(1)	N		Sulfur content of diesel fuel < 15 ppmw		N			
Hours of Operation	BAAQMD 9-8-330.1	N		Unlimited hours for emergencies	BAAQMD 9-8-530.2	C P/M	Hour Meter, Records of Operating Hours	X	
	BAAQMD 9-8-330.3	N	1/1/2012	50 hours per calendar year or permit limit whichever is lower for reliability-related activities	BAAQMD 9-8-530	C P/M	Hour Meter, Records of Operating Hours	X	
	BAAQMD Condition #22850, Part 2	Y		Unlimited hours for emergencies	BAAQMD Condition # 22820, Parts 3 and 4	C P/M	Hour Meter, Record Keeping	X	
Hours of Operation	BAAQMD Condition #22850, Part 1	Y		< 50 hours per year for reliability-related activities	BAAQMD Condition # 22820, Parts 3 and 4	C P/M	Hour Meter, Record Keeping	X	

**Table VII-D
Applicable Limits and Compliance Monitoring Requirements
S139, Emergency Natural Gas Engine Generator
S140, Emergency Propane Engine Generator**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
Opacity	BAAQMD Regulation 6-1-303.1	N		≥Ringlemann 2.0 for <3 minutes in any hour		N		X	
Opacity	SIP Regulation 6-303.1	Y		≥Ringlemann 2.0 for <3 minutes in any hour		N		X	
FP	BAAQMD Regulation 6-1-310	N		0.15 gr/dscf		N		X	
FP	SIP Regulation 6-310	Y		0.15 gr/dscf		N		X	
SO ₂	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤0.5 ppm for 3 minutes and ≤0.25 ppm for 60 min. and ≤0.05 ppm for 24 hours	None	N	N/A	X	
	BAAQMD 9-1-302	Y		300 ppm when burning gaseous fuels		N		X	
Hours of Operation	BAAQMD 9-8-330.1	N		Unlimited hours for emergencies	BAAQMD 9-8-530.2	C P/M	Hour meter, Records of Operating Hours	X	

	BAAQMD 9-8-330.3	N	1/1/2012	50 hours per calendar year or permit limit whichever is lower for reliability-related activities	BAAQMD 9-8-530	C P/M	Hour meter, Records of Operating Hours	X	
	BAAQMD Condition # 19533, Part 1	Y		50 hours per calendar year for reliability-related activities	BAAQMD Condition # 19533, Parts 2 and 3	P/E	Record-keeping	X	

**Table VII-E
Applicable Limits and Compliance Monitoring Requirements
S151, S159, Emergency Natural Gas Engine Generators**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
Opacity	BAAQMD Regulation 6-1-303.1	N		≥Ringelmann 2.0 for <3 minutes in any hour		N		X	
Opacity	SIP Regulation 6-303.1	Y		≥Ringelmann 2.0 for <3 minutes in any hour		N		X	
FP	BAAQMD Regulation 6-1-310	N		0.15 gr/dscf		N		X	
FP	SIP Regulation 6-310	Y		0.15 gr/dscf		N		X	
SO2	BAAQMD 9-1-301	Y		Property Line Ground Level Limits: ≤0.5 ppm for 3 minutes and ≤0.25 ppm for 60 min and ≤0.05 ppm for 24 hours	None	N	N/A	x	
	BAAQMD 9-1-302	Y		300 ppm		N		X	
	BAAQMD Condition #23107, Part 1	Y		Applies to S159: 50 hours per calendar year for reliability-related activities	BAAQMD Condition 23107, Parts 2 and 3	P/E	Record-keeping	X	
	BAAQMD Condition # 23112, Part 1	Y		Applies to S151: 50 hours per calendar year for reliability-related activities	BAAQMD Condition 23112, Parts 2 and 3	P/E	Record-keeping	X	

**Table VII-F
Applicable Limits and Compliance Monitoring Requirements
S201, Turbine**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
NOx	BAAQMD 9-9-301.2 and 9-9-603	N		0.70 lbs/MW-hr or 20.2 ppmv, 3-hr average when burning natural gas	BAAQMD 9-9-501	C	CEM	X	
	BAAQMD 9-9-301.2 and 9-9-603	N		1.97 lbs/MW-hr or 42 ppmv, 3-hr average when burning non-gaseous fuel	BAAQMD 9-9-501	C	CEM	X	
NOx	SIP 9-9-303.2	Y		20.2 ppmv @ 15% O2, dry (adjusted per 9-9-401), except during start-up	SIP 9-9-501	C	CEM	X	
	SIP 9-9-303.2	Y		42 ppmv @ 15% O2, dry when burning fuel oil during natural gas curtailment or short testing periods	SIP 9-9-501	C	CEM	X	

	BAAQMD Condition #366, Part 4	Y		0.70 lbs/MW-hr or 20.2 ppm _{dv} - natural gas: @ 15% O ₂ , 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	
NO _x	BAAQMD Condition #366, Part 5	Y		0.70 lbs/MW-hr or 20.2 ppm _{dv} - natural gas: @ 15% O ₂ (combined S201 & S202), 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	
	BAAQMD Condition #366, Part 6	Y		42 ppm _{dv} - fuel oil: @ 15% O ₂ , 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	
NO _x	BAAQMD Condition #366, Part 7	Y		39 ppm _{dv} - fuel oil: @ 15% O ₂ (combined S201 & S202), 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	
	BAAQMD Condition #366, Part 10	Y		547 lb/day when burning natural gas and 1,093 lb/day when burning fuel oil (combined S201 & S202)	BAAQMD Condition #366, Part 12	C	CEM	X	
	NSPS Subpart GG, 60.332(a)(1)	Y		99 ppm _{dv} @ 15% O ₂ dry, 4-hr average	NSPS Subpart GG, 60.334(b)	C	CEM	X	
CO	BAAQMD Condition #366, Part 4a	Y		200 ppm @ 15% O ₂ , 3-hour average except during start-up	BAAQMD Condition #366, Part 12a	C	CEM	X	
CO	BAAQMD Condition #366, Part 5a	Y		200 ppm @ 15% O ₂ (combined S201 & S202) 3-hour average except during start-up	BAAQMD Condition #366, Part 12a	C	CEM	X	
CO	BAAQMD Condition #366, Part 10	Y		2,195 lb/day (natural gas or fuel oil) (combined S201 & S201)	BAAQMD Condition #366, Parts 10, 12a, and 18	C	CEM, annual source test	X	
SO ₂	BAAQMD Condition #366, Part 2	Y		Maximum of 0.12% by wt. Sulfur in fuel oil	BAAQMD Condition #366, Parts 2	P/E	At Each Delivery, Fuel Sampling using District's Laboratory Procedure Method 10	X	
SO ₂	BAAQMD Condition #366, Part 3	Y		Maximum of 0.25% by wt. Sulfur in fuel oil during periods of natural gas curtailment	BAAQMD Condition #366, Parts 2	P/E	At Each Delivery, Fuel Sampling using District's Laboratory Procedure Method 10	X	
	BAAQMD Condition #366, Part 11	Y		987 lb/day except during natural gas curtailment or shutdown as allowed by Cond #366, Part 3 (combined S201 & S202)	BAAQMD Condition #366, Part 11	P/E	Fuel Sampling using District's Laboratory Procedure Method 10	X	
	BAAQMD Condition #366, Part 11	Y		40 tons/year (combined S201 & S202)	BAAQMD Condition #366, Part 11	P/E	Fuel Sampling using District's	X	

							Laboratory Procedure Method 10		
SO2	BAAQMD 9-1-301	Y		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		X	
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		X	
	BAAQMD 9-1-304	Y		0.5% wt. Sulfur in liquid fuel		P/E	Fuel certification	X	
SO2	NSPS Subpart GG, 60.333 (a)	Y		0.015% (vol) @ 15% O2 (dry), or 0.8% sulfur in gaseous fuel by weight	NSPS Subpart GG, 60.334 (h)(3)	P/M or EN	Monthly gaseous fuel analysis or current, valid purchase contract, tariff sheet or transportation contract	X	
SO2	NSPS Subpart GG, 60.33 (b)	Y		0.8 % sulfur in fuel oil by weight	NSPS Subpart GG, 60.334 (h)(1), 60.334(i)(1)	P/E	At Each Fuel Delivery, Fuel Sampling using District's Laboratory Procedure Method 10	X	
Opacity	BAAQMD 6-1-301	N		≥Ringelmann No. 1 for <3 minutes in an hour	BAAQMD Condition #366, Part 19	P/E, during distillate oil combustion	Visible emissions monitoring	X	
Opacity	SIP 6-301	Y		≥Ringelmann No. 1 for <3 minutes in an hour	BAAQMD Condition #366, Part 19	P/E, during distillate oil combustion	Visible emissions monitoring	X	
FP	BAAQMD 6-1-310.1 and 6-1-310.3	N		0.15 grain/dscf @ 6% O2		N		X	
FP	SIP 6-310	Y		0.15 grain/dscf @ 6% O2		N		X	

¹ Ground Level Concentration

**Table VII-G
Applicable Limits and Compliance Monitoring Requirements
S-202, Duct Burner**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
NOx	BAAQMD 9-9-301.2	N		0.70 lbs/MW-hr or 15 ppmv, 3-hr average when burning natural gas	BAAQMD 9-9-501	C	CEM	X	
	BAAQMD 9-9-301.2	N		1.97 lbs/MW-hr or 42 ppmv, 3-hr average when burning non-gaseous fuel	BAAQMD 9-9-501	C	CEM	X	
NOx	SIP 9-9-303.2	Y		20.2 ppmv @ 15% O2, dry (adjusted per 9-9-401), except during start-up	BAAQMD 9-9-501	C	CEM	X	
NOx	SIP 9-9-303.2	Y		42 ppmv @ 15% O2, dry during natural gas curtailment or short testing periods	BAAQMD 9-9-501	C	CEM	X	
NOx	BAAQMD Cond #366, Part 5	Y		0.70 lbs/MW-hr or 15 ppmv - natural gas: @ 15% O2 (combined S201 & S202), 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	

	BAAQMD Condition #366, Part 7	Y		39 ppmdv - fuel oil: @ 15% O2 (combined S201 & S202), 3 hr avg, except during start-up	BAAQMD Condition #366, Part 12	C	CEM	X	
	BAAQMD Condition #366, Part 10	Y		547 lb/day when burning natural gas and 1,093 lb/day when burning fuel oil (combined S201 & S202)	BAAQMD Condition #366, Parts 9 and 12	C	CEM	X	
	NSPS Subpart GG, 60.332(a)(1)	Y		99 ppmdv @ 15% O2 dry, 4-hr average	NSPS Subpart GG, 60.334(b)	C	CEM	X	
CO	BAAQMD Condition #366, Part 5a	Y		200 ppm @ 15% O2 (combined S201 & S202) 3-hour average except during start-up	BAAQMD Condition #366, Part 12a	C	CEM	X	
CO	BAAQMD Condition #366, Part 10	Y		2,195 lb/day (natural gas) 2,195 lb/day (fuel oil) (combined S201 & S202)	BAAQMD Condition #366, Parts 10, 12a, and 18	C	CEM, annual source test	X	
SO2	BAAQMD Condition #366, Part 11	Y		987 lb/day except during natural gas curtailment or shutdown as allowed by Condition #366, Part 3 (combined S201 & S202)	BAAQMD Condition #366, Part 11	P/E	Fuel Sampling using District's Laboratory Procedure Method 10	X	
SO2	BAAQMD Condition #366, Part 11	Y		40 tons/year (combined S201 & S202)	BAAQMD Condition #366, Part 11	P/E	At Each Delivery, Fuel Sampling using District's Laboratory Procedure Method 10	X	
SO2	BAAQMD 9-1-301	Y		GLC ¹ of 0.5 ppm for 3 min or 0.25 ppm for 60 min or 0.05 ppm for 24 hours		N		X	
SO2	BAAQMD 9-1-302	Y		300 ppm (dry)		N		X	
	BAAQMD 9-1-304	Y		0.5% wt. Sulfur in liquid fuel		P/E	Fuel certification	X	
SO2	NSPS Subpart GG, 60.333 (a)	Y		0.015% (vol) @ 15% O2 (dry) or 0.8% sulfur in gaseous fuel by weight	NSPS Subpart GG, 60.334 (h)(3)	P/M or EN	Monthly gaseous fuel analysis or current, valid purchase contract, tariff sheet or transportation contract	X	
SO2	NSPS Subpart GG, 60.333(b)	Y		0.8% sulfur in fuel oil by weight	NSPS Subpart GG, 60.334(h)(1), 60.334(i)(1)	P/E	At Each Fuel Oil Delivery, Fuel Sampling using District's Laboratory Procedure Method 10	X	
Opacity	BAAQMD 6-1-301	N		≥Ringelmann No. 1 for < 3 minutes in an hour	BAAQMD Condition #366, Part 19	P/E, during distillate oil combustion	Visible emissions monitoring	X	
Opacity	SIP 6-301	Y		≥Ringelmann No. 1 for < 3 minutes in an hour	BAAQMD Condition #366, Part 19	P/E, during distillate oil combustion	Visible emissions monitoring	X	
FP	BAAQMD 6-1-310.1 and 6-1-310.3	N		0.15 grain/dscf @ 6% O2		N		X	
FP	SIP 6-310	Y		0.15 grain/dscf @ 6% O2		N		X	

¹ Ground Level Concentration

**Table VII-H
Applicable Limits and Compliance Monitoring Requirements
S100, Facility-wide Painting Operations**

Type of Limit	Emission Limit Citation	FE Y/N	Future Effective Date	Emission Limit	Monitoring Requirement Citation	Monitoring Frequency (P/C/N)	Monitoring Type	Compliance	
								Yes	No
VOC	BAAQMD 8-19-302	Y		Baked Coatings: 2.3 lb/gal Air Dried Coatings: 2.8 lb/gal	BAAQMD 8-19-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-19-312.1	Y		Camouflage: Baked Coatings: 3.0 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.3	Y		Heat Resistant: Baked Coatings: 3.0 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-19-312.4	Y		High Performance Architectural Baked Coatings: 3.5 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.5	Y		Metallic Topcoat Baked Coatings: 3.0 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.7	Y		Pretreatment Wash Primer Baked Coatings: 3.5 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.8	Y		Silicon Release Baked Coatings: 3.5 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.9	Y		Solar Absorbent Baked Coatings: 3.0 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-19-312.12	Y		Extreme Performance Baked Coatings: 3.5 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-19-312.13	Y		High Temperature Baked Coatings: 3.5 lb/gal Air Dried Coatings: 3.5 lb/gal	BAAQMD 8-19-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-23-301	Y		2.1 lb/gal	BAAQMD 8-23-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-302	Y		2.8 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-302	Y		2.8 lb/gal	BAAQMD	P/W/M	Records	X	

					8-31-501 and Condition 21880, part 1c.iv				
	BAAQMD 8-31-306.1	Y		Flexible Parts: Flexible Primer: 4.1 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-306.2	Y		Flexible Parts: Color Topcoat: 3.8 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-31-306.3	Y		Flexible Parts: Base coat/clear coat (combined system): 2.8 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-31-309.1	Y		Camouflage: 3.5 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-309.2	Y		Conductive: 2.7 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-309.3	Y		Metallic Topcoat: 3.5 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-309.4	Y		Extreme Performance: 6.2 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-309.5	Y		High Gloss: 3.5 lb/gal	BAAQMD 8-31-501 and Condition 21880, part 1c.iv	P/W/M	Records	X	
VOC	BAAQMD 8-31-309.6	Y		Optical: 6.7 lb/gal	BAAQMD 8-31-501 and Condition 21880, Part 1c.iv	P/W/M	Records	X	
	BAAQMD 8-31-301	Y		See rule		N		X	
Through-put	Condition 21880, part 1a	Y		Non-water-based coating < 80 gal/consecutive 12-month period	Condition 21880, part 1c.iii	P/W/M	Record-keeping	X	
	Condition 21880, part 1a	Y		Water-based coating <250 gal/consecutive 12-month period	Condition 21880, part 1c.iii	P/W/M	Record-keeping	X	
	Condition 21880, part 1b	Y		Cleanup and surface preparation solvent <10 gal/consecutive 12-month period	Condition 21880, part 1c.i and 1c.ii	P/W/M	Record-keeping	X	
	Condition 21880, part 1b	Y		Organic thinner < 10 gal/consecutive 12-month period	Condition 21880, part 1c.ii and 1c.iii	P/W/M	Record-keeping	X	