



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 27, 2023

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 #: 714

1. RECEIVED IN ENFORCEMENT: 04/28/2023

RE: UC Berkeley, Facility #A0059 – Semi-Annual Monitoring Report for the Title V Operating Permit, October 01, 2022 – March 31, 2023

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 01, 2022 – March 31, 2023**.

Enclosed are the Tables of Applicable Emission Limits and Compliance Monitoring Requirements referenced in the Title V Operating Permit, issued July 12, 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

- BAD data was recorded at the following times due to a scheduled shutdown:
 - 11/12/2022 (06:00) - 11/21/2022 (15:00)
 - 11/21/2022 (21:00) - 11/22/2022 (13:00)
 - 11/23/2022 (02:00-10:00)
- 12/21/2022 (02:00-21:00): BAD data was recorded due to gas turbine offline.
- 01/05/2023 (14:00) – 01/25/2023 (07:00): BAD data was recorded due to plant outage, except for one hour on each of the following days:
 - 01/11/2023
 - 01/13/2023
- 02/10/2023 (11:00 – 15:00): BAD data was recorded due to gas turbine offline.
- 02/11/2023 (14:00 – 19:00): BAD data was recorded due to gas turbine offline.
- 03/11/2023 (22:00 – 24:00): BAD data was recorded due to plant outage.
- 03/12/2023 (00:00 – 14:00): BAD data was recorded due to plant outage.
- 03/30/2023 (05:00 - 16:00, 18:00-20:00): BAD data recorded when main stack process offline.

Summary of CEMS System Events

- **11/04/2022 (10:30-12:55):** CEMS out for maintenance.
- **03/03/2023 (10:05 - 11:30):** CEM out for maintenance.

Summary of Other Events

- **10/24/2022:** The Main Stack NO_x, CO, and O₂ analyzer failed calibration at 07:18. Analyzers were re-tested and successfully passed at 07:30.
- **11/26/2022:** The Main Stack CO analyzer failed calibration at 16:40. The analyzer was re-tested and successfully passed at 16:54.

Schedule of Compliance Status Updates / Deviations

- **NOV A61745:** From 14:00 April 1, 2022 to 02:40 April 2, 2022, UC Berkeley observed an exceedance in CO on the main stack (S201/202) of the Co-generation plant. The allowable limit is 200 ppm, and 3-hour average data for that time period ranged from 208.1 – 530.7 ppm CO. All NO_x values remained within emissions limits. Outside support was retained to determine the cause through a review of CEMS and GT controls data. It was determined the exceedance was due to a breakdown of the T3 probe. The unit tripped from a flame out condition triggered by the failed probe. The probe was replaced and emissions returned to within limits following startup on April 2, 2022. UC Berkeley submitted an RCA (ID 08G90) notification form to the Air District on April 8, 2022 and a follow-up deviation report on July 12, 2022. The NOV (A617445) was received on January 24, 2023 and a 10- and 30-day deviation report was submitted to BAAQMD on January 25, 2023.
- **NOV A62728:** On Tuesday, December 6, 2022, source 63 was ran over a 24-hour period to support the shutdown of Barker Hall. UC Berkeley recognizes that this generator has exceeded the annual hour limitations for a non-emergency purpose as defined in the permit. UC Berkeley self-reported this deviation within 10 days of discovery to BAAQMD on December 14, 2022 and followed up with a 30-day deviation report on January 3, 2023. UC Berkeley Environment, Health, & Safety has met with Facilities Services maintenance staff since this incident to review the Title V permit conditions and all other required testing for these generators. Environment, Health, & Safety has communicated with BAAQMD and UC Office of the President to inquire alternative permitting options that would support non-emergency situations. Facilities Services is currently renting portable generators to perform essential building maintenance in order to prevent similar violations from reoccurring. The NOV (A62728) was received on April 18, 2023 and a 10- and 30-day deviation report was submitted to BAAQMD on April 26, 2023.

If you have any questions regarding the enclosed information, please contact Miranda Monge at mirandam17@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

RCA Notification Form
UC Berkeley, Facility #A0059 – Source 201/202 – Main Stack CO exceedance (ID#08G90)
UC Berkeley, Facility #A0059 – 10-Day / 30-Day Deviation Report (NOV A61745)
UC Berkeley, Facility #A0059 – 10-Day Deviation Report
UC Berkeley, Facility #A0059 – 30-Day Deviation Report
UC Berkeley, Facility #A0059 – 10-Day / 30-Day Deviation Report (NOV A62728)

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 9-7112.2	N		30 ppmvd @ 3% O ₂ , 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% O ₂ , 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% O ₂ , 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 97-501	C	Non-resettable fuel meters	X	
NOx	SIP 9-7-305.1	Y		150 ppmv @ 3% O ₂ , dry, when operating on non-gaseous fuels during natural gas curtailment		N		X	
NOx	SIP 9-7-306.1	Y		150 ppmv @ 3% O ₂ , dry, when operating on non-gaseous fuels for equipment testing		N		X	
CO	BAAQMD 9-7112.2	N		400 ppmvd @ 3% O ₂	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	
CO	SIP 9-7-306.2	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 < 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 6-1310.3	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 < 3 minutes in any hour.		N		X	

Opacity	SIP Regulation 6-303.1	Y		>=Ringleman 2.0 for < 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	
	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		≥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 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	Recordkeeping	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	Recordkeeping	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	Recordkeeping	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	
NOx	SIP 9-9-303.2	Y		20.2 ppmv @ 15% O ₂ , dry (adjusted per 9-9-401), except during start-up	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	
NOx	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 10	Y		547 lb/day when burning natural gas (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 (combined S201 & S201)	BAAQMD Condition #366, Parts 10, 12a, and 18	C	CEM, annual source test	X	
SO ₂	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	
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	
Opacity	BAAQMD 6-1-301	N		≥Ringelmann No. 1 for <3 minutes in an hour		None		X	
Opacity	SIP 6-301	Y		≥Ringelmann No. 1 for <3 minutes in an hour		None		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	
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	BAAQMD Cond #366, Part 5	Y		0.70 lbs/MW-hr or 15 ppmdv - 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 10	Y		547 lb/day (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 (combined S201 & S202)	BAAQMD Condition #366, Parts 10, 12a, and 18	C	CEM, annual source test	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	
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	
Opacity	BAAQMD 6-1-301	N		≥Ringelmann No. 1 for < 3 minutes in an hour		None		X	
Opacity	SIP 6-301	Y		≥Ringelmann No. 1 for < 3 minutes in an hour		None		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	

**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	

¹ Ground Level Concentration

	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 8-31-306.1	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	
Throughput	Condition 21880, part 1a	Y		Non-water-based coating < 80 gal/consecutive 12month period	Condition 21880, part 1c.iii	P/W/M	Recordkeeping	X	
	Condition 21880, part 1a	Y		Water-based coating <250 gal/consecutive 12-month period	Condition 21880, part 1c.iii	P/W/M	Recordkeeping	X	
	Condition 21880, part 1b	Y		Cleanup and surface preparation solvent <10 gal/consecutive 12month period	Condition 21880, part 1c.i and 1c.iii	P/W/M	Recordkeeping	X	
	Condition 21880, part 1b	Y		Organic thinner < 10 gal/consecutive 12month period	Condition 21880, part 1c.ii and 1c.iii	P/W/M	Recordkeeping	X	



BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

COMPLIANCE & ENFORCEMENT DIVISION

Notification Form

Reportable
Compliance
Activity (RCA)

[See back of form for instructions](#) →

1. **BREAKDOWN RELIEF: *District Use Only* BREAKDOWN REFERENCE #:**

2. **MONITOR EXCESS EMISSION or EXCURSION: *District Use Only* REFERENCE #:**

3. **MONITOR IS INOPERATIVE: *District Use Only* REFERENCE #:**

4. **PRESSURE RELIEF DEVICE (PRD): *District Use Only* PRD REFERENCE #:**

SITE INFORMATION AND DESCRIPTION INFORMATION (REQUIRED)

Company	UC Berkeley	Site #	A0059
Address	209 Frank Schlessinger Way	Source #	S201/202
Reported by	Alicia Bihler	Phone #	510-725-2528
Indicated Excess	>200 ppm CO variable	Fax #	510-643-7595
Allowable Limit	200 ppm CO	Averaging Time	3 hr
Start Time/Date	04/01/2022 14:00	Clear Time	04/02/2022 02:40
Monitor/device type(s)	<input type="checkbox"/> ▶ CEM <input type="checkbox"/> ▶ GLM <input type="checkbox"/> ▶ Parametric <input type="checkbox"/> ▶ PRD <input type="checkbox"/> ▶ Non-monitor		
Monitor description(s)			
Parameter(s) exceeded or not functioning due to inoperation			
<input type="checkbox"/> ▶ NO _x	<input type="checkbox"/> ▶ SO ₂	<input checked="" type="checkbox"/> ▶ CO	<input type="checkbox"/> ▶ CO ₂
<input type="checkbox"/> ▶ O ₂	<input type="checkbox"/> ▶ H ₂ O	<input type="checkbox"/> ▶ Opacity	<input type="checkbox"/> ▶ Lead
<input type="checkbox"/> ▶ Hydrocarbon Breakthrough (VOC)	<input type="checkbox"/> ▶ Temperature	<input type="checkbox"/> ▶ Wind Speed	<input type="checkbox"/> ▶ H ₂ S
<input type="checkbox"/> ▶ Wind Direction	<input type="checkbox"/> ▶ Steam	<input type="checkbox"/> ▶ Other (describe)	<input type="checkbox"/> ▶ TRS
Unit(s) of Measurement			
<input checked="" type="checkbox"/> ▶ ppm	<input type="checkbox"/> ▶ ppb	<input type="checkbox"/> ▶ min/hr > 20%	<input type="checkbox"/> ▶ inches H ₂ O
<input type="checkbox"/> ▶ psig	<input type="checkbox"/> ▶ pH	<input type="checkbox"/> ▶ °Fahrenheit	<input type="checkbox"/> ▶ mmHg

Event Description: Exceedance observed on mainstack over 200ppm (variable 3 hr average data ranging from 208.1 - 530.7 ppm CO). All NO_x values remained within emissions limits. Outside support was required to determine if this was a failed monitor or actual exceedance. Review of CEMS and GT controls data determined exceedance was due to breakdown of T3 Probe.

District Use Only

Received by

Date

Time

General Instructions

- ✓ Check the Box numbers 1- 4 that apply to the RCA you are trying to report or request and read the detailed instructions.
- ✓ You will receive an ID # for each RCA you submit. In the case of a request for Breakdown Relief where multiple monitors are affected, you do not need to submit multiple forms, as long as all necessary information is given on one form. RCA reported during other than core business hours will be assigned an ID # the following working day. If you do not receive an ID #, it is your responsibility to contact the BAAQMD to get one.
- ✓ You may submit only one request for breakdown relief per form. However, you may submit multiple indicated excess, inoperative monitors and PRD reports on one form, provided that the start and end times given for the events in the required information section is inclusive of all events. Information on parameters exceeded, units of measurement and allowable limits can be provided in the event description box or when contacted by District staff with questions.
- ✓ Fill out the "Site Information and Description Information Required" areas of this form and email to rca@baaqmd.gov
- ✓ **A 30-day written follow-up report is required for Breakdown Requests and PRD Releases.** Reports for these types of RCA must contain a quantification of emissions, the calculations used to derive the emissions, and their duration. Reference [Breakdown Admissions Advisory dated 12/3/04](#). Send 30-day report letters to: BAAQMD Compliance and Enforcement Division, MAILSTOP: RCA 30-DAY REPORT, 375 Beale Street, Ste. 600 San Francisco, CA 94105. NOTE: **You may have additional report requirements under Title V.**

Detailed Instructions

Box 1: To Request Breakdown Relief (Regulations 1-112, 1-113, 1-208, 1-431, 1-432)

If you have an equipment malfunction (e.g.; breakdown) that leads to the release of air pollutants above the regulatory or your permitted levels, you may request relief from BAAQMD enforcement action.

- Check Box #1.
- **NOTE: Start and end times given for these events in the required information section must be inclusive of all events.**
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Requests for breakdown relief may not be withdrawn and must be called in or faxed to the BAAQMD immediately upon discovery of an equipment malfunction.
- Receipt of an RCA ID# for a breakdown does not mean relief has been granted. An Inspector will visit your facility to determine compliance.

Box 2: Monitor Indicates Excess Emission or Excursion (Regulation 1-522.7, 1-523.3, 1-542)

When a BAAQMD-required monitor indicates an excess or excursion, you must report it to the BAAQMD.

- Check Box #2.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- Any excess emission indicated by a CEM or excursion of a parametric monitor, shall be reported to the BAAQMD within 96 hours.
- Area concentration excesses over the limits prescribed in District regulations shall be reported to the BAAQMD within the next normal working day following the examination of data.

Box 3: Monitor Is Inoperative (Regulations 1-522, 1-523, 1-530)

When a BAAQMD-required monitor is inoperative for greater than 24 hours, you must report it to the BAAQMD.

- Check Box #3 only if inoperative for greater than 24 hours.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All reports of inoperative monitors must be reported by the following BAAQMD working day and additionally be cleared by a notification of resumption of monitoring. To notify the BAAQMD regarding the resumption of monitoring, do not send in a separate RCA form; call (415) 749-4979 and give the RCA ID #, date, and the time of resumption.
- Inoperative monitors (except parametric monitors) with downtime greater than 15 days must furnish proof of expedited repair in a follow-up report.

Box 4: Pressure Relief Device (PRD) Is Released (Regulation 8-28-401)

When a PRD at your refinery/chemical plant vents to the atmosphere, you must report it to the BAAQMD.

- Check Box #4 only if a pressure relief device is released.
- Separate RCA ID #'s can be applied to monitor(s) affected by a PRD by also checking Box #2 if other monitors record an excess or excursion.
- Fill out all the information in the "Site Information and Description Information (Required)" area of the form.
- All PRD release reports must be reported by the following BAAQMD working day.



OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
317 UNIVERSITY HALL
BERKELEY, CALIFORNIA 94720-1150

Via email to: compliance@baaqmd.gov

July 12, 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

RE: UC Berkeley, Facility #A0059 – Source 201/202 – Mains tack CO exceedance (ID #08G90)

Dear Director of Compliance and Enforcement:

This letter is to inform you of UC Berkeley's deviation from the Title V Operating Permit, issued in April 2022.

From 14:00 April 1, 2022 to 02:40 April 2, UC Berkeley observed an exceedance in CO on the main stack (S201/202) of the Co-generation plant. The allowable limit is 200 ppm, and 3-hour average data for that time period ranged from 208.1 – 530.7 ppm CO. All NOx values remained within emissions limits. Outside support was retained to determine the cause through a review of CEMS and GT controls data. It was determined the exceedance was due to a breakdown of the T3 probe. The unit tripped from a flame out condition triggered by the failed probe. The probe was replaced and emissions returned to within limits following startup on April 2, 2022.

If you have any questions or concerns, please contact Alicia Bihler at abihler@berkeley.edu.

Sincerely,

A handwritten signature in cursive script that reads 'Alicia Bihler'.

Alicia Bihler
Environmental Programs Manager

Cc Grace Leung, BAAQMD Inspector
Norris Herrington, UC Berkeley



OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
317 UNIVERSITY HALL
BERKELEY, CALIFORNIA 94720-1150

Via email to: compliance@baaqmd.gov

January 25, 2023

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

RE: UC Berkeley, Facility #A0059 – 10-Day / 30-Day Deviation Report (NOV A61745)

Dear Director of Compliance and Enforcement:

This letter is to inform you of UC Berkeley's deviation from the Title V Operating Permit, issued July 12, 2022.

From 14:00 April 1, 2022 to 02:40 April 2, 2022, UC Berkeley observed an exceedance in CO on the main stack (S201/202) of the Co-generation plant. The allowable limit is 200 ppm, and 3-hour average data for that time period ranged from 208.1 – 530.7 ppm CO. All NOx values remained within emissions limits. Outside support was retained to determine the cause through a review of CEMS and GT controls data. It was determined the exceedance was due to a breakdown of the T3 probe. The unit tripped from a flame out condition triggered by the failed probe. The probe was replaced and emissions returned to within limits following startup on April 2, 2022.

UC Berkeley submitted an RCA (ID 08G90) notification form to the Air District on April 8, 2022 and a follow-up deviation report on July 12, 2022. This letter serves as a deviation report for the NOV (A617445) received January 24, 2023.

If you have any questions or concerns, please contact Miranda Monge at mirandam17@berkeley.edu.

Sincerely,

Miranda Monge

Miranda Monge
Environmental Specialist

Cc Grace Leung, BAAQMD Inspector
Norris Herrington, UC Berkeley

UNIVERSITY OF CALIFORNIA, BERKELEY



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OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
317 UNIVERSITY HALL
BERKELEY, CALIFORNIA 94720-1150

Via email to: compliance@baaqmd.gov

December 13, 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

RE: UC Berkeley, Facility #A0059 –10-Day Deviation Report

Dear Director of Compliance and Enforcement:

This letter is to inform you of UC Berkeley's deviation from the Title V Operating Permit, issued July 12, 2022.

On Tuesday, December 6, 2022, source 63 was ran over a 24-hour period to support the shutdown of Barker Hall. UC Berkeley recognizes that this generator has exceeded the annual hour limitations for a non-emergency purpose as defined in the permit.

UC Berkeley Environment, Health, & Safety is in communication with Facilities Services maintenance staff regarding this incident and has scheduled a meeting to review permit conditions and prevent similar violations from reoccurring.

If you have any questions or concerns, please contact Miranda Monge at mirandam17@berkeley.edu.

Sincerely,

Miranda Monge

Miranda Monge
Environmental Specialist

Cc Grace Leung, BAAQMD Inspector
Alicia Bihler, UC Berkeley

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OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
317 UNIVERSITY HALL
BERKELEY, CALIFORNIA 94720-1150

Via email to: compliance@baaqmd.gov

January 3, 2023

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

RE: UC Berkeley, Facility #A0059 – 30-Day Deviation Report

Dear Director of Compliance and Enforcement:

This letter is to follow-up on UC Berkeley's 10-day deviation notice emailed on December 14, 2022. UC Berkeley is communicating with BAAQMD on alternative permitting options to support non-emergency situations such as building maintenance. Until a solution is reached, Environment, Health, & Safety will continue to reiterate permit requirements to Facilities Services staff.

If you have any questions or concerns, please contact Miranda Monge at mirandam17@berkeley.edu.

Sincerely,

Miranda Monge

Miranda Monge
Environmental Specialist

Cc Grace Leung, BAAQMD Inspector
Alicia Bihler, UC Berkeley



OFFICE OF ENVIRONMENT, HEALTH AND SAFETY
317 UNIVERSITY HALL
BERKELEY, CALIFORNIA 94720-1150

Via email to: compliance@baaqmd.gov

April 26, 2023

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

RE: UC Berkeley, Facility #A0059 – 10-Day / 30-Day Deviation Report (NOV A62728)

Dear Director of Compliance and Enforcement:

This letter is to inform you of UC Berkeley's deviation from the Title V Operating Permit, issued July 12, 2022.

On Tuesday, December 6, 2022, source 63 was ran over a 24-hour period to support the shutdown of Barker Hall. UC Berkeley recognizes that this generator exceeded its annual hour limitations for a non-emergency purpose as defined in the permit. UC Berkeley self-reported this deviation within 10 days of discovery to the Air District on December 14, 2022 and followed up with a 30-day deviation report on January 3, 2023. This letter serves as the 10- and 30-day deviation report for the NOV (A62728) received April 18, 2023 related to this same event.

UC Berkeley Environment, Health, & Safety has met with Facilities Services maintenance staff since this incident to review the Title V permit conditions and all other required testing for these generators. Environment, Health, & Safety has communicated with Bay Area Air Quality Management District and UC Office of the President to inquire alternative permitting options that would support non-emergency situations. Facilities Services is currently renting portable generators to perform essential building maintenance in order to prevent similar violations from reoccurring.

If you have any questions or concerns, please contact Miranda Monge at mirandam17@berkeley.edu.

Sincerely,

Miranda Monge

Miranda Monge
Environmental Specialist

Cc Grace Leung, BAAQMD Inspector

Attachments

UC Berkeley, Facility #A0059 –10-Day Deviation Report
UC Berkeley, Facility #A0059 – 30-Day Deviation Report