



OFFICE OF THE VICE CHANCELLOR FOR RESEARCH
119 CALIFORNIA HALL #1500

BERKELEY, CALIFORNIA 94720-1500

Via email to compliance@baaqmd.gov and hard copy sent via U.S. Postal Service

October 31, 2024

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 #1007 (Semi-Annual)

1. RECEIVED IN
ENFORCEMENT: 10/31/2024

RE: UC Berkeley, Facility #A0059 – Semi-Annual Monitoring Report for the Title V Operating Permit, April 01, 2024 – September 30, 2024

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 **April 01, 2024 – September 30, 2024**.

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

- **04/06/2024 (18:00-20:00):** BAD data was recorded due to annual FAT testing.
- **04/28/2024 (18:00) – 04/30/2024 (24:00):** BAD data was recorded due to plant shutdown.
- **05/01/2024 – 05/31/2024:** BAD data due to plant offline.
- **06/01/2024 – 06/05/2024:** BAD data due to plant offline.
- **06/06/2024 (09:56-14:56):** BAD data due to plant offline.
- **06/09/2024 (05:52-16:48):** BAD data due to plant offline.
- **06/14/2024 (06:08-16:08):** BAD data due to plant offline.
- **07/10/2024 (11:30-18:37):** BAD data due to steam turbine offline.
- **08/21/2024 (01:00) – 08/22/2024 (19:25):** BAD data due to plant offline.

Summary of CEMS System Events

- **09/20/2024 (08:30-12:43):** Main Stack CEMs offline due to maintenance.

- **09/30/2024 (12:09-13:53):** Main Stack CEMs offline due to maintenance.

Summary of Other Events

- **06/02/2024:** The Main Stack and Bypass Stack NOx, CO, and O2 analyzers failed the first calibration at 07:10. Main Stack analyzers were re-tested and successfully passed at 20:57, Bypass Stack analyzers passed at 21:10.
- **07/11/2024:** The Bypass Stack CO analyzer failed the first calibration at 07:10. Bypass Stack analyzers were re-tested and successfully passed at 11:07.
- **07/13/2024:** The Bypass Stack CO analyzer failed the first calibration at 13:12. Bypass Stack analyzers were re-tested and successfully passed at 13:35.
- **07/14/2024 (07:38) – 07/17/2024 (09:16):** The Bypass Stack CO analyzer failed calibration on 07/14/2024 due to failure of the internal sample pump and flow control module. The necessary parts were replaced, then the Bypass stack analyzers returned to normal operation and successfully passed on 07/17/2024.
- **07/16/2024 (13:30) – 07/17/2024 (09:16):** The Bypass Stack O2 analyzer failed calibration on 07/16/2024. Bypass Stack analyzers were re-tested and successfully passed on 07/17/2024.

Schedule of Compliance Status Updates / Deviations

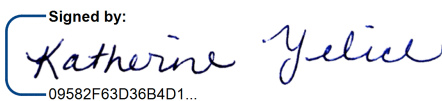
- **NOV A62678:** On Wednesday, October 18, 2023, UC Berkeley received a NOV (A62678) upon inspection from BAAQMD for an unpermitted portable vacuum excavator. The equipment was historically permitted under CARB PERP (#151725), however it should be transitioned to BAAQMD Facility A0059 Title V Operating Permit. A 10-day deviation report was submitted to BAAQMD on October 27, 2023. A 30-day deviation report was submitted to BAAQMD on November 17, 2023. A Permit to Operate application package was submitted to BAAQMD on February 28, 2024, and the permit is still under review.
- **NOV A62751/Deviation 7633:** On September 11, 2023 BAAQMD inspected UC Berkeley generators, and noted an exceedance at the Unit 2 Residence Hall for source 115 upon review of the logbook held on-site. UC Berkeley Residential and Student Service Programs maintenance staff have since received training regarding this incident and have reviewed the Title V permit conditions. UC Berkeley submitted a 10-day deviation report (ID 7633) on September 21, 2023 and a 30-day deviation report (ID 7633) on October 10, 2023. On Wednesday, October 18, 2023, UC Berkeley received a NOV (A62751) upon inspection from BAAQMD for the generator exceedance. A 10-day deviation report was submitted to BAAQMD on October 27, 2023. A 30-day deviation report was submitted to BAAQMD on November 17, 2023.
- **NOV A62752:** On Wednesday, October 18, 2023, UC Berkeley received a NOV (A62752) upon inspection from BAAQMD for a generator exceedance at the Unit 1 Residence Hall, source 112. The logbook was reviewed on-site, and noted several long periods of run time throughout 2022-2023 that in total exceed the annual hour limitations as defined in the permit. UC Berkeley has communicated with Residential and Student Service Programs, regarding this violation and has met to review the Title V permit conditions. A 10-day deviation report was submitted to BAAQMD on October 27, 2023. A 30-day deviation report was submitted to BAAQMD on November 17, 2023.
- **RCA 200473:** On July 14, 2024, the bypass stack (source 201) CO analyzer failed calibration. The sample flow rate was low, causing the response time to sample gases take longer than necessary. CEMS monitoring on the main stack continued to operate and indicated there were no exceedances during the period the bypass CO analyzer was inoperative. On July 15, 2024, UC Berkeley submitted an RCA form (ID 200473) to BAAQMD, and cogen plant staff contacted the manufacturer to purchase replacement parts. On July 16, 2024, cogen plant staff received a new

internal sample pump and flow control module in order to return the response time back to normal. On July 17, 2024, the bypass CO analyzer returned to operation and performed a valid calibration. A 10-day deviation report was submitted to BAAQMD on July 24, 2024, and a 30-day deviation report was submitted to BAAQMD on August 13, 2024.

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,

Signed by:

09582F63D36B4D1...

Katherine Yelick
Vice Chancellor for Research

Enclosures

Table of Compliance
10-day Deviation Report – Deviation 7633
30-day Deviation Report – Deviation 7633
10-day Deviation Report – NOV A62678, NOV A62679, NOV A62751, and NOV A62752
30-day Deviation Report – NOV A62678, NOV A62679, NOV A62751, and NOV A62752
10-day Deviation Report – RCA 200473
30-day Deviation Report – RCA 200473

cc Emily Guo, BAAQMD Inspector
Norris Herrington, UC Berkeley
Alicia Bihler, 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% 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	
CO	SIP 9-7-302.2	Y		400 ppmv @ 3% O ₂ , dry		N		X	
CO	SIP 9-7-303	Y		400 ppmv @ 3% O ₂ , dry		N		X	
CO	SIP 9-7-305.2	Y		400 ppmv @ 3% O ₂ , dry		N		X	
CO	SIP 9-7-306.2	Y		400 ppmv @ 3% O ₂ , 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		>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	
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**

			Future	Emission Limit		Monitoring		Compliance
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Type of Limit	Emission Limit Citation	FE Y/N	Effective Date		Monitoring Requirement Citation	Frequency (P/C/N)	Monitoring Type	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% O2, 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 ppmv - natural gas: @ 15% O2, 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 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 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 ppmv @ 15% O2 dry, 4-hr average	NSPS Subpart GG, 60.334(b)	C	CEM	X	
CO	BAAQMD Condition #366, Part 4a	Y		200 ppm @ 15% O2, 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% 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 & S201)	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% O ₂		N		X	
FP	SIP 6-310	Y		0.15 grain/dscf @ 6% O ₂		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/MWhr 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% O ₂ , 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 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 (combined S201 & S202)	BAAQMD Condition #366, Parts 9 and 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 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 & S202)	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	
SO ₂	BAAQMD 9-1-302	Y		300 ppm (dry)		N		X	
SO ₂	NSPS Subpart GG, 60.333 (a)	Y		0.015% (vol) @ 15% O ₂ (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	

¹ Ground Level Concentration

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	
	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	

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

Via email to: compliance@baaqmd.gov

September 21, 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 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 July 9, 2023 source 115 located at the Unit 2 Residence Hall was incidentally ran for approximately a 24-hour period. The automatic transfer switch system was being serviced by an outside contractor, who after repairs left the generator running. UC Berkeley maintenance staff adjusted the appropriate settings upon realization. On September 11, 2023 the Bay Area Air Quality Management District inspected UC Berkeley generators, and noted this exceedance for source 115 upon review of the logbook held on-site. UC Berkeley Environment, Health, & Safety has since confirmed 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 Residential and Student Service Programs 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

October 10, 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 September 21, 2023. UC Berkeley Environment, Health & Safety has since met with Residential and Student Service Programs facilities management to further discuss this incident and review permit conditions.

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

October 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

RE: UC Berkeley, Facility #A0059 –10-Day Deviation Report (NOV A62678, NOV A62679, NOV A62751, and NOV A62752)

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 October 18, 2023, UC Berkeley received four Notice of Violations upon inspection from BAAQMD – NOV A62678 unpermitted portable ditch witch (CARB PERP #151725), NOV A62679 unpermitted portable wood chipper (CARB PERP #171724/171725), NOV A62751 permitted hour exceedance at Unit 2 Residence Hall (S-115), and NOV A62752 permitted hour exceedance at Unit 1 Residence Hall (S-112).

For NOV A62678, UC Berkeley will continue to work with the Air District to obtain a Permit to Operate for the portable ditch witch. The equipment is currently permitted under CARB PERP, however it needs to be permitted under BAAQMD Facility A0059 due to the engine >50 hp. UC Berkeley Environment, Health, & Safety is in communication with the operating department, Facilities Services Utilities Plumbers, regarding this violation and will work on obtaining the necessary information for the BAAQMD permit application.

For NOV A62679, UC Berkeley will continue to work with the Air District to obtain a Permit to Operate for the portable wood chipper. The equipment is currently permitted under CARB PERP, however it needs to be permitted under BAAQMD Facility 16869 due to the engine >50 hp. UC Berkeley Environment, Health, & Safety is in communication with the operating department, Facilities Services Landscaping, regarding this violation and will work on obtaining the necessary information for the BAAQMD permit application.

For NOV A62751, UC Berkeley will continue to monitor usage of the Unit 2 generator (S-115) until it returns to compliance. UC Berkeley Environment, Health, & Safety is in communication with the operating department, Residential and Student Service Programs, regarding this violation and will meet to review the Title V permit conditions.

For NOV A62752, UC Berkeley will continue to monitor usage of the Unit 1 generator (S-112) until it returns to compliance. UC Berkeley Environment, Health, & Safety is in communication with the operating department, Residential and Student Service Programs, regarding this violation and will meet to review the Title V permit conditions.

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

November 17, 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 (NOV A62678, NOV A62679, NOV A62751, and NOV A62752)

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 October 18, 2023, UC Berkeley received four Notice of Violations upon inspection from BAAQMD – NOV A62678 unpermitted portable ditch witch (CARB PERP #151725), NOV A62679 unpermitted portable wood chipper (CARB PERP #171724/171725), NOV A62751 permitted hour exceedance at Unit 2 Residence Hall (S-115), and NOV A62752 permitted hour exceedance at Unit 1 Residence Hall (S-112). On October 27, 2023, UC Berkeley submitted a 10-Day Deviation Report for NOV A62678, NOV A62679, NOV A62751, and NOV A62752 to BAAQMD.

For NOV A62678 and NOV A62679, UC Berkeley has received guidance from the Air District on what forms to include as part of the permit application package. UC Berkeley will continue to draft the necessary documents, and then submit to the Air District for review. Once the permits are received, UC Berkeley Environment, Health, & Safety will review the permit requirements with the operating departments.

For NOV A62751 and NOV A62752, UC Berkeley will continue to monitor generator usage to only include normal reliability-related operations (emergency generators are tested twice a month for approximately 30 minutes) and any emergency runs. UC Berkeley will increase outreach to Residential Student Service Programs maintenance staff on permit conditions to avoid any future exceedances in hour limitations.

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

Sincerely,

A handwritten signature in cursive script that reads '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

July 24, 2024

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 (RCA # 200473) and Return to Compliance

Dear Director of Compliance and Enforcement:

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

UC Berkeley submitted a Reportable Compliance Activity form (**ID # 200473**) on July 15, 2024 for an inoperative CO monitor on the bypass stack for S-201.

On July 14, 2024, the bypass CO analyzer failed calibration. The sample flow rate was low, causing the response time to sample gases take longer than necessary. CEMS monitoring on the main stack continued to operate and indicated there were no exceedances during the period the bypass CO analyzer was inoperative. On July 15, 2024, cogen plant staff contacted the manufacturer to purchase replacement parts. On July 16, 2024, cogen plant staff received a new internal sample pump and flow control module in order to return the response time back to normal. On July 17, 2024, the bypass CO analyzer returned to operation and performed a valid calibration.

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

Sincerely,

Miranda Monge

Handwritten signature of Miranda Monge in cursive.

Environmental Specialist

Cc Emily Guo, BAAQMD Inspector
Norris Herrington, UC Berkeley
Alicia Bihler, UC Berkeley



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

Via email to: compliance@baaqmd.gov

August 13, 2024

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 (RCA # 200473) and Return to Compliance

Dear Director of Compliance and Enforcement:

This letter is to follow-up on UC Berkeley's 10-day deviation notice emailed on July 24, 2024.

The bypass CO analyzer returned to operation and has been performing valid calibrations since July 17, 2024. While the bypass CO analyzer was inoperative (07/14/2024 – 07/17/2024), the CEMS monitoring on the main stack continued to operate and indicated there were no exceedances.

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

Sincerely,

Miranda Monge

A handwritten signature in cursive script that reads "Miranda Monge".

Environmental Specialist

Cc Emily Guo, BAAQMD Inspector
Norris Herrington, UC Berkeley
Alicia Bihler, UC Berkeley