## **Creed Energy Center, LLC**

6150 Creed Road Suisun City, CA 94585

July 13, 2021

V Tracking #: 256

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

1. D RECEIVED IN 07/14/2021 ENFORCEMENT:\_

Attn: Title V

Subject: Creed Energy Center, LLC

**Title V Semi-Annual Monitoring Report** 

Facility # B4414

Reporting Period: January 1, 2021 through June 30, 2021

To Whom It May Concern:

Enclosed is the Title V CEMS Semi-Annual Monitoring Report for the Creed Energy Center ("CEC") for the reporting period from January 1, 2021 through June 30, 2021.

CEC was not in compliance with NSPS, Subpart GG 40 CFR 60.334 a(1) and (b) during this reporting period. The unit recorded NO<sub>x</sub> emissions in excess of the 4-hr rolling average 75 ppm permit limit on February 14th during hour 9. This event was reported to BAAQMD on February 17<sup>th</sup> via RCA 07Y37 and breakdown relief was requested on February 18<sup>th</sup> via RCA 07Y38.

By signing this report, I am certifying that based on information and belief formed after reasonable inquiry, the statements and information in the attached report are true, accurate, and complete.

If you have any questions or require additional information, please contact me at (707) 399-4393.

Sincerely,

Andrew Gundershaug

Plant Manager and Designated Representative/Responsible Official

## Table VII – A Applicable Limits and Compliance Monitoring Requirements S-2 – COMBUSTION GAS TURBINE January 1, 2021 through June 30,2021

| Type of | Type of Citation of  | on of FE | Future            |   | Monitoring  | Monitoring   | Monitoring  | Comp | oliance |
|---------|--|----------|-------------------|---|---|--|-------------|------|---------|
| Limit   | Limit  | Y/N      | Effective<br>Date | Limit   | Requirement<br>Citation                                       | Frequency<br>(P/C/N)   | Туре        | Yes  | No      |
| NOx     | BAAQMD<br>9-9-301.1.3  | N        |                   | 9 ppmv @ 15%<br>O2, dry   | BAAQMD 9-9-501<br>and BAAQMD<br>condition #20136,<br>part 23c | С  | CEM         | X    |         |
| NOx     | BAAQMD<br>9-9-301.1.3  | N        |                   | 9 ppmv @ 15%<br>O2, dry   | BAAQMD<br>condition #20136,<br>part 24a                       | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test | X    |         |
| NOx     | BAAQMD<br>9-9-301.2  | N        |                   | 0.43 lbs/MWhr or<br>9 ppmv @ 15%<br>O2, dry   | BAAQMD 9-9-501<br>and BAAQMD<br>condition #19684,<br>part 23c | C  | СЕМ         | X    |         |
| NOx     | SIP 9-9-<br>301.3  | Y        |                   | 9 ppmv @ 15%<br>O2, dry   | BAAQMD 9-9-501<br>and BAAQMD<br>condition #19684,<br>part 23c | C  | СЕМ         | X    |         |
|         | SIP 9-9-<br>301.3  | Y        |                   | 9 ppmv @ 15%<br>O2, dry   | BAAQMD<br>condition #19684,<br>part 24a                       | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test | X    |         |
| NOx     | NSPS,<br>Subpart GG<br>40 CFR<br>60.334<br>(a)(1) and<br>(b) | Y        |                   | 75 ppmv @ 15%<br>O2, dry  | NSPS 40 CFR<br>60.334 (b)                                     | С  | CEM         |      | X       |
| NOx     | None   | Y        |                   | None  | 40 CFR 75.10  | С  | CEM         | X    |         |
| NOx     | BAAQMD<br>condition<br>#20136, part<br>18.1                  | Y        |                   | 2.5 ppmv @ 15%<br>O2, dry, 3-hr<br>rolling average<br>except during<br>turbine startup or<br>shutdown | BAAQMD<br>condition #20136,<br>part 18.1                      | С  | CEM         | X    |         |
| NOx     | BAAQMD<br>condition<br>#20136, part<br>18.1                  | Y        |                   | 2.5 ppmv @ 15%<br>O2, dry, 3-hr<br>average except<br>during turbine<br>startup or<br>shutdown         | BAAQMD<br>condition #20136,<br>part 24a                       | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test | X    |         |
| NOx     | BAAQMD<br>condition<br>#20136, part<br>21                    | Y        |                   | 121 lb/calendar<br>day (as NO2)   | BAAQMD<br>condition #20136,<br>part 23c                       | C  | CEM         | X    |         |
| NOx     | BAAQMD<br>condition<br>#20136, part<br>21                    | Y        |                   | 16.4 tons per<br>calendar year (as<br>NO2)  | BAAQMD<br>condition #20136,<br>part 23c                       | С  | CEM         | X    |         |

| Type of         | Citation of                                 | FE  | Future            | T :   | Monitoring   | Monitoring   | Monitoring  | Compliance |    |
|-----------------|---|-----|-------------------|---|--|--|---|------------|----|
| Limit           | Limit                                       | Y/N | Effective<br>Date | Limit   | Requirement<br>Citation                                      | Frequency<br>(P/C/N)   | Туре  | Yes        | No |
| СО              | BAAQMD<br>condition<br>#20136, part<br>18.3 | Y   |                   | 6 ppmv @ 15% O2, dry, 3-hr average except during turbine startup or shutdown                      | BAAQMD<br>condition #20136,<br>parts 18.3 and 23c            | С  | CEM   | X          |    |
| СО              | BAAQMD<br>condition<br>#20136, part<br>18.3 | Y   |                   | 6 ppmv @ 15% O2, dry, 3-hr average except during turbine startup or shutdown                      | BAAQMD<br>condition #20136,<br>part 24c                      | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test   | X          |    |
| СО              | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 163 lb/calendar<br>day  | BAAQMD<br>condition #20136,<br>part 23c                      | С  | CEM   | X          |    |
| СО              | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 29.1 tons per<br>calendar year  | BAAQMD<br>condition #20136,<br>part 23c                      | С  | CEM   | X          |    |
| CO2             |   | Y   |                   | None  | 40 CFR 75.10   | С  | CEM (CO2)<br>or CEM (O2)<br>or fuel flow<br>monitor | X          |    |
| SO <sub>2</sub> | BAAQMD<br>9-1-301                           | N   |                   | GLC <sub>1</sub> of 0.5 ppm<br>for 3 min or 0.25<br>ppm for 60 min or<br>0.05 ppm for 24<br>hours |  | N  |   | X          |    |
| SO <sub>2</sub> | BAAQMD<br>9-1-302                           | N   |                   | 300 ppm (dry)   | BAAQMD<br>condition #20136,<br>part 23e                      | N  |   | X          |    |
| SO <sub>2</sub> | SIP 9-1-301                                 | Y   |                   | GLC <sub>1</sub> of 0.5 ppm<br>for 3 min or 0.25<br>ppm for 60 min or<br>0.05 ppm for 24<br>hours |  | N  |   | X          |    |
| SO <sub>2</sub> | SIP 9-1-302                                 | Y   |                   | 300 ppm (dry)   | BAAQMD<br>condition #20136,<br>part 23e                      | N  |   | X          |    |
| SO <sub>2</sub> | NSPS 40<br>CFR<br>Subpart GG<br>60.333(a)   | Y   |                   | 0.015% (vol.)<br>@15% O <sub>2</sub> (dry)  | NSPS 40 CFR<br>60.334(h)(3)                                  | N  | None  | X          |    |
| SO <sub>2</sub> | None  | Y   |                   | None  | 40 CFR<br>75.11(d)(2), 40<br>CFR 75, Appendix<br>D, part 2.3 |  | Fuel measure-<br>ments,<br>calculations             | X          |    |
| SO <sub>2</sub> | BAAQMD<br>condition<br>#20136, part<br>18.6 | Y   |                   | 1.39 lb/ hr<br>excluding startup<br>and shutdown of<br>turbines                                   | BAAQMD<br>condition #20136,<br>part 23e                      | P/Q  | Total sulfur<br>analysis                            | X          |    |
| SO <sub>2</sub> | BAAQMD<br>condition<br>#20136, part<br>18.6 | Y   |                   | 1.39 lb/ hr<br>excluding startup<br>and shutdown of<br>turbines                                   | BAAQMD<br>condition #20136,<br>part 24f                      | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test   | X          |    |

| Type of         | Citation of                                 | FE  | Future            |   | Monitoring                              | Monitoring   | Monitoring            | Compliance |    |
|-----------------|---|-----|-------------------|---|---|--|-----------------------|------------|----|
| Limit           | Limit                                       | Y/N | Effective<br>Date | Limit   | Requirement<br>Citation                 | Frequency<br>(P/C/N)   | Туре                  | Yes        | No |
| SO <sub>2</sub> | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 33 lb/calendar day  | BAAQMD<br>condition #20136,<br>part 23e | P/Q  | Total sulfur analysis | X          |    |
| SO <sub>2</sub> | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 6.0 tons/calendar<br>year   | BAAQMD<br>condition #20136,<br>part 23e | P/Q  | Total sulfur analysis | X          |    |
| Opacity         | BAAQMD<br>6-1-301                           | N   |                   | > Ringelmann No.<br>1 for no more than<br>3 minutes in any<br>hour                              |   | N  |                       | X          |    |
| Opacity         | SIP 6-301                                   | Y   |                   | > Ringelmann No.<br>1 for no more than<br>3 minutes in any<br>hour                              |   | N  |                       | X          |    |
| Opacity         | BAAQMD<br>condition<br>#20136, part<br>17   | Y   |                   | > Ringelmann No.<br>1 for no more than<br>3 minutes in any<br>hour or equivalent<br>20% opacity |   | N  |                       | X          |    |
| Filterable      | BAAQMD<br>6-1-310                           | Y   |                   | 0.15 grain/dscf   |   | N  |                       | X          |    |
| Particulate     |   |     |                   |   |   |  |                       | X          |    |
| FP              | SIP 6-310                                   | Y   |                   | 0.15 grain/dscf   |   | N  |                       | X          |    |
| PM10            | BAAQMD<br>condition<br>#20136, part<br>18.5 | Y   |                   | 3.0 lb/ hr for S-1  | BAAQMD<br>condition #20136,<br>part 24e | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test           | X          |    |
| PM10            | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 72 lb/calendar day  | BAAQMD<br>condition #20136,<br>part 24e | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source Test           | X          |    |
| PM10            | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 13.1 tons/calendar<br>year  | BAAQMD<br>condition #20136,<br>part 24e | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source Test           | X          |    |
| POC             | BAAQMD<br>condition<br>#20136, part<br>18.4 | Y   |                   | 2 ppmv @ 15%<br>O2, dry, except<br>during turbine<br>startup or<br>shutdown                     | BAAQMD<br>condition #20136,<br>part 24d | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test           | X          |    |
| POC             | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 30.0 lb/calendar<br>day   | BAAQMD<br>condition #20136,<br>part 24d | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test           | X          |    |
| POC             | BAAQMD<br>condition<br>#20136, part<br>21   | Y   |                   | 4.9 ton/calendar<br>year  | BAAQMD<br>condition #20136,<br>part 24d | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test           | X          |    |

| Type of              | Citation of                                       | FE        | Future<br>Effective | Limit  | Monitoring  | Monitoring   | Monitoring   | Comp | liance |
|----------------------|---|-----------|---------------------|--|---|--|--|------|--------|
| Limit                | Limit   | Limit Y/N | Date                | Liiiit   | Requirement<br>Citation                           | Frequency<br>(P/C/N)   | Туре   | Yes  | No     |
| NH3                  | BAAQMD<br>condition<br>#20136, Part<br>18.2       | N         |                     | 10 ppmv @ 15%<br>O2, dry, except<br>during turbine<br>startup or<br>shutdown | BAAQMD<br>condition #20136,<br>parts 18.2 and 23b | P  | District approved ammonia slip calculation and correction factor determined by source test | X    |        |
| NH <sub>3</sub>      | BAAQMD<br>condition<br>#20136, Part<br>18.2       | N         |                     | 10 ppmv @ 15%<br>O2, dry, except<br>during turbine<br>startup or<br>shutdown | BAAQMD<br>condition #20136,<br>part 24b           | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test  | X    |        |
| Heat input<br>limit  | BAAQMD<br>condition<br>#20136, part<br>22         | Y         |                     | 500 MM BTU/ hr<br>(HHV), 3-hr<br>average                                     | BAAQMD<br>condition #20136,<br>part 23d           | С  | Fuel meter   | X    |        |
| Heat input limit     | BAAQMD<br>condition<br>#20136, part<br>22         | Y         |                     | 500 MM BTU/ hr<br>(HHV), 3-hr<br>average                                     | BAAQMD<br>condition #20136,<br>part 23d           | P/M  | Fuel composition analysis  | X    |        |
| Heat input limit     | BAAQMD<br>condition<br>#20136, part<br>22         | Y         |                     | 500 MM BTU/ hr<br>(HHV), 3-hr<br>average                                     | BAAQMD<br>condition #20136,<br>part 24g           | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test  | X    |        |
| Heat input<br>limit  | BAAQMD<br>condition<br>#20136, part<br>22(a)(i)   | Y         |                     | 12,000 MM<br>BTU/day (HHV)   | BAAQMD<br>condition #20136,<br>part 23d           | С  | fuel meter, calculations   | X    |        |
| Heat input limit     | BAAQMD<br>condition<br>#20136, part<br>22(a)(ii)  | Y         |                     | 12,000 MM<br>BTU/day (HHV)   | BAAQMD<br>condition #20136,<br>part 31g           | P/Q  | Fuel composition analysis  | X    |        |
| Heat input limit     | BAAQMD<br>condition<br>#20136, part<br>22(a)(iii) | Y         |                     | 4,380,000 MM<br>BTU/yr   | BAAQMD<br>condition #20136,<br>part 23d           | C  | fuel meter,<br>calculations  | X    |        |
| Heat input limit     | BAAQMD<br>condition<br>#20136, part<br>22         | Y         |                     | 4,380,000 MM<br>BTU/yr   | BAAQMD<br>condition #20136,<br>part 31g           | P/Q  | Fuel composition analysis  | X    |        |
| MW                   | N/A   |           |                     | None   | BAAQMD<br>condition #20136,<br>part 24h           | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test  | X    |        |
| Exhaust Gas<br>Temp. | N/A   |           |                     | None   | BAAQMD<br>condition #20136,<br>part 24j           | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test  | X    |        |
| Stack gas<br>flow    | N/A   |           |                     | None   | BAAQMD<br>condition #20136,<br>part 24i           | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test  | X    |        |

| Type of                  | Citation of<br>Limit                      | FE<br>Y/N | Effective | Limit  | Monitoring                                 | Monitoring   | Monitoring  | Compliance |    |
|--------------------------|---|-----------|-----------|--|--|--|-------------|------------|----|
| Limit                    |   |           |           |  | Requirement<br>Citation                    | Frequency<br>(P/C/N)   | Туре        | Yes        | No |
| NH3<br>injection<br>rate | N/A                                       |           |           | None   | BAAQMD<br>condition #20136,<br>part 24k    | P/8,000 hrs. or<br>every 3 yrs.,<br>whichever<br>comes first | Source test | X          |    |
| Start-up<br>Period       | BAAQMD<br>condition<br>#20136, part<br>19 |           |           | 60 minutes per<br>start-up                     | BAAQMD<br>condition # 20136,<br>part 31(b) | P/E  | Records     | X          |    |
| Shut- down<br>Period     | BAAQMD<br>condition<br>#20136, part<br>20 |           |           | 30 minutes per<br>shutdown                     | BAAQMD<br>condition # 20136,<br>part 31(b) | P/E  | Records     | X          |    |
| Fuel Sulfur<br>Content   | 40 CFR<br>60.333(b)                       | Y         |           | 0.8 percent by<br>weight (8000<br>ppmw) sulfur | 440 CFR<br>60.334(h)(3)                    | N  |             | X          |    |

## Table VII - B Applicable Limits and Compliance Monitoring Requirements S-2 – DIESEL FIREWATER PUMP

| Type of            | Citation of  | FE  | Future            |  | Monitoring   | Monitoring           | Monitoring                | Comp | oliance |
|--------------------|--|-----|-------------------|--|--|----------------------|---------------------------|------|---------|
| Limit              | Limit  | Y/N | Effective<br>Date | Limit  | Requirement<br>Citation                                | Frequency<br>(P/C/N) | Туре                      | Yes  | No      |
| SO2                | BAAQMD<br>9-1-301  | N   |                   | GLC <sub>1</sub> of 0.5<br>ppm for 3 min<br>or 0.25 ppm for<br>60 min or 0.05<br>ppm for 24<br>hours         |  | N                    |                           | X    |         |
| SO <sub>2</sub>    | BAAQMD<br>9-1-304  | N   |                   | Sulfur content<br>of fuel <0.5%<br>by weight   |  | N                    |                           | X    |         |
| SO <sub>2</sub>    | SIP 9-1-<br>301  | Y   |                   | GLC <sub>1</sub> of 0.5<br>ppm for 3 min<br>or 0.25 ppm for<br>60 min or 0.05<br>ppm for 24<br>hours         |  | N                    |                           | X    |         |
| SO <sub>2</sub>    | SIP 9-1-<br>304  | Y   |                   | Sulfur content<br>of fuel <0.5%<br>by weight   |  | N                    |                           | X    |         |
| Opacity            | SIP<br>Regulation<br>6-302                                     | Y   |                   | < Ringelmann<br>No 2 for more<br>than 3 min/hr   |  | N                    |                           | X    |         |
| Opacity            | BAAQMD<br>Regulation<br>6-1-302                                | N   |                   | < Ringelmann<br>No. 2 for more<br>than 3 min/hr  |  | N                    |                           | X    |         |
| FP                 | SIP 6-310  | Y   |                   | 0.15 grain/dscf  |  | N                    |                           | X    |         |
| FP                 | BAAQMD<br>6-1-310  | N   |                   | 0.15 grain/dscf  |  | N                    |                           | X    |         |
| Hours of operation | BAAQMD<br>9-8-330.1<br>BAAQMD<br>Condition#<br>22850 Part      | Y   |                   | Emergency use<br>for an<br>unlimited<br>number of<br>hours   | BAAQMD 9-8-530<br>BAAQMD<br>Condition #22850<br>Part 3 | C P/E                | Hour meter, recordkeeping | X    |         |
| Hours of operation | BAAQMD<br>9-8-330.2<br>BAAQMD<br>Condition<br>#22850<br>Part 1 | Y   |                   | Reliability-<br>related<br>activities not to<br>exceed 50<br>hours in any<br>consecutive 12-<br>month period | BAAQMD 9-8-530<br>BAAQMD<br>Condition #22850<br>Part 3 | C P/E                | Hour meter, recordkeeping | X    |         |

## Table VII - C Applicable Limits and Compliance Monitoring Requirements S-3 - COOLING TOWER

| Type of<br>Limit      | Citation of<br>Limit            | f FE | Effective | Limit  | Monitoring              | Monitoring           | Monitoring | Comp | oliance |
|-----------------------|---------------------------------|------|-----------|--|-------------------------|----------------------|------------|------|---------|
|                       |                                 | Y/N  |           |  | Requirement<br>Citation | Frequency<br>(P/C/N) | Type       | Yes  | No      |
| Opacity               | BAAQMD<br>Regulation<br>6-1-301 | N    |           | < Ringelmann<br>NO 1 for more<br>than 3 min/hr | N                       | N                    |            | X    |         |
| Particulate<br>Weight | BAAQMD<br>Regulation<br>6-1-310 | N    |           | 0.15 grains per dscf                           | N                       | N                    |            | X    |         |
| Opacity               | SIP<br>Regulation<br>6-301      | Y    |           | < Ringelmann<br>1 for more than<br>3 min/hr    | N                       | N                    |            | X    |         |
| Particulate<br>Weight | SIP<br>Regulation<br>6-310      | Y    |           | 0.15 grains per dscf                           | Y                       | N                    |            | X    |         |
| Particulate<br>Weight | BAAQMD<br>Regulation<br>6-1-311 | Y    |           | 40 lb/hr                                       | N                       | N                    |            | X    |         |
| Particulate<br>Weight | SIP<br>Regulation<br>6-311      | Y    |           | 40 lb/hr                                       | N                       | N                    |            | X    |         |