



September 14, 2023

Mr. Tim Bofman Wellhead Power Panoche, LLC. 650 Bercut Dr, Ste C Sacramento, CA 95811

### Re: Notice of Preliminary Decision – Title V Permit Renewal Facility Number: C-3844 Project Number: C-1220526

Dear Mr. Bofman:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Wellhead Power Panoche, LLC. at 43649 W Panoche Rd, Firebaugh, California.

The notice of preliminary decision for this project has been posted on the District's website (<u>www.valleyair.org</u>). After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the renewed Federally Mandated Operating Permit. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Sincerely,

Brian Clements Director of Permit Services

Enclosures

- cc: Courtney Graham, CARB (w/enclosure) via email
- cc: Gerardo Rios, EPA (w/enclosure) via EPS

Samir Sheikh Executive Director/Air Pollution Control Officer

Northern Region 4800 Enterprise Way Modesto, CA 95356-8718 Tel: (209) 557-6400 FAX: (209) 557-6475 Central Region (Main Office) 1990 E. Gettysburg Avenue Fresno, CA 93726-0244 Tel: (559) 230-6000 FAX: (559) 230-6061 **Southern Region** 34946 Flyover Court Bakersfield, CA 93308-9725 Tel: (661) 392-5500 FAX: (661) 392-5585

www.valleyair.org www.healthyairliving.com

## SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

### Proposed Title V Permit Renewal Evaluation Wellhead Power Panoche, LLC. C-3844

## TABLE OF CONTENTS

| I.    | PROPOSAL                               | 2  |
|-------|--|----|
| II.   | FACILITY LOCATION                      | 2  |
| III.  | EQUIPMENT LISTING                      |    |
| IV.   | GENERAL PERMIT TEMPLATE USAGE          |    |
| V.    | SCOPE OF EPA AND PUBLIC REVIEW         |    |
| VI.   | FEDERALLY ENFORCEABLE REQUIREMENTS     | 3  |
| VII.  | REQUIREMENTS NOT FEDERALLY ENFORCEABLE | 6  |
| VIII. | PERMIT REQUIREMENTS                    | 6  |
| IX.   | PERMIT SHIELD                          |    |
| Х.    | CALIFORNIA ENVIRONMENTAL QUALITY ACT   |    |
| XI.   | PERMIT CONDITIONS                      | 19 |
|       |  |    |

| ATTA | CHMENTS                                | 19 |
|------|--|----|
| A.   | DRAFT RENEWED TITLE V OPERATING PERMIT |    |
| B.   | PREVIOUS TITLE V OPERATING PERMIT      |    |

C. DETAILED SUMMARY LIST OF FACILITY PERMITS

## TITLE V PERMIT RENEWAL EVALUATION Electricity Generating Facility

**Engineer:** John Yoshimura **Date:** September 13, 2023

|                       | C-3844<br>Wellhead Power Panoche, LLC.<br>650 Bercut Dr, Ste C<br>Sacramento, CA 95811 |
|-----------------------|--|
| Contact Name:         | Tim Bofman   |
| Phone:                | (559) 693-2494   |
| Responsible Official: | Paul Cummins   |
| Title:                | Vice President   |
| Project # :           | C-1220526  |
| Deemed Complete:      | May 31, 2022   |

### I. PROPOSAL

Wellhead Power Panoche, LLC. was issued a Title V permit on October 30, 2018. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

The purpose of this evaluation is to provide the legal and factual basis for all updated applicable requirements and to determine if the facility will comply with these updated requirements. It also specifically identifies all additions, deletions, and/or changes made to permit conditions or equipment descriptions.

## II. FACILITY LOCATION

Wellhead Power Panoche, LLC. is located at 43649 W Panoche Rd in Firebaugh, Fresno County, CA.

## III. EQUIPMENT LISTING

A detailed facility printout listing all permitted equipment at the facility is included as Attachment C.

## IV. GENERAL PERMIT TEMPLATE USAGE

The applicant does not propose to use any model general permit templates.

## V. SCOPE OF EPA AND PUBLIC REVIEW

The applicant is not requesting any model general permit templates. Therefore, all federally enforceable conditions in this current Title V permit will be subject to EPA and public review.

## VI. FEDERALLY ENFORCEABLE REQUIREMENTS

## A. Rules Updated

The following rules have been updated since the previous Title V Renewal was finalized on October 30, 2018.

- District Rule 2201, <u>New and Modified Stationary Source Review Rule</u> (amended February 18, 2016 ⇒ amended August 18, 2019)
- District Rule 2520, <u>Federally Mandated Operating Permits</u> (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4601, <u>Architectural Coatings</u> (amended December 17, 2009 ⇒ amended April 16, 2020)
- District Rule 4702, <u>Internal Combustion Engines</u> (amended November 14, 2013 ⇒ amended August 19, 2021)
- 40 CFR Part 60 Subpart IIII, <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u> (amended August 10, 2022)
- 40 CFR Part 60 Subpart JJJJ <u>New Source Performance Standards for</u> <u>Stationary Spark Ignition Internal Combustion Engines</u> (amended January 24, 2023)
- 40 CFR Part 60, Subpart KKKK, <u>Standards of Performance for Stationary</u> <u>Combustion Turbines</u> (amended October 7, 2020)

- 40 CFR Part 63, Subpart YYYY, <u>National Emission Standards for Hazardous</u> <u>Air Pollutants for Stationary Combustion Turbines</u> (amended March 9, 2022)
- 40 CFR Part 63 Subpart ZZZZ, <u>National Emissions Standards for Hazardous</u> <u>Air Pollutants for Stationary Reciprocating Internal Combustion Engines</u> (amended August 10, 2022)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring</u> (amended October 22, 1997)
- 40 CFR Part 82, Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (amended August 11, 2011 ⇒ amended March 24, 2021)
- 40 CFR Part 82, Subpart F, <u>Recycling and Emission Reduction</u> (amended June 18, 2008 ⇒ amended April 10, 2020)

### B. Rules Removed

• Fresno County Rule 110 (Equipment Breakdown) (Rescinded from SIP 2/17/2022)

## Fresno County Rule 110 (Equipment Breakdown)

Fresno County Rule 110 was rescinded from the California SIP. Therefore, this rule is no longer Federally Enforceable. Conditions #1 and #2 of Draft TV permit C-3844-0-3 have been edited to remove the reference to the Stanislaus County Rule and the conditions have been modified to be non-federally enforceable since District Rule 1100 is not contained in the SIP.

### C. Rules Added

There are no applicable rules that were added since the last Title V renewal.

### D. Rules Not Updated

- District Rule 1080, <u>Stack Monitoring</u> (amended December 17, 1992)
- District Rule 1081, <u>Source Sampling</u> (amended December 17, 1992)
- District Rule 1100, <u>Equipment Breakdown</u> (amended December 17,1992)
- District Rule 1160, <u>Emission Statements (amended November 18,1992</u>)
- District Rule 2010, <u>Permits Required</u> (amended December 17, 1992)
- District Rule 2020, <u>Exemptions</u> (amended December 18, 2014)

- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2040, <u>Applications</u> (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u> (amended December 17, 1992)
- District Rule 2080, <u>Conditional Approval</u> (amended December 17, 1992)
- District Rule 4101, <u>Visible Emissions</u> (amended February 17, 2005)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4202, <u>Particulate Matter Emission Rate</u> (amended December 17, 1992)
- District Rule 4701, <u>Internal Combustion Engines Phase 1</u> (amended August 21, 2003)
- District Rule 4703, <u>Stationary Gas Turbines</u> (adopted September 20, 2007)
- District Rule 4801, <u>Sulfur Compounds</u> (amended December 17, 1992)
- District Rule 8011, <u>Fugitive Dust General Requirements</u> (amended August 19, 2004)
- District Rule 8021, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Construction, Demolition, Excavation, and Extraction</u> <u>Activities</u> (amended August 19, 2004)
- District Rule 8031, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Handling and Storage of Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Carryout and Trackout</u> (amended August 19, 2004)
- District Rule 8051, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Open Area</u> (amended August 19, 2004)
- District Rule 8061, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Paved and Unpaved Roads</u> (amended August 19, 2004)
- District Rule 8071, <u>Fugitive Dust Requirements for Control of Fine Particulate</u> <u>Matter (PM10) from Unpaved Vehicle/Equipment Areas</u> (amended September 16, 2004)

- 40 CFR 60, Subpart GG <u>Standards for Performance of Stationary Gas</u> <u>Turbine</u> (amended February 24, 2006 ⇒ amended February 27, 2014)
- 40 CFR Part 61, Subpart M, <u>National Emission Standard for Asbestos</u> (amended July 20, 2004)

## VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

For each Title V source, the District issues a single permit that contains the federally enforceable requirements, as well as the District-only requirements. The District-only requirements are not a part of the Title V Operating Permits. The terms and conditions that are part of the facility's Title V permit are designated as "Federally Enforceable Through Title V Permit".

For this facility, the following are not federally enforceable and will not be discussed in further detail:

### A. Rules Added/Updated

None

### **B.** Rules Not Updated

- District Rule 1100, <u>Equipment Breakdown</u> (amended December 17, 1992)
- District Rule 4102, <u>Nuisance</u> (amended July 20, 2004)
- Title 17 California Code of Regulations (CCR) Section 93115, <u>Airborne Toxic</u> <u>Control Measure for Stationary Compression Ignition Engines</u> (amended May 19, 2011)

## VIII. PERMIT REQUIREMENTS

The purpose of this evaluation is to review changes to federally enforceable requirements; therefore, this compliance section will only address rules that have been amended or added since the issuance of the initial Title V permit or most recent renewal of the Title V permit.

### A. District Fresno County Rule 110, Kern County Rule 111, Kings County Rule 111, Madera County Rule 113, Merced County Rule 109, San Joaquin County Rule 110 Stanislaus County Rule 110, and Tulare County Rule 111 – Equipment Breakdown

In accordance with EPA's State Implementation Plan (SIP) Call, on February 17, 2022, the District rescinded Fresno County Rule 110 (Equipment Breakdown), Kern County Rule 111 (Equipment Breakdown), Kings County Rule 111 (Equipment Breakdown), Madera County Rule 113 (Equipment Breakdown), Stanislaus County Rule 110 (Equipment Breakdown), and Tulare County Rule 111 (Equipment Breakdown) from the State Implementation Plan.

Conditions 1 and 2 on the current permit C-3844-0-2 refer to all these rules. The reference to these rules are removed from conditions 1 and 2 on draft permit C-3844-0-3 and will only have reference to the applicable breakdown rules which are District Rule 1100 and San Joaquin County Rule 110. Additionally, all references made to the county rules listed on condition #39 will be removed as well. As previously explained, these conditions are no longer federally enforceable.

# B. District Rule 2201 - <u>New and Modified Stationary Source Review Rule</u> (NSR)

District Rule 2201 has been amended since this facility's initial Title V permit was issued. However, the requirements of this rule are only triggered at the time the source undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit.

### C. District Rule 2520 - Federally Mandated Operating Permits

District Rule 2520 has been amended since this facility's Title V permit was last renewed. The amendments to this rule were administrative, relating only to the notification procedure for Title V permit modifications that are required to go through a public notice. The amendments to this rule did not have any effect on current permit requirements. Therefore, the amendments to this rule will not be addressed further in this evaluation. However, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

### Greenhouse Gas Discussion

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40 CFR Part 98) is not included in the definition of an applicable requirement

within Title V (per 40 CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

### D. District Rule 4601 – Architectural Coatings

District Rule 4601 was last amended on April 16, 2020. EPA approved District Rule 4601 as amended on April 16, 2020 for inclusion in the SIP on December 14, 2022.

The purpose of this rule is to limit VOC emissions from architectural coatings. This rule specifies architectural coatings storage, cleanup, and labeling requirements. This rule is applicable to any person who supplies, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating. This rule is applicable to any person who supplies, markets, sells, offers for sale, applies, or solicits the application of any architectural coating, or who manufactures, blends or repackages any architectural coating, or who manufactures, blends or repackages any architectural coating for use within the San Joaquin Valley Air Pollution Control District.

As required by a September 2016 decision by the U.S. Court of Appeals for the Ninth Circuit in *Bahr v. U.S. Environmental Protection Agency*,<sup>1</sup> the April 16, 2020 amendments to District Rule 4601 added a contingency measure for the District's 2016 Ozone Plan that would remove the exemption for specific categories of coatings sold in small containers with a volume of one liter or less if EPA issues a finding that the San Joaquin Valley Air Basin has failed to attain, or to make reasonable further progress towards attainment of, the 2008 National Ambient Air Quality Standard (NAAQS) for ozone. The April 16, 2020 amendments to District Rule 4601 implemented provisions of the 2019 California Air Resources Board (ARB) Suggested Control Measure for Architectural Coatings,<sup>2</sup> including lowering VOC limits for several categories of architectural coatings, and adding new requirements for colorants.

The primary effect of the April 16, 2020 amendments to District Rule 4601 was reducing VOC content limits required for specific categories of coatings and adding VOC content limits for specific categories of colorants. The previous VOC content limits of District Rule 4601 and the VOC content limits of coatings and colorants that became effective on and after January 1, 2022 are summarized below.

<sup>&</sup>lt;sup>1</sup> United States Court of Appeals for the Ninth Circuit (September 12, 2016) Bahr v. U.S. Environmental Protection Agency. https://cdn.ca9.uscourts.gov/datastore/opinions/2016/09/12/14-72327.pdf

<sup>&</sup>lt;sup>2</sup> California Air Resources Board (May 2019) California Air Resources Board (CARB) Suggested Control Measure for Architectural Coatings. https://ww2.arb.ca.gov/sites/default/files/2020-05/10602\_scm\_final.pdf

### Section 5.1 - VOC Content Limits:

Except as provided in Sections 5.2 and 5.3, no person shall: manufacture, blend, or repackage for use within the District; or supply, sell, market or offer for sale within the District; or solicit for application or apply within the District any architectural coating or colorant with a VOC content in excess of the corresponding limit specified in Table 1 or Table 2, after the specified effective date in Table 1 or Table 2. Limits are expressed as VOC Regulatory, thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

| Rule 4601, Table 1 - VOC Content Limits for Coatings <sup>1</sup> |              |                                 |  |  |
|---|--------------|---------------------------------|--|--|
| COATING CATEGORY  | Previous VOC | VOC Limit (g/l)                 |  |  |
|   | Limit (g/l)  | Effective on and after 1/1/2022 |  |  |
| Flat Coatings   | 50           | 50                              |  |  |
| Nonflat Coatings  | 100          | 50                              |  |  |
| Specialty Coatings  | -            | -                               |  |  |
| Aluminum Roof Coatings  | 400          | 100                             |  |  |
| Basement Specialty Coatings                                       | 400          | 400                             |  |  |
| Bituminous Roof Coatings  | 50           | 50                              |  |  |
| Bituminous Roof Primers   | 350          | 350                             |  |  |
| Bond Breakers   | 350          | 350                             |  |  |
| Building Envelope Coatings  | -            | 50                              |  |  |
| Concrete Curing Compounds   | 350          | 350                             |  |  |
| Concrete/Masonry Sealers  | 100          | 100                             |  |  |
| Driveway Sealers  | 50           | 50                              |  |  |
| Dry Fog Coatings  | 150          | 50                              |  |  |
| Faux Finishing Coatings   | 350          | 350                             |  |  |
| Fire Resistive Coatings   | 350          | 150                             |  |  |
| Floor Coatings  | 100          | 50                              |  |  |
| Form-Release Compounds  | 250          | 100                             |  |  |
| Graphic Arts Coatings (Sign<br>Paints)                            | 500          | 500                             |  |  |
| High Temperature Coatings   | 420          | 420                             |  |  |
| Industrial Maintenance Coatings                                   | 250          | 250                             |  |  |
| Low Solids Coatings <sup>2</sup>                                  | 120          | 120                             |  |  |
| Magnesite Cement Coatings   | 450          | 450                             |  |  |
| Mastic Texture Coatings   | 100          | 100                             |  |  |
| Metallic Pigmented Coatings                                       | 500          | 500                             |  |  |
| Multi-Color Coatings  | 250          | 250                             |  |  |
| Pre-Treatment Wash Primers  | 420          | 420                             |  |  |
| Primers, Sealers, and Undercoaters                                | 100          | 100                             |  |  |
| Reactive Penetrating Sealers                                      | 350          | 350                             |  |  |
| Recycled Coatings   | 250          | 250                             |  |  |
| Roof Coatings   | 50           | 50                              |  |  |
| Rust Preventative Coatings  | 250          | 250                             |  |  |
| Shellacs:   |              |                                 |  |  |

| Rule 4601, Table 1 - VOC Content Limits for Coatings <sup>1</sup> |                             |  |  |  |
|---|-----------------------------|--|--|--|
| COATING CATEGORY  | Previous VOC<br>Limit (g/l) | VOC Limit (g/l)<br>Effective on and after 1/1/2022 |  |  |
| Clear   | 730                         | 730  |  |  |
| Opaque  | 550                         | 550  |  |  |
| Specialty Primers, Sealers, and<br>Undercoaters                   | 100                         | 100  |  |  |
| Stains  | 250                         | 100  |  |  |
| Interior Stains   |                             | 250  |  |  |
| Stone Consolidants  | 450                         | 450  |  |  |
| Swimming Pool Coatings  | 340                         | 340  |  |  |
| Tile and Stone Sealers  |                             | 100  |  |  |
| Traffic Marking Coatings  | 100                         | 100  |  |  |
| Tub and Tile Refinish Coatings                                    | 420                         | 420  |  |  |
| Waterproofing Membranes   | 250                         | 100  |  |  |
| Wood Coatings   | 275                         | 275  |  |  |
| Wood Preservatives  | 350                         | 350  |  |  |
| Zinc-Rich Primers   | 340                         | 340  |  |  |

1 Limits are expressed as VOC Regulatory (except where noted otherwise), thinned to the manufacturer's maximum thinning recommendation, excluding any colorant added to tint bases.

2 Units are grams of VOC per liter of coating, including water and exempt compounds, in accordance with Section 3.72.

| Rule 4601, Table 2 VOC Content Limits for Colorants <sup>1</sup>     |  |  |  |  |
|--|--|--|--|--|
| Colorants Added To   | VOC Limit (g/l)<br>Effective on and after 1/1/2022 |  |  |  |
| Architectural Coatings, excluding Industrial<br>Maintenance Coatings | 50   |  |  |  |
| Solvent Based Industrial Maintenance Coatings                        | 600  |  |  |  |
| Waterborne Industrial Maintenance Coatings                           | 50   |  |  |  |
| Wood Coatings  | 600  |  |  |  |

1 Limits are expressed as VOC Regulatory.

The following conditions of the proposed requirements of the facility-wide permit ensure compliance with this rule.

| Permit Unit # | Permit Description   | Condition #s |
|---------------|----------------------|--------------|
| C-3844-0-3    | Facility-Wide Permit | 23-25        |

### E. District Rule 4702 – Internal Combustion Engines

This rule was amended on August 19, 2021. However, the amended rule has not yet been approved by EPA into the California SIP. This rule's previous version (amended November 14, 2013) was approved by EPA into California's SIP. Although the latest amended Rule 4702 is not SIP approved, the District

evaluated the internal combustion engine permits at this facility to determine whether the amendments to the Rule will require any changes to the permit conditions.

This facility includes an IC engine powering a compressor (C-3844-3) used for cold-starts of the gas turbine located at this site. This engine is limited to 50 hours per year and qualifies as a low-use engine under Section 4.2 of Rule 4702; therefore, the engine is only subject to the requirements of Sections 5.10 and 6.23 of the amended Rule. The qualifications to qualify for the low-use exemption listed in Section 4.2 and the requirements of 5.10 and 6.23 were not modified in the latest amendments to Rule 4702; therefore, no changes to the permit conditions for the IC engine powering a compressor were necessary.

The facility also includes an emergency IC engine powering an electrical generator (C-3844-5). This engine was permitted as an emergency IC engine and qualifies as an emergency IC engine under Section 4.2 of Rule 4702; therefore, the engine is only subject to the requirements of Sections 5.10 and 6.23 of the amended Rule. The qualifications to qualify for the emergency engine exemption listed in Section 4.2 and the requirements of 5.10 and 6.23 were not modified in the latest amendments to Rule 4702; therefore, no changes to the permit conditions for the emergency IC engine powering an electrical generator were necessary.

### F. 40 CFR Part 60 Subpart IIII – <u>Standards of Performance for Stationary</u> <u>Compression Ignition Internal Combustion Engines</u>

Section 60.4200 states that the provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section.

This facility operates one compression ignited diesel-fired IC engine under permit C-3844-3.

Section (a)(1) applies to manufacturers of engines. This facility does not manufacture engines. Therefore, the requirements of this section are not applicable.

Section (a)(2) specifies requirements for owners and operators of stationary CI ICE that commenced construction after July 11, 2005 and manufactured after April 1, 2006 (and are not fire pump engines). The ATC for unit '-3 was issued in September 2004 and the facility commenced construction shortly after receiving their ATC and prior to July 11, 2005. Furthermore, the engine was manufactured prior to April 1, 2006. Therefore, the requirements of this section are not applicable.

Section (a)(3) states that owners and operators of stationary CI ICE that are modified or reconstructed after July 11, 2005, and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005. The engine has not been modified or reconstructed since its initial installation. Therefore, the requirements of this section are not applicable.

Section (a)(4) states that the provisions of Section 60.4208 of this subpart are applicable to all owners or operators of stationary CI ICE that commenced construction after July 11, 2005. The ATC for unit '-3 was issued in September 2004 and the facility commenced construction shortly after receiving their ATC and prior to July 11, 2005. Therefore, the provisions of Section 60.4208 are not applicable.

As shown above, the Subpart IIII requirements are not applicable to the dieselfired IC engine (C-3844-3).

### G. 40 CFR 60 Subpart JJJJ - <u>Standards of Performance for Stationary Spark</u> Ignition Internal Combustion Engines

Section 60.4230 states that the provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section.

This facility operates one spark ignited natural gas-fired IC engine (SC ICE) under permit C-3844-5.

Sections (a)(1) through (a)(3) apply to manufacturers of engines. This facility does not manufacture engines. Therefore, the requirements of these sections are not applicable.

Section (a)(4) states that owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

- (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP); or
- (ii) On or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1350 HP; or
- (iii) On or after July 1, 2008, for engines with a maximum engine power less than 500 HP; or

(iv) On or after January 1, 2009, for emergency engines with a maximum engine power greater than 19 KW (25 HP).

This facility operates one SI ICE engine under permit C-3844-5. The engine was installed prior to June 12, 2006. Therefore, the SI ICE operated at this facility does not meet any of the applicability requirements specified above and the requirements of this section are not applicable.

Section (a)(5) states that owners and operators of stationary SI ICE that are modified or reconstructed after June 12, 2006, and any person that modifies or reconstructs any stationary SI ICE after June 12, 2006. As discussed above, the engine was installed at this facility prior to June 12, 2006 and has not been modified or reconstructed since installation. Therefore, the requirements of this section are not applicable.

Section (a)(6) states that the provisions of Section 60.4236 of this subpart are applicable to all owners or operators of stationary SI ICE that commence construction after June 12, 2006. Again, the SI ICE operated at this facility was installed prior to June 12, 2006. Therefore, it is not subject to the requirements of this section.

As shown above, the Subpart JJJJ requirements are not applicable to the natural gas-fired IC engine (C-3844-5).

### H. 40 CFR Part 60 Subpart KKKK – <u>Standards of Performance for Stationary</u> <u>Combustion Turbines</u>

40 CFR Part 60 Subpart KKKK applies to all stationary gas turbines rated at greater than or equal to 10 MMBtu/hr that commence construction, modification, or reconstruction after February 18, 2005. The gas turbines at this facility were installed prior to February 18, 2005. Furthermore, the permitting actions associated with the gas turbines since February 18, 2005 have not met the definition of a modification or reconstruction. Therefore, this subpart does not apply to these gas turbines.

### I. 40 CFR Part 63 Subpart YYYY – <u>National Emissions Standards for</u> <u>Hazardous Air Pollutants for Stationary Combustion Turbines</u>

40 CFR Part 63 Subpart YYYY applies to any existing, new, or reconstructed stationary combustion turbine located at a major source of HAP emissions.

The District performed HAP calculations for the previous Title V Renewal (Project C-1171376) and determined that this facility is not a Major Source of HAPs since the facility does not emit any single HAP at a rate of 10 tons per

year and does not emit a combination of HAP's at a rate of 25 tons per year. Therefore, the requirements of this subpart are not applicable.

### J. 40 CFR Part 63 Subpart ZZZZ – <u>National Emission Standards for</u> <u>Hazardous Air Pollutants for Stationary Reciprocating Internal</u> <u>Combustion Engines (RICE)</u>

Section 63.6585 states that you are subject to this subpart if you own or operate a stationary reciprocating internal combustion engines (RICE) at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

This facility operates one natural gas-fired RICE and one diesel-fired RICE. The facility does not emit any single HAP at a rate of 10 tons per year and does not emit a combination of HAP's at a rate of 25 tons per year. Therefore, this facility can be classified as an area source of HAP emissions and the requirements of this subpart are applicable to the engines.

The requirements of 40 CFR Part 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, are applicable to owners and operators of a stationary RICE located at a major or area source of HAP emissions. This facility is not a major source of HAP emissions and is therefore, by definition, an area source of HAP emissions. Therefore, the requirements of this subpart are applicable to the engines.

This subpart was amended on November 19, 2020, December 4, 2020, August 10, 2022, and January 24, 2023. The amendments to this subpart are summarized as the following:

- References were changed to some sections offering exemptions from the requirements of this subpart as described in 40 CFR part 1068, subpart C.
- References were changed to the sulfur limit of gasoline for engines that use gasoline.
- References were changed to Phase 1 emission standards for certain engines.
- References were changed for engines being certified to the voluntary certification standards in Table 1 of this subpart.
- Section 60.4241(a) requires manufacturers of stationary SI internal combustion engines who choose not to certify their engines under this section to notify the ultimate purchaser that testing requirements apply as described in §60.4243(b)(2).
- It also requires manufacturers to keep a copy of this notification for five years after shipping each engine and make those documents available to

EPA upon request. Section 60.4243(f) added a definition of engine rebuilding.

• Table 2 to Subpart JJJJ clarified that the measurements to determine the exhaust flowrate must be made (1) at the same time as the measurement for NOx concentration or, alternatively (2) according to the option in Section 11.1.2 of Method 1A of 40 CFR part 60, Appendix A-1, if applicable.

The above amendments did not require any changes to the permit conditions for the permitted engines at this facility. Therefore, continued compliance with this rule is expected.

### K. 40 CFR Part 64 - Compliance Assurance Monitoring (CAM)

40 CFR Part 64 requires Compliance Assurance Monitoring for units that meet the following three criteria:

- 1) the unit must have an emission limit for the pollutant;
- 2) the unit must have add-on controls for the pollutant; these are devices such as flue gas recirculation (FGR), baghouses, and catalytic oxidizers; and
- 3) the unit must have a pre-control potential to emit of greater than the major source thresholds.

| Pollutant        | Major Source Threshold<br>(Ib/year) |
|------------------|-------------------------------------|
| NO <sub>X</sub>  | 20,000                              |
| SO <sub>X</sub>  | 140,000                             |
| PM <sub>10</sub> | 140,000                             |
| CO               | 200,000                             |
| VOC              | 20,000                              |

- a. <u>C-3844-1-17: 49.9 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND ELECTRICAL POWER GENERATING SYSTEM CONSISTING</u> OF TWO 25.0 MW PRATT & WHITNEY MODEL #FT4C1 NATURAL GAS-FIRED (TWINPAC CONFIGURATION) GAS TURBINE ENGINES (GTE) WITH DRY LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY, A SHARED SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH OXIDATION CATALYSTS AND INLET AIR FOGGING
  - 1. The permit unit has emissions limits for all five criteria pollutants: NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, CO, and VOC.
  - 2. The unit is served by a SCR system to control NOx emissions and an oxidation catalyst to control VOC and CO emissions.
  - 3. The SCR system will be assumed to have a NOx control efficiency of 90%. The oxidation catalyst will be assumed to have a CO control efficiency of 80%.

The facility operates a Continuous Emissions Monitoring (CEM) system to monitor NOx and CO emissions from this turbine. Based on 40 CFR 64.2(b)(1)(vi), NO<sub>x</sub> and CO emissions limits are exempt from CAM since the Part 70 permit already specifies a continuous emissions monitoring compliance determination method for both NO<sub>x</sub> and CO. The existing conditions on the permit that require the CEMs to be installed, calibrated, maintained, and require the data to be reported, ensure that the equipment will remain exempt from CAM requirements.

This permit unit may be subject to CAM for VOC since there is a VOC limit and it has add-on control in the form of an oxidation catalytic system. However as shown below, the pre-control VOC potential to emit is less than the major source threshold of 20,000 lb-VOC/year as shown below.

The natural gas uncontrolled emission factor is 1.75 lb-VOC/hr (permit condition 16).

1.75 lb-VOC/hr x 8,760 hr/yr = 15,330 lb-VOC/yr

Since 15,330 lb-VOC/yr < 20,000 lb-VOC/yr (Major Source threshold for VOC), this unit is not subject to CAM for VOC.

Since the unit is not equipped with add-on controls for SOx and PM<sub>10</sub>, the unit is not subject to CAM for those pollutants.

b. <u>C-3844-3-3: 440 BHP CATERPILLAR MODEL 3406 TA DIESEL-FIRED</u> LOW USE IC ENGINE POWERING A COMPRESSOR TO START THE GAS TURBINES (C-3844-1)

The permit unit has emissions limits for all five criteria pollutants NO<sub>X</sub>, SO<sub>X</sub>,  $PM_{10}$ , CO, and VOC. Unit C-3844-3-2 does not have add-on controls for any pollutant; therefore CAM is not applicable to this unit.

- c. <u>C-3844-5-4: 329 BHP CAT MODEL #G379 RICH-BURN NATURAL GAS-FIRED IC ENGINE POWERING AN ELECTRICAL GENERATOR AND</u> <u>SERVED BY A 3-WAY CATALYST</u>
  - 1. The permit unit has emissions limits for all five criteria pollutants: NO<sub>X</sub>, SO<sub>X</sub>, PM<sub>10</sub>, CO, and VOC.
  - 2. The unit is served by a NSCR system to control NOx, CO and VOC emissions.
  - 3. The NSCR system will be assumed to have a NOx control efficiency of 90%, a CO control efficiency of 80%, and a VOC control efficiency of 50% (Update On Emissions Form 960, Second Editions, Waukesha Engine Division, Dresser Industries, October 1991)

## Pre-control Annual Potential to Emit (PE):

PE = (0.072 g-NO<sub>x</sub>/hp-hr) x (329 hp) x (8,760 hr/yr) x (1 lb/453.6 g) = 457 lb-NO<sub>x</sub>/year

Pre-control PE = PE ÷ (1 – CE) = (457 lb-NO<sub>x</sub>/year) ÷ (1 – 0.9) = 4,570 lb-NO<sub>x</sub>/year

Since 4,570 lb-NO<sub>x</sub>/yr < 20,000 lb-NO<sub>x</sub>/yr (Major Source threshold for NO<sub>x</sub>), this unit is not subject to CAM for NO<sub>x</sub> emissions.

<u>CO:</u> PE = (5.69 lb-CO/hp-hr) x (329 hp) x (8,760 hr/yr) x (1 lb/453.6 g) = 36,152 lb-CO/year

Pre-control PE = PE ÷ (1 – CE) = (36,152 lb-CO/year) ÷ (1 – 0.8) = 180,763 lb-CO/year

Since 180,763 lb-CO/yr < 200,000 lb-CO/yr (Major Source threshold for CO), this unit is not subject to CAM for CO emissions.

<u>VOC:</u> PE = (0.125 lb-VOC/hp-hr) x (329 hp) x (8,760 hr/yr) x (1 lb/453.6 g) = 794 lb-VOC/year

Pre-control PE = PE ÷ (1 – CE) = (794 lb-VOC/year) ÷ (1 – 0.5) = 1,588 lb-VOC/year

Since 1,588 lb-VOC/yr < 20,000 lb-VOC/yr (Major Source threshold for VOC), this unit is not subject to CAM for VOC emissions.

### L. 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners

The purpose of 40 CFR Part 82 Subpart B is to implement section 609 of the Clean Air Act, as amended regarding the servicing of motor vehicle air conditioners (MVACs), and to implement section 608 of the Act regarding certain servicing, maintenance, repair, and disposal of air conditioners in MVACs and MVAC-like appliances.

These regulations apply to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner.

The amendments to this subpart do not result in a modification to the current permit requirements included as condition 28 on the draft permit requirements of draft PTO C-3844-0-3. Therefore, the amendments to this subpart are not addressed any further in this evaluation.

### M. 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction

The purpose of this subpart is to reduce emissions of class I and class II refrigerants and their non-exempt substitutes to the lowest achievable level by maximizing the recapture and recycling of such refrigerants during the maintenance, service, repair, and disposal of appliances and restricting the sale of refrigerants consisting in whole or in part of a class I or class II ozone-depleting substance or their non-exempt substitutes in accordance with Title VI of the Clean Air Act.

This subpart applies to any person maintaining, servicing, or repairing appliances containing class I, class II or non-exempt substitute refrigerants. This subpart also applies to persons disposing of such appliances (including small appliances and motor vehicle air conditioners), refrigerant reclaimers, technician certifying programs, appliance owners and operators, manufacturers of appliances, manufacturers of recovery and/or recycling equipment, approved recovery and/or recycling equipment testing organizations and persons buying, selling, or offering to sell class I, class II, or non-exempt substitute refrigerants.

The amendments to this subpart do not result in a modification to the current permit requirement included as condition 27 on the draft permit requirements of draft PTO C-3844-0-3. Therefore, the amendments to this subpart are not addressed any further in this evaluation.

## IX. PERMIT SHIELD

A permit shield legally protects a facility from enforcement of the shielded regulations when a source is in compliance with the terms and conditions of the Title V permit. Compliance with the terms and conditions of the Operating Permit is considered compliance with all applicable requirements upon which those conditions are based, including those that have been subsumed.

### A. Requirements Addressed by Model General Permit Templates

The applicant does not propose to use any model general permit templates.

## X. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The purpose of the Title V permit renewal is to update the permit to ensure that any changes to regulations since the issuance of the initial Title V permit or most recent renewal of the Title V permit are incorporated as permit requirements.

Per the California Environmental Quality Act (CEQA) Statute §21080.24, and CEQA Guidelines §15281, the issuance, modification, amendment, or renewal of any permit by an air pollution control district or air quality management district pursuant to Title V is exempt from CEQA, unless the issuance, modification, amendment, or renewal authorizes a physical or operational change to a source or facility. There will be no physical or operational change to the source or facility nor will the Title V permit renewal authorize a physical or operational change to the source or facility. Therefore, this project, a Title V permit renewal, is subject to a ministerial action that is exempt from CEQA.

## XI. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit.

## ATTACHMENTS

- A. Draft Renewed Title V Operating Permit
- B. Previous Title V Operating Permit
- C. Detailed Summary List of Facility Permits

# ATTACHMENT A

Draft Renewed Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

FACILITY: C-3844-0-3

LOCATION: 43649 VV PANO C-3844-0-3 : Sep 13 2023 4:17PM - YOSHIMUJ



# FACILITY-WIDE REQUIREMENTS

- 1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, 6.1]
- 2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0]
- 3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
- 4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
- 5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.8.1 and 9.13.1] Federally Enforceable Through Title V Permit
- 6. {4367} A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
- 7. Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form prescribed by the District. [District Rule 2040]
- 8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
- 9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

### FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units. Facility Name: WELLHEAD POWER PANOCHE, LLC. Location: 43649 W PANOCHE RD, FIREBAUGH, CA 93622

### Facility-wide Requirements for C-3844-0-3 (continued)

- 10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit
- 11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit
- 12. {4373} If for any reason a permit requirement or condition is being challenged for its constitutionality or validity by a court of competent jurisdiction, the outcome of such challenge shall not affect or invalidate the remainder of the conditions or requirements in that permit. [District Rule 2520, 9.7] Federally Enforceable Through Title V Permit
- 13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit
- 14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit
- 15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit
- 16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit
- 17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit
- 18. {4379} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to enter the permittee's premises where a permitted source is located or emissions related activity is conducted, or where records must be kept under condition of the permit. [District Rule 2520, 9.13.2.1] Federally Enforceable Through Title V Permit
- 19. {4380} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit. [District Rule 2520, 9.13.2.2] Federally Enforceable Through Title V Permit
- 20. {4381} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. [District Rule 2520, 9.13.2.3] Federally Enforceable Through Title V Permit
- 21. {4382} Upon presentation of appropriate credentials, a permittee shall allow an authorized representative of the District to sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or applicable requirements. [District Rule 2520, 9.13.2.4] Federally Enforceable Through Title V Permit

FACILITY WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate. Facility-wide Requirements for C-3844-0-3 (continued)

- 22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
- 23. No person shall manufacture, blend, repackage, supply, market, sell, solicit or apply any architectural coating or colorant with a VOC content in excess of the applicable limits specified in Table 1 (Coatings) and Table 2 (Colorants) of District Rule 4601 (4/16/20), unless exempted under section 4.0 of District Rule 4601 (4/16/20). [District Rule 4601] Federally Enforceable Through Title V Permit
- 24. All VOC-containing materials subject to Rule 4601 (4/16/20) shall be stored in closed containers when not in use. [District Rule 4601] Federally Enforceable Through Title V Permit
- 25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (4/16/20). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
- 27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
- 28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit
- 29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8021] Federally Enforceable Through Title V Permit
- {4391} Outdoor handling, storage and transport of any bulk material which emits dust shall comply with the requirements of District Rule 8031, unless specifically exempted under Section 4.0 of Rule 8031 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8031] Federally Enforceable Through Title V Permit
- {4392} An owner/operator shall prevent or cleanup any carryout or trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8041] Federally Enforceable Through Title V Permit
- 32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8051] Federally Enforceable Through Title V Permit
- 33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8061] Federally Enforceable Through Title V Permit

FACILITY WIDE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

### Facility-wide Requirements for C-3844-0-3 (continued)

- 34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rules 8011 and 8071] Federally Enforceable Through Title V Permit
- 35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit
- 36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit
- 37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit
- 38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit
- 39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (San Joaquin), Rule 110 (San Joaquin), and Rule 202 (San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 42. On November 30, 2012, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin December 1 of every year, unless alternative dates are approved by the District Compliance Division. These reports are due within 30 days after the end of the reporting period. [District Rule 2520] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3844-1-17

Location:

### **EQUIPMENT DESCRIPTION:**

49.9 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND ELECTRICAL POWER GENERATING SYSTEM CONSISTING OF TWO 25.0 MW PRATT & WHITNEY MODEL #FT4C1 NATURAL GAS-FIRED (TWINPAC CONFIGURATION) GAS TURBINE ENGINES (GTE) WITH DRY LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY, A SHARED SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH A 28" CORMETECH LAYER AND INLET AIR FOGGING

EXPIRATION DA

# PERMIT UNIT REQUIREMENTS

- All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize 1. emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- Both turbine engines shall be operated simultaneously, except during start up and shut down. [District Rule 2201] 3. Federally Enforceable Through Title V Permit
- 4. Gas turbine engines and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Gas turbine engines shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 6. Gas turbine engines shall be equipped with a single continuous emissions monitor (CEM) for NOx (before and after SCR system), CO, and O2. The CEM shall meet the requirements of 40 CFR part 60, Appendix F and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 7. The facility shall maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
- 8. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-1-17 (continued)

- 10. Gas turbine engines shall be fired exclusively on natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201 and 4801, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- Combined annual emissions from units C-3844-1 and C-3844-5 shall not exceed any of the following limits: 22,816 lb-NOx/year, 7,068 lb-SOx/year, 16,368 lb-PM10/year, 89,032 lb-CO/year, or 6,448 lb-VOC/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Maximum annual heat input for both natural gas-fired turbine engines combined shall not exceed 2,480,000 MMBtu/year, measured on a calendar year period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Daily combined NOx emissions from both natural gas-fired turbine engines shall not exceed 148.8 lb-NOx/day, measured on a 24 hour rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Annual combined NOx emissions from both natural gas-fired turbine engines shall not exceed 22,816 lb-NOx/year, measured on a calendar year period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Except during thermal stabilization periods, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 6.20 lb-NOx/hour (as NO2) equivalent to 2.5 ppmvd @ 15% O2, 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour equivalent to 16.0 ppmvd @ 15% O2, 1.75 lb-VOC/hour (as methane) equivalent to 2.0 ppmv @ 15% O2, or 10 ppmv ammonia @ 15% O2. All emission limits are based on one (1) hour rolling averages. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 16. During periods of thermal stabilization, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 25.0 lb-NOx/hour (as NO2), 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour, or 1.75 lb-VOC/hour (as methane), based on one hour averages. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 17. Thermal stabilization is defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours as stated in Section 3.25 of Rule 4703. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 19. Compliance testing to measure NOx (as NO2), CO, VOC, ammonia emissions, and fuel gas sulfur content requirements of this permit shall be conducted at least once every twelve months. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 20. Compliance testing to measure PM10 shall be conducted at least once every 60 months. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Compliance testing to measure NOx (as NO2), CO, and ammonia emissions shall be conducted within 60 days of switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa. [District Rules 2201 and 40 CFR 60 GG] Federally Enforceable Through Title V Permit
- 22. Compliance testing shall be required at least once per twelve-month period for which the technology is used. Switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa, shall not be required solely for source testing purposes. [District Rule 2201 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 23. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = {[a-(b x c/1,000,000)] x 1,000,000/b}, where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), and c = change in measured NOx concentration ppmv at 15% O2 across the catalyst. [District Rule 4102]

Permit Unit Requirements for C-3844-1-17 (continued)

- 24. Compliance testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used, PM10: EPA Method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA Method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 27. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 28. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 29. Demonstration of compliance with the annual average sulfur content limit shall be demonstrated by a 12 month rolling average of the sulfur content either (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) tested using ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [District Rule 1081 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 30. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 31. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 32. The permittee shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when no continuous emission monitoring data for NOx is available or when continuous emission monitoring system is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-1-17 (continued)

- 34. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, and calculated NOx mass emission rates (lb/hr). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 36. All records shall be maintained, retained on-site for a minimum of five (5) years and shall be made available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3844-3-3

### **EQUIPMENT DESCRIPTION:**

EXPIRATION DAT

440 BHP CATERPILLAR MODEL 3406 TA DIESEL-FIRED LOW USE IC ENGINE POWERING A COMPRESSOR TO START THE GAS TURBINES (C-3844-1)

# PERMIT UNIT REQUIREMENTS

- 1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. Total time shall include all operational use and operation for maintenance and testing purposes. [District Rule 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 6. Operation of this engine for all purposes shall not exceed 1 hour per day and 50 hours per year. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 7. Emissions from this engine shall not exceed any of the following limits: 6.9 g-NOx/hp-hr, 3.03 g-CO/hp-hr or 1.12 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Emissions from this engine shall not exceed 0.1 g-PM10/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain daily and annual records of operation. Records shall include the date, the number of hours of operation, the quantity of diesel fuel used, and the purpose of the operation (e.g., startup of turbine, testing, maintenance, etc.). Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 4702, and 40 CFR 60 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first.
  [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

### Permit Unit Requirements for C-3844-3-3 (continued)

- 13. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 15. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-3844-5-4

#### **EQUIPMENT DESCRIPTION:**

EXPIRATION DATE: 71/30/2022

329 BHP CAT MODEL #G379 RICH-BURN NATURAL GAS-FIRED IC ENGINE POWERING AN ELECTRICAL GENERATOR AND SERVED BY A 3-WAY CATALYST

# PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- 7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 10. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 11. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. The permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit



Permit Unit Requirements for C-3844-5-4 (continued)

- 13. This engine shall be operated within the ranges that the source testing has shown result in pollution concentrations within the emissions limits as specified on this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Combined annual emissions from units C-3844-1 and -5 shall not exceed any of the following limits: 22,816 lb-NOx/year, 7,068 lb-SOx/year, 16,368 lb-PM10/year, 89,032 lb-CO/year, and 6,448 lb-VOC/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Emissions from this IC engine shall not exceed any of the following limits: 5 ppmvd NOx @ 15% O2 (equivalent to 0.072 g-NOx/hp-hr), 0.0104 g-SOx/hp-hr, 0.071 g-PM10/hp-hr, 670 ppmvd CO @ 15% O2 (equivalent to 5.69 g-CO/hp-hr), or 25 ppmvd VOC @ 15% O2 (equivalent to 0.125 g-VOC/hp-hr). [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702]
- 19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-5-4 (continued)

- 26. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 27. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first.
  [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 29. The engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 30. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

# ATTACHMENT B

Previous Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

### PERMIT UNIT: C-3844-1-13

### EXPIRATION DATE: 11/30/2022

### **EQUIPMENT DESCRIPTION:**

49.9 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND ELECTRICAL POWER GENERATING SYSTEM CONSISTING OF TWO 25.0 MW PRATT & WHITNEY MODEL #FT4C1 NATURAL GAS-FIRED (TWINPAC CONFIGURATION) GAS TURBINE ENGINES (GTE) WITH DRY LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY, A SHARED SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH A 28" CORMETECH LAYER AND INLET AIR FOGGING

# PERMIT UNIT REQUIREMENTS

- 1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201] Federally Enforceable Through Title V Permit
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 3. Both turbine engines shall be operated simultaneously, except during start up and shut down. [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. Gas turbine engines and generator lube oil vents shall be equipped with mist eliminators. Visible emissions from lube oil vents shall not exhibit opacity of 5% or greater except for up to three minutes in any hour. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. Gas turbine engines shall be equipped with a continuous monitoring system to measure and record hours of operation and fuel consumption. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 6. Gas turbine engines shall be equipped with a single continuous emissions monitor (CEM) for NOx (before and after SCR system), CO, and O2. The CEM shall meet the requirements of 40 CFR part 60, Appendix F and shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- The facility shall maintain equipment, facilities, and systems compatible with the District's CEM data polling software system and shall make CEM data available to the District's automated polling system on a daily basis. [District Rule 1080] Federally Enforceable Through Title V Permit
- 8. Upon notice by the District that the facility's CEM system is not providing polling data, the facility may continue to operate without providing automated data for a maximum of 30 days per calendar year provided the CEM data is sent to the District by a District-approved alternative method. [District Rule 1080] Federally Enforceable Through Title V Permit
- 9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-1-13 (continued)

- 10. Gas turbine engines shall be fired exclusively on natural gas with a sulfur content of no greater than 1.0 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rules 2201 and 4801, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- Combined annual emissions from units C-3844-1 and C-3844-5 shall not exceed any of the following limits: 22,816 lb-NOx/year, 7,068 lb-SOx/year, 16,368 lb-PM10/year, 89,032 lb-CO/year, or 6,448 lb-VOC/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Maximum annual heat input for both natural gas-fired turbine engines combined shall not exceed 2,480,000 MMBtu/year, measured on a calendar year period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 13. Daily combined NOx emissions from both natural gas-fired turbine engines shall not exceed 148.8 lb-NOx/day, measured on a 24 hour rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 14. Annual combined NOx emissions from both natural gas-fired turbine engines shall not exceed 22,816 lb-NOx/year, measured on a calendar year period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Except during thermal stabilization periods, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 6.20 lb-NOx/hour (as NO2) equivalent to 2.5 ppmvd @ 15% O2, 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour equivalent to 16.0 ppmvd @ 15% O2, 1.75 lb-VOC/hour (as methane) equivalent to 2.0 ppmv @ 15% O2, or 10 ppmv ammonia @ 15% O2. All emission limits are based on one (1) hour rolling averages. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 16. During periods of thermal stabilization, combined emissions from both natural gas-fired turbine engines shall not exceed any of the following limits: 25.0 lb-NOx/hour (as NO2), 1.92 lb-SOx/hour (as SO2), 4.45 lb-PM10/hour, 24.20 lb-CO/hour, or 1.75 lb-VOC/hour (as methane), based on one hour averages. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 17. Thermal stabilization is defined as the start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours as stated in Section 3.25 of Rule 4703. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. The emission control systems shall be in operation and emissions shall be minimized insofar as technologically feasible during startup and shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 19. Compliance testing to measure NOx (as NO2), CO, VOC, ammonia emissions, and fuel gas sulfur content requirements of this permit shall be conducted at least once every twelve months. [District Rules 2201 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 20. Compliance testing to measure PM10 shall be conducted at least once every 60 months. [District Rule 2201] Federally Enforceable Through Title V Permit
- 21. Compliance testing to measure NOx (as NO2), CO, and ammonia emissions shall be conducted within 60 days of switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa. [District Rules 2201 and 40 CFR 60 GG] Federally Enforceable Through Title V Permit
- 22. Compliance testing shall be required at least once per twelve-month period for which the technology is used. Switching the turbine combustion emission control technology from Dry Low NOx (DLN) to water injection technology, or vice versa, shall not be required solely for source testing purposes. [District Rule 2201 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 23. Compliance with ammonia slip limit shall be demonstrated by using the following calculation procedure: ammonia slip ppmv @ 15% O2 = {[a-(b x c/1,000,000)] x 1,000,000/b}, where a = ammonia injection rate (lb/hr)/17 (lb/lb mol), b = dry exhaust gas flow rate (lb/hr)/29 (lb/lb mol), and c = change in measured NOx concentration ppmv at 15% O2 across the catalyst. [District Rule 4102]

Permit Unit Requirements for C-3844-1-13 (continued)

- 24. Compliance testing shall be District witnessed, or authorized and samples shall be collected by a California Air Resources Board certified testing laboratory. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 25. The following test methods shall be used, PM10: EPA Method 5 (front half and back half), NOx: EPA Method 7E or 20, CO: EPA Method 10 or 10B, O2: EPA Method 3, 3A, or 20, VOC: EPA Method 18 or 25, ammonia: BAAQMD ST-1B, and fuel gas sulfur content: ASTM D3246. Alternative test methods as approved by the District may also be used to address the source testing requirements of this permit. [District Rules 1081 and 4703, and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 26. Results of continuous emissions monitoring shall be reduced according to the procedure established in 40 CFR, Part 51, Appendix P, paragraphs 5.0 through 5.3.3, or by other methods deemed equivalent by mutual agreement with the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 27. Audits of continuous emission monitors shall be conducted quarterly, except during quarters in which relative accuracy and total accuracy testing is performed, in accordance with EPA guidelines. The District shall be notified prior to completion of the audits. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit
- 28. The owner/operator shall perform a relative accuracy test audit (RATA) as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit
- 29. Demonstration of compliance with the annual average sulfur content limit shall be demonstrated by a 12 month rolling average of the sulfur content either (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) tested using ASTM Methods D1072, D3246, D4084, D4468, D4810, D6228, D6667 or Gas Processors Association Standard 2377. [District Rule 1081 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 30. Excess emissions shall be defined as any operating hour in which the 4-hour or 30-day rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 31. The permittee shall submit a written report to the APCO for each calendar quarter, within 30 days of the end of the quarter, including: time intervals, data and magnitude of excess emissions, nature and cause of excess emissions (if known), corrective actions taken and preventive measures adopted; averaging period used for data reporting shall correspond to the averaging period for each respective emission standard; applicable time and date of each period during which the CEM was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60 Subpart GG] Federally Enforceable Through Title V Permit
- 32. The permittee shall submit to the District information correlating the NOx control system operating parameters to the associated measured NOx output. The information must be sufficient to allow the District to determine compliance with the NOx emission limits of this permit when no continuous emission monitoring data for NOx is available or when continuous emission monitoring system is not operating properly. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, length and reason for reduced load periods, total hours of operation, and type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-1-13 (continued)

- 34. The permittee shall maintain the following records: date and time, duration, and type of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, and maintenance of any continuous emission monitor. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 35. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, and calculated NOx mass emission rates (lb/hr). [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 36. All records shall be maintained, retained on-site for a minimum of five (5) years and shall be made available for District inspection upon request. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

### **PERMIT UNIT: C-3844-3-2**

### EXPIRATION DATE: 11/30/2022

### **EQUIPMENT DESCRIPTION:**

440 BHP CATERPILLAR MODEL 3406 TA DIESEL-FIRED LOW USE IC ENGINE POWERING A COMPRESSOR TO START THE GAS TURBINES (C-3844-1)

# PERMIT UNIT REQUIREMENTS

- 1. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 2. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 4. Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. Total time shall include all operational use and operation for maintenance and testing purposes. [District Rule 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 6. Operation of this engine for all purposes shall not exceed 1 hour per day and 50 hours per year. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- Emissions from this engine shall not exceed any of the following limits: 6.9 g-NOx/hp-hr, 3.03 g-CO/hp-hr or 1.12 g-VOC/hp-hr. [District Rule 2201] Federally Enforceable Through Title V Permit
- 8. Emissions from this engine shall not exceed 0.1 g-PM10/hp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102] Federally Enforceable Through Title V Permit
- 9. During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. The permittee shall maintain daily and annual records of operation. Records shall include the date, the number of hours of operation, the quantity of diesel fuel used, and the purpose of the operation (e.g., startup of turbine, testing, maintenance, etc.). Such records shall be retained on-site for a period of at least five years and made available for District inspection upon request. [District Rules 1070 and 4702, and 40 CFR 60 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 500 hours of operation or every 12 months, whichever comes first.
  [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 12. The engine's air filter shall be inspected every 1,000 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

### Permit Unit Requirements for C-3844-3-2 (continued)

- 13. The engine's hoses and belts shall be inspected every 500 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 14. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days of the oil changes for the engine. The analysis program must be part of the program, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 16. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 18. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

# San Joaquin Valley Air Pollution Control District

### **PERMIT UNIT:** C-3844-5-3

### EXPIRATION DATE: 11/30/2022

### **EQUIPMENT DESCRIPTION:**

329 BHP CAT MODEL #G379 RICH-BURN NATURAL GAS-FIRED IC ENGINE POWERING AN ELECTRICAL GENERATOR AND SERVED BY A 3-WAY CATALYST

# PERMIT UNIT REQUIREMENTS

- 1. No modification to this unit shall be performed without an Authority to Construct for such modification(s), except for changes specified in conditions below. [District Rule 2010] Federally Enforceable Through Title V Permit
- 2. While dormant, the fuel line shall be physically disconnected from the unit. [District Rule 2080] Federally Enforceable Through Title V Permit
- 3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
- 4. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
- 5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
- 6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
- 7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
- 8. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 10. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
- 11. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702] Federally Enforceable Through Title V Permit
- 12. The permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-5-3 (continued)

- 13. This engine shall be operated within the ranges that the source testing has shown result in pollution concentrations within the emissions limits as specified on this permit. [District Rule 4702] Federally Enforceable Through Title V Permit
- Combined annual emissions from units C-3844-1 and -5 shall not exceed any of the following limits: 22,816 lb-NOx/year, 7,068 lb-SOx/year, 16,368 lb-PM10/year, 89,032 lb-CO/year, and 6,448 lb-VOC/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 15. Emissions from this IC engine shall not exceed any of the following limits: 5 ppmvd NOx @ 15% O2 (equivalent to 0.072 g-NOx/hp-hr), 0.0104 g-SOx/hp-hr, 0.071 g-PM10/hp-hr, 670 ppmvd CO @ 15% O2 (equivalent to 5.69 g-CO/hp-hr), or 25 ppmvd VOC @ 15% O2 (equivalent to 0.125 g-VOC/hp-hr). [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
- 16. The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702] Federally Enforceable Through Title V Permit
- 17. Source testing to measure natural gas-combustion NOx, CO, and VOC emissions from this unit shall be measured not less than once every 24 months. [District Rule 4702] Federally Enforceable Through Title V Permit
- 18. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rule 4702]
- 19. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rule 4702] Federally Enforceable Through Title V Permit
- 20. The following test methods shall be used: NOx (ppmv) EPA Method 7E or ARB Method 100, CO (ppmv) EPA Method 10 or ARB Method 100, stack gas oxygen EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) EPA Method 18, 25A or 25B, or ARB Method 100. [District Rules 1081 and 4702] Federally Enforceable Through Title V Permit
- 21. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
- 22. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
- 23. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
- 24. The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702] Federally Enforceable Through Title V Permit
- 25. All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Permit Unit Requirements for C-3844-5-3 (continued)

- 26. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 27. The engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- The engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first.
  [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 29. The engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 30. The engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 31. The permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 32. The permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 33. The permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

# ATTACHMENT C

**Detailed Summary List of Facility Permits** 

| SJVUAPCD<br>CENTRAL   |                                 | S          |   | For Fac       | i <b>cility Rej</b><br>ility=3844<br>me and Per |   | er   | 7/6/23<br>1:40 pm                              |
|---|---------------------------------|------------|---|---------------|---|---|--|--|
| WELLHEAD POWER PANOCHE, LLC.<br>43649 W PANOCHE RD<br>FIREBAUGH, CA 93622 |                                 |            | FAC # C 3844<br>STATUS: A<br>TELEPHONE: |               |   | TYPE: TitleV EXPIRE ON:<br>TOXIC ID: 51925 AREA:<br>INSP. DATE: | 11/30/2022<br>2 /<br>06/24   |  |
| PERMIT NUMBER   | FEE DESCRIPTION                 | FEE RULE   | QTY                                     | FEE<br>AMOUNT | FEE<br>TOTAL                                    | PERMIT<br>STATUS  | EQUIPMENT DESCRIPTION  |  |
| C-3844-1-13   | 49.9 MW                         | 3020-08B G | 1                                       | 12,254.00     | 12,254.00                                       | A   | 49.9 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMA<br>ELECTRICAL POWER GENERATING SYSTEM CONSISTIN<br>25.0 MW PRATT & WHITNEY MODEL #FT4C1 NATURAL G<br>(TWINPAC CONFIGURATION) GAS TURBINE ENGINES (G<br>LOW NOX (DLN) OR WATER INJECTION TECHNOLOGY, A<br>SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH<br>CORMETECH LAYER AND INLET AIR FOGGING | G OF TWO<br>AS-FIRED<br>TE) WITH DRY<br>SHARED |
| C-3844-3-2  | 440 bhp IC engine               | 3020-10 D  | 1                                       | 577.00        | 577.00  | A   | 440 BHP CATERPILLAR MODEL 3406 TA DIESEL-FIRED LO<br>ENGINE POWERING A COMPRESSOR TO START THE GA<br>(C-3844-1)  |  |
| C-3844-5-3  | 329 bhp IC engine               | 3020-10 C  | 1                                       | 290.00        | 290.00  | A   | 329 BHP CAT MODEL #G379 RICH-BURN NATURAL GAS-F<br>ENGINE POWERING AN ELECTRICAL GENERATOR AND<br>3-WAY CATALYST   |  |
| C-3844-6-0  | 25.0 MW Power Generating System | 3020-08A F | 1                                       | 9,803.00      | 9,803.00  | D   | 25.0 MW PRATT & WHITNEY MODEL FT4C-1 NATURAL G/<br>GAS TURBINE ENGINE (GTE) WITH DRY LOW NOX (DLN)<br>INJECTION TECHNOLOGY AND A SHARED SELECTIVE C/<br>REDUCTION (SCR) SYSTEM WITH OXIDATION CATALYST<br>AIR FOGGING SHARED WITH PERMIT C-3844-1 USED AS<br>TEMPORARY REPLACEMENT UNIT (TREU) FOR ONE TUR<br>ON PERMIT C-3844-1                 | OR WATER<br>ATALYTIC<br>'S AND INLET<br>A      |

Number of Facilities Reported: 1