



May 13, 2021

Mr. Claude Couvillion MRP San Joaquin Energy, LLC 14950 W Schulte Rd Tracy, CA 95377

Re: Notice of Preliminary Decision - Title V Permit Renewal

Facility Number: C-4140 Project Number: C-1202391

Dear Mr. Couvillion:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for MRP San Joaquin Energy, LLC at 10596 Idaho Ave, Hanford, California.

The notice of preliminary decision for this project has been posted on the District's website (www.valleyair.org). 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. Errol Villegas, Permit Services Manager, at (559) 230-5900.

Sincerely,

**Brian Clements** 

**Director of Permit Services** 

**Enclosures** 

CC: Courtney Graham, CARB (w/enclosure) via email Laura Yannayon, EPA (w/enclosure) via EPS CC:

> Samir Sheikh Executive Director/Air Pollution Control Officer

# SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation MRP San Joaquin Energy, LLC C-4140

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# TITLE V PERMIT RENEWAL EVALUATION <u>Power Plant</u>

Engineer: Mungi Hong
Date: May 11, 2021

Facility Number: C-4140

Facility Name: MRP San Joaquin Energy, LLC

Mailing Address: 14950 W Schulte Rd

Tracy, CA 95377

Contact Name: Claude Couvillion

**Phone:** (312) 766-8716

Responsible Official: Claude Couvillion

**Title:** Director of Operations

**Project #:** C-1202391

Deemed Complete: July 22, 2020

#### I. PROPOSAL

MRP San Joaquin Energy, LLC was issued its last renewed Title V permit on April 3, 2017. As required by District Rule 2520, the applicant has applied to renew their Title V permit. 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 renewed Title V permit.

In addition, in accordance with 40 CFR Part 75, the facility has requested to add ASTM D5504, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescene, to Condition 28 of permit units C-4140-1 and C-4140-2 as an additional sampling method when using manual sampling to determine the sulfur content of the fuel.

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

MRP San Joaquin Energy, LLC is located at 10596 Idaho Ave in Hanford, 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 is requesting to use the following model general permit Templates:

#### A. Template SJV-UM-0-3 Facility Wide Umbrella

The applicant has requested to utilize template No. SJV-UM-0-3, <u>Facility Wide Umbrella</u>. Based on the information submitted in the Template Qualification Form, the applicant qualifies for the use of this template.

#### V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed Operating Permit are based on model general permit templates that have been previously subject to EPA and public review. The terms and conditions from the model general permit templates are included in the proposed permit and are not subject to further EPA and public review.

For permit applications utilizing model general permit templates, public and agency comments on the District's proposed actions are limited to the applicant's eligibility for model general permit template, applicable requirements not covered by the model general permit template, and the applicable procedural requirements for issuance of Title V Operating Permits.

The following permit conditions, including their underlying applicable requirements, originate form model general permit templates and are not subject to further EPA or public review.

Conditions 2 through 41 of the requirements for permit unit C-4140-0-3.

#### VI. FEDERALLY ENFORCEABLE REQUIREMENTS

#### **Rules Addressed by General Permit Template**

District Rule 2010, Permits Required (amended December 17, 1992)

- District Rule 2020, <u>Exemptions</u> (amended December 18, 2014)<sup>1</sup>
- District Rule 2031, <u>Transfer of Permits</u> (amended December 17, 1992)
- District Rule 2070, <u>Standards for Granting Applications</u>, <u>Section 7.0</u> (amended December 17, 1992)
- District Rule 2080, Conditional Approval (amended December 17, 1992)
- District Rule 2520, <u>Federally Mandated Operating Permits</u>, <u>Sections 5.2</u>, <u>9.1.1</u>, <u>9.4</u>, <u>9.5</u>, <u>9.7</u>, <u>9.8</u>, <u>9.9</u>, <u>9.13.1</u>, <u>9.13.2</u>, <u>9.16</u>, <u>10.0</u> (amended June 21, 2001 ⇒ amended August 15, 2019)
- District Rule 4101, Visible Emissions (amended February 17, 2005)
- District Rule 8021, <u>Construction, Demolition Excavation, Extraction, and Other Earthmoving Activities</u> (amended August 19, 2004)
- District Rule 8031, <u>Bulk Materials</u> (amended August 19, 2004)
- District Rule 8041, Carryout and Trackout (amended August 19, 2004)
- District Rule 8051, Open Areas (amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads (amended August 19, 2004)
- District Rule 8071, <u>Unpaved Vehicle/Equipment Traffic Areas</u> (amended September 16, 2004)
- 40 CFR Part 61, Subpart M, <u>National Emission Standards for Asbestos</u> (amended July 20, 2004)
- 40 CFR Part 82, Subpart B, <u>Servicing of Motor Vehicle Air Conditioners</u> (amended June 25, 2013 ⇒ amended August 23, 2019)
- 40 CFR Part 82, Subpart F, <u>Recycling and Emissions Reduction</u> (April 10, 2015
   ⇒ amended April 10, 2020)

<sup>&</sup>lt;sup>1</sup> This amendments made to this rule on August 18, 2011 and December 18, 2014 have no impact on this source; therefore, template SJV-UM-0-3 is still valid for this project.

#### **Rules Not Addressed by General Permit Template**

#### A. Rules Updated or Evaluated

- District Rule 2201, New and Modified Stationary Source Review Rule (amended April 21, 2011 ⇒ amended August 15, 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)
- 40 CFR Part 60, Subpart IIII, <u>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</u> (amended July 7, 2016 ⇒ December 4, 2020)
- 40 CFR Part 63, Subpart YYYY, <u>National Emission Standards for Hazardous</u> <u>Air Pollutants for Stationary Combustion Turbines</u> (amended April 20, 2006 ⇒ November 19, 2020)
- 40 CFR Part 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (amended January 30, 2013 ⇒ December 4, 2020)
- 40 CFR Part 64, <u>Compliance Assurance Monitoring</u> (amended October 22, 1997)
- 40 CFR Part 72, <u>Permits Regulation</u> (amended May 12, 2005 ⇒ March 28, 2011)
- 40 CFR Part 73, <u>Sulfur Dioxide Allowance System</u> (amended May 12, 2005 ⇒ April 28, 2006)
- 40 CFR Part 75, <u>Continuous Emission Monitoring</u> (amended March 28, 2011 ⇒ April 22, 2020)

#### B. Rules Removed

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

#### C. Rules Added

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

#### D. Rules Not Updated

- District Rule 1080, Stack Monitoring (amended December 17, 1992)
- District Rule 1081, Source Sampling (amended December 17, 1992)
- District Rule 2410, <u>Prevention of Significant Deterioration</u> (adopted June 16, 2011)
- District Rule 4201, <u>Particulate Matter Concentration</u> (amended December 17, 1992)
- District Rule 4702, <u>Internal Combustion Engines</u> (amended November 14, 2013)
- District Rule 4703, Stationary Gas Turbines (amended September 20, 2007)
- District Rule 4801, Sulfur Compounds (amended December 17, 1992)
- 40 CFR Part 60, Subpart A, <u>General Provisions</u> (promulgated October 6, 1975)
- 40 CFR Part 60, Subpart GG, <u>Standards of Performance for Stationary Gas Turbines</u> (amended February 27, 2014)
- 40 CFR Part 77, Excess Emissions (amended May 12, 2005)
- Kings County Rule 407 (amended January 5, 1988)

#### 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:

#### **Rules Addressed by General Permit Template**

- District Rule 1100, <u>Equipment Breakdown</u> (amended December 17, 1992)
- District Rule 1160, Emission Statements (adopted November 18, 1992)

• District Rule 2040, <u>Applications</u> (amended December 17, 1992)

#### **Rules Not Addressed by General Permit Template**

#### A. Rules Added/Updated

There are no rules that are not federally enforceable being added or updated at this time.

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

#### 1. District Rule 4102, Nuisance (as amended December 17, 1992)

The purpose of this rule is to protect the health and safety of the public, and this rule applies to any source operation which emits or may emit air contaminants or other materials.

The following conditions are based on this rule and are therefore not federally enforceable through Title V:

| Permit Unit | Condition # |
|-------------|-------------|
| C-4140-0-3  | 1           |
| C-4140-1-7  | 22          |
| C-4140-2-7  | 22          |

#### VIII. PERMIT REQUIREMENTS

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

#### A. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 has been amended since this facility's Title V permit was last renewed. However, the requirements of this rule are only triggered when a source installs new equipment and/or undergoes a modification. All applicable requirements from any NSR permit actions have already been incorporated into the current Title V permit. Therefore, the updated requirements of this rule are not applicable at this time.

#### B. 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 procedures 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 and will therefore 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.

#### C. District Rule 4601 - Architectural Coatings

District Rule 4601 was amended on April 16, 2020. However, the amended rule is not SIP-approved by EPA. The previous version of this rule (amended December 17, 2009) is SIP-approved and is addressed by the District's facility-wide umbrella template. Therefore, template SJV-UM-0-3 is still valid for this project.

# D. 40 CFR Part 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

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.

Section 60.4200(a)(2) states that owners and operators of stationary CI ICE that comments construction after July 11, 2005, where the stationary CI ICE are:

- (i) Manufactured after April 1, 2006, and are not fire pump engines, or
- (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.

Section 60.4200(a)(3) states that owners and operators of any 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 CI ICE at this facility was installed prior to July 11, 2005 and has never been modified or reconstructed after July 11, 2005. Therefore, the CI ICE at this facility is not subject to the requirements of this subpart.

# E. 40 CFR Part 63, Subpart YYYY – National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emissions from stationary combustion turbines located at major sources of HAP emissions, and requirements to demonstrate initial and continuous compliance with the emission and operating limitations.

Section 63.6085(b) states, "A major source of HAP emissions is a contiguous site under common control that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site."

As seen in Appendix D below, the facility is not a major source as defined in Section 63.6085(b). Therefore, this subpart is not applicable and no further discussion is required.

# F. 40 CFR Part 63, Subpart ZZZZ – National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

This subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

The amendments to this subpart do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following conditions on the draft renewed permit are a mechanism to ensure compliance with the requirements of this subpart:

| Permit     | Condition #                                 |
|------------|---|
| C-4140-4-2 | 1, 2, 6, 11, 12, 13, 14, 15, 18, 19, and 20 |

#### G. 40 CFR Part 64 - Compliance Assurance Monitoring

#### Section 64.2 - Applicability

40 CFR Part 64 requires Compliance Assurance Monitoring (CAM) 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>(lb/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. C-4140-1 and '-2: NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM CONSISTING OF A NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEM, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM AND AN OXIDATION CATALYST
- 1) Each permit unit contains emission limits for NOx, SOx, PM<sub>10</sub>, CO, and VOC.
- 2) Each permit unit has no add-on controls for SOx or PM<sub>10</sub> emissions; therefore, SOx and PM<sub>10</sub> emissions are not subject to CAM. Pursuant to 40 CFR 64.2(b)(1)(vi), NOx and CO emissions are exempt from CAM since both permits already require a continuous compliance determination method for both NOx and CO emissions.

Each unit has add-on controls (oxidation catalysts) for VOC emissions; therefore, both units may be subject to CAM for VOC emissions.

3) The post-control potential to emit (PE) for VOC emissions is based on the post-control PE of 1.19 lb/hr², operation limit of 8,000 hr/year², and the catalytic oxidation control efficiency (CE) is 71%³.

```
Pre-control PE = Post-control PE (lb-VOC/hr) x Operation Limit (hr/year) ÷ (1 – CE) = 1.19 lb-VOC/hr x 8,000 hr/year ÷ (1 – 0.71) = 32,828 lb-VOC/year
```

Since the pre-control PE for each unit is greater than the major source threshold of 20,000 lb-VOC/year, these units are subject to CAM for VOC emissions.

#### §64.3 - Monitoring Design Criteria

This section specifies the design criteria for the CAM system. Paragraph (a) (*General criteria*) requires that the CAM system be designed to obtain data for one or more appropriate indicators of emission control system performance and requires the owner to establish appropriate ranges or designated conditions for the selected indicators such that operation within the ranges provides a reasonable assurance of ongoing compliance with emission limitations or standards for the anticipated range of operating conditions.

Paragraph (b) (*Performance criteria*) requires the owner or operator to establish and maintain the following:

- Specifications to ensure that representative data are collected.
- Verification procedures for startup of new monitoring equipment.
- Quality assurance and control practices to ensure continuing validity of data.
- Data collection frequency and procedures.

Paragraph (c) (*Evaluation factors*) requires the owner or operator to take into account site-specific factors in the design of the CAM system.

Paragraph (d) (Special criteria for the use of continuous emission, opacity, or predictive monitoring systems) requires the owner or operator to use a continuous emission monitoring system (CEMS), continuous opacity monitoring system (COMS), or a predictive emission monitoring system (PEMS) to satisfy CAM requirements, provided that these monitoring systems

<sup>&</sup>lt;sup>2</sup>PTOs C-4140-1-6 and '-2-6

<sup>&</sup>lt;sup>3</sup>District BACT Guideline 3.4.4

are required pursuant to other authority under the Clean Air Act or state or local law. This subsection also stipulates the following:

- The use of a CEMS, COMS, or PEMS that satisfies any of the following monitoring requirements shall be deemed to satisfy the general design criteria in paragraphs (a) and (b) of this section, provided that a COMS may be subject to the criteria for establishing indicator ranges under paragraph (a) of this section:
- (i) Section 51.214 and appendix P of 40 CFR 51;
- (ii) Section 60.13 and appendix B of 40 CFR 60;
- (iii) Section 63.8 and any applicable performance specifications required pursuant to the applicable subpart of 40 CFR 63;
- (iv) 40 CFR 75;
- (v) Subpart H and appendix IX of 40 CFR 266; or
- (vi) In the event that the monitoring system is not subject to any of the requirements listed above, comparable requirements and specifications established by the permitting authority.
- The owner or operator shall design the monitoring system subject to this paragraph (d) to:
- (i) Allow for reporting of exceedances (or excursions if applicable to a COMS used to assure compliance with a particulate matter standard), consistent with any period for reporting of exceedances in an underlying requirement. If an underlying requirement does not contain a provision for establishing an averaging period for the reporting of exceedances or excursions, the criteria used to develop an averaging period specified in the data collection procedures required under paragraph (b) of this section shall apply; and
- (ii) Provide an indicator range consistent with paragraph (a) of this section for a COMS used to assure compliance with a particulate matter standard. If an opacity standard applies to the pollutant-specific emissions unit, such limit may be used as the appropriate indicator range unless the opacity limit fails to meet the criteria in paragraph (a) of this section after considering the type of control device and other site-specific factors applicable to the pollutant-specific emissions unit.

#### §64.4 - Submittal Requirements

This section specifies submittal requirements for the owner or operator which ensure the CAM system will comply with the design criteria of §64.3.

#### §64.5 - Deadlines for Submittals

This section specifies required timing for submittals required under §64.4.

Large pollutant-specific emissions units (those with controlled emissions exceeding major source thresholds) are required to make the submittals as a part of the initial Title V permit application where the application has either not been filed or has not been deemed complete. Where the initial Title V permit has been issued without implementation of 40 CFR 64, the owner or operator must make the required submittals as a part of a subsequent application for any significant permit revision. If the required information is not submitted by either of these deadlines, it must be submitted as a part of the application for the Title V permit renewal.

For *other pollutant-specific emissions units*, the required submittal deadline is the application for Title V permit renewal.

#### §64.6 - Approval of monitoring

This section stipulates the following:

- A requirement that the permitting authority act to approve the proposed monitoring by confirming that the monitoring submitted complies with the requirements of §64.3
- An allowance for the permitting authority to condition the approval based on collecting additional data on the indicators to be monitored, including performance or compliance testing
- The minimum conditions that must be placed on the permit in the event that
  the proposed monitoring is approved by the permitting authority including a
  milestone schedule for completion of any conditional approval actions
  required by the owner or operator, such as installations, testing, or
  verification of operational status
- Actions required by the permitting authority in the event that the proposed monitoring is not approved

The CAM submittal requirements and stipulations for approval of such submittals pursuant to §64.4, §64.5, and §64.6 have been completed in conjunction with the application and review process for this renewal of the Title V permit.

#### §64.7 - Operation of Approved Monitoring

This section stipulates the following:

- Requirements that the owner or operator 1) commence the monitoring upon receipt of a Title V permit that includes such monitoring, 2) properly maintain the monitoring system, and 3) conduct all monitoring in a continuous mode with the exception of outage periods associated with monitor malfunction and repair and with quality assurance and control activities
- Actions required by the owner or operator in response to excursions or exceedances
- A requirement for the owner or operator to document any need for improved monitoring based upon either an identification of a failure of the monitoring system to identify an excursion or exceedance or upon the results of compliance or performance testing that identifies a need to modify the monitoring

#### §64.8 - Quality Improvement Plan (QIP) Requirements

This section stipulates that the Administrator or the permitting authority may require that the facility develop and implement a QIP in the event of a determination of a need for improved monitoring pursuant to §64.7. §64.8 also identifies the minimum elements required in the QIP, and requires that the facility implement the QIP as expeditiously as possible, with implementation not exceeding 180 days after the date that the need for implementation was identified unless the permitting authority is notified.

#### §64.9 - Reporting and Recordkeeping Requirements

This section stipulates the minimum reporting and recordkeeping requirements for facilities subject to 40 CFR 64.

#### §64.10 - Savings Provisions

This section states that the purpose of 40 CFR 64 is to require, as a part of the issuance of a Title V permit, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of 40 CFR 64. In addition, §64.10 states that nothing in 40 CFR 64 shall excuse an owner or operator from any other requirements of federal, state or local law or restrict or abrogate the authority of the Administrator or of the permitting authority.

The facility proposed to comply with CAM by monitoring the oxidation catalyst temperatures under the last Title V renewal (C-1152715). There have been no changes to units C-4140-1 or '-2 since the last Title V permit renewal, and the facility has not proposed any changes to either units under this Title V permit renewal; therefore, compliance is expected to continue.

The following conditions on the draft renewed permits are a mechanism to ensure compliance with the requirements of this subpart:

| Permit     | Condition #                    |
|------------|--------------------------------|
| C-4140-1-7 | 48, 49, 50, 51, 52, 53, and 54 |
| C-4140-2-7 | 48, 49, 50, 51, 52, 53, and 54 |

- b. C-4140-4: DISEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR
- 1) This permit unit contains emission limits only for SOx and PM<sub>10</sub>.
- 2) The unit has no add-on controls for SOx or PM<sub>10</sub> emissions; therefore, it is not subject to CAM and no further discussion is required.

#### H. 40 CFR Part 72 – Permits Regulation

The purpose of 40 CFR Part 72 is to establish certain general provisions and the operating permit program requirements for affected sources and affected units under the Acid Rain Program, pursuant to title IV of the Clean Air Act.

Although this part was amended in 2011, the 2011 amendments to this part were not evaluated when the facility was issued its last renewed Title V permit in 2017.

However, the 2011 amendments to this part do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following conditions on the draft renewed permits are a mechanism to ensure compliance with the requirements of this part:

| Permit     | Condition #                    |
|------------|--------------------------------|
| C-4140-1-7 | 55, 60, 61, 63, 64, 65, and 68 |
| C-4140-2-7 | 55, 60, 61, 63, 64, 65, and 68 |

#### I. 40 CFR Part 73 – Sulfur Dioxide Allowance System

The purpose of this part is to establish the requirements and procedures for the following:

- (a) The allocation of sulfur dioxide emissions allowances;
- (b) The tracking, holding, and transfer of allowances;

- (c) The deduction of allowances for purposes of compliance and for purposes of offsetting excess emissions pursuant to parts 72 and 77 of this chapter;
- (d) The sale of allowances through EPA-sponsored auctions and a direct sale, including the independent power producers written guarantee program; and
- (e) The application for, and distribution of, allowances from the Conservation and Renewable Energy Reserve.
- (f) The application for, and distribution of, allowances for desulfurization of fuel by small diesel refineries.

Although this part was amended in 2006, the 2006 amendments to this part were not evaluated when the facility was issued its last renewed Title V permit in 2017.

However, the 2006 amendments to this part do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following conditions on the draft renewed permits are a mechanism to ensure compliance with the requirements of this part:

| Permit     | Condition # |
|------------|-------------|
| C-4140-1-7 | 58 and 62   |
| C-4140-2-7 | 58 and 62   |

#### J. 40 CFR Part 75 – Continuous Emission Monitoring

The purpose of 40 CFR Part 75 is to establish requirements for the monitoring, recordkeeping, and reporting of SO2, NOx, and CO2 emissions, volumetric flow, and opacity data from affected units under the Acid Rain Program pursuant to sections 412 and 821 of the Clean Air Act. In addition, this part sets forth provisions for the monitoring, recordkeeping, and reporting of NOx mass emissions with which EPA, individual States, or groups of States may require sources to comply in order to demonstrate compliance with a NOx mass emission reduction program, to the extent these provisions are adopted as requirements under such a program.

These regulations apply to each affected unit subject to Acid Rain emission limitations or reduction requirements for SO2 or NOx, except as provided in (b) and (c) of Section 75.2 in 40 CFR Part 75.

As discussed above, the facility is proposing to add ASTM D5504 to Condition 28 of permit units C-4140-1 and C-4140-2 as an additional sampling method when using manual sampling to determine the sulfur content of the fuel. The District has verified that ASTM D5504 is one of the sampling methods specified

in Section 2.3.3.1.2 of Appendix D to this part to determine the sulfur content of the fuel. Therefore, as the applicant requested, Condition 28 of permit units C-4140-1 and C-4140-2 will be revised as follows:

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 or D5504. EPA approved 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, 40 CFR 60.335(a) & (b)(10), and 40 CFR 75]

Also, the amendments to this part do not have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following conditions on the draft renewed permits are a mechanism to ensure compliance with the requirements of this part:

| Permit     | Condition #                |
|------------|----------------------------|
| C-4140-1-7 | 28, 56, 57, 60, 69, and 70 |
| C-4140-2-7 | 28, 56, 57, 60, 69, and 70 |

#### K. 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 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 have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

| Permit     | Condition # |
|------------|-------------|
| C-4140-0-3 | 29          |

#### L. 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, appliance owners technician certifying programs, and manufacturers of appliances, manufacturers of recovery and/or recycling and/or recycling equipment. approved recovery 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 have any effect on current permit requirements and will therefore not be addressed further in this evaluation.

The following condition on the draft renewed permit is a mechanism to ensure compliance with the requirements of this subpart:

| Permit     | Condition # |
|------------|-------------|
| C-4140-0-3 | 28          |

#### 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

#### 1. Model General Permit Template SJV-UM-0-3

By submitting Model General Permit Template SJV-UM-0-3 qualification form, the applicant has requested that a permit shield be granted for all the applicable requirements identified by the template. Therefore, the permit

shields as granted in Model General Permit Template is included as conditions 40 and 41 of the facility-wide requirements (C-4140-0-3).

#### B. Requirements not Addressed by Model General Permit Templates

The applicant has not requested any permit shields other than as discussed above.

#### C. Obsolete Permit Shields From Existing Permit Requirements

There were no obsolete permit shields listed in the existing permit requirements.

#### 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. 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
- D. HAP Major Source Calculations

# ATTACHMENT A

Draft Renewed Title V Operating Permit

# San Joaquin Valley Air Pollution Control District

**EXPIRATION D FACILITY:** C-4140-0-3

## **FACILITY-WIDE REQUIREMENTS**

- 1. [98] No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. {4362} 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- {4363} 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- {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
- {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
- {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
- 7. {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
- {4368} Every application for a permit required under Rule 2010 (12/17/92) shall be filed in a manner and form 8. prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
- {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

FACILITY-WIDE REQUIRENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Remail to Operate. Any amendments to these Facility-wide Requirements that affect specific Permit Units may constitute modification of those Permit Units

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

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- 10. {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
- 11. {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
- 12. {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
- 13. {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
- 14. {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
- 15. {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
- 16. {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
- 17. {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
- 18. {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
- 19. {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
- 20. {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
- 21. {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
- 22. {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.

- 23. {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
- 24. {4384} No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 25. {4385} All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 26. {4386} The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 27. {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
- 28. {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
- 29. {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
- 30. {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
- 31. {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
- 32. {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
- 33. {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
- 34. {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 WHOE REQUIREMENTS CONTINUE ON NEXT PAGE These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

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- 35. {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
- 36. {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
- 37. {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
- 38. {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
- 39. {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
- 40. {4400} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. {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
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 932

## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-4140-1-7

#### **EQUIPMENT DESCRIPTION:**

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM#1七〇NSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS. SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

- 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. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combustion turbine generator (CTG) 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
- The CTG shall be equipped with a continuous monitoring system to measure and record hours of operation, and fuel consumption. [District Rule 2201 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- Operation of the turbine shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CTG shall be equipped with continuous emission monitors (CEM) for NOx (before and after SCR system), CO, and O2. Exhaust gas continuous emission monitors shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. [District Rules 2201 and 4703, and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- The facility shall operate and 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
- 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption, and the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- 10. CEM cycling times shall be those specified in 40 CFR Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 Location:

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- 11. The exhaust gas continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
- 14. The CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content no greater than 0.25 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, Kings County Rule 407, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
- 15. If this unit is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 16. During startup or shutdown of any gas turbine engine, combined emissions from the two gas turbine engines (Unit #1 and Unit #2) shall not exceed either of the following limits: NOx 15.4 lb or CO 15.4 lb per event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. Startup and shutdown durations shall not exceed a time period of one hour each per occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. 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
- 20. Emission rates from this unit, excluding startup and shutdown, shall not exceed any of the following limits: PM10: 3.03 lb/hr, SOx (as SO2): 0.33 lb/hr, NOx (as NO2): 3.7 ppmvd @ 15% O2 and 6.3 lb/hr, VOC (as methane): 2.0 ppmvd @ 15% O2 and 1.19 lb/hr, or CO: 6.0 ppmvd @ 15% O2 and 6.2 lb/hr. All emission limits, except ammonia, are three hour rolling averages. [District Rules 2201 and 4703, and 40 CFR 60.332(a)] Federally Enforceable Through Title V Permit
- 21. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @ 15% O2 = ((a (b x c/1,000,000)) x (1,000,000 / b) x d, where a = ammonia injection rate (lb/hr) / (17 lb/lb mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous instack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
- 23. Maximum daily emissions from this unit shall not exceed any of the following limits: PM10 72.8 lb/day; SOx (as SO2) 7.8 lb/day; NOx (as NO2) 151.5 lb/day; VOC 28.7 lb/day; or CO 150.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Maximum annual emissions from this unit shall not exceed any of the following limits: NOx (as NO2) 52,314 lb/year; VOC 9,764 lb/year; CO 51,947 lb/year; PM10 25,176 lb/year; or SOx (as SO2) 2,710 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230

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- 25. {2255} The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
- 26. Compliance testing to demonstrate compliance with PM10, NOx (as NO2), VOC, CO, ammonia emission rates, and fuel gas sulfur content shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source 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
- 28. 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 or D5504. EPA approved 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, 40 CFR 60.335(a) & (b)(10), and 40 CFR 75] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [District Rule 4703, 40 CFR 60.8(a), and 40 CFR 60.335(a)] Federally Enforceable Through Title V Permit
- 30. {2270} All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
- 31. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall not operate the gas turbine under load conditions, except as allowed by the transitional operation period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 34. 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
- 35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
- 36. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an 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; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)] Federally Enforceable Through Title V Permit

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230

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- 37. 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
- 38. 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
- 39. 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
- 40. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 41. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [District Rule 1080 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 42. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 44. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 45. The operator of this unit shall keep records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: Kings County Rule 407 as of the date of permit issuance. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 48. This unit shall be equipped with temperature measurement devices that continuously measure the oxidation catalyst inlet temperatures. [40 CFR 64] Federally Enforceable Through Title V Permit
- 49. Except during periods of startup, shutdown, or when conducting combustor tuning activities, the average oxidation catalyst inlet temperature shall not be lower than 700 degrees Fahrenheit. [40 CFR 64] Federally Enforceable Through Title V Permit
- 50. Upon detecting any excursion from the acceptable oxidation catalyst average inlet temperature range, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent the recurrence of the excursion as expeditiously as possible. [40 CFR 64] Federally Enforceable Through Title V Permit

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

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Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 C-4140-1-7: May 12 2021 11:57AM - HONGM

- 51. The permittee shall maintain records of the oxidation catalyst average inlet temperatures and any maintenance/repairs performed on the temperature measurement devices. [40 CFR 64] Federally Enforceable Through Title V Permit
- 52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 53. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 54. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 55. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 57. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 58. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 59. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
- 61. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 62. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 63. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 64. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 65. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 66. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 67. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77 [40 CFR 77] Federally Enforceable Through Title V Permit PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 C-4140-1-7: May 12 2021 11:57AM - HONGM

- 68. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 69. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 70. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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RLANT.HANFORD, CA 93230

Facility Name: MRP SAN JOAQUIN ENERGY, LLC
Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKE
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## San Joaquin Valley Air Pollution Control District

**PERMIT UNIT:** C-4140-2-7

#### **EQUIPMENT DESCRIPTION:**

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2℃ONSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS. SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

- 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. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combustion turbine generator (CTG) 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
- The CTG shall be equipped with a continuous monitoring system to measure and record hours of operation, and fuel consumption. [District Rule 2201 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- Operation of the turbine shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CTG shall be equipped with continuous emission monitors (CEM) for NOx (before and after SCR system), CO, and O2. Exhaust gas continuous emission monitors shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. [District Rules 2201 and 4703, and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- The facility shall operate and 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
- 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption, and the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- 10. CEM cycling times shall be those specified in 40 CFR Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 Location:

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- 11. The exhaust gas continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
- 14. The CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content no greater than 0.25 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, Kings County Rule 407, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
- 15. If this unit is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 16. During startup or shutdown of any gas turbine engine, combined emissions from the two gas turbine engines (Unit #1 and Unit #2) shall not exceed either of the following limits: NOx - 15.4 lb or CO - 15.4 lb per event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. Startup and shutdown durations shall not exceed a time period of one hour each per occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. 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
- 20. Emission rates from this unit, excluding startup and shutdown, shall not exceed any of the following limits: PM10: 3.03 lb/hr, SOx (as SO2): 0.33 lb/hr, NOx (as NO2): 3.7 ppmvd @ 15% O2 and 6.3 lb/hr, VOC (as methane): 2.0 ppmvd @ 15% O2 and 1.19 lb/hr, or CO: 6.0 ppmvd @ 15% O2 and 6.2 lb/hr. All emission limits, except ammonia, are three hour rolling averages. [District Rules 2201 and 4703, and 40 CFR 60.332(a)] Federally Enforceable Through Title V Permit
- 21. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @  $15\% \text{ O2} = ((a - (b \times c/1,000,000)) \times (1,000,000 / b) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb)mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous instack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
- 23. Maximum daily emissions from this unit shall not exceed any of the following limits: PM10 72.8 lb/day; SOx (as SO2) - 7.8 lb/day; NOx (as NO2) - 151.5 lb/day; VOC - 28.7 lb/day; or CO - 150.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Maximum annual emissions from this unit shall not exceed any of the following limits: NOx (as NO2) 52,314 lb/year; VOC - 9,764 lb/year; CO - 51,947 lb/year; PM10 - 25,176 lb/year; or SOx (as SO2) - 2,710 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMITUNIT REDUIREMENTS CONTINUE ON NEXT PAGE

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- 25. {2255} The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] Federally Enforceable Through Title V Permit
- 26. Compliance testing to demonstrate compliance with PM10, NOx (as NO2), VOC, CO, ammonia emission rates, and fuel gas sulfur content shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source 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
- 28. 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 or D5504. EPA approved 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, 40 CFR 60.335(a) & (b)(10), and 40 CFR 75] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [District Rule 4703, 40 CFR 60.8(a), and 40 CFR 60.335(a)] Federally Enforceable Through Title V Permit
- 30. {2270} All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
- 31. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall not operate the gas turbine under load conditions, except as allowed by the transitional operation period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 34. 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
- 35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
- 36. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an 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; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)] Federally Enforceable Through Title V Permit

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Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230

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- 37. 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
- 38. 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
- 39. 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
- 40. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 41. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [District Rule 1080 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 42. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rule 2201] Federally Enforceable Through Title V Permit
- 43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 44. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 45. The operator of this unit shall keep records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: Kings County Rule 407 as of the date of permit issuance. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 48. This unit shall be equipped with temperature measurement devices that continuously measure the oxidation catalyst inlet temperatures. [40 CFR 64] Federally Enforceable Through Title V Permit
- 49. Except during periods of startup, shutdown, or when conducting combustor tuning activities, the average oxidation catalyst inlet temperature shall not be lower than 700 degrees Fahrenheit. [40 CFR 64] Federally Enforceable Through Title V Permit
- 50. Upon detecting any excursion from the acceptable oxidation catalyst average inlet temperature range, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent the recurrence of the excursion as expeditiously as possible. [40 CFR 64] Federally Enforceable Through Title V Permit

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 C-4140-2-7: May 12 2021 11:57AM - HONGM

- 51. The permittee shall maintain records of the oxidation catalyst average inlet temperatures and any maintenance/repairs performed on the temperature measurement devices. [40 CFR 64] Federally Enforceable Through Title V Permit
- 52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit
- 53. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 54. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 55. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 57. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 58. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 59. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
- 61. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 62. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 63. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 64. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 65. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 66. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 67. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77 [40 CFR 77] Federally Enforceable Through Title V Permit PERMITUNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

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- 68. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 69. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 70. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC 10596 IDAHO AVE, HANFORD ENERGY PARK PE RLANT.HANFORD, CA 93230

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**PERMIT UNIT:** C-4140-4-2

EXPIRATION DATE: 04/30/202

#### **EQUIPMENT DESCRIPTION:**

724 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING AN ELECTRICAL GENERATOR

### PERMIT UNIT REQUIREMENTS

- 1. 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
- 2. This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rules 2201 and 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 3. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407] 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. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 6. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 7. 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
- 8. An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- 9. This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230

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- 11. 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
- 12. 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
- 13. 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
- 14. 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
- 15. 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
- 16. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 2520 and 4702, and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] 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, 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
- 19. The permittee must maintain records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. 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, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

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

ANT.HANFORD, CA 93230

Facility Name: MRP SAN JOAQUIN ENERGY, LLC 10596 IDAHO AVE, HANFORD ENERGY PARK PEAK Location:

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## **ATTACHMENT B**

Previous Title V Operating Permit

**FACILITY:** C-4140-0-2 **EXPIRATION DATE:** 04/30/2021

#### **FACILITY-WIDE REQUIREMENTS**

- 1. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
- 2. 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 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; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings)] Federally Enforceable Through Title V Permit
- 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
- 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
- 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
- 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
- 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] Federally Enforceable Through Title V Permit
- 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
- 10. 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: MRP SAN JOAQUIN ENERGY, LLC

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- 11. 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
- 12. 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
- 13. 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
- 14. 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
- 15. 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
- 16. 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
- 17. 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
- 18. 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
- 19. 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
- 20. 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
- 21. 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
- 22. 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
- 23. 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

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

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

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- 24. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in Table of Standards 1 effective until 12/30/10 or Table of Standards 2 effective on and after 1/1/11 of District Rule 4601 (12/17/09) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
- 25. All VOC-containing materials subject to Rule 4601 (12/17/09) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
- 26. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (12/17/09). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
- 27. 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
- 28. 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
- 29. 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
- 30. 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
- 31. 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
- 32. 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
- 33. 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
- 34. 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
- 35. 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
- 36. 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

- 37. 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
- 38. 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
- 39. 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**
- 40. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Rule 401 (Madera, Fresno, Kern, Kings, San Joaquin, Stanislaus, Tulare and Merced), Rule 110 (Fresno, Stanislaus, San Joaquin), Rule 109 (Merced), Rule 113 (Madera), Rule 111 (Kern, Tulare, Kings), and Rule 202 (Fresno, Kern, Tulare, Kings, Madera, Stanislaus, Merced, San Joaquin). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
- 41. 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
- 42. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin January 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

**PERMIT UNIT:** C-4140-1-6 **EXPIRATION DATE:** 04/30/2021

#### **EQUIPMENT DESCRIPTION:**

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS. SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

- 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. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combustion turbine generator (CTG) 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
- The CTG shall be equipped with a continuous monitoring system to measure and record hours of operation, and fuel consumption. [District Rules 2201 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- Operation of the turbine shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CTG shall be equipped with continuous emission monitors (CEM) for NOx (before and after SCR system), CO, and O2. Exhaust gas continuous emission monitors shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. [District Rules 2201 and 4703; and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- The facility shall operate and 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
- 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption, and the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- 10. CEM cycling times shall be those specified in 40 CFR Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 C-4140-1-6: Mar 30 2021 2:20PM -- HONGM

- 11. The exhaust gas continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
- 14. The CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content no greater than 0.25 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, Kings County Rule 407, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
- 15. If this unit is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 16. During startup or shutdown of any gas turbine engine, combined emissions from the two gas turbine engines (Unit #1 and Unit #2) shall not exceed either of the following limits: NOx - 15.4 lb or CO - 15.4 lb per event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. Startup and shutdown durations shall not exceed a time period of one hour each per occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. 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
- 20. Emission rates from this unit, excluding startup and shutdown, shall not exceed any of the following limits: PM10: 3.03 lb/hr, SOx (as SO2): 0.33 lb/hr, NOx (as NO2): 3.7 ppmvd @ 15% O2 and 6.3 lb/hr, VOC (as methane): 2.0 ppmvd @ 15% O2 and 1.19 lb/hr, or CO: 6.0 ppmvd @ 15% O2 and 6.2 lb/hr. All emission limits, except ammonia, are three hour rolling averages. [District Rules 2201 and 4703; and 40 CFR 60.332(a)] Federally Enforceable Through Title V Permit
- 21. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @  $15\% \text{ O2} = ((a - (b \times c/1,000,000)) \times (1,000,000 / b) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb)mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous instack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
- 23. Maximum daily emissions from this unit shall not exceed any of the following limits: PM10 72.8 lb/day; SOx (as SO2) - 7.8 lb/day; NOx (as NO2) - 151.5 lb/day; VOC - 28.7 lb/day; or CO - 150.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Maximum annual emissions from this unit shall not exceed any of the following limits: NOx (as NO2) 52,314 lb/year; VOC - 9,764 lb/year; CO - 51,947 lb/year; PM10 - 25,176 lb/year; or SOx (as SO2) - 2,710 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE,HANFORD ENERGY PARK PEAKER PLANT,HANFORD, CA 93230 C-4140-1-6: Mar 30 2021 2:20PM - HONGM

- 26. Compliance testing to demonstrate compliance with PM10, NOx (as NO2), VOC, CO, ammonia emission rates, and fuel gas sulfur content shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source 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
- 28. 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. EPA approved 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 60.335(a) & (b)(10)] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [District Rule 4703, 40 CFR 60.8(a), and 40 CFR 60.335(a)] Federally Enforceable Through Title V Permit
- 30. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
- 31. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall not operate the gas turbine under load conditions, except as allowed by the transitional operation period, which results in the measured CO emissions concentration exceeding 200 ppmy @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 34. 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
- 35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
- 36. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an 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; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
- 37. 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

- 38. 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
- 39. 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
- 40. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 41. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [District Rule 1080 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 42. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rule 2201] Federally Enforceable Through Title V **Permit**
- 43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 44. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 45. The operator of this unit shall keep records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: Kings County Rule 407 as of the date of permit issuance. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 48. This unit shall be equipped with temperature measurement devices that continuously measure the oxidation catalyst inlet temperatures, [40 CFR 64] Federally Enforceable Through Title V Permit
- 49. Except during periods of startup, shutdown, or when conducting combustor tuning activities, the average oxidation catalyst inlet temperature shall not be lower than 700 degrees Fahrenheit. [40 CFR 64] Federally Enforceable Through Title V Permit
- 50. Upon detecting any excursion from the acceptable oxidation catalyst average inlet temperature range, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent the recurrence of the excursion as expeditiously as possible. [40 CFR 64] Federally Enforceable Through Title V Permit
- 51. The permittee shall maintain records of the oxidation catalyst average inlet temperatures and any maintenance/repairs performed on the temperature measurement devices. [40 CFR 64] Federally Enforceable Through Title V Permit
- 52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

- 53. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 54. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 55. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 57. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 58. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 59. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
- 61. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 62. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 63. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 64. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 65. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 66. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 67. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

- 68. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 69. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 70. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** C-4140-2-6 **EXPIRATION DATE:** 04/30/2021

#### **EQUIPMENT DESCRIPTION:**

47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS. SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST

## PERMIT UNIT REQUIREMENTS

- 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. Selective catalytic reduction (SCR) system and oxidation catalyst shall serve the gas turbine engine. Exhaust ducting shall be equipped with a fresh air inlet and blower to be used to lower the exhaust temperature prior to inlet of the SCR system catalyst. [District Rule 2201] Federally Enforceable Through Title V Permit
- Combustion turbine generator (CTG) 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
- The CTG shall be equipped with a continuous monitoring system to measure and record hours of operation, and fuel consumption. [District Rules 2201 and 40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- Operation of the turbine shall not exceed 8,000 hours per calendar year. [District Rule 2201] Federally Enforceable Through Title V Permit
- The CTG shall be equipped with continuous emission monitors (CEM) for NOx (before and after SCR system), CO, and O2. Exhaust gas continuous emission monitors shall meet the requirements of 40 CFR parts 60 and 75 and shall be capable of monitoring emissions during startups and shutdowns as well as normal operating conditions. [District Rules 2201 and 4703; and 40 CFR 60.334(b)] Federally Enforceable Through Title V Permit
- The facility shall operate and 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
- 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. [District Rule 1081] Federally Enforceable Through Title V Permit
- The owner or operator shall operate and maintain in calibration a system which continuously measures and records: emissions control system operating parameters, elapsed time of operation of the turbine, the fuel consumption, and the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(a)] Federally Enforceable Through Title V Permit
- 10. CEM cycling times shall be those specified in 40 CFR Part 51, Appendix P, Sections 3.4, 3.4.1 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit

- 11. The exhaust gas continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080] Federally Enforceable Through Title V Permit
- 12. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201] Federally Enforceable Through Title V Permit
- 13. Sulfur compound emissions shall not exceed 0.2% by volume, 2,000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407 and 40 CFR 60.333(a)] Federally Enforceable Through Title V Permit
- 14. The CTG shall be fired exclusively on PUC-regulated natural gas with a sulfur content no greater than 0.25 grain of sulfur compounds (as S) per 100 dry scf of natural gas. [District Rule 2201, Kings County Rule 407, and 40 CFR 60.333(b)] Federally Enforceable Through Title V Permit
- 15. If this unit is fired on PUC-regulated natural gas, then maintain on file copies of natural gas bills. [District Rule 2520] Federally Enforceable Through Title V Permit
- 16. During startup or shutdown of any gas turbine engine, combined emissions from the two gas turbine engines (Unit #1 and Unit #2) shall not exceed either of the following limits: NOx - 15.4 lb or CO - 15.4 lb per event. [District Rule 2201] Federally Enforceable Through Title V Permit
- 17. Startup shall be defined as the period of time during which a unit is brought from a shutdown status to its operating temperature and pressure, including the time required by the unit's emission control system to reach full operations, and the unit meets the lb/hr and ppmvd emission limits specified within this permit. Shutdown shall be defined as the period of time during which a unit is taken from an operational to a non-operational status as the fuel supply to the unit is completely turned off. [District Rule 4703] Federally Enforceable Through Title V Permit
- 18. Startup and shutdown durations shall not exceed a time period of one hour each per occurrence. [District Rules 2201 and 4703] Federally Enforceable Through Title V Permit
- 19. 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
- 20. Emission rates from this unit, excluding startup and shutdown, shall not exceed any of the following limits: PM10: 3.03 lb/hr, SOx (as SO2): 0.33 lb/hr, NOx (as NO2): 3.7 ppmvd @ 15% O2 and 6.3 lb/hr, VOC (as methane): 2.0 ppmvd @ 15% O2 and 1.19 lb/hr, or CO: 6.0 ppmvd @ 15% O2 and 6.2 lb/hr. All emission limits, except ammonia, are three hour rolling averages. [District Rules 2201 and 4703; and 40 CFR 60.332(a)] Federally Enforceable Through Title V Permit
- 21. The ammonia (NH3) emissions shall not exceed 10 ppmvd @ 15% O2 over a 24 hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit
- 22. Compliance with ammonia slip limit shall be demonstrated utilizing the following calculation procedure: ammonia slip ppmvd @  $15\% \text{ O2} = ((a - (b \times c/1,000,000)) \times (1,000,000 / b) \times d$ , where a = ammonia injection rate (lb/hr) / (17 lb/lb)mol), b = dry exhaust flow rate (lb/hr) / (29 lb/lb mol), c = change in measured NOx concentration ppmvd @ 15% O2 across the catalyst and d = correction factor. The correction factor shall be derived annually during compliance testing by comparing the measured and calculated ammonia slip. Alternatively, the permittee may utilize a continuous instack ammonia monitor, acceptable to the District to monitor compliance. At least 60 days prior to using a NH3 CEM, the permittee shall submit a monitoring plan for District review and approval. [District Rule 4102]
- 23. Maximum daily emissions from this unit shall not exceed any of the following limits: PM10 72.8 lb/day; SOx (as SO2) - 7.8 lb/day; NOx (as NO2) - 151.5 lb/day; VOC - 28.7 lb/day; or CO - 150.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 24. Maximum annual emissions from this unit shall not exceed any of the following limits: NOx (as NO2) 52,314 lb/year; VOC - 9,764 lb/year; CO - 51,947 lb/year; PM10 - 25,176 lb/year; or SOx (as SO2) - 2,710 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
- 25. The owner or operator shall be required to conform to the compliance testing and sampling procedures described in District Rule 1081 (as amended 12/16/93). [District Rule 1081] 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE,HANFORD ENERGY PARK PEAKER PLANT,HANFORD, CA 93230 C-41402-6: Mar 30 2021 2:20PM - HONGM

- 26. Compliance testing to demonstrate compliance with PM10, NOx (as NO2), VOC, CO, ammonia emission rates, and fuel gas sulfur content shall be conducted at least once every twelve months. [District Rule 1081] Federally Enforceable Through Title V Permit
- 27. Compliance demonstration (source 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
- 28. 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. EPA approved 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 60.335(a) & (b)(10)] Federally Enforceable Through Title V Permit
- 29. The owner or operator shall provide source test information annually regarding the exhaust gas NOx and CO concentration corrected to 15% O2 (dry). EPA Methods 7E or 20 shall be used for NOx emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [District Rule 4703, 40 CFR 60.8(a), and 40 CFR 60.335(a)] Federally Enforceable Through Title V Permit
- 30. All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device. [40 CFR 60.13(b)] Federally Enforceable Through Title V Permit
- 31. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either EPA Method 7E or EPA Method 20 for NOx, EPA Test Methods 10 or 10B for CO, or EPA Methods 3, 3A, or 20 for O2, or, if continuous emission monitors are used, all applicable requirements of CFR 60.13. [District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
- 32. The owner or operator shall not operate the gas turbine under load conditions, except as allowed by the transitional operation period, which results in the measured CO emissions concentration exceeding 200 ppmv @ 15% O2. [District Rule 4703] Federally Enforceable Through Title V Permit
- 33. The HHV and LHV of the fuel combusted shall be determined using ASTM D3588, ASTM 1826, or ASTM 1945. [District Rule 4703 and 40 CFR 60.332(a) & (b)] Federally Enforceable Through Title V Permit
- 34. 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
- 35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080] Federally Enforceable Through Title V Permit
- 36. Operators of CEM systems installed at the direction of the APCO shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken and preventive measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an 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; A negative declaration when no excess emissions occurred. [District Rule 1080 and 40 CFR 60.334(j)] Federally Enforceable Through Title V Permit
- 37. 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

- 38. 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
- 39. 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
- 40. APCO or an authorized representative shall be allowed to inspect, as he or she determines to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080] Federally Enforceable Through Title V Permit
- 41. The owner or operator shall maintain records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, any periods during which a continuous monitoring system or monitoring device is inoperative, maintenance of any CEM system that has been installed pursuant to District Rule 1080 (as amended 12/17/92), and emission measurements. [District Rule 1080 and 40 CFR 60.8(d)] Federally Enforceable Through Title V Permit
- 42. The permittee shall maintain the following records: hours of operation, fuel consumption (scf/hr and scf/rolling twelve month period), continuous emission monitor measurements, calculated ammonia slip, and calculated NOx mass emission rates (lb/hr and lb/twelve month rolling period). [District Rule 2201] Federally Enforceable Through Title V **Permit**
- 43. The owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local start-up and stop time, length and reason for reduced load periods, total hours of operation, type and quantity of fuel used. [District Rule 4703] Federally Enforceable Through Title V Permit
- 44. The operator performing start-up or shutdown of this unit shall keep records of the duration of start-up or shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit
- 45. The operator of this unit shall keep records of the date, time and duration of each bypass transition period and each primary re-ignition period. [District Rule 4703] Federally Enforceable Through Title V Permit
- 46. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirement: Kings County Rule 407 as of the date of permit issuance. A permit shield is granted from this requirement. [District Rule 2520] Federally Enforceable Through Title V Permit
- 47. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93) as of the date of permit issuance. A permit shield is granted from these requirements. [District Rule 2520] Federally Enforceable Through Title V Permit
- 48. This unit shall be equipped with temperature measurement devices that continuously measure the oxidation catalyst inlet temperatures, [40 CFR 64] Federally Enforceable Through Title V Permit
- 49. Except during periods of startup, shutdown, or when conducting combustor tuning activities, the average oxidation catalyst inlet temperature shall not be lower than 700 degrees Fahrenheit. [40 CFR 64] Federally Enforceable Through Title V Permit
- 50. Upon detecting any excursion from the acceptable oxidation catalyst average inlet temperature range, the permittee shall investigate the excursion and take corrective action to minimize excessive emissions and prevent the recurrence of the excursion as expeditiously as possible. [40 CFR 64] Federally Enforceable Through Title V Permit
- 51. The permittee shall maintain records of the oxidation catalyst average inlet temperatures and any maintenance/repairs performed on the temperature measurement devices. [40 CFR 64] Federally Enforceable Through Title V Permit
- 52. The permittee shall comply with the compliance assurance monitoring operation and maintenance requirements of 40 CFR part 64.7. [40 CFR 64] Federally Enforceable Through Title V Permit

- 53. The permittee shall comply with the recordkeeping and reporting requirements of 40 CFR part 64.9. [40 CFR 64] Federally Enforceable Through Title V Permit
- 54. If the District or EPA determine that a Quality Improvement Plan is required under 40 CFR 64.7(d)(2), the permittee shall develop and implement the Quality Improvement Plan in accordance with 40 CFR part 64.8. [40 CFR 64] Federally Enforceable Through Title V Permit
- 55. The owners and operators of each affected source and each affected unit at the source shall: (i) Operate the unit in compliance with a complete Acid Rain permit application or a superceding Acid Rain permit issued by the permitting authority; and (ii) Have an Acid Rain permit. [40 CFR 72] Federally Enforceable Through Title V Permit
- 56. The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75. [40 CFR 75] Federally Enforceable Through Title V Permit
- 57. The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 58. The owners and operators of each source and each affected unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide. [40 CFR 73] Federally Enforceable Through Title V Permit
- 59. Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act. [40 CFR 77] Federally Enforceable Through Title V Permit
- 60. An affected unit shall be subject to the sulfur dioxide requirements starting on the later of January 1, 2000, or the deadline for monitoring certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3) that is not a substitution or compensating unit. [40 CFR 72 and 40 CFR 75] Federally Enforceable Through Title V Permit
- 61. Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program. [40 CFR 72] Federally Enforceable Through Title V Permit
- 62. An allowance shall not be deducted in order to comply with the requirements under 40 CFR part 73, prior to the calendar year for which the allowance was allocated. [40 CFR 73] Federally Enforceable Through Title V Permit
- 63. An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization. [40 CFR 72] Federally Enforceable Through Title V Permit
- 64. An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right. [40] CFR 72] Federally Enforceable Through Title V Permit
- 65. The owners and operators of each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides. [40 CFR 72] Federally Enforceable Through Title V Permit
- 66. The designated representative of an affected unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit
- 67. The owners and operators of an affected unit that has excess emissions in any calendar year shall: (i) Pay without demand the penalty required, and pay up on demand the interest on that penalty; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77. [40 CFR 77] Federally Enforceable Through Title V Permit

- 68. The owners and operators of the each affected unit at the source shall keep on site the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority: (i) The certificate of representation for the designated representative for the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site beyond such five-year period until such documents are superceded because of the submission of a new certificate of representation changing the designated representative. [40 CFR 72] Federally Enforceable Through Title V Permit
- 69. The owners and operators of each affected unit at the source shall keep on site each of the following documents for a period of five years from the date the document is created. This period may be extended for cause, at any time prior to the end of five years, in writing by the Administrator or permitting authority; (ii) All emissions monitoring information, in accordance with 40 CFR part 75; (iii) Copies of all reports, compliance certifications and other submissions and all records made or required under the Acid Rain Program; (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission that demonstrates compliance with the requirements of the Acid Rain Program. [40 CFR 75] Federally Enforceable Through Title V Permit
- 70. The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 75 Subpart I. [40 CFR 75] Federally Enforceable Through Title V Permit

**PERMIT UNIT:** C-4140-4-1 **EXPIRATION DATE:** 04/30/2021

#### **EQUIPMENT DESCRIPTION:**

724 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY STANDBY IC ENGINE POWERING A 475 KW **ELECTRICAL GENERATOR** 

#### PERMIT UNIT REQUIREMENTS

- 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
- This engine shall be equipped with a non-resettable hour meter with a minimum display capability of 9,999 hours, unless the District determines that a non-resettable hour meter with a different minimum display capability is appropriate in consideration of the historical use of the engine and the owner or operator's compliance history. [District Rules 2201 and 4702; 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kings County Rule 407] Federally Enforceable Through Title V Permit
- 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
- 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 only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 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
- An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702] Federally Enforceable Through Title V Permit
- This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702] Federally Enforceable Through Title V Permit
- 10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Kings County Rule 407. A permit shield is granted from these requirements. [District Rule 2520] 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.

Facility Name: MRP SAN JOAQUIN ENERGY, LLC

Location: 10596 IDAHO AVE,HANFORD ENERGY PARK PEAKER PLANT,HANFORD, CA 93230 C-41404-1: Mar 30 2021 2:20PM - HONGM

- 11. 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
- 12. 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
- 13. 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
- 14. 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
- 15. 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
- 16. The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rules 2520 and 4702; and 17 CCR 93115] Federally Enforceable Through Title V Permit
- 17. The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] 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, 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
- 19. The permittee must maintain records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit
- 20. 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, 17 CCR 93115, and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

Location: 10596 IDAHO AVE, HANFORD ENERGY PARK PEAKER PLANT, HANFORD, CA 93230 C-4140-4-1: Mar 30 2021 2:20PM -- HONGM

## ATTACHMENT C

**Detailed Summary List of Facility Permits** 

# Detailed Facility Report For Facility=4140 Sorted by Facility Name and Permit Number

3/30/21 2:13 pm

| MRP SAN JOAQUIN ENERGY, LLC      | FAC #      | C 4140 | TYPE:     | TitleV | EXPIRE ON:  | 04/30/2021 |
|----------------------------------|------------|--------|-----------|--------|-------------|------------|
| 10596 IDAHO AVE                  | STATUS:    | A      | TOXIC ID: | 51860  | AREA:       | 10 /       |
| HANFORD ENERGY PARK PEAKER PLANT | TELEPHONE: |        |           |        | INSP. DATE: | 03/21      |
| HANFORD, CA 93230                |            |        |           |        |             |            |

|               |                            |            |     | FEE       | FEE       | PERMIT |  |
|---------------|----------------------------|------------|-----|-----------|-----------|--------|--|
| PERMIT NUMBER | FEE DESCRIPTION            | FEE RULE   | QTY | AMOUNT    | TOTAL     | STATUS | EQUIPMENT DESCRIPTION  |
| C-4140-1-6    | 47,500 kW                  | 3020-08B G | 1   | 12,254.00 | 12,254.00 | А      | 47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #1 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST |
| C-4140-2-6    | 47,500 kW                  | 3020-08B G | 1   | 12,254.00 | 12,254.00 | Α      | 47.5 MW NOMINALLY RATED SIMPLE-CYCLE PEAK-DEMAND POWER GENERATING SYSTEM #2 CONSISTING OF A GENERAL ELECTRIC MODEL LM6000 NATURAL GAS-FIRED COMBUSTION TURBINE GENERATOR WITH WATER SPRAY PREMIXED COMBUSTION SYSTEMS, SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND AN OXIDATION CATALYST |
| C-4140-4-1    | 724 HP EMERGENCY IC ENGINE | 3020-10 D  | 1   | 577.00    | 577.00    | А      | 724 BHP CATERPILLAR MODEL 3412 DIESEL-FIRED EMERGENCY<br>STANDBY IC ENGINE POWERING A 475 KW ELECTRICAL GENERATOR  |

Number of Facilities Reported: 1

## ATTACHMENT D

**HAP Major Source Calculations** 

|                   | Diese                      | and Bio                          | diesel-Fir  | ed Interr                                    | nal Comb                        | ustion                         |      |                                      |            |        |  |  |
|-------------------|----------------------------|----------------------------------|---|--|---------------------------------|--------------------------------|------|--------------------------------------|------------|--------|--|--|
| Name              |                            | Engines                          |   |  |                                 |                                |      | Diesel Particulate Matter Calculator |            |        |  |  |
| Applicability     | Engines. (Du is not in cur | e to the Distr<br>rent use for D | or Diesel and<br>ict's Diesel Sc<br>Diesel, only for<br>Biodiesel blen<br>output in g | reening Met<br>Biodiesel; h<br>ds) Entries r | hodology, this<br>nowever the D | s spreadsheet<br>Diesel values | CAS# | PM <sub>10</sub> g/bhp-              | Bhp        | hrs/yr |  |  |
| Author or updater | Matthew                    | Cegielski                        | Last Update   | February                                     | y 22, 2016                      |                                |      | 0.4                                  | 724        | 20     |  |  |
| Facility:         | MRP San Jos                | aquin Energy                     | LLC   |  |                                 |                                |      | lbs/hr                               | lbs/yr     |        |  |  |
| ID#:              | C-4140                     |                                  |   |  |                                 |                                | 9901 | 0.63844797                           | 12.7689594 |        |  |  |
| Project #:        | C-1202391                  |                                  |   |  |                                 |                                |      |                                      |            | ,      |  |  |
| Inputs            | 1,000<br>gallons /hr       | 1,000<br>gallons /yr             |   |  |                                 |                                |      |                                      |            |        |  |  |
| Diesel Fuel usage | 2.50E-02                   | 0.5                              | 1   |  |                                 |                                |      |                                      |            |        |  |  |
|                   |                            |                                  |   |  |                                 |                                |      |                                      |            |        |  |  |

| Name                    |                             | Nat                              | tural Gas-F                         |          |         |  |  |
|-------------------------|-----------------------------|----------------------------------|-------------------------------------|----------|---------|--|--|
| Applicability           | Use this sp                 | readsheet for Na                 | tural Gas-Fired<br>ellow areas, out |          |         |  |  |
| Author or updater       | Matthew                     | Matthew Cegielski Last Update    |                                     |          | 5, 2016 |  |  |
| Facility:               | MRP San Joaquin Energy, LLC |                                  |                                     |          |         |  |  |
| ID#:                    | C-4140                      |                                  |                                     |          |         |  |  |
| Project #:              | C-1202391                   |                                  |                                     |          |         |  |  |
| nputs                   | MMscf /hr                   | MMscf /yr                        |                                     |          |         |  |  |
| Natural Gas usage rate  | 3.24E-01                    | 2,594.000                        |                                     |          |         |  |  |
| SCONOX Catalyst? Y or N | N                           |                                  |                                     |          |         |  |  |
|                         |                             |                                  |                                     |          |         |  |  |
| Substances              | CAS#                        | Emission<br>Factor lbs/<br>MMscf | LB/HR                               | LB/YR    |         |  |  |
| 1, 3 Butadiene          | 106990                      | 4.30E-04                         | 1.39E-04                            | 1.12E+00 |         |  |  |
| Acetaldehyde            | 75070                       | 4.00E-02                         | 1.30E-02                            | 1.04E+02 |         |  |  |
| Acrolein                | 107028                      | 6.40E-03                         | 2.07E-03                            | 1.66E+01 |         |  |  |
| Benzene                 | 71432                       | 1.20E-02                         | 3.89E-03                            | 3.11E+01 |         |  |  |
| Ethyl Benzene           | 100414                      | 3.20E-02                         | 1.04E-02                            | 8.30E+01 |         |  |  |
| Formaldehyde            | 50000                       | 7.10E-01                         | 2.30E-01                            | 1.84E+03 |         |  |  |
| Naphthalene             | 91203                       | 1.30E-03                         | 4.21E-04                            | 3.37E+00 |         |  |  |
| PAH's                   | 1150                        | 2.20E-03                         | 7.13E-04                            | 5.71E+00 |         |  |  |
| Propylene Oxide         | 75569                       | 2.90E-02                         | 9.40E-03                            | 7.52E+01 |         |  |  |
| Toluene                 | 108883                      | 1.30E-01                         | 4.21E-02                            | 3.37E+02 |         |  |  |
| Xylenes                 | 1330207                     | 6.40E-02                         | 2.07E-02                            | 1.66E+02 |         |  |  |
| References:             |                             |                                  |                                     |          |         |  |  |

<sup>\*</sup> The emission factors are derived from table 3.1-3, "Emission Factors for Hazardous Air Pollutants from Natural Gas-Fired Stationary Gas Turbines" in April 2000 AP 42 Chapter 3 Stationary Internal Combustion Sources, Section 3 Stationary Gas Turbines. Assumes 1,000 Btu's per scf natural gas.

Emission factors in boxes change when a SCONOX catalyst is used. SCONOx™ is a NOx reduction system produced by Goal Line Environmental Technologies (now distributed by

EmeraChem)