San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

MAY 27 2011

Gerardo C. Rios, Chief
Permits Office (AIR-3)
U.S. EPA - Region IX
75 Hawthorne St.
San Francisco, CA 94105

Re: Notice of Preliminary Decision – Title V Permit Renewal
District Facility # N-2052
Project # N-1071280

Dear Mr. Rios:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Modesto Irrigation District for its power plant at 639 South McClure Road in Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 45-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

DW:JH/st

Enclosures

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

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San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

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MAY 27 2011

Mike Tollstrup, Chief
Project Assessment Branch
Air Resources Board
P O Box 2815
Sacramento, CA 95812-2815

Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # N-2052
Project # N-1071280

Dear Mr. Tollstrup:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Modesto Irrigation District for its power plant at 639 South McClure Road in Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

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AIR POLLUTION CONTROL DISTRICT

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MAY 27 2011

Gregory Salyer
Modesto Irrigation District
PO Box 4060
Modesto, CA 95352

Re: Notice of Preliminary Decision - Title V Permit Renewal
District Facility # N-2052
Project # N-1071280

Dear Mr. Salyer:

Enclosed for your review and comment is the District's analysis of the application to renew the Federally Mandated Operating Permit for Modesto Irrigation District for its power plant at 639 South McClure Road in Modesto, California.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. Please submit your written comments on this project within the 30-day comment period which begins on the date of publication of the public notice.

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

Sincerely,

David Warner
Director of Permit Services

DW:JH/st

Enclusures

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Modesto Bee

NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED RENEWAL OF
THE FEDERALLY MANDATED OPERATING PERMIT

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Air Pollution Control District solicits public comment on the proposed renewal of the Federally Mandated Operating Permit to Modesto Irrigation District for its power plant at 639 South McClure Road in Modesto, California.

The District's analysis of the legal and factual basis for this proposed action, project #N-1071280, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and the District office at the address below. There are no emission changes associated with this proposed action. This will be the public's only opportunity to comment on the specific conditions of the proposed renewal of the Federally Mandated Operating permit. If requested by the public, the District will hold a public hearing regarding issuance of this renewed permit. For additional information, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400. Written comments on the proposed renewed permit must be submitted within 30 days of the publication date of this notice to DAVID WARNER, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT, 4800 ENTERPRISE WAY, MODESTO, CA 95356-0244.

SAN JOAQUIN VALLEY
AIR POLLUTION CONTROL DISTRICT

Proposed Title V Permit Renewal Evaluation
Modesto Irrigation District
N-2052

TABLE OF CONTENTS

I. PROPOSAL 2
II. FACILITY LOCATION 5
III. EQUIPMENT LISTING 5
IV. GENERAL PERMIT TEMPLATE USAGE 6
V. SCOPE OF EPA AND PUBLIC REVIEW 6
VI. FEDERALLY ENFORCEABLE REQUIREMENTS 6
VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE 9
VIII. PERMIT REQUIREMENTS 9
IX. PERMIT SHIELD 23
X. PERMIT CONDITIONS 27
XI. ATTACHMENTS 27

A. DRAFT RENEWED TITLE V OPERATING PERMIT
B. PREVIOUS TITLE V OPERATING PERMIT
C. DETAILED FACILITY LIST
D. PSD PERMIT

TITLE V PERMIT RENEWAL EVALUATION

Simple-Cycle Power Plant

Engineer: James Harader
Date: March 8, 2011

Facility Number: N-2052
Facility Name: Modesto Irrigation District
Mailing Address: PO Box 4060
Modesto, CA 95352

Contact Name: Gregory E. Salyer
Phone: (209) 526-7550

Responsible Official: Gregory E. Salyer
Title: Resource Planning and Development Manager

Project # : N-1071280
Deemed Complete: April 12, 2007

I. PROPOSAL

Modesto Irrigation District was issued a Title V permit on April 30, 2003. As required by District Rule 2520, the applicant is requesting a permit renewal. The existing Title V permit shall be reviewed and modified to reflect all applicable District and federal rules updated, removed, or added since the issuance of the initial Title V permit.

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

Proposed Changes to Facility-Wide Permit Conditions

With the application, the applicant submitted a request that the following changes be made to the existing facility-wide permit (N-2052-0-1).

1. *"Conditions #42, #43, and #44 of the Facility Wide Requirements exclusively cite the District's NSR rule as a basis for the conditions. These are old NSR conditions, which are equipment specific and not "facility wide", and have been subsumed by the new ATC's."*

   The applicant is requesting to remove conditions #42, #43, and #44 from the current facility-wide permit. These conditions required the facility to keep records of each fuel oil shipment received, to keep appropriate records from the oil suppliers certifying that the fuel delivery meets certain specifications, and to maintain monthly reports that include the hours of operation and fuel consumption rates. Existing Permits to Operate N-2052-1-9 and N-2052-2-10, conditions #37, #38, #39, and #51 have subsumed these requirements and these requirements will be included on the renewed permits. Therefore, existing conditions #42, #43, and #44 will be removed from the facility-wide permit.

2. *"Conditions #47, #48, #49, and #50 of the current Facility Wide requirements exclusively cite the old Federal PSD permit as the basis for the conditions. These conditions are equipment specific and not "facility-wide". Furthermore, the old PSD permit has been subsumed by the new PTO.*

   a. *"Condition #47 specifies daily and annual fuel usage limits. These fuel limits were superseded by ATC's 1-4 and 2-4 (the SCR retrofit). As part of the retrofit, MID increased the maximum allowable fuel consumption of Unit 1 and Unit 2. Therefore, condition #47 is obsolete and should be removed from the Title V permit.*

      The source of this requirement is the original NSR permit issued by EPA, prior to transferring authority over NSR permits to the District. In 2004, the District issued revised Authority to Construct permits that allowed the increase in the fuel usage which have been implemented into the TV permit, while also requiring the installation of a Selective Catalytic Reduction System. These Authority to Construct permits were implemented into the TV permit in 2005 and render condition #47 obsolete. Condition #47 of the facility-wide permit is obsolete.

Per EPA's White Paper for Streamlined Development of Part 70 Permit Applications (July 10, 1995), "NSR permit terms and conditions may be patently obsolete and no longer relevant to the operation of the source...These terms no longer serve a Federal purpose and need not be included as terms of the Part 70 permit.". Condition #47 is a NSR permit term that is patently obsolete; therefore, per the guidance of EPA's whitepaper, condition #47 has been removed from the Title V permit.

b. *"Condition #48 is identical to condition #50 of PTO 1-9 and 2-10. Condition #50 cited Rule 2201 (New Source Review) as the basis for the condition. Therefore, condition #48 has been subsumed by condition #50 of PTO 1-0 and 2-10 and should be removed from the Title V permit.*

This condition requires the equipment to be maintained in proper operating condition and be operated in a manner that will minimize emissions of air contaminants into the atmosphere. The conditions on the individual operating permits and the facility-wide permit are redundant. Therefore, condition #48 will be removed from the facility-wide permit. Additionally, *Federal NSR/PSD Permit SJ 79-16* will be added as a rule reference to condition #2 of the individual operating permits (N-2052-1-6 and '-2-7).

c. *Conditions #49 and #6 in the Facility Wide Requirements are similar. Condition #6 cited Rule 2031 as the basis for the condition. Therefore condition #49 has been subsumed by Condition #6 and should be removed from the Title V permit.*

Condition #49 states that in the event of a change in the control of ownership, this operating permit shall be binding on the new owners and operators and that the applicant shall notify the successor of the existence of this Operating Permit and its conditions in writing. Condition #6 states that an Authority to Construct or Permit to Operate cannot be transferred unless a new application is filed with and approved by the District. Condition #6 will be modified to include the requirement to require the operating permit to be binding on the new owners and operators and that the applicant must notify the successor of the operating permit and its conditions in writing. Therefore, revised Condition #6 will addressed the requirements of the Federal NSR/PSD Permit and previous Condition #49 may be removed. Federal NSR/PSD Permit SJ 79-16 will be added as a rule reference to condition #6 of the facility-wide permit.

d. *Condition #50 specifies that all correspondence required by the old Federal PSD permit be forwarded to USEPA Region IX, CARB, and the District. Since the old Federal PSD permit has been subsumed by the Title V permit, this condition should be removed from the Title V permit.*

This requirement is necessary to comply with the PSD permit; therefore, the condition will remain on the TV permit as condition #44. The condition language has been modified to clarify that only correspondence required by permit conditions based on Federal NSR/PSD Permit SJ 79-16 are required to be forwarded.

3. *MID requests that the District remove the citations to the old Federal PSD permit from the facility wide conditions #1, #2, #12, #13, #18, #19, #21, and #36.*

The citations have been retained for conditions #1, #2, #12, #18, #19, #20, and #21, as these citations identify that these conditions are required for compliance with the Federal NSR/PSD permit. The citations to the Federal PSD permit have been removed from conditions #13 and #36, as these requirements are not specified in the Federal PSD permit.

4. *MID further requests that the District add a new condition stating that compliance with the Title V permit conditions shall constitute compliance with the old EPA issued permit: (Federal NSR/PSD Permit SJ 79-16)*

This request is for a permit shield from EPA's old NSR/PSD permit. Further information on the permit shield is included in Section IX of this evaluation.

II. FACILITY LOCATION

This power generation facility is located at 639 South McClure Road in Modesto, 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, Facility Wide Umbrella.

V. SCOPE OF EPA AND PUBLIC REVIEW

Certain segments of the proposed Renewed Operating Permit are based on model general permit template that has 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 from the 0-3 umbrella template and are not subject to further EPA or public review.

Conditions 1 through 40 of the facility wide requirements of N-2052-0-1 have been subsumed by conditions 1 through 40 of the facility wide requirements of permit N-2052-0-2 .

VI. FEDERALLY ENFORCEABLE REQUIREMENTS

A. Rules Updated

- District Rule 2020, Exemptions
  (amended September 21, 2006 ⇒ amended December 20, 2007)
- District Rule 2201, New and Modified Stationary Source Review Rule
  (amended December 18, 2008)
- District Rule 4101, Visible Emissions
  (amended November 15, 2001 ⇒ amended February 17, 2005)

- District Rule 4601, Architectural Coatings
  (amended October 31, 2001 ⇒ amended December 17, 2009)

- District Rule 4703, Stationary Gas Turbines
  (amended August 17, 2006 ⇒ amended September 20, 2007)

- District Rule 8011, General Requirements
  (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8021, Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities
  (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8031, Bulk Materials
  (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8041, Carryout and Trackout
  (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8051, Open Areas
  (adopted November 15, 2001 ⇒ amended August 19, 2004)
- District Rule 8061, Paved and Unpaved Roads
  (adopted November 15, 2001 ⇒ amended August 19, 2004)

- District Rule 8071, Unpaved Vehicle/Equipment Traffic Areas
  (adopted November 15, 2001 ⇒ amended September 16, 2004)

- 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines
  (amended February 24, 2006)

- 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos
  (amended July 20, 2004)

- 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners
  (amended June 18, 2008)

- 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction
  (amended June 18, 2008)

- 40 CFR Part 64, Compliance Assurance Monitoring (CAM)

B. Rules Removed

No rules have been removed.

C. Rules Added

- 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Gas Turbines
  (adopted July 6, 2006)

D. Rules Not Updated

- District Rule 1081, Source Sampling
  (amended December 16, 1993)
- District Rule 2010, Permits Required
  (amended December 17, 1992)
- District Rule 2031, Transfer of Permits
  (amended December 17, 1992)
- District Rule 2070, Standards for Granting Applications
  (amended December 17, 1992)
- District Rule 2080, Conditional Approval
  (amended December 17, 1992)
- District Rule 2520, Federally Mandated Operating Permits
  (amended June 21, 2001)
- District Rule 4201, Particulate Matter Concentration
  (amended December 17, 1992)
- District Rule 4202, Particulate Matter - Emission Rate
  (amended December 17, 1992)
- District Rule 4801, Sulfur Compounds
  (amended December 17, 1992)

E. Federal Permits

- Federal NSR/PSD Permit SJ 79-16

VII. REQUIREMENTS NOT FEDERALLY ENFORCEABLE

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

A. Rules Added

No rules have been added.

B. Rules Not Updated

- District Rule 1070, Inspections
  (amended December 17, 1992)
- District Rule 1100, Equipment Breakdown
  (amended December 17, 1992)
- District Rule 1160, Emission Statements
  (adopted November 18, 1992)
- District Rule 2040, Applications
  (amended December 17, 1992)
- District Rule 4102, Nuisance
  (as amended December 17, 1992)

VIII. PERMIT REQUIREMENTS

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

A. District Rule 2020 - Exemptions

The changes to District Rule 2020 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

B. District Rule 2201 - New and Modified Stationary Source Review Rule

District Rule 2201 was amended on September 21, 2006, after this facility's Title V permit was last renewed. This Title V permit renewal does not constitute a modification per section 3.25, defined as an action including at least one of the following items:

1) Any change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions.
2) Any structural change or addition to an existing emissions unit which would necessitate a change in permit conditions. Routine replacement shall not be considered to be a structural change.
3) An increase in emissions from an emissions unit caused by a modification of the Stationary Source when the emissions unit is not subject to a daily emissions limitation.
4) Addition of any new emissions unit which is subject to District permitting requirements.
5) A change in a permit term or condition proposed by an applicant to obtain an exemption from an applicable requirement to which the source would otherwise be subject.

Since this project does not constitute a modification, the updated requirements of this rule are not applicable to this project.

C. District Rule 2520- <u>Federally Mandated Operating Permits</u>

No changes to this Rule have occurred since issuance of the TV permit; however, greenhouse gas emissions will be addressed under Rule 2520 during this renewal.

<u>Greenhouse Gas Discussion</u>

There are no federally applicable Greenhouse Gas (GHG) requirements for this source. It should be noted that the Mandatory Greenhouse Gas Reporting rule (40CFR Part 98) is not included in the definition of an applicable requirement within Title V (per 40CFR 71.2). Therefore, there will be no further discussion of GHG in this evaluation.

D. District Rule 4101 - Visible Emissions

The changes to District Rule 4101 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

E. District Rule 4601 - Architectural Coatings

The changes to District Rule 4601 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

F. District Rule 4703 – Stationary Gas Turbines

Both permit units at this facility are subject to this rule. Since permit units N-2052-1 and N-2052-2 are identical, and their permit conditions are identical (with the exception of the conditions that list the steady state CO, PM_{10} and SOx emission rates). The following analysis applies to each unit.

The purpose of this rule is to limit NO_x emissions from stationary gas turbine systems. The provisions of this rule apply to all stationary gas turbine systems, which are subject to District permitting requirements, and with ratings equal to or greater than 0.3 megawatt (MW) and/or a maximum heat input rating of more than 3,000,000 Btu per hour, except as provided in Section 4.0. Each stationary gas turbine is rated at 49.5 MW and is subject to this rule. It should also be noted that each turbine is permitted to fire on either natural gas or 15 ppmw sulfur diesel fuel.

<table>
<tr><th>Rule 4703 Requirements</th><th>Method of Compliance</th></tr>
<tr><td>
Section 5.1 requires that NO_x emissions concentrations measured for compliance with Section 5.0 be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with either the applicable test method in Section 6.4, or, if continuous emission monitors are used, all applicable requirements of 40 CFR Part 60, as detailed in Section 6.2. Any variations from these measurement requirements are subject to APCO and EPA approval prior to implementation.

Section 5.1.1 specifies the Tier 1 NO_X compliance limits.

Section 5.1.2 specifies the Tier 2 NO_X compliance limits for all stationary gas turbines, and states that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured emissions concentration exceeding the applicable emissions limits shown in Table 5-2 of Rule 4703, according to the Tier 2 Compliance Schedules listed in Section 7.2.

Table 5-2: Rule 4703 Tier 2 NOx Compliance Limits
<table>
<tr><th rowspan="2">Turbine Rating (MW)</th><th rowspan="2">Compliance Option</th><th colspan="2">NOx Compliance Limit, ppmvd at 15% O_2</th></tr>
<tr><th>Gas Fuel</th><th>Liquid Fuel</th></tr>
<tr><td rowspan="2">e) Greater than 10 MW, Simple cycle, and permit conditions for greater than 877 hrs/yr operation.</td><td>Standard</td><td>5</td><td>25</td></tr>
<tr><td>Enhanced</td><td>3</td><td>25</td></tr>
</table>
</td><td>
Each stationary gas turbine operates in compliance with the Tier 2 NO_X emission limits specified in section 5.1.2. The Tier 2 NO_X emission limits are more stringent than the Tier 1 emissions limits. Therefore, compliance with the Tier 1 NO_X emission limits will be demonstrated with compliance of the Tier 2 NO_X emission limits.

Each of the gas-fired turbines is subject to the standard compliance option listed in Category e of Table 5-2. Thus, Rule 4703 requires the turbines meet a NOx compliance limit of 5 ppmvd @ 15% O_2. Each of the turbines is limited to 3 ppmvd NOx @ 15% O_2 when firing on natural gas and 5 ppmvd NOx @ 15% O_2 when firing on ultra-low sulfur diesel fuel.

Conditions #10 and #11 enforce the NOx emission limits on the proposed permits.
</td></tr>
</table>

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Rule 4703 Requirements	Method of Compliance
Section 5.1.3 specifies Tier 3 NO_X compliance limits, and states that the owner or operator of any stationary gas turbine system listed in Table 5-3 of Rule 4703 shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured emissions concentration exceeding the applicable emission limits in Table 5-3, according to the Tier 3 Compliance Schedule listed in Section 7.3.	These stationary gas turbine systems do not fall into any of the categories listed in Table 5-3. Therefore, Tier 3 NOx requirements are not applicable to these units.
Section 5.2 requires that the owner or operator of any stationary gas turbine system shall not operate such unit under load conditions, except as allowed by Section 5.3, which results in the measured CO emissions concentration exceeding the compliance limits listed below:	These turbines are each fall into the "Units not identified below" category and are subject to the 200 ppmv @ 15% O_2 limit. The turbines are each limited to 15 ppmvd CO @ 15% O_2. Compliance with the CO emission limit is enforced by Conditions #10 and #11 on the proposed permits.
Section 5.3 states that the applicable emission limits of Sections 5.1 and 5.2 shall not apply during a transitional operation period (bypass transition period, primary re-ignition period, reduced load period, startup or shutdown) provided an operator complies with the requirements specified below: • The duration of each startup or each shutdown shall not exceed two hours, except as provided in section 5.3.3 below. • For each bypass transition period, the requirements specified in Section 3.2 shall be met. • For each primary re-ignition period, the requirements specified in Section 3.20 shall be met. • Each reduced load period shall not exceed one hour. • The emission control system shall be in operation and emissions shall be minimized insofar as technologically feasible during each transitional operation period. • An operator may submit an application to allow more than two hours for each startup or each shutdown or more than one hour for each reduced load period provided the operator meets all of the conditions specified in the rule.	Each of the turbine permits allow for higher emission rates during startup and shutdown. The current permits do not allow for bypass transition periods, reduced load periods, and primary re-ignition periods. Conditions #13 through #15 enforce the startup and shutdown emission limits on the proposed permits.

Rule 4703 Gas Turbine CO Emission Limit

Stationary Gas Turbine	CO Emission Limit (ppmv @ 15% O_2)
Units not identified below	200
General Electric Frame 7	25
General Electric Frame 7 with Quiet Combustors	52
< 2.0 MW Solar Saturn gas turbine powering a centrifugal compressor	250

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Rule 4703 Requirements	**Method of Compliance**
Section 6.1 requires the applicant to submit an emission control plan to demonstrate how the applicant intends to comply with the requirements of the applicable NOx compliance limit in Section 5.0 and compliance schedule in Section 7.0 of Rule 4703.	The turbines are in compliance with the applicable NOx compliance limits of Section 5.0. A permit condition to enforce this requirement is not necessary
Section 6.2.1 states that except for units subject to Section 6.2.3, for turbines with exhaust gas NO_x control devices, the owner or operator shall either install, operate, and maintain continuous emissions monitoring equipment for NO_x and oxygen, as identified in Rule 1080 (Stack Monitoring), or install and maintain APCO-approved alternate monitoring.	Each of the turbines is equipped with a selective catalytic reduction (SCR) control system. Therefore, this requirement is applicable. Each of the units is equipped with a Continuous Emission Monitoring system (CEMs) for NOx. Condition #39 of each proposed Permit to Operate enforces this requirement.
Sections 6.2.2 states that except for units Subject to Section 6.2.3, for turbines without exhaust-gas NOx control devices and without continuous emission monitoring equipment, the owner or operator shall monitor operational characteristics recommended by the turbine manufacturer or emission control system supplier, and approved by the APCO.	This section does not apply to the turbines, since each of the turbines is equipped with an exhaust-gas NOx control device.
Section 6.2.3 states that for units 10 MW and greater that operated an average of more than 4,000 hours/year over the last three years before August 18, 1994, the owner or operator shall monitor the exhaust gas NOx emissions. The NOx monitoring system shall meet EPA requirements as specified in 40 CFR Part 60 App. B, Spec 2, 40 CFR Part 60 App. F, and 40 CFR Part 60.7(c), 60.7(d), and 60.13, or other systems that are acceptable to the EPA.	The hours of operation of each turbine in 1994 are not known; however, the CEMs that is installed on each turbine meet the specified EPA requirements. Conditions #41, #44, 45, #48, #49 and #50 of each proposed Permit to Operate enforce these requirements.
Section 6.2.4 requires that the owner or operator maintain all records for a period of five years from the date of data entry and make those records available to the APCO upon request.	Condition #58 of each proposed Permit to Operate enforces this requirement.
Section 6.2.5 requires the owner or operator to submit to the APCO, before issuance of the Permit to Operate, information correlating the control system operating parameters to the associated measured NOx output.	A Permit to Operate has already been issued for each of these units; therefore, this section is no longer applicable and this requirement will not be listed on the proposed Permits to Operate.
Section 6.2.6 states that 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 (liquid/gas)	Condition #54 of each proposed Permit to Operate enforces this requirement.
Section 6.2.7 states that the owner or operator shall maintain a stationary gas turbine system operating log for units exempt under Section 4.2.	These units are not exempt under Section 6.4.2. Therefore, this Section is not applicable.
Section 6.2.8 states that the owner or operator shall keep records of the duration of start-up or shutdown.	Condition #55 of each proposed Permit to Operate enforces this requirement.
Continued on next page	

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Rule 4703 Requirements	**Method of Compliance**
Section 6.2.9 requires an operator of a unit subject to Section 5.1.3.3 to keep certain records.	Section 5.1.3.3 is for units limited to 877 operating hours/year. These turbines are not subject to 5.1.3.3; therefore, Section 6.2.9 recordkeeping requirements are not applicable.
Section 6.2.10 requires the unit subject to 6.5.2 to identify in the gas turbine system operating log the date and start time and end time that the unit was operated pursuant to 6.5.2 and keep a copy of the emergency declaration.	These units are not subject to 6.5.2; thus, these recordkeeping requirements are not applicable.
Section 6.2.11 requires the operator of a unit to keep records of the date, time and duration of each bypass transition period and each primary re-ignition period.	The applicant has not requested relief from the emission limits during bypass and primary re-ignition periods for these turbines. Therefore, this requirement is not applicable.
Section 6.2.12 requires operators of turbines subject to subsection (b) of Table 5-3 to keep records of the date, time and duration of each steady state period and the quantity of fuel used during each period.	These turbines are not subject to any of the subsections of Table 5.3. Therefore, this requirement is not applicable.
Section 6.3.1 requires the owner or operator of any stationary gas turbine subject to the provisions of Section 5.0 to provide source test information annually regarding the exhaust gas NOx and CO concentrations.	Condition #22 of each proposed Permit to Operate enforces this requirement.
Section 6.3.2 requires the owner or operator of any stationary gas turbine operating system to provide source test information biennially regarding the exhaust gas NOx Concentration.	These units operate more than 877 hours per year. Therefore, the requirements of this Section are not applicable.
Section 6.3.3 requires the owner or operator of any unit with an intermittently operated auxiliary duct burner to demonstrate compliance with the duct burner both on and off.	These turbines are not equipped with a duct burner. Therefore, the requirements of this Section are not applicable.
Section 6.4.1 requires oxides of nitrogen emissions for compliance tests be determined using EPA Method 7E or EPA Method 20.	Condition #25 of each proposed Permit to Operate enforces these requirements.
Section 6.4.2 requires carbon monoxide emissions be determined using EPA Test Methods 10 or 10B.	
Section 6.4.3 requires oxygen content of the exhaust gas be determined using EPA Methods 3, 3A, or 20.	
Section 6.4.4 requires the HHV and LHV of distillate fuels be determined using ASTM D240-87 or ASTM D2382-88.	Condition #29 of each proposed Permit to Operate enforces these requirements.
Section 6.4.5 requires the HHV and LHV of gaseous fuels be determined using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81.	Condition #30 of each proposed Permit to Operate enforces these requirements.
Section 6.4.6 lists requirements for demonstrating the percent efficiency of a stationary gas turbine using the facility instrumentation for gas turbine fuel consumption and power output.	No percent efficiency testing is required for these turbines; therefore, Section 6.4.6 is not applicable.
Sections 6.5.1 and 6.5.2 list requirements for Exempt and Emergency Standby Units.	These turbines are not Exempt or Emergency Standby Units. Therefore, this Section is not applicable.

G. District Rule 8011 - General Requirements

The changes to District Rule 8011 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

H. District Rule 8021 - Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities

The changes to District Rule 8021 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

I. District Rule 8031 - Bulk Materials

The changes to District Rule 8031 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

J. District Rule 8041 - Carryout and Trackout

The changes to District Rule 8041 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

K. District Rule 8051 - Open Areas

The changes to District Rule 8051 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

L. District Rule 8061 - Paved and Unpaved Roads

The changes to District Rule 8061 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

M. District Rule 8071 - Unpaved Vehicle/Equipment Traffic Area

The changes to District Rule 8071 have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

N. 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines

40 CFR Part 60 Subpart GG applies to all stationary gas turbines with a heat input greater than 10.7 gigajoules per hour (10.2 MMBtu/hr), that commence construction, modification or reconstruction after 10/03/77. These turbines are subject to Subpart GG requirements.

40 CFR Part 60 Subpart GG Requirements	Method of Compliance
Section 60.332(b) requires that a stationary gas turbine with a heat input rate greater than 100 MMBtu/hr to comply with the NOx limit (STD) derived from the following equation in 60.332(a)(1). STD = $0.0075\frac{(14.4)}{Y} + F$; where • STD = allowable ISO corrected NOx emission concentration in % by volume @ 15% O_2 on dry basis • Y = Manufacturer's rated heat rate at manufacturer's rated load (kJ/w-hr) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The Y shall not exceed 14.4 kJ/w-hr. • F = NO_x emission allowance for fuel-bound nitrogen.	These units are each rated much greater than 100 MMBtu/hr. Therefore, the NOx standard of 60.332(a)(1) is applicable. Assuming Y is 14.4 and F is zero, the NOx STD is equal to 0.0075% by volume @ 15% O_2, or 75 ppmvd NOx @ 15% O_2. The maximum steady state NOx limit on the permit is 5 ppvmd @ 15% O_2; therefore, compliance is expected. Conditions #10 and #11 of the draft Permits to Operate enforce this requirement.
Section 60.332(f) states that stationary gas turbines using water or steam injection for control of NOx emissions are exempt from the NOx emission limit when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine.	These gas turbines are not equipped with water or steam injection; therefore, the requirements of this section are not applicable.
Sections 60.332(g) through 60.332(l) list exemptions for the NOx emission limit.	None of the exemptions listed in 60.332(g) through 60.332(l) apply to these turbines.
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40 CFR Part 60 Subpart GG Requirements	**Method of Compliance**
The turbines must comply with either Section 60.333(a) or 60.333(b). Section 60.333(a) states that no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% O_2 on a dry basis.	The analysis for the initial TV permit in Project N-1011282, demonstrated that the use of natural gas with a sulfur content of 1.0 grains/dscf, or less, and the use of diesel fuel with a sulfur content less than 15 ppmv will both result in exhaust gas sulfur concentrations lower than 0.015% by volume at 15% O_2 on a dry basis. Conditions #5 and #6 of the proposed Permits to Operate will enforce this requirement.
Section 60.334 (a), (b), (d), and (g) list requirements for turbines equipped with water or steam injection.	These turbines are not equipped with water or steam injection. Therefore, the requirements of these Sections are not applicable.
Section 60.334(c) states that for any turbine that commenced construction, reconstruction, or modification after October 3, 1977, but before July 8, 2004 and which does not use water or steam injection for NOx control, the owner or operator may, but is not required to, for purposes of determining excess emissions, use a NOx CEMs that meets the requirements of 60.334(b) of this section.	These turbines are equipped with NOx CEMs that meet the requirements of 60.334(b) of this section, and has elected to use the CEMs data to determine excess NOx emissions.
Section 60.334(e) and (f) list monitoring requirements for new turbines that commence construction after July 8, 2004.	These turbines are not new turbines that commenced construction after July 8, 2004; therefore, the requirements of these sections are not applicable.
Section 60.334(h)(1) states that the owner or operator of the stationary gas turbine must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in (h)(3). The sulfur content of the fuel must be determined using total sulfur methods described in 60.335(b)(10). Alternatively, if the sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), the ASTM D4084-82, 94, D5504-01, or Gas Processors Association Standard 2377-86 testing methods may be used. Section 60.334(h)(3) states that the owner or operator may elect to not monitor the sulfur fuel content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 60.331(u). For natural gas, the owner or operator may elect to keep current valid purchase contracts, tariff sheet or transportation contracts for the gaseous fuel, that specify the total sulfur content.	Conditions #35 through #38 of the proposed Permits to Operate enforce these requirements.

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40 CFR Part 60 Subpart GG Requirements	**Method of Compliance**
Section 60.334(h)(2) states that the owner or operator shall monitor the nitrogen content of the fuel combusted in the turbine, if the owner or operator claims an allowance for fuel bound nitrogen.	An allowance for the fuel bound nitrogen has not been claimed; therefore, the requirements of this section are not applicable.
Section 60.334(j)(1)iii) states that for turbines using NOx and diluent CEMs: • An hour of excess emissions is any unit operating hour in which the 4-hour rolling average NOx concentration exceeds the applicable emission limit in Section 60.332(a)(1) or (2). For the purposes of this subpart, a "4-hour rolling average NOx concentration" is the arithmetic average of the average NOx concentration measured by the CEMs for any given hour (corrected to 15% O_2) and, if required under Section 60.335(b)(1), to ISO standard conditions, and the three unit operating hour average NOx concentrations immediately preceding that hour. • A period of monitoring downtime is any unit operating hour in which sufficient data are not obtained to validate the hour, for either the NOx concentration or diluent (or both). • Each report shall include ambient conditions (temperature, pressure, and humidity) during the period of excess emissions.	The emission limit on the permits is based on a 3-hour average. The operator reports excess emissions based on the emission limits on the permits and this 3-hour average. Conditions #45 and #48 of the proposed Permits to Operate enforce these requirements.
Section 60.335 lists requirements for the initial source tests conducted under 40 CFR 60.8.	The initial source testing requirements have been satisfied. No further discussion is necessary.

O. 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Gas Turbines

Section 60.4305(a) states that stationary combustion turbines with a heat input at peak load equal to or greater than 10 MMBtu/hr, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005 are subject to this Subpart. The turbines operated by MID at the McClure site were constructed prior to this date, and have not been modified or reconstructed after February 18, 2005. Therefore, Subpart KKKK is not applicable to these turbines. No further analysis is necessary.

P. 40 CFR Part 61, Subpart M, National Emissions Standards for Asbestos

The changes to 40 CFR Part 61 Subpart M have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

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

The changes to 40 CFR Part 82, Subpart B have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

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

The changes to 40 CFR Part 82, Subpart F have been addressed through umbrella template 0-3. The applicant has proposed the use of this umbrella template and the umbrella template conditions will be included on the facility-wide permit. No further analysis is necessary.

S. 40 CFR Part 64 – CAM

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.

The following Major Source thresholds will be used, as necessary, to determine whether CAM is triggered.

Pollutant	lb/year	ton/year
NOx	20,000	10
SOx	140,000	70
PM10	140,000	70
CO	200,000	100
VOC	20,000	10

Each of the turbines is equipped with a selective catalytic reduction system for control of NOx emissions, and with an oxidation catalyst for control of CO and VOC emissions. CAM can only potentially be triggered for these pollutants.

Pursuant to Section 64.2(b)(vi), emission limits or standards for which the permit specifies a continuous compliance determination method are exempt from CAM requirements. Each of the turbines is equipped with a Continuous Emission Monitoring system (CEMs) that measures NOx and CO emissions. Therefore, the turbines are exempt from CAM requirements for NOx and CO.

The only remaining pollutant is VOC. Each turbine is equipped with an oxidation catalyst that controls VOC emissions. Pursuant to California Air Resources Board's "Guidance for Power Plant Siting and Best Available Control Technology" publication, dated September 1999, an oxidation catalyst reduces between 40% and 50% of VOC emissions, by weight.

To determine whether CAM is applicable, the annual uncontrolled VOC emission rate must be determined. The turbine manufacturer does not have data on the uncontrolled VOC emissions for these specific turbines. The controlled VOC emission factor will be required in order to estimate the uncontrolled VOC emission rate. The VOC emissions limit on the permit is 2 ppmvd @ 15% O_2; however, this emissions concentration was not based upon the specific turbines operated by the Modesto Irrigation District. Rather, this emissions concentration was placed on the permit to satisfy requirements from CARB's "Guidance for Power Plant Siting and Best Available Control Technology" publication, which published a VOC emission requirement that is based on data collected from a variety of turbine systems that operate with oxidation catalysts. Since 2004, a total of 13 source tests have been performed to measure the controlled VOC emissions from either of the identical turbines operated at this facility. Since these tests were specific to the turbines operated at the facility, the source test data is expected to be the most representative data set for determining the controlled VOC emission concentration.

Based on a review of the source tests, the measured VOC emissions concentration has varied from 0.0 to 1.5 ppmvd @ 15% O_2. The highest measured concentration, 1.5 ppmvd @ 15% O_2, will conservatively be utilized for this analysis. As stated earlier, an oxidation catalyst is expected to achieve a control efficiency (CE) between 40% and 50% for VOC emissions. 40% VOC control will be assumed, since this value will

result in the largest uncontrolled VOC emission rate. Emissions from the turbines are calculated below.

EF_{VOC} Controlled = 1.5 ppmvd @ 15% O_2
EF_{VOC} Uncontrolled = EF_{VOC} Controlled ÷ (CE/100%)
EF_{VOC} Uncontrolled = 1.5 ppmvd @ 15% O_2 ÷ (40%/100%)
EF_{VOC} Uncontrolled = 3.75 ppmvd @ 15% O_2

The uncontrolled emission factor is converted into lb/MMBtu units below, assuming an F-Factor of 8,578 dscf/MMBtu.

$$\frac{(3.75\,\text{ppmvd})\left(8{,}578\frac{\text{dscf}}{\text{MMBtu}}\right)\left(16\frac{\text{lb - VOC}}{\text{lb}-\text{mol}}\right)}{\left(379.5\frac{\text{dscf}}{\text{lb}-\text{mol}}\right)\left(10^6\right)\left(\frac{20.95-15}{20.95}\right)} = \quad 0.0048\frac{\text{lb}-VOC}{\text{MMBtu}}$$

The combined total heat input limit for the two turbines is 4,000,000 MMBtu/year. Each turbine is capable of consuming the full 4,000,000 MMBtu/year. Therefore, an annual heat input of 4,000,000 MMBtu/year will be utilized to calculate the potential annual uncontrolled emissions from each turbine.

The maximum uncontrolled VOC emission for either turbine is calculated below:

$VOC_{Uncontrolled}$ = Heat Input (MMBtu/year) x EF (lb/MMBtu)
$VOC_{Uncontrolled}$ = 4,000,000 MMBtu/year x 0.0048 lb-VOC/MMBtu
$VOC_{Uncontrolled}$ = 19,200 lb-VOC/year

The maximum uncontrolled VOC emissions rate for each turbine is 19,200 lb-VOC/year, which is less than the CAM threshold of 20,000 lb-VOC/year for VOC emissions; Therefore, CAM is not triggered for VOC emissions.

CAM is not required for these turbines for any pollutant. No further analysis is necessary.

T. Federal NSR/PSD Permit SJ 79-16

EPA issued this permit to MID on November 1, 1979, pursuant to the requirements of 40 CFR 52.233(g) (non-attainment NSR) and 40 CFR 52.21 (PSD). The permit was modified by EPA on 12/30/81, 4/1/83 and 2/29/88. Since that time, the District obtained a SIP approved non-attainment NSR program and became the permitting authority for all

modifications involving non-attainment pollutants. In 200X, the District issued ATC's (Add citations) to MID to modify the exiting gas turbines by adding SCR units to reduce NOx emissions and remove various operating limits regarding fuel use and hours of operation. The issuance of these NSR ATC's made several of the conditions contained in EPA's NSR permit obsolete. The remaining conditions have either been subsumed by more stringent District requirements or are incorporated into this Title V permit. See Section IX – Permit Shield for more detailed information.

IX. PERMIT SHIELD

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

A. Requirements Addressed by Model General Permit Templates

The following permit shields were issued via the 0-3 umbrella template:

N-2052-0-2, Condition 39: *Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Stanislaus County Rules 110, 202, and 401. A permit shield is granted from these requirements. [District Rule 2520, 13.2]*

N-2052-0-2, Condition 40: *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]*

Additionally, the applicant has proposed the following permit shield be added to the Title V permit:

N-2052-0-2, Condition 45: *Compliance with permit conditions in the Title V permit shall be deemed in compliance with EPA* PSD Permit NSR 4-4-8, SJ 79-16. *A permit shield is granted from these requirements. [District Rule 2520, 13.2]*

A copy of the *Federal NSR/PSD permit* is included in Appendix D of this Title V evaluation. *Federal NSR/PSD permit SJ 79-16* requires the following:

1. Notification of Commencement of Construction and Start-up

This requirement of the PSD/NSR permit was satisfied and is obsolete. Pursuant to EPA Whitepaper #1, obsolete conditions may be excluded from the Title V Permit. Additionally, since this condition is obsolete, inclusion on the Title V permit is not necessary for issuance of a permit shield from PSD Permit NSR 4-4-8, SJ 79-16.

2. Facilities Operation

The PSD/NSR permit requires all equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of the permit to at all times be operated in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. Proposed TV permits N-2052-1-6 condition #2 and N-2052-2-7, Condition #2 enforces this requirement.

3. Malfunction

The PSD/NSR permit requires the regional administrator be notified by telephone within 48 hours of any failure of the air pollution control equipment and be notified in writing within 15 days of any such failure. Conditions #1 and #2 of the proposed TV permit N-2052-0-2 require notification by telephone within 1 hour of detection and written notice within 10 days of any such failure. Therefore, conditions #1 and #2 are more stringent and enforce these requirements.

4. Right to entry

The PSD/NSR permit requires the facility to allow state or District inspectors to enter the premises upon request, to have access to and a copy of any records required to be kept, to be allowed to inspect any equipment upon request, and to sample emissions from the source. Proposed TV permit N-2052-0-2 conditions #18 through #21 enforce these requirements.

5. Transfer of Ownership

The PSD/NSR permit states that in the event of any changes in control or ownership of the facilities, the approval to construct/modify the permit is binding on all subsequent operators. Condition #6 of proposed Title V permit N-2052-0-2 states that an Authority to Construct or Permit to Operate cannot be transferred unless a new application is filed with and approved by the District. Proposed Condition #6 has been modified to require the operator to notify a new owner of the existence of Federal NSR/PSD Permit SJ-79-16. Therefore, proposed TV permit N-2052-0-2 Condition #6 will enforce this requirement.

6. Severability

The PSD/NSR permit states that the provisions of the Authority to Construct/Modify are severable, and, if any provision of the Approval to Construct/Modify is held invalid, the remainder of the Approval to Construct/Modify is not affected. Proposed TV permit N-2052-0-2 Condition #12 enforces this requirement.

7. Other Applicable Regulations

The PSD/NSR permit states "The owner and operator of the proposed project shall construct and operate the proposed stationary source if 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State, and local air quality regulations". This condition appears to require the source to operate in compliance with 40 CFR Parts 52, 60, and 61, and all other Federal, State, and local air quality regulations. The title V permit includes all the requirements of federal, state and local air quality regulations. Therefore, compliance with the TV permit is expected to satisfy this requirement.

8. Special Conditions

This section of the NSR/PSD permit includes requirements for the following:

a. Fuel Usage and Sulfur Content
b. Hours of Operation
c. Performance Tests (initial testing)
d. Emission Limitations
e. Federal Regulations

As stated earlier in this evaluation, the fuel usage and sulfur content, hours of operation, and emission limitations have been subsumed by subsequent NSR actions, which established new fuel usage and sulfur content requirements, new hours of operation requirements, and new emission limitations. These requirements were therefore determined to be obsolete and are not longer required on the Part 70 permit, per the guidance of EPA's white paper #1. Therefore, the inclusion of these requirements on the permit is not necessary to establish a permit shield for the old NSR/PSD permitting action.

Additionally, the performance testing listed in the NSR/PSD permit is only an initial testing requirement that was previously performed. Therefore, this requirement has already been satisfied and is also obsolete and not required to establish a permit shield from the old NSR/PSD permitting action.

Finally, the NSR/PSD permit states that the turbines are subject to 40 CFR Part 60 Subpart GG. Compliance with the applicable Subpart GG requirements was demonstrated earlier in this evaluation. Therefore, this requirement is satisfied by the conditions of the TV permit.

9. Agency Notifications

The NSR/PSD permit requires that all correspondence required by a condition based on permit SJ 79-16 be forwarded to USEPA Region IX, CARB, and the District. Proposed TV permit N-2052-0-2 Condition #44 enforces this requirement.

10. Conclusion:

As demonstrated above, many of the requirements of PSD Permit SJ 79-16 have been made obsolete by the issuance of a newer NSR permit issued by the District. Others have been subsumed by more stringent conditions based on the newer NSR permit or SIP rules. The remaining applicable (non-obsolete) requirements of PSD Permit SJ 79-16 are enforced on the permit; therefore the request to include a permit shield has been granted.

B. Requirements not Addressed by Model General Permit Templates

The applicant is not proposing any new permit shields.

C. Obsolete Permit Shields From Existing Permit Requirements

Condition #60 of each proposed turbine permit includes a permit shield from Country Rules. The following amendments were made to the permit shield.

Condition 60: *Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules ~~404 (Madera), 406 (Fresno), and~~ 407 (~~Kings, Merced, San Joaquin, Tulare, Kern, and~~ Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2]*

Condition #61 of each proposed turbine permit includes a permit shield. The following amendments were made to the existing condition to remove obsolete permit shields.

Condition 61: *Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), ~~(a)(2), 60.333 (b); 60.334(b) (b)(1), (b)(2),~~ (h)(3), (j), (j)(1)(iii), and (j)(5)~~, and 60.335(a), (b)(7), (b)(3), and District Rule 4703 (as amended 8/17/06), Sections 5.1.2.1, 5.2, 6.2.1, 6.2.6, 6.3, and 6.4~~. A permit shield is granted from these requirements. [District Rule 2520, 13.2]*

X. PERMIT CONDITIONS

See Attachment A - Draft Renewed Title V Operating Permit

XI. ATTACHMENTS

A. Draft Renewed Title V Operating Permit
B. Previous Title V Operating Permit
C. Detailed Facility List
D. PSD Permit NSR 4-4-8, SJ 79-16

ATTACHMENT A

Draft Renewed Title V Operating Permit

San Joaquin Valley
Air Pollution Control District

FACILITY: N-2052-0-2 **EXPIRATION DATE:** 09/30/2007

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FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the owner or operator demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100, Stanislaus County Rule 110, and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, Stanislaus County Rule 110, and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit
3. {4364} The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. {4365} Any person building, altering or replacing any operation, article, machine, equipment, or other contrivance, the use of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, shall first obtain an Authority to Construct (ATC) from the District unless exempted by District Rule 2020 (12/20/07). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. {4366} The permittee must comply with all conditions of the permit including permit revisions originated by the District. All terms and conditions of a permit that are required pursuant to the Clean Air Act (CAA), including provisions to limit potential to emit, are enforceable by the EPA and Citizens under the CAA. Any permit noncompliance constitutes a violation of the CAA and the District Rules and Regulations, and is grounds for enforcement action, for permit termination, revocation, reopening and reissuance, or modification; or for denial of a permit renewal application. [District Rules 2070, 7.0; 2080; and 2520, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. 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. In the event of changes in control or ownership, Federal NSR/PSD Permit SJ 79-16 shall be binding on new owners and operators. The applicant shall notify successor of the existence of Federal NSR/PSD Permit SJ 79-16 and its conditions in writing and forward a copy to the District, California Air Resources Board, and EPA. [District Rule 2031 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit
7. {4368} 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
8. {4369} The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

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9. {4370} The operator shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, or report. Support information includes copies of all reports required by the permit and, for continuous monitoring instrumentation, all calibration and maintenance records and all original strip-chart recordings. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

10. {4371} The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

11. {4372} Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

12. 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 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

13. {4374} It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. [District Rule 2520, 9.8.2] Federally Enforceable Through Title V Permit

14. {4375} The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

15. {4376} The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

16. {4377} The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

17. {4378} The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

18. 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 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

19. 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 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

20. 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 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

21. 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 and Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

22. {4383} No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit

23. {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

24. {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

25. {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

26. {4387} With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit

27. {4388} If the permittee performs maintenance on, or services, repairs, or disposes of appliances, the permittee shall comply with the standards for Recycling and Emissions Reduction pursuant to 40 CFR Part 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit

28. {4389} If the permittee performs service on motor vehicles when this service involves the ozone-depleting refrigerant in the motor vehicle air conditioner (MVAC), the permittee shall comply with the standards for Servicing of Motor Vehicle Air Conditioners pursuant to all the applicable requirements as specified in 40 CFR Part 82, Subpart B. [40 CFR Part 82, Subpart B] Federally Enforceable Through Title V Permit

29. {4390} Disturbances of soil related to any construction, demolition, excavation, extraction, or other earthmoving activities shall comply with the requirements for fugitive dust control in District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit

30. {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 Rule 8031 and 8011] Federally Enforceable Through Title V Permit

31. {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 Rule 8041 and 8011] Federally Enforceable Through Title V Permit

32. {4393} Whenever open areas are disturbed, or vehicles are used in open areas, the facility shall comply with the requirements of Section 5.0 of District Rule 8051, unless specifically exempted under Section 4.0 of Rule 8051 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit

33. {4394} Any paved road or unpaved road shall comply with the requirements of District Rule 8061 unless specifically exempted under Section 4.0 of Rule 8061 (8/19/2004) or Rule 8011 (8/19/2004). [District Rule 8061 and Rule 8011] Federally Enforceable Through Title V Permit

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FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

34. {4395} Any unpaved vehicle/equipment area that anticipates more than 50 Average annual daily Trips (AADT) shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 150 vehicle trips per day (VDT) shall comply with the requirements of Section 5.1.2 of District Rule 8071. On each day that 25 or more VDT with 3 or more axles will occur on an unpaved vehicle/equipment traffic area, the owner/operator shall comply with the requirements of Section 5.1.3 of District Rule 8071. On each day when a special event will result in 1,000 or more vehicles that will travel/park on an unpaved area, the owner/operator shall comply with the requirements of Section 5.1.4 of District Rule 8071. All sources shall comply with the requirements of Section 5.0 of District Rule 8071 unless specifically exempted under Section 4.0 of Rule 8071 (9/16/2004) or Rule 8011 (8/19/2004). [District Rule 8071 and Rule 8011] Federally Enforceable Through Title V Permit

35. {4396} Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

36. {4397} The permittee shall submit certifications of compliance with the terms and standards contained in Title V permits, including emission limits, standards and work practices, to the District and the EPA annually (or more frequently as specified in an applicable requirement or as specified by the District). The certification shall include the identification of each permit term or condition, the compliance status, whether compliance was continuous or intermittent, the methods used for determining the compliance status, and any other facts required by the District to determine the compliance status of the source. [District Rule 2520, 9.16] Federally Enforceable Through Title V Permit

37. {4398} The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. {4399} When a term is not defined in a Title V permit condition, the definition in the rule cited as the origin and authority for the condition in a Title V permits shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following outdated SIP requirements: Stanislaus County Rules 110, 202, and 401. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

40. {4401} Compliance with permit conditions in the Title V permit shall be deemed in compliance with the following applicable requirements: SJVUAPCD Rules 1100, sections 6.1 and 7.0 (12/17/92); 2010, sections 3.0 and 4.0 (12/17/92); 2031 (12/17/92); 2040 (12/17/92); 2070, section 7.0 (12/17/92); 2080 (12/17/92); 4101 (2/17/05); 4601 (12/17/09); 8021 (8/19/2004); 8031 (8/19/2004); 8041 (8/19/2004); 8051 (8/19/2004); 8061 (8/19/2004); and 8071 (9/16/2004). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

42. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit

43. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report begin April 30 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

44. All correspondence as required b a permit condition based on Federal NSR/PSD Permit SJ 79-16 shall be forwarded to: the District; Director, Air & Toxics Div. (Attn: A-3), EPA Region IX, 75 Hawthorne St. San Francisco, CA 94105; and Chief, Stationary Source Div., CARB, P.O. Box 2815, Sacramento, CA 95812. [Federal NSR/PSD Permit SJ 79-16] Federally Enforceable Through Title V Permit

45. Compliance with permit conditions in the Title V permit shall be deemed in compliance with Federal NSR/PSD Permit SJ 79-16. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-2052-1-6 **EXPIRATION DATE:** 09/30/2007

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EQUIPMENT DESCRIPTION:
ONE (1) GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL # 281786) SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #1)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit
3. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Natural gas or 15 ppmw sulfur diesel are the only fuels permitted for combustion in the turbine. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall be fired on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.33(b), District Rule 4201, and Stanislaus Country Rule 407] Federally Enforceable Through Title V Permit
7. Fuel consumption shall be limited to 794.6 MMBtu per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The duration of all start-up and shutdown events shall not exceed 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to a total of 4,000,000 MMBtu/year when firing on natural gas and diesel during base load operation. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to 2,000,000 MMBtu/year when firing on diesel during base load operation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on natural gas: NOx (as NO2) - 8.64 lb/hr and 3.0 ppmvd @ 15% O2; VOC (as CH4) - 2.01 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.29 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 7.5 lb/hr; or SOx - 2.26 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on 15 ppmw sulfur diesel: NOx (as NO2) - 15.31 lb/hr and 5.0 ppmvd @ 15% O2; VOC (as CH4) - 2.14 lb/hr and 2.0 ppmvd @ 15% O2; CO - 27.97 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 20.00 lb/hr; or SOx - 1.19 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

12. Except during start-up and shutdown periods, NOx emissions from this unit shall not exceed the heat input weighted average of the applicable ppmvd or hourly limits when fired simultaneously on natural gas and 15 ppmw sulfur diesel, as calculated by the following equation: Weighted Average Limit = [(NOx limit for gaseous fuel x heat input from gaseous fuel) + (NOx limit for liquid fuel x heat input for liquid fuel)]/(heat input for gaseous fuel + heat input from liquid fuel). All emission concentration limits are based on 3-hour rolling averages. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The emissions during start-up and shutdown periods shall not exceed 40 lb NOx (as NO2)/hr and 100 lb CO/hr when firing on natural gas or diesel. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Start-up period is defined as the period of time during which the 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 operation. The start-up period shall not exceed two hours for each start-up. [District Rule 4703, 3.24] Federally Enforceable Through Title V Permit

15. Shutdown is defined as the period beginning with the initiation of the turbine shutdown sequence and ending with the cessation of the firing of the turbine. The shutdown period shall not exceed two hours for each shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

16. The ammonia emissions shall not exceed either of the following limits: 11.4 lb/hr or 10.0 ppmvd @ 15% O2 based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = (1,000,000 x a/b - c) 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; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102] Federally Enforceable Through Title V Permit

18. Emission rates shall not exceed any of the following limits: NOx (as NO2) - 441.5 lb/day; VOC - 51.4 lb/day; CO - 887.4 lb/day; PM10 - 480.0 lb/day; or SOx (as SO2) - 54.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Emissions from units N-2052-1 and N-2052-2 combined shall not exceed any of the following limits: NOx (as NO2) - 76,282 lb/year; VOC - 11,302 lb/year, CO - 176,572 lb/year, PM10 - 77,218 lb/year; or SOx - 12,281 lb/year. All annual emission limits are based on twelve consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Each 3-hour rolling average will be compiled from the three most recent one hour periods. Each 1-hour period shall commence on the hour. Each 1-hour period in a 24-hour average for ammonia slip will commence on the hour. The 24-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Daily emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Source testing to measure NOx, CO, VOC, PM10 and ammonia emissions shall be conducted at least once every twelve months. NOx, CO, VOC and ammonia emissions shall be reported in ppmvd @ 15% O2 and lb/hr, and PM10 emissions shall be reported in lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Source testing to measure the start-up NOx emission rate shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit

25. Emission concentrations shall be measured using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7), and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

26. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

27. PM10 emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

28. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit

29. The higher heating value and lower heating value of distillate fuels shall be determined using ASTM D240-87 or ASTM D2382-88. [District Rule 4703] Federally Enforceable Through Title V Permit

30. The higher heating value and lower heating value of gaseous fuels shall be determined using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81. [District Rule 4703] Federally Enforceable Through Title V Permit

31. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit

32. The District must be notified 30 days prior to any source testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

33. Source testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of source testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit

34. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit

35. If the turbine is fired on noncertified diesel fuel, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 129-00, D 2622-98, D 4294-02, D 1266-98, D 5453-00 or D 1552-01. [District Rule 2520, 9.3.2 and 40 CFR 60.335(10)(i)] Federally Enforceable Through Title V Permit

36. If the turbine is not fired on certified 15 ppmw sulfur diesel fuel, the sulfur content shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(4)] Federally Enforceable Through Title V Permit

37. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the 15 ppmw sulfur content diesel fuel requirement shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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38. The sulfur content of natural gas shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six months. If any six month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

39. The owner or operator shall certify, maintain, operate, and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. The CEM shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b) and District Rules 4703, 6.2.1, 2201, & 1080] Federally Enforceable Through Title V Permit

40. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

41. The NOx, CO, and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

42. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system and shall make CEM Data available to the District's automated polling system on a daily basis. 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, 7.1] Federally Enforceable Through Title V Permit

43. 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

44. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

45. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The reports 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 the 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 (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), 60.7(c), 60.7(d), and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

46. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

47. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

48. Results of the CEMS shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1 & 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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49. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

50. The owner/operator shall perform a RATA as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

51. The permittee shall monitor and record the fuel flow rate, NOx emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

52. The permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the permittee demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]

53. 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]

54. Owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

55. The permittee shall maintain the following records: date and time, duration, and type of any start-up, shutdown, or malfunction; source testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit

56. The facility's operating and alarm logs must be available at the time of inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

57. Owner or operator shall keep the following records: (1) A record of the 12-month rolling combined NOx, VOC, CO, PM10, and SOx emissions for units N-2052-1 and N-2052-2, in (lb/year). This record shall be updated on at least a monthly basis, (2) A record of the total combined annual heat input for units N-2052-1 and N-2052-2. This record shall be updated on at least a monthly basis, (3) A record of the combined annual heat input for units N-2052-1 and N-2052-2, when firing on diesel fuel. This record shall be updated on at least a monthly basis, and (4) A record of the annual total duration of all start-up and shutdown events for this turbine. [District Rule 2520] Federally Enforceable Through Title V Permit

58. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

59. The requirements of the Acid Rain Program do not apply to this source because this is a simple combustion turbine that commenced commercial operation before November 15, 1990. A permit shield is granted from this requirement. [40 CFR 72.6(b)(1) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (h)(3), (j), (j)(1)(iii), and (j)(5). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. 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, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 8.0, and 11.0; 1081(as amended 12/16/93), Sections 3.0, 6.0, 7.1, 7.2, and 7.3; and 4201 (as amended 12/17/92). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-2052-2-7 **EXPIRATION DATE:** 09/30/2007

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EQUIPMENT DESCRIPTION:
ONE (1) GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL # 281905) SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #2)

PERMIT UNIT REQUIREMENTS

1. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit
2. All equipment shall be maintained in proper operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere. [District Rule 2201 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit
3. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Natural gas or 15 ppmw sulfur diesel are the only fuels permitted for combustion in the turbine. [District Rule 2201] Federally Enforceable Through Title V Permit
6. This unit shall be fired on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.33(b), District Rule 4201, and Stanislaus Country Rule 407] Federally Enforceable Through Title V Permit
7. Fuel consumption shall be limited to 794.6 MMBtu per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The duration of all start-up and shutdown events shall not exceed 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit
9. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to a total of 4,000,000 MMBtu/year when firing on natural gas and diesel during base load operation. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to 2,000,000 MMBtu/year when firing on diesel during base load operation. [District Rule 2201] Federally Enforceable Through Title V Permit
10. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on natural gas: NOx (as NO2) - 8.64 lb/hr and 3.0 ppmvd @ 15% O2 ; VOC (as CH4) - 2.01 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.29 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 7.5 lb/hr; or SOx - 2.26 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on 15 ppmw sulfur diesel: NOx (as NO2) - 15.31 lb/hr and 5.0 ppmvd @ 15% O2 ; VOC (as CH4) - 2.14 lb/hr and 2.0 ppmvd @ 15% O2; CO - 27.97 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 20.00 lb/hr; or SOx - 1.19 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

12. Except during start-up and shutdown periods, NOx emissions from this unit shall not exceed the heat input weighted average of the applicable ppmvd or hourly limits when fired simultaneously on natural gas and 15 ppmw sulfur diesel, as calculated by the following equation: Weighted Average Limit = [(NOx limit for gaseous fuel x heat input from gaseous fuel) + (NOx limit for liquid fuel x heat input for liquid fuel)]/(heat input for gaseous fuel + heat input from liquid fuel). All emission concentration limits are based on 3-hour rolling averages. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The emissions during start-up and shutdown periods shall not exceed 40 lb NOx (as NO2)/hr and 100 lb CO/hr when firing on natural gas or diesel. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Start-up period is defined as the period of time during which the 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 operation. The start-up period shall not exceed two hours for each start-up. [District Rule 4703, 3.24] Federally Enforceable Through Title V Permit

15. Shutdown is defined as the period beginning with the initiation of the turbine shutdown sequence and ending with the cessation of the firing of the turbine. The shutdown period shall not exceed two hours for each shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

16. The ammonia emissions shall not exceed either of the following limits: 11.4 lb/hr or 10.0 ppmvd @ 15% O2 based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = (1,000,000 x a/b - c) 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; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102] Federally Enforceable Through Title V Permit

18. Emission rates shall not exceed any of the following limits: NOx (as NO2) - 441.5 lb/day; VOC - 51.4 lb/day; CO - 887.4 lb/day; PM10 - 480.0 lb/day; or SOx (as SO2) - 54.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Emissions from units N-2052-1 and N-2052-2 combined shall not exceed any of the following limits: NOx (as NO2) - 76,282 lb/year; VOC - 11,302 lb/year, CO - 176,572 lb/year, PM10 - 77,218 lb/year; or SOx - 12,281 lb/year. All annual emission limits are based on twelve consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit

20. Each 3-hour rolling average will be compiled from the three most recent one hour periods. Each 1-hour period shall commence on the hour. Each 1-hour period in a 24-hour average for ammonia slip will commence on the hour. The 24-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit

21. Daily emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Source testing to measure NOx, CO, VOC, PM10 and ammonia emissions shall be conducted at least once every twelve months. NOx, CO, VOC and ammonia emissions shall be reported in ppmvd @ 15% O2 and lb/hr, and PM10 emissions shall be reported in lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

23. Source testing to measure the start-up NOx emission rate shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit

24. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit

25. Emission concentrations shall be measured using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7), and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

26. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

27. PM10 emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

28. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit

29. The higher heating value and lower heating value of distillate fuels shall be determined using ASTM D240-87 or ASTM D2382-88. [District Rule 4703] Federally Enforceable Through Title V Permit

30. The higher heating value and lower heating value of gaseous fuels shall be determined using ASTM D3588-91, ASTM 1826-88, or ASTM 1945-81. [District Rule 4703] Federally Enforceable Through Title V Permit

31. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit

32. The District must be notified 30 days prior to any source testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

33. Source testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of source testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit

34. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit

35. If the turbine is fired on noncertified diesel fuel, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 129-00, D 2622-98, D 4294-02, D 1266-98, D 5453-00 or D 1552-01. [District Rule 2520, 9.3.2 and 40 CFR 60.335(10)(i)] Federally Enforceable Through Title V Permit

36. If the turbine is not fired on certified 15 ppmw sulfur diesel fuel, the sulfur content shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(4)] Federally Enforceable Through Title V Permit

37. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the 15 ppmw sulfur content diesel fuel requirement shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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38. The sulfur content of natural gas shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six months. If any six month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

39. The owner or operator shall certify, maintain, operate, and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. The CEM shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b) and District Rules 4703, 6.2.1, 2201, & 1080] Federally Enforceable Through Title V Permit

40. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit

41. The NOx, CO, and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit

42. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system and shall make CEM Data available to the District's automated polling system on a daily basis. 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, 7.1] Federally Enforceable Through Title V Permit

43. 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

44. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit

45. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The reports 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 the 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 (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), 60.7(c), 60.7(d), and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

46. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

47. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

48. Results of the CEMS shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1 & 6.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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49. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

50. The owner/operator shall perform a RATA as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

51. The permittee shall monitor and record the fuel flow rate, NOx emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

52. The permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the permittee demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]

53. 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]

54. Owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

55. The permittee shall maintain the following records: date and time, duration, and type of any start-up, shutdown, or malfunction; source testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit

56. The facility's operating and alarm logs must be available at the time of inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

57. Owner or operator shall keep the following records: (1) A record of the 12-month rolling combined NOx, VOC, CO, PM10, and SOx emissions for units N-2052-1 and N-2052-2, in (lb/year). This record shall be updated on at least a monthly basis, (2) A record of the total combined annual heat input for units N-2052-1 and N-2052-2. This record shall be updated on at least a monthly basis, (3) A record of the combined annual heat input for units N-2052-1 and N-2052-2, when firing on diesel fuel. This record shall be updated on at least a monthly basis, and (4) A record of the annual total duration of all start-up and shutdown events for this turbine. [District Rule 2520] Federally Enforceable Through Title V Permit

58. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

59. The requirements of the Acid Rain Program do not apply to this source because this is a simple combustion turbine that commenced commercial operation before November 15, 1990. A permit shield is granted from this requirement. [40 CFR 72.6(b)(1) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

60. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rule 407 (Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

61. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (h)(3), (j), (j)(1)(iii), and (j)(5). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

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PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. 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, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 8.0, and 11.0; 1081(as amended 12/16/93), Sections 3.0, 6.0, 7.1, 7.2, and 7.3; and 4201 (as amended 12/17/92). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

ATTACHMENT B

Previous Title V Operating Permit

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

Permit to Operate

FACILITY: N-2052 **EXPIRATION DATE:** 09/30/2007

LEGAL OWNER OR OPERATOR: MODESTO IRRIGATION DISTRICT
MAILING ADDRESS: GENERATION DEPT ADMIN OFFICES
P.O. BOX 4060
MODESTO, CA 95352

FACILITY LOCATION: MCCLURE
MODESTO, CA 95352

FACILITY DESCRIPTION: ELECTRIC POWER GENERATION

The Facility's Permit to Operate may include Facility-wide Requirements as well as requirements that apply to specific permit units.

This Permit to Operate remains valid through the permit expiration date listed above, subject to payment of annual permit fees and compliance with permit conditions and all applicable local, state, and federal regulations. This permit is valid only at the location specified above, and becomes void upon any transfer of ownership or location. Any modification of the equipment or operation, as defined in District Rule 2201, will require prior District approval. This permit shall be posted as prescribed in District Rule 2010.

Seyed Sadredin
Executive Director / APCO

David Warner
Director of Permit Services

May 23 2011 11:05AM – KARADERJ

San Joaquin Valley
Air Pollution Control District

FACILITY: N-2052-0-1 **EXPIRATION DATE:** 09/30/2007

FACILITY-WIDE REQUIREMENTS

1. The owner or operator shall notify the San Joaquin Valley Air Pollution Control District (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) and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit
2. The District shall be notified in writing within ten days following the correction of any breakdown condition. The breakdown notification shall include a description of the equipment malfunction or failure, the date and cause of the initial failure, the estimated emissions in excess of those allowed, and the methods utilized to restore normal operations. [District Rule 1100, 7.0; County Rules 110 (Fresno, Stanislaus, San Joaquin); 109 (Merced); 113 (Madera); and 111 (Kern, Tulare, Kings) and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit
3. The owner or operator of any stationary source operation that emits more than 25 tons per year of nitrogen oxides or reactive organic compounds, shall provide the District annually with a written statement in such form and at such time as the District prescribes, showing actual emissions of nitrogen oxides and reactive organic compounds from that source. [District Rule 1160, 5.0] Federally Enforceable Through Title V Permit
4. 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 (3/21/02). [District Rule 2010, 3.0 and 4.0; and 2020] Federally Enforceable Through Title V Permit
5. 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, 9.9.1 and 9.13.1] Federally Enforceable Through Title V Permit
6. A Permit to Operate or an Authority to Construct shall not be transferred unless a new application is filed with and approved by the District. [District Rule 2031] Federally Enforceable Through Title V Permit
7. Every application for a permit required under Rule 2010 (12/17/92) (Permits Required) shall be filed in a manner and form prescribed by the District. [District Rule 2040] Federally Enforceable Through Title V Permit
8. The operator shall maintain records of required monitoring that include: 1) the date, place, and time of sampling or measurement; 2) the date(s) analyses were performed; 3) the company or entity that performed the analysis; 4) the analytical techniques or methods used; 5) the results of such analysis; and 6) the operating conditions at the time of sampling or measurement. [District Rule 2520, 9.4.1] Federally Enforceable Through Title V Permit
9. 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

10. The operator shall submit reports of any required monitoring at least every six months unless a different frequency is required by an applicable requirement. All instances of deviations from permit requirements must be clearly identified in such reports. [District Rule 2520, 9.5.1] Federally Enforceable Through Title V Permit

11. Deviations from permit conditions must be promptly reported, including deviations attributable to upset conditions, as defined in the permit. For the purpose of this condition, promptly means as soon as reasonably possible, but no later than 10 days after detection. The report shall include the probable cause of such deviations, and any corrective actions or preventive measures taken. All required reports must be certified by a responsible official consistent with Section 10.0 of District Rule 2520 (6/21/01). [District Rules 2520, 9.5.2 and 1100, 7.0] Federally Enforceable Through Title V Permit

12. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

13. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

14. The permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 2520, 9.8.3] Federally Enforceable Through Title V Permit

15. The permit does not convey any property rights of any sort, or any exclusive privilege. [District Rule 2520, 9.8.4] Federally Enforceable Through Title V Permit

16. The Permittee shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the District copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to EPA along with a claim of confidentiality. [District Rule 2520, 9.8.5] Federally Enforceable Through Title V Permit

17. The permittee shall pay annual permit fees and other applicable fees as prescribed in Regulation III of the District Rules and Regulations. [District Rule 2520, 9.9] Federally Enforceable Through Title V Permit

18. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

19. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

20. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

21. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

22. 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 (11/15/01), by using EPA method 9. If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
23. No person shall manufacture, blend, repackage, supply, sell, solicit or apply any architectural coating with a VOC content in excess of the corresponding limit specified in the Table of Standards of District Rule 4601 (10/31/01) for use or sale within the District. [District Rule 4601, 5.1] Federally Enforceable Through Title V Permit
24. All VOC-containing materials for architectural coatings subject to Rule 4601 (10/31/01) shall be stored in closed containers when not in use. [District Rule 4601, 5.4] Federally Enforceable Through Title V Permit
25. The permittee shall comply with all the Labeling and Test Methods requirements outlined in Rule 4601 sections 6.1 and 6.3 (10/31/01). [District Rule 4601, 6.1 and 6.3] Federally Enforceable Through Title V Permit
26. With each report or document submitted under a permit requirement or a request for information by the District or EPA, the permittee shall include a certification of truth, accuracy, and completeness by a responsible official. [District Rule 2520, 9.13.1 and 10.0] Federally Enforceable Through Title V Permit
27. 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 82, Subpart F. [40 CFR 82 Subpart F] Federally Enforceable Through Title V Permit
28. 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 82, Subpart B. [40 CFR 82, Subpart B] Federally Enforceable Through Title V Permit
29. Disturbances of soil related to any construction, demolition, excavation, extraction, or water mining activities shall comply with the requirements for fugitive dust control in SJVUAPCD District Rule 8021 unless specifically exempted under Section 4.0 of Rule 8021(11/15/01) or Rule 8011 (11/15/01). [District Rule 8021 and 8011] Federally Enforceable Through Title V Permit
30. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8031 and 8011] Federally Enforceable Through Title V Permit
31. An owner/operator shall prevent or cleanup any carryout and trackout in accordance with the requirements of District Rule 8041 Section 5.0, unless specifically exempted under Section 4.0 of Rule 8041 (11/15/01) or Rule 8011 (11/15/01) [District Rule 8041 and 8011] Federally Enforceable Through Title V Permit
32. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8051 and 8011] Federally Enforceable Through Title V Permit
33. 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8061 and 8011] Federally Enforceable Through Title V Permit
34. Any unpaved vehicle/equipment area that anticipates more than 75 vehicle trips per day shall comply with the requirements of Section 5.1.1 of District Rule 8071. Any unpaved vehicle/equipment area that anticipates more than 100 vehicle trips per day shall comply with the requirements of Section 5.1.2 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 (11/15/01) or Rule 8011 (11/15/01). [District Rule 8071 and 8011] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

35. Any owner or operator of a demolition or renovation activity, as defined in 40 CFR 61.141, shall comply with the applicable inspection, notification, removal, and disposal procedures for asbestos containing materials as specified in 40 CFR 61.145 (Standard for Demolition and Renovation). [40 CFR 61 Subpart M] Federally Enforceable Through Title V Permit

36. 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 and PSD Permit NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

37. The permittee shall submit an application for Title V permit renewal to the District at least six months, but not greater than 18 months, prior to the permit expiration date. [District Rule 2520, 5.2] Federally Enforceable Through Title V Permit

38. 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 permit shall apply. [District Rule 2520, 9.1.1] Federally Enforceable Through Title V Permit

39. Compliance with permit conditions in the Title V permit shall be deemed 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), 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

40. Compliance with permit conditions in the Title V permit shall be deemed 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 (12/17/92); 4601, sections 5.1, 5.2, 5.4, 5.5, 6.1, and 6.2 (9/17/97); 8020 (4/25/96); 8030 (4/25/96); 8060 (4/25/96); A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

41. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

42. An analysis of a sample from each shipment of fuel oil received shall be performed to determine, by weight, the ash content, the sulfur content, the nitrogen content, and the aromatics content. [District NSR Rule] Federally Enforceable Through Title V Permit

43. With each shipment of oil, M.I.D. is to keep appropriate records from the oil suppliers certifying that the delivery meets the required specifications as outlined in M.I.D.7-24-84 specification for No. 2 Gas Turbine Fuel Oil as revised 9-23-96. [District NSR Rule] Federally Enforceable Through Title V Permit

44. M.I.D. is to maintain monthly reports to include hours of operation and fuel consumption during the months of operation. These reports shall be kept on the premises at all times and shall be made available for District's inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

45. When applicable to 40 CFR Part 68, a subject facility shall submit to the proper authority a Risk Management Plan when mandated by the regulation. [40 CFR Part 68] Federally Enforceable Through Title V Permit

46. On April 30, 2003, the initial Title V permit was issued. The reporting periods for the Report of Required Monitoring and the Compliance Certification Report are based upon this initial permit issuance date, 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, 9.5] Federally Enforceable Through Title V Permit

47. The facility (N-2052-1 and N-2052-2) shall consume no more fuel than the equivalent of 9,120 gallons per hour of distillate fuel oil on a daily average and no more fuel than the equivalent of 781 gallons per hour of distillate fuel oil on an annual average. Part or all of these equivalent gallons may be represented by the consumption of natural gas using the relation that 139.4 cubic feet of natural gas is equal to one gallon of distillate fuel oil in terms of Btu. [PSD NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

FACILITY-WIDE REQUIREMENTS CONTINUE ON NEXT PAGE

48. Equipment covered by this permit shall at all times be maintained in good working order and be operated as efficiently as possible so to minimize air pollutant emissions. [PSD NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

49. In the event of changes in control or ownership, this Operating Permit shall be binding on new owners and operators. The applicant shall notify successor of the existence of this Operating Permit and its conditions in writing and forward a copy to the District, California Air Resources Board, and EPA. [PSD NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

50. All correspondence as required by this Operating Permit shall be forwarded to: the District; Director, Air & Toxics Div. (Attn: A-3), EPA Region IX, 75 Hawthorne St. San Francisco, CA 94105; and Chief, Stationary Source Div., CARB, P.O. Box 2815, Sacramento, CA 95812. [PSD NSR 4-4-8, SJ 79-16] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-2052-1-9 **EXPIRATION DATE:** 09/30/2007

EQUIPMENT DESCRIPTION:
ONE GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL #281786) SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND OXIDATION CATALYST SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #1)

PERMIT UNIT REQUIREMENTS

1. The owner or operator shall certify, maintain, operate, and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. The CEM shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b) and District Rules 4703, 6.2.1, 2201, & 1080] Federally Enforceable Through Title V Permit
2. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
3. The NOx, CO, and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
4. The CEMS shall be linked to a data logger which is compatible with the District's Data aquisition system and shall make CEM Data available to the District's automated polling system on a daily basis. 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, 7.1] Federally Enforceable Through Title V Permit
5. 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
6. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
7. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The reports 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 the 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 (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

10. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Natural gas or 15 ppmw sulfur diesel are the only fuels permitted for combustion in the turbine. [District Rule 2201] Federally Enforceable Through Title V Permit

13. This unit shall be fired on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.33(b, District Rule 4201, County Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County] Federally Enforceable Through Title V Permit

14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit

15. Fuel consumption shall be limited to 794.6 MMBtu per hour. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The duration of all start-up and shutdown events shall not exceed 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit

17. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to a total of 4,000,000 MMBtu/year when firing on natural gas and diesel during base load operation. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to 2,000,000 MMBtu/year when firing on diesel during base load operation. [District Rule 2201] Federally Enforceable Through Title V Permit

18. The emissions during start-up and shutdown periods shall not exceed 40 lb NOx (as NO2)/hr and 100 lb CO/hr when firing on natural gas or diesel. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on natural gas: NOx (as NO2) - 8.64 lb/hr and 3.0 ppmvd @ 15% O2; VOC (as CH4) - 2.01 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.29 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 7.5 lb/hr; or SOx - 2.26 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

20. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on 15 ppmw sulfur diesel: NOx (as NO2) - 15.31 lb/hr and 5.0 ppmvd @ 15% O2; VOC (as CH4) - 2.14 lb/hr and 2.0 ppmvd @ 15% O2; CO - 27.97 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 20.00 lb/hr; or SOx - 1.19 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

21. Except during start-up and shutdown periods, NOx emissions from this unit shall not exceed the heat input weighted average of the applicable ppmvd or hourly limits when fired simultaneously on natural gas and 15 ppmw sulfur diesel, as calculated by the following equation: Weighted Average Limit = [(NOx limit for gaseous fuel x heat input from gaseous fuel) + (NOx limit for liquid fuel x heat input for liquid fuel)]/(heat input for gaseous fuel + heat input from liquid fuel). All emission concentration limits are based on 3-hour rolling averages. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Start-up period is defined as the period of time during which the 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 operation. The start-up period shall not exceed two hours for each start-up. [District Rule 4703, 3.24] Federally Enforceable Through Title V Permit

23. Shutdown is defined as the period beginning with the initiation of the turbine shutdown sequence and ending with the cessation of the firing of the turbine. The shutdown period shall not exceed two hours for each shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

24. The ammonia emissions shall not exceed either of the following limits: 11.4 lb/hr or 10.0 ppmvd @ 15% O2 based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Each 3-hour rolling average will be compiled from the three most recent one hour periods. Each 1-hour period shall commence on the hour. Each 1-hour period in a 24-hour average for ammonia slip will commence on the hour. The 24-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Emission rates shall not exceed any of the following limits: NOx (as NO2) - 441.5 lb/day; VOC - 51.4 lb/day; CO - 887.4 lb/day; PM10 - 480.0 lb/day; or SOx (as SO2) - 54.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Emissions from units N-2052-1 and N-2052-2 combined shall not exceed any of the following limits: NOx (as NO2) - 76,282 lb/year; VOC - 11,302 lb/year, CO - 176,572 lb/year, PM10 - 77,218 lb/year; or SOx - 12,281 lb/year. All annual emission limits are based on twelve consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Daily emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Source testing to measure NOx, CO, VOC, PM10 and ammonia emissions shall be conducted at least once every twelve months. NOx, CO, VOC and ammonia emissions shall be reported in ppmvd @ 15% O2 and lb/hr, and PM10 emissions shall be reported in lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Source testing to measure the start-up NOx emission rate shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit

32. Emission concentrations shall be measured using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7), and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

33. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

34. PM10 emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

35. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = (1,000,000 x a/b - c) 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; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102] Federally Enforceable Through Title V Permit

37. If the turbine is fired on noncertified diesel fuel, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 129-00, D 2622-98, D 4294-02, D 1266-98, D 5453-00 or D 1552-01. [District Rule 2520, 9.3.2 and 40 CFR 60.335(10)(i)] Federally Enforceable Through Title V Permit

38. If the turbine is not fired on certified 15 ppmw sulfur diesel fuel, the sulfur content shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(4)] Federally Enforceable Through Title V Permit

39. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the 15 ppmw sulfur content diesel fuel requirement shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

40. The facility's operating and alarm logs must be available at the time of inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

41. The sulfur content of natural gas shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six months. If any six month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

42. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit

43. The District must be notified 30 days prior to any source testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

44. Source testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of source testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit

45. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit

46. Results of the CEMS shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1 & 6.4] Federally Enforceable Through Title V Permit

47. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

48. Owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

49. The requirements of the Acid Rain Program do not apply to this source because this is a simple combustion turbine that commenced commercial operation before November 15, 1990. A permit shield is granted from this requirement. [40 CFR 72.6(b)(1) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

50. All equipment shall be maintained in proper 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

51. The permittee shall monitor and record the fuel flow rate, NOx emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

52. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

53. The owner/operator shall perform a RATA as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

54. The permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the permittee demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]

55. 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]

56. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (a)(2), 60.333 (b); 60.334(b) (b)(1), (b)(2), (h)(3), (j), (j)(1)(iii), and (j)(5), and 60.335(a), (b)(7), (b)(3), and District Rule 4703 (as amended 8/17/06), Sections 5.1.2.1, 5.2, 6.2.1, 6.2.6, 6.3, and 6.4. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

58. 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, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 8.0, and 11.0; 1081(as amended 12/16/93), Sections 3.0, 6.0, 7.1, 7.2, and 7.3; and 4201 (as amended 12/17/92). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

59. The permittee shall maintain the following records: date and time, duration, and type of any start-up, shutdown, or malfunction; source testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit

60. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-2052-2-10 **EXPIRATION DATE:** 09/30/2007

EQUIPMENT DESCRIPTION:
ONE GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL #281905) SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND OXIDATION CATALYST SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #2)

PERMIT UNIT REQUIREMENTS

1. The owner or operator shall certify, maintain, operate, and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx, CO, and O2 concentrations. The CEM shall be capable of monitoring emissions during startups and shutdowns as well as during normal operating conditions. [40 CFR 60.334 (b) and District Rules 4703, 6.2.1, 2201, & 1080] Federally Enforceable Through Title V Permit
2. The CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(2) and District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
3. The NOx, CO, and O2 CEMS shall meet the requirements in 40 CFR 60, Appendix F Procedure 1 and Part 60, Appendix B Performance Specifications 2 and 3, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [40 CFR 60.334(b)(1) and District Rule 1080, 6.3, 6.5, 6.6, & 7.2] Federally Enforceable Through Title V Permit
4. The CEMS shall be linked to a data logger which is compatible with the District's Data aquisition system and shall make CEM Data available to the District's automated polling system on a daily basis. 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, 7.1] Federally Enforceable Through Title V Permit
5. 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
6. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emission measurements. [40 CFR 60.7(b) and District Rule 1080, 7.3] Federally Enforceable Through Title V Permit
7. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The reports 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 the 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 (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred. [40 CFR 60.334(j), (j)(5), and District Rule 1080, 8.0] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

8. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by this rule to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit

9. The exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods and shall be equipped with safe permanent provisions to sample stack gases with a portable NOx, CO, and O2 analyzer during District inspections. The sampling ports shall be located in accordance with the CARB regulation titled California Air Resources Board Air Monitoring Quality Assurance Volume VI, Standard Operating Procedures for Stationary Source Emission Monitoring and Testing. [District Rule 1081] Federally Enforceable Through Title V Permit

10. A selective catalytic reduction (SCR) system and an oxidation catalyst shall serve the gas turbine engine. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The gas turbine engine and generator lube oil vents shall be equipped with mist eliminators or equivalent technology sufficient to limit the visible emissions from the lube oil vents to not exceed 5% opacity, except for a period not exceeding three minutes in any one hour. [District Rule 2201] Federally Enforceable Through Title V Permit

12. Natural gas or 15 ppmw sulfur diesel are the only fuels permitted for combustion in the turbine. [District Rule 2201] Federally Enforceable Through Title V Permit

13. This unit shall be fired on natural gas as defined in 40 CFR 60.331(u) which has a total sulfur content of less than or equal to 1.0 gr/100 scf. [40 CFR 60.33(b, District Rule 4201, County Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus County] Federally Enforceable Through Title V Permit

14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.0] Federally Enforceable Through Title V Permit

15. Fuel consumption shall be limited to 794.6 MMBtu per hour. [District Rule 2201] Federally Enforceable Through Title V Permit

16. The duration of all start-up and shutdown events shall not exceed 200 hours per year. [District Rule 2201] Federally Enforceable Through Title V Permit

17. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to a total of 4,000,000 MMBtu/year when firing on natural gas and diesel during base load operation. The heat input to units N-2052-1 and N-2052-2 combined shall be limited to 2,000,000 MMBtu/year when firing on diesel during base load operation. [District Rule 2201] Federally Enforceable Through Title V Permit

18. The emissions during start-up and shutdown periods shall not exceed 40 lb NOx (as NO2)/hr and 100 lb CO/hr when firing on natural gas or diesel. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on natural gas: NOx (as NO2) - 8.64 lb/hr and 3.0 ppmvd @ 15% O2 ; VOC (as CH4) - 2.01 lb/hr and 2.0 ppmvd @ 15% O2; CO - 26.29 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 7.5 lb/hr; or SOx - 2.26 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

20. Except during start-up and shutdown periods, emissions from this unit shall not exceed any of the following limits when fired on 15 ppmw sulfur diesel: NOx (as NO2) - 15.31 lb/hr and 5.0 ppmvd @ 15% O2 ; VOC (as CH4) - 2.14 lb/hr and 2.0 ppmvd @ 15% O2; CO - 27.97 lb/hr and 15.0 ppmvd @ 15% O2; PM10 - 20.00 lb/hr; or SOx - 1.19 lb/hr. All emission concentration limits are based on 3-hour rolling averages. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

21. Except during start-up and shutdown periods, NOx emissions from this unit shall not exceed the heat input weighted average of the applicable ppmvd or hourly limits when fired simultaneously on natural gas and 15 ppmw sulfur diesel, as calculated by the following equation: Weighted Average Limit = [(NOx limit for gaseous fuel x heat input from gaseous fuel) + (NOx limit for liquid fuel x heat input for liquid fuel)]/(heat input for gaseous fuel + heat input from liquid fuel). All emission concentration limits are based on 3-hour rolling averages. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

22. Start-up period is defined as the period of time during which the 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 operation. The start-up period shall not exceed two hours for each start-up. [District Rule 4703, 3.24] Federally Enforceable Through Title V Permit

23. Shutdown is defined as the period beginning with the initiation of the turbine shutdown sequence and ending with the cessation of the firing of the turbine. The shutdown period shall not exceed two hours for each shutdown. [District Rule 4703] Federally Enforceable Through Title V Permit

24. The ammonia emissions shall not exceed either of the following limits: 11.4 lb/hr or 10.0 ppmvd @ 15% O2 based on a 24-hour rolling average. [District Rule 2201] Federally Enforceable Through Title V Permit

25. Each 3-hour rolling average will be compiled from the three most recent one hour periods. Each 1-hour period shall commence on the hour. Each 1-hour period in a 24-hour average for ammonia slip will commence on the hour. The 24-hour average will be calculated starting and ending at twelve-midnight. [District Rule 2201] Federally Enforceable Through Title V Permit

26. Emission rates shall not exceed any of the following limits: NOx (as NO2) - 441.5 lb/day; VOC - 51.4 lb/day; CO - 887.4 lb/day; PM10 - 480.0 lb/day; or SOx (as SO2) - 54.2 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

27. Emissions from units N-2052-1 and N-2052-2 combined shall not exceed any of the following limits: NOx (as NO2) - 76,282 lb/year; VOC - 11,302 lb/year, CO - 176,572 lb/year, PM10 - 77,218 lb/year; or SOx - 12,281 lb/year. All annual emission limits are based on twelve consecutive month rolling emissions totals. [District Rule 2201] Federally Enforceable Through Title V Permit

28. Daily emissions will be compiled for a 24-hour period starting and ending at twelve-midnight. Each calendar month in a twelve consecutive month rolling emissions total will commence at the beginning of the first day of the month. The twelve consecutive month rolling emissions totals to determine compliance with annual emission limits will be compiled from the twelve most recent calendar months. [District Rule 2201] Federally Enforceable Through Title V Permit

29. Source testing to measure NOx, CO, VOC, PM10 and ammonia emissions shall be conducted at least once every twelve months. NOx, CO, VOC and ammonia emissions shall be reported in ppmvd @ 15% O2 and lb/hr, and PM10 emissions shall be reported in lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

30. Source testing to measure the start-up NOx emission rate shall be conducted at least once every seven years. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Source testing shall be witnessed or authorized by District personnel and samples shall be collected by a California Air Resources Board (CARB) certified testing laboratory or a CARB certified source testing firm. [District Rule 1081] Federally Enforceable Through Title V Permit

32. Emission concentrations shall be measured using the following test methods: EPA Methods 7E or 20 for NOx emissions, EPA Methods 10 or 10B for CO emissions, EPA Methods 3, 3A, or 20 for Oxygen content of the exhaust gas. The 9-run tests shall be performed at highest physically achievable load of the gas turbine. [40 CFR 60.335(a), (b)(7), and District Rule 4703, 6.3.1, 6.4.1, 6.4.2, & 6.4.3] Federally Enforceable Through Title V Permit

33. VOC emissions (referenced as methane) shall be determined using EPA method 18 or EPA method 25. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

34. PM10 emissions shall be determined using EPA methods 201 and 202, EPA methods 201A and 202, or CARB method 501 in conjunction with CARB method 5. [District Rules 1081 and 2201] Federally Enforceable Through Title V Permit

35. Ammonia emissions shall be determined using BAAQMD method ST-1B. [District Rules 1081 and 4102] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

36. Compliance with the ammonia emission limits shall be demonstrated utilizing one of the following procedures: 1) calculate the daily ammonia emissions using the following equation: (ppmvd @ 15% O2) = (1,000,000 x a/b - c) 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; 2.) utilize another District-approved calculation method using measured surrogate parameters to determine the daily ammonia emissions in ppmvd @ 15% O2. If this option is chosen, the permittee shall submit a detailed calculation protocol for District approval at least 60 days prior to commencement of operation; 3.) Alternatively, the permittee may utilize a continuous in-stack ammonia monitor to verify compliance with the ammonia emissions limit. If this option is chosen, the permittee shall submit a monitoring plan for District approval at least 60 days prior to commencement of operation. [District Rule 4102] Federally Enforceable Through Title V Permit

37. If the turbine is fired on noncertified diesel fuel, then the sulfur content of the liquid fuel being fired in the unit shall be determined using ASTM D 129-00, D 2622-98, D 4294-02, D 1266-98, D 5453-00 or D 1552-01. [District Rule 2520, 9.3.2 and 40 CFR 60.335(10)(i)] Federally Enforceable Through Title V Permit

38. If the turbine is not fired on certified 15 ppmw sulfur diesel fuel, the sulfur content shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [40 CFR 60.334(h)(4)] Federally Enforceable Through Title V Permit

39. Copies of all fuel invoices, gas purchase contracts, supplier certifications, and test results to determine compliance with the 15 ppmw sulfur content diesel fuel requirement shall be maintained. The operator shall record daily amount and type(s) of fuel(s) combusted and all dates on which unit is fired on any noncertified fuel and record specific type of noncertified fuel used. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

40. The facility's operating and alarm logs must be available at the time of inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

41. The sulfur content of natural gas shall be: (i) documented in a valid purchase contract, a supplier certification, a tariff sheet or transportation contract or (ii) monitored weekly using ASTM Methods D4084, D5504, D6228, or Gas Processors Association Standard 2377. If sulfur content is less than 1.0 gr/100 scf for 8 consecutive weeks, then the Monitoring frequency shall be every six months. If any six month monitoring show an exceedance, weekly monitoring shall resume. [40 CFR 60.334(h)(3) and District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

42. The owner or operator shall be required to conform to the sampling facilities and testing procedures described in District Rule 1081, 3.0, & 6.0 (as amended 12/16/93). [District Rule 1081, 3.0 & 6.0] Federally Enforceable Through Title V Permit

43. The District must be notified 30 days prior to any source testing and a test plan shall be submitted for District approval 15 days prior to such testing. [District Rule 1081, 7.1] Federally Enforceable Through Title V Permit

44. Source testing shall be witnessed or authorized by District personnel. Test results must be submitted to the District within 60 days of source testing. [District Rule 1081, 7.2 & 7.3] Federally Enforceable Through Title V Permit

45. EPA approved alternative source testing methods will be allowed, upon District approval, provided it does not result in a relaxation of emission limitations. The request to utilize EPA approved alternative source testing methods must be submitted in writing and written approval received from the District prior to the submission of the source test plan. [District Rules 1081 and 4001] Federally Enforceable Through Title V Permit

46. Results of the CEMS shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of 40 CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1 & 6.4] Federally Enforceable Through Title V Permit

47. The owner or operator of a stationary gas turbine system shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.4.2 and 4703, 6.2.4] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

48. Owner or operator shall maintain a stationary gas turbine system operating log that includes, on a daily basis, the actual local time start-up and stop time, total hours of operation, type and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit

49. The requirements of the Acid Rain Program do not apply to this source because this is a simple combustion turbine that commenced commercial operation before November 15, 1990. A permit shield is granted from this requirement. [40 CFR 72.6(b)(1) and District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

50. All equipment shall be maintained in proper 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

51. The permittee shall monitor and record the fuel flow rate, NOx emission rate, CO emission rate, ammonia injection rate, exhaust temperature both prior to and after the SCR system, exhaust oxygen content and exhaust flow rate. [District Rules 2201, 4001 and 4703] Federally Enforceable Through Title V Permit

52. In accordance with 40 CFR, Part 60, Appendix F, 5.1, cylinder gas audits (CGA) or relative accuracy audits (RAA) of continuous emission monitors shall be conducted quarterly, except during quarters in which a relative accuracy test audit (RATA) is performed. Audit reports shall be submitted along with quarterly compliance reports to the District. [District Rule 1080] Federally Enforceable Through Title V Permit

53. The owner/operator shall perform a RATA as specified by 40 CFR Part 60, Appendix F, 5.11, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080] Federally Enforceable Through Title V Permit

54. The permittee shall notify the District of any breakdown condition as soon as reasonably possible, but no later than one hour after its detection, unless the permittee demonstrates to the District's satisfaction that the longer reporting period was necessary. [District Rule 1100]

55. 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]

56. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

57. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.332 (a)(1), (a)(2), 60.333 (b); 60.334(b) (b)(1), (b)(2), (h)(3), (j), (j)(1)(iii), and (j)(5), and 60.335(a), (b)(7), (b)(3), and District Rule 4703 (as amended 8/17/06), Sections 5.1.2.1, 5.2, 6.2.1, 6.2.6, 6.3, and 6.4. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

58. 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, 60.13, and District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 6.6, 7.1, 7.2, 7.3, 8.0, and 11.0; 1081(as amended 12/16/93), Sections 3.0, 6.0, 7.1, 7.2, and 7.3; and 4201 (as amended 12/17/92). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

59. The permittee shall maintain the following records: date and time, duration, and type of any start-up, shutdown, or malfunction; source testing, evaluations, calibrations, checks, adjustments, any period which a continuous monitoring system or device was inoperative, and maintenance of any continuous emission monitoring system or device. [District Rule 2201] Federally Enforceable Through Title V Permit

60. All records required to be maintained by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4703] Federally Enforceable Through Title V Permit

ATTACHMENT C

Detailed Facility List

Detailed Facility Report

For Facility=2052

Sorted by Facility Name and Permit Number

MODESTO IRRIGATION DISTRICT
MCCLURE
MODESTO, CA 95352

FAC # N 2052
STATUS A
TELEPHONE 2095267616

TYPE TitleV
TOXIC ID 10666
EXPIRE ON 09/30/2007
AREA 8
INSP. DATE 07/11

PERMIT NUMBER	FEE DESCRIPTION	FEE RULE	QTY	FEE AMOUNT	FEE TOTAL	PERMIT STATUS	EQUIPMENT DESCRIPTION
N-2052-1-9	49,500 kW	3020-08A G	1	10,215.00	10,215.00	A	ONE GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL #281786) SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND OXIDATION CATALYST SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #1)
N-2052-2-10	49,500 kW	3020-08A G	1	10,215.00	10,215.00	A	ONE GENERAL ELECTRIC MODEL MS-7000-1-B GAS TURBINE ENGINE (SERIAL #281905) SERVED BY A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM WITH AMMONIA INJECTION AND OXIDATION CATALYST SERVING A 49.5 MW ELECTRICAL GENERATOR (UNIT #2)

Number of Facilities Reported: 1

ATTACHMENT D

PSD Permit NSR 4-4-8, SJ 79-16

APPROVAL TO CONSTRUCT/MODIFY
A STATIONARY SOURCE

In compliance with provisions of the Clean Air Act, as amended (42 U.S.C. 7401 et seq.), Modesto Irrigation District is granted approval to construct a 49.8 megawatt gas turbine facility to be located in the Beard Industrial Park, Modesto, California in accordance with the plans submitted with the application and with the Federal regulations governing the review of New Sources and Modifications (40 CFR 52.233(g) and the Prevention of Significant Deterioration (40 CFR 52.21) and other conditions attached to this document and made a part of this approval.

Failure to comply with any condition or term set forth in this approval will be considered grounds for enforcement action pursuant to Section 113 of the Clean Air Act.

This Approval to Construct/Modify a stationary source grants no relief from the responsibility for compliance with any other applicable provision of 40 CFR Parts 52, 60 and 61 or any applicable Federal, State, or local air quality regulations.

This approval shall become effective immediately.

Dated: NOV [illegible]

Clyde B. Eller
Director, Enforcement Division

Permit Conditions

I. Notification of Commencement of Construction and Start-up

The Regional Administrator shall be notified in writing of the anticipated date of initial start-up (as defined in 40 CFR 60.2(o)) of each facility of the source not more than sixty (60) days nor less than thirty (30) days prior to such date and shall be notified in writing of the actual date of commencement of construction and start-up within fifteen (15) days after such date.

II. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this Approval to Construct/Modify shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions.

III. Malfunction

The Regional Administrator shall be notified by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of these conditions. In addition, the Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

IV. Right to Entry

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible

local air pollution control agency, and/or their authorized representatives, upon the presentation of credentials shall be permitted:

A. to enter upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and

B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of this Approval to Construct/Modify; and

C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and

D. to sample emissions from the source.

V. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency.

VI. Severability

The provisions of this Approval to Construct/Modify are severable, and, if any provision of this Approval to Construct/Modify is held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby.

VII. Other Applicable Regulations

The owner and operator of the proposed project shall construct and operate the proposed stationary source if 40 CFR Parts 52, 60 and 61 and all other applicable Federal, State and local air quality regulations.

VIII. Special Conditions

A. Fuel Usage and Sulfur Content

Modesto Irrigation District shall consume no more than 9120 gallons per hour of distillate fuel oil on a daily basis and no more than 729 gallons per hour on an annual average basis for the following equipment:

two (2) 49,800 kw gas turbine facilities

The sulfur content of the fuel shall be no greater than three tenths of one percent (0.3%) by weight as a daily average and no greater than 0.3% by weight on an annual basis as determined by ASTM Methods D115-68, D129-64, or D1551-64, or equivalent methods approved by the EPA. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for periodic inspection by the Stanislaus County APCD and the EPA.

B. Hours of Operation

The combined total operating hours for the two gas turbines shall not exceed 1400 hours per year.

C. Performance Tests

1. Within 60 days after achieving the maximum production rate of each new or modified source, but not later than 180 days after initial start-up of each new or modified source, and at such other times as specified by the EPA, Modesto Irrigation District shall conduct performance tests (as defined in 40 CFR 60.8) for nitrogen dioxide, particulate matter and carbon monoxide and furnish the Stanislaus County APCD and the EPA a written report of the results of such tests. All performance tests shall be conducted at the maximum operating capacity of the facilities being tested. The tests shall be conducted on an annual basis. The EPA (Attn: E-3-1) shall be notified at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to

arrange for an observer to be present at the test. Such prior approval will minimize the possibility of EPA rejection of test results for procedural deficiencies.

2. The performance tests shall be conducted for the following equipment designated below:

two (2) 49,800 kw gas turbine facilities

Performance tests for the emissions of nitrogen dioxide, particulate matter and carbon monoxide shall be conducted and results reported in accordance with the methods set forth in Part 60.8 and Methods 5, 10 and 20 of Appendix A of the Standards of Performance for New Sources regulations on the equipment named above. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods equivalent methods may be used if approved by the EPA.

D. Emission Limitations

On and after the date of start-up of the equipment for which the performance test required to be conducted by Condition C. above is initiated, Modesto Irrigation District shall not discharge or cause the discharge into the atmosphere from the subject equipment any emissions in excess of the following:

Pollutant	Limitations
Nitrogen Dioxide	0.23 lb/10^6 BTU*
Particulate Matter	0.025 lb/10^6 BTU
Carbon Monoxide	0.05 lb/10^6 BTU

* Note: This emission rate is equivalent to 46.5 ppm (percent by volume at 15 percent oxygen and on a dry basis)

E. The gas turbines are subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60). Modesto Irrigation District shall meet all requirements of Subparts A (General Requirements) and GG (Standards

of Performance for Stationary Gas Turbines) of this regulation.

IX. Agency Notifications

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

A. Director, Enforcement Division (Attn: E-3)
EPA Region IX
215 Fremont Street
San Francisco CA 94105 (415/556-6150)

B. Chief, Stationary Source Control Division
California Air Resources Board
P.O. Box 2815
Sacramento CA 95814

C. Pollution Control Officer
Stanislaus County Air Pollution Control District
1050 North Carpenter Road Suite J
Modesto CA 95351

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

IN REPLY REFER TO: E-4-2
NSR 4-4-8
SJ 79-16

Vincent Bradford
Assistant General Manager
Modesto Irrigation District
P.O. Box 4060
Modesto, CA 95352

DEC 30 1981

Dear Mr. Bradford:

In accordance with provisions of the Clean Air Act, as amended (42 USC 7401 et seq.) the Environmental Protection Agency has reviewed the request for amendments submitted by Modesto Irrigation District.

A request for public comment regarding EPA's proposed action on the above application has been published. After consideration of the expressed view of all interested persons, the EPA hereby issues the enclosed amendments to the Approval to Construct referenced above. This action does not constitute a significant change from the proposed action set forth and offered for public comment.

These amendments shall take effect immediately.

Sincerely yours,

Carl C. Kohnert, Jr.
Acting Director
Enforcement Division

Enclosure

cc: Stanislaus County APCD
CARB

X/C

Amendments to November 1, 1979
Approval to Construct
(NSR 4-4-8, SJ 79-16)

1. Condition VIII.A is hereby amended to read as follows:

A. Fuel Use and Sulfur Content

Modesto Irrigation District shall consume no more than 9120 gallons per hour of distillate fuel oil on a daily basis for the following equipment:

two (2) 49,800 KW gas turbine facilities
(McClure Units 1 and 2)

Modesto Irrigation District shall consume no more than 781 gallons per hour on an annual average basis for each of the following facilities:

two (2) 49,800 KW gas turbine facilities
(McClure Units 1 and 2)

The sulfur content of the fuel shall be no greater than 0.30% by weight calculated as a daily average and no greater than 0.30% calculated as an annual average. Fuel sulfur content shall be determined using ASTM Method D-129, D-1552, D2622, the most current method promulgated by ASTM, or by other methods approved by EPA. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for inspection by the Stanislaus County APCD and the EPA.

2. Condition VIII.B is hereby amended to read as follows:

B. Hours of Operation

The operating hours for each turbine shall not exceed 1500 hours per year. The number of hours of operation shall be recorded in a permanent record and shall be available for inspection by the Stanislaus County ACPD and the EPA.

All other conditions contained within EPA's Approval to Construct (NSR 4-4-8, SJ 79-16) shall remain unchanged and in effect.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

IN REPLY A-3-1
REFER TO: NSR 4-4-8
SJ 79-16

01 APR 1983

Mr. V.G. Bradford
Assistant General Manager
Power Operations
Modesto Irrigation District
1231 Eleventh Street
P.O. Box 4060
Modesto, CA 95352

Dear Mr. Bradford:

This is in response to your letter, dated March 3, 1983, requesting EPA to eliminate the annual source tests required by Modesto Irrigation District's November 1, 1979 PSD permit (NSR 4-4-8: SJ 79-16, Special Conditions VIII.C.1.). The annual tests are required for each of two identical 49.8 MW gas turbine units located at McClure Road in Beard Industrial Park, Modesto, California.

EPA has reviewed the information submitted by Modesto Irrigation District (MID) and has determined to revise the permit's annual source testing condition. The revision will require MID to only conduct annual source tests on one of the two turbines provided that: 1) the one unit tested meets all limits/conditions set forth in the permit, 2) both units have been operating on identical fuel and under similar conditions, and 3) the units are tested on a alternating basis. EPA has also revised the permit to allow a specific test to be waived upon prior written approval from EPA. Enclosed is a copy of the revised Special Condition VIII.C.1.

If you have any questions regarding this matter, please contact David Solomon of the New Source Section at (415)974-8240.

Sincerely yours,

David P. Howekamp
Director
Air Management Division

Enclosure

cc: CARB
Stanislaus County APCD

Amendment to EPA's November 1, 1979
Approval to Construct
NSR 4-4-8: SJ 79-16

The November 1, 1979 Approval to Construct (as amended on December 30, 1981) is hereby amended as follows. This amendment shall take effect the date of this letter.

Special Condition VIII.C.1. is hereby amended to read as follows:

C. Performance Tests

1. Within 60 days after achieving the maximum production rate of each new or modified source, but not later than 180 days after initial start-up of each new or modified source, and at such other times as specified by the EPA, Modesto Irrigation District shall conduct performance tests (as defined in 40 CFR 60.8) for nitrogen dioxide, particulate matter and carbon ~~dioxide~~ monoxide and furnish the Stanislaus County APCD and the EPA a written report of the results of such tests. All performance tests shall be conducted at the maximum operating capacity of the facilities being tested. The tests shall be conducted on an annual basis and at such times as may be specified by EPA. The EPA (Attn: A-3-3) shall be notified at least 30 days prior to such tests to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test. Such prior approval will minimize the possiblity of EPA rejection of test results for procedural deficiencies.

8-8-83 lcth

Only one of the two (2) 49,800 KW gas turbine facilities specified in Condition VIII.C.2. need be tested provided Modesto Irrigation District submit to EPA in writing documentation that: 1) the one unit tested meets all limits/conditions set forth in this permit, 2) both units have been operating on identical fuel and under similar conditions, and 3) the units are being tested on an alternating basis. Also, after initial performance tests and upon written request and justification from Modesto Irrigation District, and written approval from EPA, a specific annual test may be waived.

All other conditions (including Special Conditions VIII.C.2.) contained within EPA November 1, 1979 Approval to Construct shall remain unchanged and in effect.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

08 AUG 1983

In Reply A-3-1
Refer to: NSR 4-4-8
SJ 79-16

Mr. V. G. Bradford
Assistant General Manager
Power Operations
Modesto Irrigation District
1231 Eleventh Street
P. O. Box 4060
Modesto, CA 95352

Dear Mr. Bradford:

On April 1, 1983 EPA issued an amendment to Modesto Irrigation District's (MID) November 1, 1979 PSD permit (NSR 4-4-8:SJ 79-16). The amendment specified in part that MID conduct source tests for carbon dioxide. This testing requirement is incorrect. The correct pollutant to be tested for is carbon monoxide as measured by EPA Method 10.

We would also like to bring to your attention that EPA is referring to nitrogen oxides, as measured as nitrogen dioxide by EPA Method 5, whenever nitrogen dioxide is specified in the permit.

If you have any questions, please contact David Solomon of my staff at (415) 974-8240.

Sincerely,

David P. Howekamp
Director
Air Management Division

cc: ARB
Stanislaus County APCD

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
215 Fremont Street
San Francisco, Ca. 94105

IN REPLY REFER TO: A-3-1
NSR 4-4-8
SJ 79-16

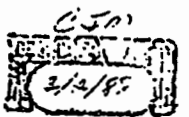
Mr. C. J. Mayer
Chief, Electric Operations Division
Modesto Irrigation District
P.O. Box 4060
Modesto, CA 95352

Dear Mr. Mayer:

This letter contains our response to your December 17, 1987 request to amend your November 1, 1979 Approval to Construct with regards to fuel usage (NSR 4-4-8: SJ 79-16, Special Conditions VIII, Part A). Currently, distillate fuel oil #2 is the only permitted fuel for each of the two identical 49.8 MW gas turbine units located at McClure Road in Beard Industrial Park, Modesto, California.

Modesto Irrigation District (MID) requests that the restriction on fuel usage be revised to allow the use of both natural gas and distillate fuel oil. The permitted restrictions on fuel consumption rates would remain unchanged using the conversion factor of 139.4 cubic feet of natural gas equals one gallon of distillate fuel.

The EPA has reviewed the information submitted by MID and has determined that the project, as amended, will not cause significant deterioration of air quality or interfere with the attainment and maintenance of the National Ambient Air Quality Standards in the Stanislaus County Air Pollution Control District. The EPA has revised Special Condition Part A to allow for the use of natural gas. All other permit conditions and amendments are unchanged and remain in effect. Enclosed is a copy of the revised Special Condition VIII, Part A.



Should you have any questions regarding this matter, Please contact Peter Fickenscher of our New Source Section at (415) 974-8226.

Sincerely,

David P. Howekamp
Director
Air Management Division

Enclosure:

cc: Stanislaus County APCD, Wayne Morgan
CARB, Ray Menebroker

ADDENDUM
PERMIT CONDITIONS
MODESTO IRRIGATION DISTRICT
(NSR 4-4-8, SJ 79-16)

The November 1, 1979 Approval to Construct (as amended on December 30, 1981 and April 1, 1983) is hereby amended as follows. The amendment shall take effect on the date of this letter.

Special Conditions VIII. A. is revised to read as follows:

A. Fuel Use and Sulfur Content

The Modesto Irrigation District shall consume no more fuel than the equivalent of 9,120 gallons per hour of distillate fuel oil on a daily average and no more than the equivalent of 781 gallons per hour of distillate fuel oil on an annual average. Part or all of these equivalent gallons may be represented by the consumption of natural gas using the relation that 139.4 cubic feet of natural gas is equal to one gallon of distillate fuel oil in terms of BTU. Distillate fuel oil and natural gas are the only two fuels allowed by this permit. These restrictions apply to each of the following facilities:

two (2) 49,800 KW gas turbine facilities
(McClure Units 1 and 2)

The sulfur content of the fuel shall be no greater than 0.30% by weight calculated as a daily average and no greater than 0.30% calculated on an annual average. Fuel sulfur content shall be determined using ASTM Method D-129, D-1552, D2622, the most current method promulgated by ASTM, or by other methods approved by EPA. The amount of fuel burned and the sulfur content of the fuel shall be recorded in a permanent record and shall be available for inspection by the Stanislaus County APCD and the EPA.