



Mr. Doyle Hibler
All American Oil & Gas dba Western Power and Steam
3300 Manor Street
Bakersfield, CA 93308

**Re: Proposed Authority to Construct/Certificate of Conformity (Minor Mod)
District Facility # S-724
Project # 1154126**

Dear Mr. Hibler:

Enclosed for your review is the District's analysis of an application for Authority to Construct for the facility identified above. You requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project removes a steam turbine electrical generator from a cogeneration system.

After addressing all comments made during the 45-day EPA comment period, the District intends to issue the Authority to Construct with a Certificate of Conformity. Prior to operating with modifications authorized by the Authority to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Leonard Scandura, Permit Services Manager, at (661) 392-5500.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
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Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Remove Steam Turbine Electrical Generator

Facility Name: All American Oil & Gas Inc dba Western Power & Steam Inc Date: January 15, 2016
Mailing Address: 3300 Manor Street Bakersfield, CA 93308 Engineer: Richard Edgehill
Lead Engineer: Dan Klevann
Contact Person: Doyle Hibler and Doug McCormick *DK 1-15-16*
Telephone: (661) 393-1618 (DH) and (661) 282-2200 (DM)
Fax: (661) 393-3602
E-Mail: dhibler@wpsi1.com
Application #(s): S-724-1-7
Project #: 1154126
Deemed Complete: November 17, 2015

I. Proposal

All American Oil & Gas Inc dba Western Power & Steam Inc (All American) has requested an Authority to Construct (ATC) permit to remove the steam turbine electrical generator associated with cogeneration system S-724-1. The final rating of the gas turbine electrical generator will be 20 MW.

Note that no changes in fuel use nor emissions of the gas turbine are proposed. The project is not a NSR modification (please see the Compliance Section). BACT, offsets, and public notice are not required.

Current PTO S-724-1-6 is included in **Attachment I**.

All American received their Title V Permit on January 6, 2000. This modification can be classified as a Title V minor modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. All American must apply to administratively amend their Title V permit.

II. Applicable Rules

Rule 2201 New and Modified Stationary Source Review Rule (4/21/11) – **not applicable** – please see Compliance Section

- Rule 2410 Prevention of Significant Deterioration (6/16/11) – **not applicable** –not an NSR Modification and there is no increase in emissions
- Rule 2520 Federally Mandated Operating Permits (6/21/01)
- Rule 2520 Federally Mandated Operating Permits (6/21/01)
- Rule 4001 New Source Performance Standards (4/14/99)
 - Subpart GG - Standards of Performance for Stationary Gas Turbines
 - Subpart KKKK – Standards of Performance for Stationary Combustion Turbines – **not applicable**- units were constructed pre-2005
- Rule 4101 Visible Emissions (02/17/05)
- Rule 4102 Nuisance (12/17/92)
- Rule 4201 Particulate Matter Concentration (12/17/92)
- Rule 4703 Stationary Gas Turbines (09/20/07)
- Rule 4801 Sulfur Compounds (12/17/92)
- CH&SC 41700 Health Risk Assessment
- CH&SC 42301.6 School Notice
- Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
- California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The cogeneration facility is located in the Kern River Oil Fields, near 3300 Manor Drive in Oildale, California, NW Section 6, T29 S, R28 E. The project site is not located within 1000 feet of a school.

IV. Process Description

All American operates a gas turbine engine-driven combined cycle cogeneration system which supplies electricity to the local power grid. The 29.1 MW system includes natural gas-fired turbine, exhaust heat recovery steam generator (HRSG), steam turbine, and selective catalytic reduction (SCR). Steam from the cogeneration system is used by the steam turbine and by the thermally enhanced oil recovery (TEOR) operations in the surrounding land. No changes in equipment or process flow are proposed.

Proposed Modification

The steam turbine electrical generator (7 MW) will be removed in the project. The gas turbine electrical generating capacity will be lowered to 20 MW. The facility HRSG will continue to provide steam for TEOR operations.

V. Equipment Listing

Pre-Project Equipment Description:

PTO S-724-1-6: COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 22.1 MW GAS & 7 MW STEAM TURBINE ELECTRICAL GENERATORS, INLET AIR ABSORPTION CHILLER, WATER

INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, &
BABCOCK-HITACHI SCR SYSTEM

Proposed Modification:

ATC S-724-1-7: MODIFICATION OF COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 22.1 MW GAS & 7 MW STEAM TURBINE ELECTRICAL GENERATORS, INLET AIR ABSORPTION CHILLER, WATER INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, & BABCOCK-HITACHI SCR SYSTEM: REMOVE 7 MW STEAM TURBINE ELECTRICAL GENERATOR AND REVISE ELECTRICAL GENERATION CAPACITY TO 20 MW

Post Project Equipment Description:

PTO S-724-1-7: COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 20 MW GAS TURBINE ELECTRICAL GENERATOR, INLET AIR ABSORPTION CHILLER, WATER INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, & BABCOCK-HITACHI SCR SYSTEM

VI. Emission Control Technology Evaluation

As stated above, the cogeneration system includes a natural gas-fired turbine and selective catalytic reduction (SCR) for control of NOx emissions. No changes to the SCR system are proposed.

VII. General Calculations

A. Assumptions

Operational time, 365 days/yr
Fuel use: 6.34 MMscf/day
Natural gas heating value: 100 Btu/scf

B. Emission Factors

Pollutant	Pre-Project Emission Factors (EF1)		Source
NO _x	0.027 lb-NO _x /MMBtu	7.7 ppmv @ 15% O ₂	Current Permit, lb/MMBtu from District Calculator
SO _x		0.32 lb SO _x /hr	Current Permit
PM ₁₀		5.66 lb/hr turbine exhaust and 0.58 lb/hr lube oil cooler accumulator vents	Current Permit
CO	0.101 lb-CO/MMBtu	48 ppmvd @ 15% O ₂	Current Permit, lb/MMBtu from District Calculator
VOC		5.38 lb/hr turbine exhaust and 0.58 lb/hr lube oil cooler accumulator vents	Current Permit

C. Calculations

Post-Project Potential to Emit (PE2)

$6.32 \text{ MMscf/day} \times 1000 \text{ MMBtu/MMscf} = 6,320 \text{ MMBtu/day} (163.33 \text{ MMBtu/hr})$

$\text{NO}_x: 0.027 \text{ lb/MMBtu} \times 6,320 \text{ MMBtu/day} = 170.6 \text{ lb NO}_x/\text{day} (65,513 \text{ lb NO}_x/\text{yr})$

$\text{SO}_x: 0.32 \text{ lb SO}_2/\text{hr} \times 24\text{hr/day} = 7.7 \text{ lb/day}, (2,803 \text{ lb/yr})$

$\text{PM}_{10}: (5.66 + 0.58) \times 24 \text{ hr/day} = 149.8 \text{ lb/day} (54,662 \text{ lb/yr})$

$\text{CO}: 0.101 \text{ lb/MMBtu} \times 6,320 \text{ MMBtu/day} = 644.6 \text{ lb CO/day} (235,279 \text{ lb CO/yr})$

$\text{VOC}: (5.38 + 0.58) \times 24 \text{ hr/day} = 143.0 \text{ lb/day} (52,210 \text{ lb/yr})$

PE2		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO _x	170.6	62,269
SO _x	7.7	2,811
PM ₁₀	149.8	54,677
CO	644.6	235,279
VOC	143.0	52,195

The emissions profile is included in **Attachment II**.

VIII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

Rule 2201 New and Modified Stationary Source Review Rule

Removal of the steam turbine electrical generator does not meet the following criteria for a Modification, as defined in Section 3.26, and is therefore not subject to this rule.

- 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.
- 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.
- 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.
- Addition of any new emissions unit which is subject to District permitting requirements.
- 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.

Rule 2201 is not applicable.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. The proposed modification is a Minor Modification to the Title V Permit pursuant to Section 3.20 of this rule:

In accordance with Rule 2520, 3.20, these modifications:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:

- a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act; and
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
 6. Do not seek to consolidate overlapping applicable requirements.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility may construct/operate under the ATC upon submittal of the Title V administrative amendment application. The Compliance Certification Form is included in **Attachment III**.

Rule 4001 New Source Performance Standards

40 CFR 60 – Subpart GG

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. Each of the turbines within this project were installed after 1977 and before 2005 (Subpart KKKK is not applicable). Therefore, this subpart applies to the turbines.

The turbine is currently operating in compliance and this project is not expected to affect compliance status. Continued compliance is expected.

Rule 4101 Visible Emissions

Per Section 5.0, no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). As the turbine is fired solely on natural gas, visible emissions are not expected to exceed Ringelmann 1 or 20% opacity. Also, based on past inspections of the facility continued compliance is expected.

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – Risk Management Policy for Permitting New and Modified Sources specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

As demonstrated above, there are no increases in emissions associated with this project and no changes to the exhaust stack parameters, therefore a health risk assessment is not necessary for this project and continued compliance with the requirements of this rule is expected.

Rule 4201 Particulate Matter Concentration

Section 3.1 prohibits discharge of dust, fumes, or total particulate matter into the atmosphere from any single source operation in excess of 0.1 grain per dry standard cubic foot. The unit is currently operating in compliance and the project is not expected to affect compliance status.

Rule 4703 Stationary Gas Turbines

The purpose of this rule is to limit oxides of nitrogen (NOx) 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) or a maximum heat input rating of more than 3 MMBtu per hour.

The gas turbine is rated at 20 MW. Therefore, the turbine is subject to the requirements of this rule.

Compliance with the NOx Tier II limit (5 ppmv @ 15% O₂) has been demonstrated with emission reductions of at least 95% across the SCR catalyst. The ATC and current PTO include permit conditions ensuring compliance with the monitoring and record-keeping requirements of the rule and the project is not expected to affect compliance status. Continued compliance is expected.

Rule 4801 Sulfur Compounds

Per Section 3.1, a person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 % by volume calculated as SO₂ on a dry basis averaged over 15 consecutive minutes.

The unit is operating in compliance and continued compliance is expected.

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The District performed an Engineering Evaluation (this document) for the proposed project and determined that all project specific emission unit(s) are exempt from Best Available Control Technology (BACT) requirements. Furthermore, the District has determined that potential emission increases would have a less than significant health impact on sensitive receptors. Issuance of permits for emissions units not subject to BACT requirements and with health impact less than significant is a matter of ensuring conformity with applicable District rules and regulations and does not require discretionary judgment or deliberation. Thus, the District concludes that this permitting action constitutes a ministerial approval. Section 21080 of the Public Resources Code exempts from the application of CEQA those projects over which a public agency exercises only ministerial approval. Therefore, the District finds that this project is exempt from the provisions of CEQA.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful COC review period, issue ATC S-724-1-7 subject to the permit conditions on the attached draft ATC in **Attachment IV**.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-724-1-7	3020-08A-F	20 MW	\$8564.00

Attachments

- I: Current PTO
- II: Emissions Profile
- III: Title V Compliance Certification Form
- IV: Draft ATC

Attachment I
Current PTO

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-724-1-6

EXPIRATION DATE: 12/31/2016

SECTION: NW06 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 22.1 MW GAS & 7 MW STEAM TURBINE ELECTRICAL GENERATORS, INLET AIR ABSORPTION CHILLER, WATER INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, & BABCOCK-HITACHI SCR SYSTEM

PERMIT UNIT REQUIREMENTS

1. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
2. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1080] Federally Enforceable Through Title V Permit
3. System shall be equipped with operational temperature indicator installed at the SCR catalyst inlet, continuously recording fuel gas flowmeter, ammonia flowmeter, and ammonia injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Gas turbine engine combustor water injection system shall be equipped with continuously recording water-to-fuel injection rate monitoring system accurate to within 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
5. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
6. 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
7. The NOx 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
8. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. 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
9. 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

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

10. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx 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
11. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
12. Gas turbine engine water injection rate shall be maintained at water-to-fuel ratio documented to result in compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
13. Gas turbine shall be shut down if water injection or SCR system is inoperative. [District NSR Rule] Federally Enforceable Through Title V Permit
14. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by Rule 1080 to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
15. Catalyst failure to perform as required due to catalyst poisoning or fouling shall not be recognized as basis for Rule 1100 enforcement exemption. [District NSR Rule] Federally Enforceable Through Title V Permit
16. The start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit
17. Unit shall be fired exclusively on PUC-regulated natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (b); 60.332(a); Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
18. The sulfur content of each fuel source 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 (6) months. If any six (6) 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
19. Gas turbine shall not burn more than 6.32 million SCF per day of natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
20. Oxides of Nitrogen (NOx) emissions shall not exceed 7.7 ppmvd at 15% O2. [District NSR Rule and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
21. Sulfur compounds emissions shall not exceed 0.32 lb/hr of SOx (as SO2). [District NSR Rule] Federally Enforceable Through Title V Permit
22. Particulate (PM10) emissions shall not exceed any of the following: 5.66 lb/hr in the turbine exhaust, or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit
23. Carbon Monoxide (CO) emissions shall not exceed 48 ppmvd @ 15% O2. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
24. Volatile Organic Compounds (VOC) emissions shall not exceed 5.38 lb/hr in the turbine exhaust or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

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

25. NOx and CO emissions shall be measured by District-witnessed, or authorized, sample collection by an independent testing laboratory annually within 60 days prior to the anniversary of the permit issuance date. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
26. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
27. Official test results and field data shall be submitted to the District within 60 days after collection. [District Rule 1081] Federally Enforceable Through Title V Permit
28. Performance testing shall be conducted annually to measure NOx and CO emission concentrations 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 the highest load of the gas turbine physically achievable on the date of the performance test. [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
29. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 50 ppmvd. [District NSR Rule] Federally Enforceable Through Title V Permit
30. A violation of NOx emission standards indicated by the NOx CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
31. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
32. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
33. Permittee shall maintain on file, copies of natural gas bills. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
34. Records of daily amount of fuel gas consumption shall be maintained on the premises for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
35. Operator shall maintain a stationary gas turbine 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, and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
36. The 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] Federally Enforceable Through Title V Permit

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

Attachment II Emissions Profile

Permit #: S-724-1-7	Last Updated
Facility: ALL AMERICAN OIL & GAS COMPANY	01/12/2016 EDGEHILR

Equipment Pre-Baselined: NO

	<u>NOX</u>	<u>SOX</u>	<u>PM10</u>	<u>CO</u>	<u>VOC</u>
Potential to Emit (lb/Yr):	62269.0	2811.0	54677.0	235279.0	52195.0
Daily Emis. Limit (lb/Day)	170.6	7.7	149.8	644.6	143.0
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	0.0	0.0	0.0	0.0	0.0
Q2:	0.0	0.0	0.0	0.0	0.0
Q3:	0.0	0.0	0.0	0.0	0.0
Q4:	0.0	0.0	0.0	0.0	0.0
Check if offsets are triggered but exemption applies	N	N	N	N	N
Offset Ratio					
Quarterly Offset Amounts (lb/Qtr)					
Q1:					
Q2:					
Q3:					
Q4:					

Attachment III
Title V Compliance Certification Form

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

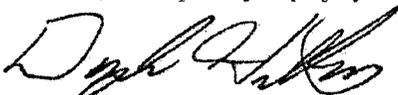
- SIGNIFICANT PERMIT MODIFICATION ADMINISTRATIVE
 MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: All American Oil & Gas Company	FACILITY ID: S - 724
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name:	
3. Agent to the Owner:	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- Based on information and belief formed after reasonable inquiry, the source identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the source identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



 Signature of Responsible Official

January 7, 2016

 Date

Doyle D. Hibler

 Name of Responsible Official (please print)

President WPSI

 Title of Responsible Official (please print)

Revise Turbine Equipment Listing

Attachment IV
Draft ATC

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT
ISSUANCE DATE: DRAFT

PERMIT NO: S-724-1-7

LEGAL OWNER OR OPERATOR: ALL AMERICAN OIL & GAS COMPANY
MAILING ADDRESS: 3300 MANOR STREET
BAKERSFIELD, CA 93308

LOCATION: HEAVY OIL CENTRAL
NW 06, T29S, R28E
BAKERSFIELD, CA

SECTION: NW06 **TOWNSHIP:** 29S **RANGE:** 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF COGENERATION SYSTEM WITH GE LM2500PE 250 MMBTU/HR GAS-FIRED GAS TURBINE ENGINE, 22.1 MW GAS & 7 MW STEAM TURBINE ELECTRICAL GENERATORS, INLET AIR ABSORPTION CHILLER, WATER INJECTION, UNFIRED HEAT RECOVERY STEAM GENERATOR, & BABCOCK-HITACHI SCR SYSTEM: REMOVE 7 MW STEAM TURBINE ELECTRICAL GENERATOR AND REVISE ELECTRICAL GENERATION CAPACITY TO 20 MW

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Operator shall not discharge into the atmosphere combustion contaminants (PM) exceeding in concentration at the point of discharge, 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
4. Exhaust stack shall be equipped with permanent provisions to allow collection of stack gas samples consistent with EPA test methods. [District Rule 1080] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU **MUST** NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (661) 392-5500 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director, APCO

Arnaud Marjollet, Director of Permit Services
S-724-1-7: Jan 19 2016 9:12AM -- EDGEHILL : Joint Inspection NOT Required

5. System shall be equipped with operational temperature indicator installed at the SCR catalyst inlet, continuously recording fuel gas flowmeter, ammonia flowmeter, and ammonia injection pressure indicator. [District NSR Rule] Federally Enforceable Through Title V Permit
6. Gas turbine engine combustor water injection system shall be equipped with continuously recording water-to-fuel injection rate monitoring system accurate to within 5%. [District NSR Rule] Federally Enforceable Through Title V Permit
7. The owner or operator shall install, certify, maintain, operate and quality-assure a Continuous Emission Monitoring System (CEMS) which continuously measures and records the exhaust gas NOx and O2 concentrations. [40 CFR 60.334(b) and District Rule 4703, 6.2.1] Federally Enforceable Through Title V Permit
8. 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
9. The NOx 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
10. The CEMS shall be linked to a data logger which is compatible with the District's Data acquisition system. 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
11. 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
12. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NOx 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
13. Excess emissions shall be defined as any operating hour in which 4-hour rolling average NOx concentration exceeds applicable emissions limit and a period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour for either NOx or O2 (or both). [40 CFR 60.334(J)(1)(iii)] Federally Enforceable Through Title V Permit
14. Gas turbine engine water injection rate shall be maintained at water-to-fuel ratio documented to result in compliance with emission limits. [District NSR Rule] Federally Enforceable Through Title V Permit
15. Gas turbine shall be shut down if water injection or SCR system is inoperative. [District NSR Rule] Federally Enforceable Through Title V Permit
16. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the monitoring devices required by Rule 1080 to ensure that such devices are functioning properly. [District Rule 1080, 11.0] Federally Enforceable Through Title V Permit
17. Catalyst failure to perform as required due to catalyst poisoning or fouling shall not be recognized as basis for Rule 1100 enforcement exemption. [District NSR Rule] Federally Enforceable Through Title V Permit
18. The start up or shut down time during which the exhaust gas is not within the normal operating temperature range, not to exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

19. Unit shall be fired exclusively on PUC-regulated natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333 (b); 60.332(a); Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
20. The sulfur content of each fuel source 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 (6) months. If any six (6) 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
21. Gas turbine shall not burn more than 6.32 million SCF per day of natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
22. Oxides of Nitrogen (NOx) emissions shall not exceed 7.7 ppmvd at 15% O₂. [District NSR Rule and District Rule 4703, 5.1.2] Federally Enforceable Through Title V Permit
23. Sulfur compounds emissions shall not exceed 0.32 lb/hr of SO_x (as SO₂). [District NSR Rule] Federally Enforceable Through Title V Permit
24. Particulate (PM₁₀) emissions shall not exceed any of the following: 5.66 lb/hr in the turbine exhaust, or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit
25. Carbon Monoxide (CO) emissions shall not exceed 48 ppmvd @ 15% O₂. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
26. Volatile Organic Compounds (VOC) emissions shall not exceed 5.38 lb/hr in the turbine exhaust or 0.58 lb/hr in the lube oil cooler/accumulator vents. [District NSR Rule] Federally Enforceable Through Title V Permit
27. NO_x and CO emissions shall be measured by District-witnessed, or authorized, sample collection by an independent testing laboratory annually within 60 days prior to the anniversary of the permit issuance date. [District NSR Rule and District Rule 4703] Federally Enforceable Through Title V Permit
28. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. [District Rule 1081] Federally Enforceable Through Title V Permit
29. Official test results and field data shall be submitted to the District within 60 days after collection. [District Rule 1081] Federally Enforceable Through Title V Permit
30. Performance testing shall be conducted annually to measure NO_x and CO emission concentrations using the following test methods: EPA Methods 7E or 20 for NO_x 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 the highest load of the gas turbine physically achievable on the date of the performance test. [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
31. Ammonia injection rate shall be controlled to maintain ammonia "breakthrough" to less than 50 ppmvd. [District NSR Rule] Federally Enforceable Through Title V Permit
32. A violation of NO_x emission standards indicated by the NO_x CEM shall be reported by the operator to the APCO within 96 hours. [District Rule 1080, 9.0] Federally Enforceable Through Title V Permit
33. Operator shall notify the APCO no later than eight hours after the detection of a breakdown of the CEM. Operator shall inform the APCO of the intent to shut down the CEM at least 24 hours prior to the event. [District Rule 1080, 10.0] Federally Enforceable Through Title V Permit
34. Results of the CEM system shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance with all applicable requirements of CFR 60.13. [40 CFR 60.13 and District Rule 4703, 5.1, 6.4] Federally Enforceable Through Title V Permit
35. Permittee shall maintain on file, copies of natural gas bills [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

36. Records of daily amount of fuel gas consumption shall be maintained on the premises for a period of at least five years and shall be made readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit
37. Operator shall maintain a stationary gas turbine 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, and quantity of fuel used. [District Rule 4703, 6.2.6] Federally Enforceable Through Title V Permit
38. The 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] Federally Enforceable Through Title V Permit

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