San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

APR 17 2013

Gerardo C. Rios, Chief
Permits Office
Air Division
U.S. EPA - Region IX
75 Hawthorne St
San Francisco, CA 94105

Re: **Proposed Authority to Construct / Certificate of Conformity (Minor Mod)**
District Facility # S-1114
Project # 1124280

Dear Mr. Rios:

Enclosed for your review is the District's engineering evaluation of an application for Authority to Construct for Seneca Resources , located at the heavy oil production stationary source in the western Kern County fields, CA , which has been issued a Title V permit. Seneca Resources is requesting that a Certificate of Conformity, with the procedural requirements of 40 CFR Part 70, be issued with this project. The project lowers the NOx emissions limit of a natural gas-fired IC engine for Rule 4702 compliance.

Enclosed is the engineering evaluation of this application, a copy of the current Title V permit, and proposed Authority to Construct # S-1114-103-6 with Certificate of Conformity. After demonstrating compliance with the Authority to Construct, the conditions will be incorporated into the facility's Title V permit through an administrative amendment.

Please submit your written comments on this project within the 45-day comment period that begins on the date you receive this letter. 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,

for David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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APR 17 2013

Timothy Alburger
Seneca Resources
2131 Mars Court
Bakersfield, CA 93308

Re: Proposed Authority to Construct / Certificate of Conformity (Minor Mod)
District Facility # S-1114
Project # 1124280

Dear Mr. Alburger:

Enclosed for your review is the District's analysis of your application for Authority to Construct for the facility identified above. You have requested that a Certificate of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The project lowers the NOx emissions limit of a natural gas-fired IC engine for Rule 4702 compliance.

After addressing any EPA comments made during the 45-day comment period, the Authority to Construct will be issued to the facility 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,

David Warner
Director of Permit Services

Enclosures
cc: Richard Edgehill, Permit Services

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Lower NOx Emissions Limit for Rule 4702 Compliance

Facility Name:	Seneca Resources	Date:	January 7, 2013
Mailing Address:	2131 Mars Court Bakersfield, CA 93308	Engineer:	Richard Edgehill
		Lead Engineer:	Allan Phillips
Contact Person:	Timothy Alburger		
Telephone:	(661) 399-4270 (# 3544)		
Fax:	(661) 399-7706		
E-Mail:	alburgert@srcx.com		
Application #(s):	S-1114-103-6		
Project #:	1124280		
Deemed Complete:	December 13, 2012		

I. Proposal

Seneca Resources (Seneca) has requested an Authority to Construct (ATC) to lower the NOx emissions limit from 25 ppmv @ 15% O_2 to 11 ppmv @ 15% O_2 for Rule 4702 compliance. As the IC engine has been shown in source testing to be capable of achieving this limit, no equipment modifications are proposed. Please note that the project is consistent with District FYI 111 Category 5 and is not a NSR modification. The project also corrects current permit 40 CFR Part 63 Subpart ZZZZ (NESHAP) conditions which are applicable to 2-stroke lean burn (2SLB) IC engines (non-emergency non-black start). The subject IC engine is 4-stroke rich burn (4SRB) (non-emergency non-black start). The replaced and revised requirements are listed in the table below.

~~Table 2d Item 6~~	~~Non-emergency non-black start 2SLB stationary RICE < 500 HP~~	~~Change oil and filter every 4,320 hours of operation or annually.~~ ~~Inspect spark plugs every 4,320 hours or annually.~~ ~~Inspect hoses and belts every 4,320 hours of operation or annually.~~
Table 2d Item 10	Non-emergency non-black start 4SRB stationary RICE≤ 500 HP	Change oil and filter every 1,440 hours of operation or annually. Inspect spark plugs every 1,440 hours or annually. Inspect hoses and belts every 1,440 hours of operation or annually.

This change is also not a NSR modification as it is consistent with District FYI 111 Category 5.

The project does not trigger BACT, offsets, or public notice.

PTO S-1114-103-5 is included in **Attachment I**.

Seneca facility S-1114 has a Title V permit. 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. Seneca 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**
Rule 2410	Prevention of Significant Deterioration (6/16/11) – **not applicable** – there is no emissions increase
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99) – 40 CFR Part 60 Subpart JJJJ and Subpart IIII - **not applicable** – engine is spark-ignited gas-fired and was constructed (ordered) before 6/12/06 and manufactured before 7/01/08
Rule 4002	National Emission Standards for Hazardous Air Pollutants (5/20/04) – 40 CFR Part 63 Subpart ZZZZ

Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4701	Stationary Internal Combustion Engines – Phase 1 (8/21/03)
Rule 4702	Stationary Internal Combustion Engines – Phase 2 (8/18/11)
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 IC engine is located in Seneca's existing Western Heavy Oil Production Operations (NE ¼, Sec. 24, T26W, R20E). The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

From project S-1114, 1020051

Seneca operates oil recovery operations in Diatomite and Tulare leases of the Lost Hills Oil Field in Kern County. Equipment used in these operations includes gas-liquid separators and water knockout vessels for separating water from crude oil. Gas produced from Diatomite Lease is of high Btu content and very low sulfur and is considered of commercial (sales) quality. Gas produced from Tulare Lease is of poor quality with low Btu content and high sulfur. Seneca also maintains tanks under vapor recovery. Recovered vapors have low Btu content and high sulfur contents and are incinerated to destroy VOCs. Waste gas (process gas and Tulare lease gas) is blended with Diatomite Lease gas before being flared. The remainder of the Diatomite Lease gas is compressed and sold.

IC engine S-1114-103-6 is a 4SRB IC engine (non-emergency non-black start) engine used to a power gas compressor for transportation of Diatomite Lease gas from the production operation to the sales pipeline and is fired on Diatomite Lease gas.

Proposed Modifications

The project lowers the NOx emissions limit from 25 ppmv @ 15% O_2 to 11 ppmv @ 15% O_2 for Rule 4702 compliance. Revised (corrected) 40 CFR Part 63 Subpart ZZZZ conditions are added to the ATC.

V. Equipment Listing

Pre-Project Equipment Description:

S-1114-103-5: 325 HP NATURAL GAS-FIRED CATERPILLAR MODEL G3406 IC ENGINE WITH THREE WAY CATALYST, DRIVING A GAS COMPRESSOR

Proposed Modification:

S-1114-103-6: MODIFICATION OF 325 HP NATURAL GAS-FIRED CATERPILLAR MODEL G3406 IC ENGINE WITH THREE WAY CATALYST, DRIVING A GAS COMPRESSOR: LOWER NOx EMISSIONS LIMIT FROM 25 PPMV @ 15% O2 TO 11 PPMV @ 15% O2 FOR RULE 4702 COMPLIANCE, CORRECT SUBPART ZZZZ CONDITIONS

Post Project Equipment Description:

S-1114-103-6: 325 HP NATURAL GAS-FIRED CATERPILLAR MODEL G3406 IC ENGINE WITH THREE WAY CATALYST, DRIVING A GAS COMPRESSOR

VI. Emission Control Technology Evaluation

The IC engine is equipped with Non Selective Catalytic Reduction (NSCR) for control of NOx, CO, and VOC emissions. No change in control technology is proposed.

VII. General Calculations

A. Assumptions

Operating schedule: 24 hr/day, 365 days/yr

IC engine emissions are based on fuel consumption rate of 2,684 scf/hr (61.84 MMBtu/day & 22,571.6 MMBtu/yr), 980 Btu/scf natural gas – project 1020051, ATC S-1114-103-0

The project is not a NSR modification and therefore calculations are not required. Only PE2 will be calculated for inclusion in the PAS emissions profile.

B. Emission Factors

For the new diesel-fired IC engine, the emissions factors for NO_X, CO, VOC, and PM_{10} are provided by the applicant and are guaranteed by the engine manufacturer. The SO_X emission factor is calculated using the sulfur content in the diesel fuel (0.0015% sulfur).

A. Emission Factors (pre-project 1020051, ATC S-1114-103-0)

NOx: 25 ppmv @ 15% O_2 (pre-project)

$$\frac{25\ ppmv\ NO_X}{10^6} \times \frac{46\ lb\ NO_X}{lb\text{-}mole} \times \frac{1\ lb\text{-}mole}{385.3\ ft^3} \times \frac{8710\ ft^3}{MMBtu} \times \frac{20.9}{20.9 - 15\%\ O_2} = 0.092\ \frac{lb}{MMBtu}$$

NOx: 11 ppmv @ 15% O_2 (post-project)

$$\frac{11\ ppmv\ NO_X}{10^6} \times \frac{46\ lb\ NO_X}{lb\text{-}mole} \times \frac{1\ lb\text{-}mole}{385.3\ ft^3} \times \frac{8710\ ft^3}{MMBtu} \times \frac{20.9}{20.9 - 15\%\ O_2} = 0.0405\ \frac{lb}{MMBtu}$$

VOC: 66 ppmv @ 15% O_2 (Proposed by Applicant)

$$\frac{30\ ppmv\ VOC}{10^6} \times \frac{16\ lb\ VOC}{lb\text{-}mole} \times \frac{1\ lb\text{-}mole}{385.3\ ft^3} \times \frac{8710\ ft^3}{MMBtu} \times \frac{20.9}{20.9 - 15\%\ O_2} = 0.038\ \frac{lb}{MMBtu}$$

CO: 400 ppmv @ 15% O_2 (Proposed by Applicant)

$$\frac{400\ ppmv\ CO}{10^6} \times \frac{28\ lb\ CO}{lb\text{-}mole} \times \frac{1\ lb\text{-}mole}{385.3\ ft^3} \times \frac{8710\ ft^3}{MMBtu} \times \frac{20.9}{20.9 - 15\%\ O_2} = 0.897\ \frac{lb}{MMBtu}$$

PM10: 10.0 lbs/MMscf (EPA publication for natural gas fired reciprocating engines 450/4-90-003, page 33)

$$\frac{10.0\ lb\ PM10}{MMscf} \times \frac{MMscf}{960\ MMBtu} = 0.011\ \frac{lb}{MMBtu}$$

SOx: 2.0 gr/100 scf total sulfur in fuel gas for IC engine (Proposed by Applicant).

$$\frac{2.0\ gr\ S}{100\ ft^3} \times \frac{64\ lb\ SO_X}{32\ lb\ S} \times \frac{1\ lb}{7000\ gr} \times \frac{1000\ ft^3}{0.96\ MMBtu} = 0.006\ \frac{lb}{MMBtu}$$

Post Project Potential to Emit (PE2)

NOx: 0.0405 lb/MMBtu x 61.84 MMBtu/day = 2.5 lb/day
NOx: 0.0405 lb/MMBtu x 22,571.6 MMBtu/yr = 914 lb/yr

SOx: 0.006 lb/MMBtu x 61.84 MMBtu/day = 0.4 lb/day
SOx: 0.006 lb/MMBtu x 22,571.6 MMBtu/yr = 135 lb/yr

PM_{10}: 0.0113 lb/MMBtu x 61.84 MMBtu/day = 0.7 lb/day
PM_{10}: 0.0113 lb/MMBtu x 22,571.6 MMBtu/yr = 255 lb/yr

CO: 0.897 lb/MMBtu x 61.84 MMBtu/day = 55.5 lb/day
CO: 0.897 lb/MMBtu x 22,571.6 MMBtu/yr = 20,247 lb/yr

VOC: 0.038 lb/MMBtu x 61.84 MMBtu/day = 2.4 lb/day
VOC: 0.038 lb/MMBtu x 22,571.6 MMBtu/yr = 858 lb/yr

Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. There is no increase in emissions of SOx, PM10, CO or VOC therefore QNEC = 0.

QNEC for NOx = (0.0405 lb/MMBtu – 0.092 lb/MMBtu) 22,571.6 MMBtu/yr
= -1162 lb/yr (-291 lb/qtr)

Emissions Profiles are included in **Attachment II**.

VIII. Compliance

Rule 2520 Federally Mandated Operating Permits

As discussed above, this facility is a major source. Pursuant to Rule 2520 and as required by permit condition, the facility will have up to 12 months from the date of ATC issuance to either submit a Title V Application or comply with District Rule 2530 *Federally Enforceable Potential to Emit.*

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.

In accordance with Rule 2520, 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/minor modification application.

Seneca's Title V Compliance Certification form is included in **Attachment IV**.

Rule 4002 National Emission Standards for Hazardous Air Pollutants (NESHAPs)

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE)

The subpart is applicable to the ICEs which were installed (contractural obligation) before June 12, 2006. The current PTO erroneously included conditions applicable for 2-stroke lean burn engines < 500 hp which will replaced by the following conditions applicable for 4-stroke, rich burn IC engines < 500 hp included in District FYI 309:

On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Y

On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Y

2228. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of action taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Y

2229. On and after October 19, 2013, the permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d of Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the

limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63 Subpart ZZZZ] Y

All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Y

Rule 4101 Visible Emissions

Rule 4101 states that 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 IC engine 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

Rule 4102 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, therefore a health risk assessment is not necessary and no further risk analysis is required.

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. As the IC engine is fired on natural gas only and the project has no effect on this continued compliance is expected.

Rule 4701 Internal Combustion Engines – Phase 1

Pursuant to Section 7.6.3.3.2 of Rule 4702, engines that are subject to Section 5.1 of Rule 4702, are no longer subject to Rule 4701.

Since the engine is subject to the requirements of Section 5.1 of Rule 4702, Rule 4701 is not applicable to these engines.

Rule 4702 Internal Combustion Engines – Phase 2

The purpose of this rule is to limit the emissions of nitrogen oxides (NO_X), carbon monoxide (CO), and volatile organic compounds (VOC) from internal combustion engines.

This rule applies to any internal combustion engine with a rated brake horsepower greater than 50 horsepower.

The proposed engine in this project is subject to the rule.

Section 5.1 applies to only Non-Agricultural Operations (Non-AO) IC engines up to 50 hp – not applicable.

Section 5.2 Table 1 requires that Non-AO spark-ignited IC engines > 50 hp meet the following emissions limits: 25 ppmv NO_X @ 15% O_2, 2000 ppmv CO @ 15% O_2 and 250 ppmv VOC @ 15% O_2 until demonstration of compliance with Table 2 pursuant to Section 7.5 compliance deadlines (Table 5 for single IC engine 1/1/12 for ECP, 1/1/13 for ATC, and 1/1/14 full compliance).

Table 2 requires that Non-AO spark-ignited IC engines > 50 hp meet the following emissions limits: 11 ppmv NO_X @ 15% O_2, 2000 ppmv CO @ 15% O_2 and 250 ppmv VOC @ 15% O_2. The applicant has proposed 11 ppmv-NO_x @ 15% O_2, 400 ppmv-CO @ 15% O_2 and 30 ppmv-VOC @ 15% O_2. Since these limits satisfy both Table 1 and Table 2 limits, compliance with Section 5.2 is expected.

Section 5.3 applies to CEMs – not applicable

Sections 5.4 and 5.5 apply to compliance demonstration with percent emissions reductions– not applicable

Section 5.6 applies to annual fee payment – not applicable

Section 5.7 applies to sulfur oxide (SOx) control requirements. The engine is required to combust natural gas containing no more than 2.0 gr S/100scf and therefore will meet the Section 5.7.2 requirement of 5 gr S/100 scf.

Section 5.8 Monitoring Requirements

Requires the operator with an engine equipped with an external control device to either install, operate, and maintain continuous monitoring equipment (CEMs) for NOx, CO, and oxygen, as identified in Rule 1080 (Stack Monitoring), or install, operate, and maintain APCO-approved alternate monitoring consisting of one or more of the following:

- Periodic NO_x and CO emission concentrations,
- Engine exhaust oxygen concentration,
- Air-to-fuel ratio,
- Flow rate of reducing agents added to engine exhaust,
- Catalyst inlet and exhaust temperature,

- Catalyst inlet and exhaust oxygen concentration,
- Other operational characteristics.

Since the applicant has selected periodic monitoring of emissions with a portable analyzer, the following conditions are listed on each permit to ensure compliance.

The permittee shall monitor and record the stack concentration of NO_x, CO, and O_2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O_2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]

{3786} If either the NO_X or CO concentrations corrected to 15% O_2, as measured by the portable analyzer, exceed the allowable emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing required by this condition. [District Rule 4702]

{3787} All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]

The permittee shall maintain records of: (1) the date and time of NO_X, CO, and O_2 measurements, (2) the O_2 concentration in percent and the measured NO_X and CO concentrations corrected to 15% O_2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702]

Section 5.8.3 – requires alternate monitoring system to be approved by APCO-continued compliance expected

Sections 5.8.4 and 5.8.5 - applies to installed monitoring systems (CEMS)-not applicable

Section 5.8.6 requires that each engine shall have a non-resettable operating time meter. The applicant has proposed to install a non-resettable elapsed operating meter, and the following condition is listed on the ATC to ensure compliance:

Permittee shall operate this engine with a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of operating a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. Permittee shall maintain these required meters in proper operating condition. The

fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rules 2201, 4701, and 4702]

Section 5.8.7 requires for each engine, the operator implement the Inspection and Monitoring (I&M) plan, if any, submitted to and approved by the APCO pursuant to Section 6.5. Section 5.8.8 requires that for each engine, the operator collect data through the I&M plan in a form approved by the APCO. The following condition is listed on the ATC to ensure continued compliance.

{3202} This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702]

Section 5.8.9 requires that a portable NO_x analyzer be used to take NO_x emission readings to verify compliance with the emission requirements of Section 5.1during each calendar quarter in which a source test is not performed. The data must be taken and reported as approved by the APCO. This requirement is identified in the alternate monitoring section above and by inclusion of the following ATC condition:

The permittee shall monitor and record the stack concentration of NOx, CO, and O2 at least once every calendar quarter (in which a source test is not performed) using a portable emission monitor that meets District specifications. [In-stack O2 monitors may be allowed if approved by the APCO.] Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]

Section 5.9 Monitoring Requirements for Other Engines (not subject to Section 5.8) – not applicable

Section 5.10 SOx Emissions Monitoring Requirements (applicable after compliance deadline in Table 7.5)

Section 5.10.1 requires an annual fuel sulfur analysis (applicable after compliance deadline in Table 7.5)

Sections 5.10.2 and 5.10.3 – applicable only if SOx control device used – not proposed

Section 5.11– **not applicable** - unit is not PEER

Section 6.1 requires that the owner of an engine to submit to the APCO an emission control plan of all actions to be taken to satisfy the emission requirements of Section 5.1 and the compliance schedules of Section 7.0. The engine is expected to be in full compliance with Rule 4702 emissions limits and SOx control requirement.

Section 6.2 requires that the owner of an engine subject to the requirements of this rule shall maintain an engine operating log to demonstrate compliance with this rule. The following condition is listed on each permit to ensure compliance.

{3797} The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702]

Section 6.2.2 requires that data collected be maintained for at least five years, shall be readily available, and made available to the APCO upon request. The following condition is listed on each permit to ensure compliance.

{modified 3873} All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ]

Section 6.3 identifies the source testing requirements. Engines retrofitted with exhaust control devices must comply with Sections 6.3.2 through 6.3.4 (source testing frequency, under normal conditions, source test protocol). Note that the 2/14/11 source test results were NOx 4 ppmvd @15% O_2, CO 8 ppmvd @15% O_2, and VOC 0.4 ppmvd @15% O_2 and the next scheduled source test is 2/14/13.Startup source testing may not be required. However, the following conditions are listed on each permit to ensure compliance.

District witnessed or approved compliance source testing for NOx, VOC, and CO emission limits shall be demonstrated within 60 days of ATC issuance and not less than once every 24 months thereafter. [District Rules 2201 and 4702] Y

Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Y

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] Y

The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Y

Section 6.3.5 applies to engines combusting PUC-quality gas only where reoccurring VOC testing is not required – not proposed

Section 6.3.6 (representative source testing) allows for representative source testing from an engine or engines that represents a specified group of engines, provided the necessary requirements are met. Representative source testing has not been proposed.

Section 6.4 specifies the required testing methods. The following conditions are listed on each permit to ensure compliance.

The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702] Y

Section 6.5 requires that the owner of an engine subject to the emission limits in Section 5.1 shall submit to the APCO for approval, an I&M plan that specifies all actions to be taken to satisfy the requirements of Section 5.6 and 6.5. Seneca has submitted an I&M Plan which has been approved.

The following condition was erroneously excluded from the PTO and has been added to the ATC to ensure compliance:

> {3212} The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]

Section 7.0 Compliance schedules

Sections 7.1 and 7.2 are related to loss of exemption and permanent removal requirements - not applicable

Sections 7.3 and 7.4 apply to compression ignition engines – not applicable

Section 7.5 requires that non AO spark ignited ICEs operate in compliance with the dates in Table 5 after the listed compliance dates.

Section 8.0 Alternate Emissions Control Plan – not proposed

Section 9.0 Exhaust Control Certification Requirements – NSCR Certification not proposed

The engine is expected to be in full compliance with Rule 4702.

Rule 4801 Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO_2) shall not exceed 0.2% by volume. The IC engine is restricted to combust natural gas containing no more than 2 gr S/100 scf and the project has no effect on this requirement. 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)

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 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; and
- 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 EPA COC review period, issue ATC S-1114-103-6 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-1114-103	3020-10-C	325 hp IC engine	$ 240.00

Attachments

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

ATTACHMENT I
Current PTO

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1114-103-5 **EXPIRATION DATE:** 02/29/2016

SECTION: NE24 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
325 HP NATURAL GAS-FIRED CATERPILLAR MODEL G3406 IC ENGINE WITH THREE WAY CATALYST, DRIVING A GAS COMPRESSOR

PERMIT UNIT REQUIREMENTS

1. Permittee shall maintain with the permit accurate fugitive component count associated with operation of engine/compressor and resultant emissions calculated using EPA Publication 453/R-95-017, Table 2-4 factors. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The engine shall only burn natural gas with fuel gas sulfur content of 2.0 grains/100 Scf or less. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Air contaminant emissions shall not exceed any of the following: NOx: 25 ppmv @ 15% O2; VOC: 30 ppmv @ 15% O2; CO: 400 ppmv @ 15% O2); and PM10: 10.0 lb/MMscf. [District Rules 2201 and 4702, 5.1] Federally Enforceable Through Title V Permit
4. The permittee shall monitor and record the stack concentrations of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications [in stack O2 monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
5. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing by this condition. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
6. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

7. District witnessed or approved compliance source testing for NOx, VOC, and CO emission limits shall be demonstrated not less than once every 24 months. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit
8. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit
9. 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
10. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
11. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit
12. Fuel sulfur content and higher heating value shall be measured quarterly using gas chromatographic analysis to calculate SOx emission rate. Test reports of measured fuel sulfur content and higher heating value shall be maintained. The calculated SOx emission rate shall be recorded in format approved by the District. If compliance with the SOx emission rate has been demonstrated for 8 consecutive quarters for a fuel source, then the testing frequency shall be annually. If an annual fuel sulfur content and higher heating value testing fails to show compliance, quarterly testing shall resume. [District Rule 1070] Federally Enforceable Through Title V Permit
13. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit
14. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit
15. The sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
16. Permittee shall operate this engine with a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of operating a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. Permittee shall maintain these required meters in proper operating condition. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit
17. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
18. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit
19. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

20. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit
21. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 1070 and 4702, 6.2.2; 40 CFR 63, ZZZZ] Federally Enforceable Through Title V Permit
22. On and after October 19, 2013, the engine shall be in full compliance with 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63, ZZZZ]
23. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63, ZZZZ]
24. On and after October 19, 2013, the engine's oil and filter shall be changed every 4,320 hours of operation or every 12 months, whichever comes first. [40 CFR 63, ZZZZ]
25. On and after October 19, 2013, the engine's spark plugs shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
26. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 4,320 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63, ZZZZ]
27. On and after October 19, 2013, the permittee shall maintain monthly records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63, ZZZZ]
28. On and after October 19, 2013, the permittee shall maintain monthly records of all performance tests, opacity and visible emissions observations and required maintenance performed on the air pollution control and monitoring equipment. [District Rule 1070 and 40 CFR 63, ZZZZ]
29. On and after October 19, 2013, the permittee shall maintain monthly records of the occurrence and duration of each malfunction of the operation (i.e., process equipment) or the air pollution control and monitoring equipment. The permittee shall also maintain monthly records of the action(s) taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning operation and air pollution control and monitoring equipment to its normal or usual manner of operation. [District Rule 1070 and 40 CFR 63, ZZZZ]

ATTACHMENT II
Emissions Profiles

Application Emissions

Permit #: S-1114-103-6	**Last Updated**
Facility: SENECA RESOURCES	03/04/2013 EDGEHILR

Equipment Pre-Baselined: NO

	NOX	SOX	PM10	CO	VOC
Potential to Emit (lb/Yr):	914.0	135.0	255.0	20247.0	858.0
Daily Emis. Limit (lb/Day)	2.5	0.4	0.7	55.5	2.4
Quarterly Net Emissions Change (lb/Qtr)					
Q1:	-290.0	0.0	0.0	0.0	0.0
Q2:	-290.0	0.0	0.0	0.0	0.0
Q3:	-291.0	0.0	0.0	0.0	0.0
Q4:	-291.0	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
[X] MINOR PERMIT MODIFICATION
[ ] ADMINISTRATIVE AMENDMENT

COMPANY NAME: **Seneca Resources**	FACILITY ID: S– **1114**
1. Type of Organization:[X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility	
2. Owner's Name:	
3. Agent to the Owner:	

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

(BE) Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).

(BE) Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.

(BE) Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.

(BE) 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:

Brad Elliott

Signature of Responsible Official

November 26, 2012

Date

Brad Elliott

Name of Responsible Official (please print)

Vice President – West Division

Title of Responsible Official (please print)

ATTACHMENT IV
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: S-1114-103-6 **ISSUANCE DATE:** DRAFT

LEGAL OWNER OR OPERATOR: SENECA RESOURCES
MAILING ADDRESS: 2131 MARS COURT
BAKERSFIELD, CA 93308-6830

LOCATION: HEAVY OIL WESTERN
CA

SECTION: NE24 **TOWNSHIP:** 26S **RANGE:** 20E

EQUIPMENT DESCRIPTION:
MODIFICATION OF 325 HP NATURAL GAS-FIRED CATERPILLAR MODEL G3406 IC ENGINE WITH THREE WAY CATALYST, DRIVING A GAS COMPRESSOR: REVISE PERMIT LIMITS TO COMPLY WITH RULE 4702, TABLE 2, CATEGORY 1.D

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. Permittee shall maintain with the permit accurate fugitive component count associated with operation of engine/compressor and resultant emissions calculated using EPA Publication 453/R-95-017, Table 2-4 factors. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The engine shall only burn natural gas with fuel gas sulfur content of 2.0 grains/100 Scf or less. [District Rule 2201] Federally Enforceable Through Title V Permit
5. Air contaminant emissions shall not exceed any of the following: NOx: 11ppmv @ 15% O2; VOC: 30 ppmv @ 15% O2; CO: 400 ppmv @ 15% O2); and PM10: 10.0 lb/MMscf. [District Rules 2201 and 4702] 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

DAVID WARNER, Director of Permit Services
S-1114-103-6 : Apr 11 2013 12:33PM -- EDGEHILR : Joint Inspection NOT Required

6. The permittee shall monitor and record the stack concentrations of NOx (as NO2), CO, and O2 at least once every calendar quarter using a portable emission monitor that meets District specifications [in stack O2 monitors may be allowed if approved by the APCO]. Monitoring shall be performed not less than once every month for 12 months if 2 consecutive deviations are observed during quarterly monitoring. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 1 day of restarting the engine unless monitoring has been performed within the last month if on a monthly monitoring schedule, or within the last quarter if on a quarterly monitoring schedule. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

7. If the NOx and/or CO concentrations corrected to 15% O2, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1 hour, conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of the performing the notification and testing by this condition. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

8. The permittee shall maintain records of: (1) the date and time of NOx, CO, and O2 measurements, (2) the O2 concentration in percent and the measured NOx and CO concentrations corrected to 15% O2, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

9. District witnessed or approved compliance source testing for NOx, VOC, and CO emission limits shall be demonstrated within 60 days of issuance of this ATC and not less than once every 24 months thereafter. [District Rules 2201 and 4702] Federally Enforceable Through Title V Permit

10. Compliance demonstration (source testing) shall be by District witnessed, or authorized, sample collection by ARB certified testing laboratory. [District Rule 1081] Federally Enforceable Through Title V Permit

11. 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

12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

13. The following test methods shall be used: NOx (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25A or 25B, or ARB Method 100. [District Rules 1081, 4701, and 4702] Federally Enforceable Through Title V Permit

14. Fuel sulfur content and higher heating value shall be measured quarterly using gas chromatographic analysis to calculate SOx emission rate. Test reports of measured fuel sulfur content and higher heating value shall be maintained. The calculated SOx emission rate shall be recorded in format approved by the District. If compliance with the SOx emission rate has been demonstrated for 8 consecutive quarters for a fuel source, then the testing frequency shall be annually. If an annual fuel sulfur content and higher heating value testing fails to show compliance, quarterly testing shall resume. [District Rule 1070] Federally Enforceable Through Title V Permit

15. {2414} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201, 3.1] Federally Enforceable Through Title V Permit

16. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Kern County Rule 407] Federally Enforceable Through Title V Permit

17. The sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D1072, D3031, D4084 or D3246. [District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

18. Permittee shall operate this engine with a nonresettable fuel meter and a nonresettable elapsed operating time meter. In lieu of operating a nonresettable fuel meter, the owner or operator may use an alternative device, method, or technique in determining monthly fuel consumption provided that the alternative is approved by the APCO. Permittee shall maintain these required meters in proper operating condition. The fuel meter shall be calibrated periodically per the recommendations of the manufacturer. [District Rules 2201, 4701, and 4702] Federally Enforceable Through Title V Permit

19. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

20. For emissions source testing, the arithmetic average of three 30-consecutive-minute test runs shall apply. If two of three runs are above an applicable limit, the test cannot be used to demonstrate compliance with an applicable limit. VOC emissions shall be reported as methane. VOC, NOx, and CO concentrations shall be reported in ppmv, corrected to 15% oxygen. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

21. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rules 4701 and 4702] Federally Enforceable Through Title V Permit

22. The permittee shall maintain an engine operating log to demonstrate compliance. The engine operating log shall include, on a monthly basis, the following information: total hours of operation, type and quantity (cubic feet of gas or gallons of liquid) of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance. [District Rule 4702] Federally Enforceable Through Title V Permit

23. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified on the Inspection and Monitoring (I&M) plan submitted to the District. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

24. {3212} The permittee shall update the I&M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I&M plan and must submit an updated I&M plan to the APCO for approval no later than 14 days after the change. The date and time of the change to the I&M plan shall be recorded in the engine's operating log. For modifications, the revised I&M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I&M plan at any time. [District Rule 4702]

25. On and after October 19, 2013, the engine shall be in full compliance with the applicable sections of 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

26. On and after October 19, 2013, the permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emissions standards applicable to all times other than startup in Table 2d of 40 CFR 63 Subpart ZZZZ apply. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

27. On and after October 19, 2013, the engine's oil and filter shall be changed every 1,440 hours of operation or every 12 months, whichever comes first. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

28. On and after October 19, 2013, the engine's spark plugs shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

29. On and after October 19, 2013, the engine's hoses and belts shall be inspected every 1,440 hours of operation or every 12 months, whichever comes first, and replaced as necessary. [40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

30. On and after October 19, 2013, the permittee shall maintain records of engine hours, dates, and cumulative hours since last service for each of the following maintenance activities: oil and filter changes, spark plug inspection and replacement, hose and belt inspection and replacement. [40 CFR 63 Subpart ZZZZ]

31. On and after October 19, 2013, the permittee shall maintain records that include any information necessary to demonstrate compliance with 40 CFR 63, ZZZZ. [District Rule 1070 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit

32. All records shall be maintained and retained on-site for a period of at least 5 years and shall be made available for District inspection upon request. [District Rule 4702 and 40 CFR 63 Subpart ZZZZ] Federally Enforceable Through Title V Permit