San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

OCT 21 2014

Mr. Brent Winn
Aera Energy LLC
PO Box 11164
Bakersfield, CA 93389

Re: Notice of Minor Title V Permit Modification
District Facility # S-1543
Project # 1143703

Dear Mr. Winn:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to modify Permit(s) to Operate (PTOs) S-1543-4-21 of the facility's current Title V operating permit. The project deletes 40 CFR Subpart 63 Subpart HH conditions which are not applicable as facility S-1543 is not a Major HAPs source.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V PTO(s) S-1543-4-23, application, and previous Title V permit. This project will be finalized after the 45-day EPA comment period.

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
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

TITLE V APPLICATION REVIEW

Minor Modification
Project #: 1143703

Engineer: Richard Edgehill
Date: October 20, 2014

Facility Number: S-1543
Facility Name: Aera Energy LLC
Mailing Address: PO Box 11164
Bakersfield, CA 93389

Received by APCD AQE

OCT 20 2014

Contact Name: Brent Winn
Phone: (661) 665-4363

Responsible Official: R. A. Roeder
Title: Process Supervisor

I. PROPOSAL

Aera Energy LLC is proposing a Title V Minor Permit Modification to delete 40 CFR 63 Subpart HH conditions from Gas Processing Plant PTO S-1543-4-21. These conditions are applicable to Major Hazardous Air Pollutants (HAPs) sources which emit more $\geq$ 10 ton/yr of a single HAP and $\geq$ 25 tons/yr total HAPs, respectively.

The District has determined that S-1543 is not a Major HAPs source.

Note that, because these conditions were imposed erroneously, their removal is not a relaxation in monitoring, reporting, or recordkeeping requirements in the permit. Therefore, the proposed change is a Minor (not a Significant) Modification of the Title V Permit.

The following conditions have been deleted from from PTO S-1543-4-21:

~~90. Annual average benzene emissions shall not exceed 1,980 pounds per year. [40 CFR 63.764(e)(ii), 40 CFR 63.765(a), and 40 CFR 63.762(e)] Y~~

~~91. The owner/operator shall not shut down equipment required for compliance with 40 CFR 63 subpart HH if the shutdown would contravene requirements based on subpart HH; unless: 1) the equipment is malfunctioning; or 2) the equipment must be shut down to avoid damage due to a startup, shutdown or malfunction of associated equipment. [40 CFR 63.762(b)] Y~~

~~92. During startups, shutdowns, and malfunctions when the requirements of 40 CFR 63 subpart HH do not apply pursuant to provision of this permit, the owner/operator shall implement measures to prevent or minimize emissions to the maximum extent practical as described in 40 CFR 63.762 (c). [40 C FR 63.762(c)] Y~~

~~93. Storage vessels with potential for flash emissions shall comply with 40 CFR 63.766. [40 CFR 63.766] Y~~

~~94. Each cover, closed-vent system, and control device installed and operated to control air emissions as required by the provisions of 40 CFR 63 subpart HH shall comply with section 40 CFR 63.771. [40 CFR 63.771] Y~~

~~95. The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc , Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1). [40 CFR 63.772(b)(2)] Y~~

~~96. Storage vessels with potential for flash emissions shall comply with the inspection and monitoring requirements of 40 CFR 63.773. [40 CFR 63.773] Y~~

~~97. The owner/operator shall maintain the records of actual average benzene emissions (in terms of benzene emission per year) as required by 40 CFR 63.772(b)(2). [40 CFR 63.774(d)(1)(ii)] Y~~

~~98. The owner/operator shall maintain all records required by 40 CFR 63.774. Records shall be maintained for a period of 5 years following the date of each occurrence, measurement, maintenance corrective action, report or period. All applicable records shall be maintained in hard copy or computer readable form in a manner such that they can be readily accessed. The most recent 12 months of records shall be maintained on site or shall be accessible from a central location by computer or other means that provides for access within 2 hours. The remaining 4 years of records may be retained offsite. [40 CFR 63.774] Y~~

~~99. The owner/operator shall notify and provide reports in accordance with 40 CFR 63.775. [40 CFR 63.775] Y~~

II. FACILITY LOCATION

The Gas Processing Plant equipment is located at the Belridge Gas Plant 32 Section 32, T28S, R21E.

III. EQUIPMENT DESCRIPTION

PTO S-1543-4-23: GAS PROCESSING PLANT WITH INLET GAS SCRUBBERS, INLET GAS FILTER SEPARATOR(S), SULFUR REMOVAL VESSEL EXHAUST GAS TREATMENT SYSTEM, SULFUR REMOVAL PROCESS PLANT WITH 1.9 MMBTU/HR THERMAL OXIDIZER, FRACTIONATION SECTION, ETHYLENE GLYCOL INJECTION, PROPANE REFRIGERATION, HEAT TRANSFER OIL CIRCULATION SYSTEM, FUEL GAS SYSTEM, AND METHANOL INJECTION

IV. APPLICABLE REQUIREMENTS

District Rule 2520, Federally Mandated Operating Permits (Adopted June 21, 2001)

VII. COMPLIANCE

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.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
2. The source's suggested draft permit; and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used.

VIII. ATTACHMENTS

A. Proposed Title V PTO S-1543-4-23
B. Permit Application
C. Current Title V PTO S-1543-4-21

ATTACHMENT A

Proposed Title V PTO

S-1543-4-23

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1543-4-23 **EXPIRATION DATE:** 05/31/2016

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

DRAFT

EQUIPMENT DESCRIPTION:
MODIFICATION OF GAS PROCESSING PLANT WITH INLET GAS SCRUBBERS, INLET GAS FILTER SEPARATOR(S), SULFUR REMOVAL VESSEL EXHAUST GAS TREATMENT SYSTEM, SULFUR REMOVAL PROCESS PLANT WITH 1.9 MMBTU/HR THERMAL OXIDIZER, FRACTIONATION SECTION, ETHYLENE GLYCOL INJECTION, PROPANE REFRIGERATION, HEAT TRANSFER OIL CIRCULATION SYSTEM, FUEL GAS SYSTEM, AND METHANOL INJECTION: REMOVE SUBPART HH CONDITIONS

PERMIT UNIT REQUIREMENTS

1. Operation shall include sulfur removal vessels employing fixed-bed granular iron oxide (or equivalent) sweetening process. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Operation shall include sulfur removal process plant employing chelated iron redox (or equivalent) sweetening process. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Operation shall be equipped with H2S sampling port at the sulfur removal vessel exhaust and the sulfur removal process plant exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Operation may include H2S scavenger chemical storage and injection equipment listed on S-1543-41-0 to be utilized on an as-needed basis, for supplemental removal of H2S from produced gas, to maintain gas sulfur content limit. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Active chemical concentrations in the Sulfurox regeneration solution shall be maintained by continuous chemical injection at appropriate chemical feed rates to ensure that H2S emissions do not increase as a result of regeneration solution degradation or exhaustion. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas processing plant equipment may also include outlet gas sulfur removal vessels and associated piping. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Off-gas sulfur concentration from the sulfur removal plant regenerator into the thermal oxidizer shall not exceed 75 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Hydrogen sulfide (H2S) concentration at discharge of sulfur removal vessels and/or sulfur removal plant shall not exceed 14 ppmv as measured by Draeger tubes. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total stationary source fugitive component VOC emissions shall not exceed 320.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Emissions of VOCs in regenerator vent gas shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Thermal oxidizer shall be used when regenerator vent gas VOC emissions rate exceeds 1.9 lb/day as calculated from measurements of VOC concentration in regenerator vent gas and regenerator vent gas flow rate. Thermal oxidizer shall remain in use until VOC emissions rate is less than 1.9 lb/day for 8 consecutive weeks. [District Rule 2201] Federally Enforceable Through Title V Permit
12. When thermal oxidizer is not in use, fuel line shall be disconnected (or locked out) and regeneration vent emissions shall be routed to bypass stack. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

13. Emissions of reduced sulfur compounds (as H2S) in regeneration vessel vent gas shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Flow rate of regeneration vent vessel vent gas shall be recorded each time vent gas is sampled for VOC or H2S, with the recorded flow rates used to perform mass balance emission calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Water-cooled heat exchangers shall be maintained and operated in a manner minimizing emission of VOC's in cooling tower. [District NSR Rule] Federally Enforceable Through Title V Permit

16. All pumps in VOC service installed after June 25, 2001 (excluding routine replacements of pumps installed prior to June 25, 2001) shall be subject to the BACT leak action level as described in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit

17. Pump seals in VOC service which are vented to a closed vent system (i.e. flare header) may be exempted from inspection and maintenance (I&M) requirements of 40 CFR Part 60, Subpart KKK and Rule 4409. For any I&M-exempt pump seals, permittee shall comply with record-keeping requirements of 40 CFR 60.486(d) and associated closed vent system shall comply with design and performance criteria set forth in 40 CFR 60.482-10 and Rule 4409, Section 3.4. [40 CFR 60.632(a), 60.482-2(f), 60.482-10, 60.486(d), District Rule 4409, 3.4, 4.2.1] Federally Enforceable Through Title V Permit

18. Only utility wastewater and process wastewater containing [less than 35 mg/L] VOC's shall be stored in Sump JC-2. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Heat transfer oil drain pit JC-3 shall be used only during breakdown, as defined in Rule 1100 (amended December 17, 1992), of heat transfer oil circulation unit. [District NSR Rule] Federally Enforceable Through Title V Permit

20. Filters handling fluids with greater than 10% VOCs by weight shall be completely drained before cleaning, and cleaning shall be performed in a manner minimizing VOC emissions. For filters excluded from this handling requirement, VOC content of fluids shall be documented by Double GC analysis, EPA test method 8240, or EPA Method 24. [District NSR Rule] Federally Enforceable Through Title V Permit

21. Leaks from valves, connectors, and other components (not including pump and compressor seals) subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible but not greater than one (1) cm from the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

22. Leaks from pump and compressor seals subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible but not greater than one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

23. Components subject to the BACT leak action level requirements shall be tagged or listed in an on-site log such that they may be readily identified as subject to BACT. [District NSR Rule] Federally Enforceable Through Title V Permit

24. Components subject to the BACT leak action level requirements are valves, connectors, pump seals, and compressor seals, and other components with emission factors in EPA Publication 450/3-83-007 which are subject to Rule 4409 (adopted April 20, 2005) and associated with the sulfur removal process plant, new refrigeration skid, other modifications performed to increase the production from 50 MM scf/day to 85 MM scf/day (new equipment installed after June 25, 2001). BACT leak action threshold does not apply to identical replacement of components existing prior to June 25, 2001. [District NSR Rule and Rule 4409] Federally Enforceable Through Title V Permit

25. Components subject to the BACT leak action level shall be cataloged, screened, and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for pump seals, and compressor seals and 100 ppmv for valves connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Rule 4409 (adopted April 20, 2005). This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the revised Operator Management Plan required by Rule 4409. [District NSR Rule and Rule 4409] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

26. For components not subject to BACT leak action level, permittee shall comply with monitoring, inspection, maintenance, and recordkeeping, and reporting requirements of 40 CFR Part 60 Subpart KKK and Rule 4409. [40 CFR Part 60 Subpart KKK and District Rule 4409] Federally Enforceable Through Title V Permit

27. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit

28. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District NSR Rule] Federally Enforceable Through Title V Permit

29. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District NSR Rule] Federally Enforceable Through Title V Permit

30. Valves shall be monitored with a portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District NSR Rule] Federally Enforceable Through Title V Permit

31. All other components such as diaphragms, instruments, and meters shall be monitored at all points of possible emissions. [District NSR Rule] Federally Enforceable Through Title V Permit

32. {3321} The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

33. {3322} For valves, threaded connections, flanges, pipes, pumps, compressors, and other components not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

34. {3323} For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

35. {3325} Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit

36. {3327} Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit

37. {3328} Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. {3329} An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit

39. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit

40. {3331} A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit

41. {3332} A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

42. {3333} When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

43. {3334} When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

44. {3335} When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

45. {3336} When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

46. {3337} When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

47. {3340} When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

48. {3341} For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit

49. {3342} For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

DRAFT

50. {3343} All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit

51. {3344} Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit

52. {3345} All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit

53. {3346} All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit

54. {3347} All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

55. {3348} All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

56. All pipes, in VOC service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit

57. {3350} The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non- Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit

58. {3351} Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit

59. {3352} The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit

60. {3353} A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit

61. {3354} Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

62. {3355} District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit

63. {3356} The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

64. {3357} The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

65. {3358} The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

66. {3359} For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit

67. {3360} If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

68. {3361} For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

69. {3362} All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit

70. {3363} The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit

71. {3364} By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

72. {3365} The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

73. {3366} Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

74. {3367} Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit

75. {3368} All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit

76. {3369} All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit

77. FOR PURPOSES OF RULE 4409 COMPLIANCE, the VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit

78. {3371} The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit

79. {3372} The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit

80. {3373} The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit

81. {3374} The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit

82. {3375} Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit

83. Permittee shall determine concentration of VOC in regeneration vent gas, regeneration vent gas flow rate, and regeneration vent gas VOC emissions (in lb/day) weekly for eight consecutive weeks. After demonstrating compliance for eight consecutive weeks VOC emissions testing may be conducted on a quarterly basis. If regeneration vent gas VOC emissions exceed 1.9 lb/day as measured on a quarterly basis, weekly sampling shall resume. Gas analysis shall be performed using ASTM D-3588, EPA Method 18, or EPA Method 25A. [District Rule 2201] Federally Enforceable Through Title V Permit

84. Permittee shall determine concentration of sulfur in regeneration vent gas, regeneration vent gas flow rate, and regenerator vent gas sulfur emissions (in lb/day) weekly for eight consecutive weeks. After demonstrating compliance for eight consecutive weeks testing may be conducted on a quarterly basis. If regeneration vent gas sulfur emissions exceed 0.4 lb/day as measured on a quarterly basis, weekly sampling shall resume. Weekly gas sampling shall be performed using Draeger tubes and quarterly gas analysis using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 1081 and 2201] Federally Enforceable Through Title V Permit

DRAFT

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

85. Sulferox regeneration vent stack shall be equipped with a valved or capped sampling extraction port or tubing accessible for District inspection upon request. [District Rule 1081 and 2201] Federally Enforceable Through Title V Permit

86. Permittee shall maintain records of weekly and quarterly measurements of concentration of sulfur and VOCs in regeneration vent gas, regeneration vent gas flow rate, and regeneration vent gas sulfur and VOC emissions. Such records will be made readily available for District inspection upon request for a period of five years. [District Rule 2201 and Rule 1070, 4.0] Federally Enforceable Through Title V Permit

87. Records of the sources and VOC content (mg/L) of utility wastewater and process wastewater in Sump JC-2 shall be kept and made available for District inspection upon request. [VOC content shall be determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E 260-85, may be excluded from the total concentration.] [District Rule 1070] Federally Enforceable Through Title V Permit

88. Permittee shall maintain for a period of five years, accurate records of fugitive inspection component counts, leak screening values in excess of 10,000 ppmv, leak screening values less than 10,000 ppmv, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

89. 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] Federally Enforceable Through Title V Permit

90. Compliance with Title V permit conditions for this unit shall be deemed compliance with applicable requirements of 40 CFR 60, Subpart KKK. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

ATTACHMENT B
Application

San Joaquin Valley Air Pollution Control District

APPLICATION FOR TITLE V MODIFICATION:

RECEIVED
SEP 26 2014
SJVAPCD
Southern Region

[ ] ADMINISTRATIVE AMENDMENT
[X] MINOR MODIFICATION
[ ] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: AERA ENERGY LLC

2. MAILING ADDRESS:
STREET/P.O. BOX: P.O. BOX 11164
CITY: _____ STATE: CA 9-DIGIT ZIP CODE: 93389-1164

3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED:
STREET: Belridge Gas Plant 32 Stationary Source (S-1543)
CITY: _____
1/4 SECTION 32 TOWNSHIP 28S RANGE 21E

INSTALLATION DATE:

4. GENERAL NATURE OF BUSINESS:

5. EQUIPMENT FOR WHICH APPLICATION IS MADE (Include Permit Nos.):

Modify PTO S-1543-4-21 – remove conditions 90 through 99 (pertaining to 40 CFR 60 Subpart HH). See cover letter and attachments for further details.

(Use additional sheets if necessary)

6. DO YOU REQUEST A CERTIFICATE OF CONFORMITY WITH THIS ACTION? [ ] YES [X] NO

7. IS THIS APPLICATION SUBMITTED AS A RESULT OF A NOV/NTC? [X] YES [ ] NO NOV/NTC No.: 15108

8. SIGNATURE OF APPLICANT/CONTACT PERSON: Brent Winn

TYPE OR PRINT TITLE OF APPLICANT: Environmental Engineer

9. TYPE OR PRINT NAME OF APPLICANT/CONTACT: Brent Winn

DATE: 9/20/14

10. FAX NUMBER: (661) 665-7437

TELEPHONE NUMBER: (661) 665-4363

FOR APCD USE ONLY: NO $

DATE STAMP	FILING FEE RECEIVED: $ _____/ DATE PAID: _____ PROJECT NO.: S-1143833 FACILITY REGION & ID: S-1543

RECEIVED
SEP 26 2014
SJVAPCD
Southern Region

San Joaquin Valley
Unified Air Pollution Control District

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

Remove non-applicable requirements for Subpart HH – Gas Plant 32 (S-1543)

I. TYPE OF PERMIT ACTION (Check appropriate box)

[ ] SIGNIFICANT PERMIT MODIFICATION [ ] ADMINISTRATIVE AMENDMENT
[X] MINOR PERMIT MODIFICATION

COMPANY NAME: **AERA ENERGY LLC**	FACILITY ID: **S-1543**
1. Type of Organization: [X] Corporation [ ] Sole Ownership [ ] Government [ ] Partnership [ ] Utility	
2. Owner's Name: **AERA ENERGY LLC**	
3. Agent to the Owner: ***N/A***	

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

RA Based on information and belief formed after reasonable inquiry, the emissions unit(s) identified in this application will continue to comply with the applicable federal requirement(s) which the emissions unit(s) is in compliance.

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

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

RA 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 — Date: 9-25-14

R.A. Roeder
Name of Responsible Official (please print)

Process Supervisor
Title of Responsible Official (please print)

ATTACHMENT C

Current Title V PTO S-1543-4-21

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: S-1543-4-21 **EXPIRATION DATE:** 05/31/2016

SECTION: 32 **TOWNSHIP:** 28S **RANGE:** 21E

EQUIPMENT DESCRIPTION:
GAS PROCESSING PLANT WITH INLET GAS SCRUBBERS, INLET GAS FILTER SEPARATOR(S), SULFUR REMOVAL VESSEL EXHAUST GAS TREATMENT SYSTEM, SULFUR REMOVAL PROCESS PLANT WITH 1.9 MMBTU/HR THERMAL OXIDIZER, FRACTIONATION SECTION, ETHYLENE GLYCOL INJECTION, PROPANE REFRIGERATION, HEAT TRANSFER OIL CIRCULATION SYSTEM, FUEL GAS SYSTEM, AND METHANOL INJECTION

PERMIT UNIT REQUIREMENTS

1. Operation shall include sulfur removal vessels employing fixed-bed granular iron oxide (or equivalent) sweetening process. [District NSR Rule] Federally Enforceable Through Title V Permit
2. Operation shall include sulfur removal process plant employing chelated iron redox (or equivalent) sweetening process. [District NSR Rule] Federally Enforceable Through Title V Permit
3. Operation shall be equipped with H2S sampling port at the sulfur removal vessel exhaust and the sulfur removal process plant exhaust. [District NSR Rule] Federally Enforceable Through Title V Permit
4. Operation may include H2S scavenger chemical storage and injection equipment listed on S-1543-41-0 to be utilized on an as-needed basis, for supplemental removal of H2S from produced gas, to maintain gas sulfur content limit. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Active chemical concentrations in the Sulfurox regeneration solution shall be maintained by continuous chemical injection at appropriate chemical feed rates to ensure that H2S emissions do not increase as a result of regeneration solution degradation or exhaustion. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Gas processing plant equipment may also include outlet gas sulfur removal vessels and associated piping. [District NSR Rule] Federally Enforceable Through Title V Permit
7. Off-gas sulfur concentration from the sulfur removal plant regenerator into the thermal oxidizer shall not exceed 75 ppmv. [District NSR Rule] Federally Enforceable Through Title V Permit
8. Hydrogen sulfide (H2S) concentration at discharge of sulfur removal vessels and/or sulfur removal plant shall not exceed 14 ppmv as measured by Draeger tubes. [District NSR Rule] Federally Enforceable Through Title V Permit
9. Total stationary source fugitive component VOC emissions shall not exceed 320.9 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
10. Emissions of VOCs in regenerator vent gas shall not exceed 2.0 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
11. Thermal oxidizer shall be used when regenerator vent gas VOC emissions rate exceeds 1.9 lb/day as calculated from measurements of VOC concentration in regenerator vent gas and regenerator vent gas flow rate. Thermal oxidizer shall remain in use until VOC emissions rate is less than 1.9 lb/day for 8 consecutive weeks. [District Rule 2201] Federally Enforceable Through Title V Permit
12. When thermal oxidizer is not in use, fuel line shall be disconnected (or locked out) and regeneration vent emissions shall be routed to bypass stack. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

13. Emissions of reduced sulfur compounds (as H2S) in regeneration vessel vent gas shall not exceed 0.5 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Flow rate of regeneration vent vessel vent gas shall be recorded each time vent gas is sampled for VOC or H2S, with the recorded flow rates used to perform mass balance emission calculations. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Water-cooled heat exchangers shall be maintained and operated in a manner minimizing emission of VOC's in cooling tower. [District NSR Rule] Federally Enforceable Through Title V Permit

16. All pumps in VOC service installed after June 25, 2001 (excluding routine replacements of pumps installed prior to June 25, 2001) shall be subject to the BACT leak action level as described in this permit. [District NSR Rule] Federally Enforceable Through Title V Permit

17. Pump seals in VOC service which are vented to a closed vent system (i.e. flare header) may be exempted from inspection and maintenance (I&M) requirements of 40 CFR Part 60, Subpart KKK and Rule 4409. For any I&M-exempt pump seals, permittee shall comply with record-keeping requirements of 40 CFR 60.486(d) and associated closed vent system shall comply with design and performance criteria set forth in 40 CFR 60.482-10 and Rule 4409, Section 3.4. [40 CFR 60.632(a), 60.482-2(f), 60.482-10, 60.486(d), District Rule 4409, 3.4, 4.2.1] Federally Enforceable Through Title V Permit

18. Only utility wastewater and process wastewater containing [less than 35 mg/L] VOC's shall be stored in Sump JC-2. [District Rule 2201] Federally Enforceable Through Title V Permit

19. Heat transfer oil drain pit JC-3 shall be used only during breakdown, as defined in Rule 1100 (amended December 17, 1992), of heat transfer oil circulation unit. [District NSR Rule] Federally Enforceable Through Title V Permit

20. Filters handling fluids with greater than 10% VOCs by weight shall be completely drained before cleaning, and cleaning shall be performed in a manner minimizing VOC emissions. For filters excluded from this handling requirement, VOC content of fluids shall be documented by Double GC analysis, EPA test method 8240, or EPA Method 24. [District NSR Rule] Federally Enforceable Through Title V Permit

21. Leaks from valves, connectors, and other components (not including pump and compressor seals) subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 100 ppmv above background when measured as close as possible but not greater than one (1) cm from the potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

22. Leaks from pump and compressor seals subject to a BACT requirement shall be defined as a reading of methane on a portable hydrocarbon detection instrument in excess of 500 ppmv above background when measured as close as possible but not greater than one (1) cm from potential source. [District NSR Rule] Federally Enforceable Through Title V Permit

23. Components subject to the BACT leak action level requirements shall be tagged or listed in an on-site log such that they may be readily identified as subject to BACT. [District NSR Rule] Federally Enforceable Through Title V Permit

24. Components subject to the BACT leak action level requirements are valves, connectors, pump seals, and compressor seals, and other components with emission factors in EPA Publication 450/3-83-007 which are subject to Rule 4409 (adopted April 20, 2005) and associated with the sulfur removal process plant, new refrigeration skid, other modifications performed to increase the production from 50 MM scf/day to 85 MM scf/day (new equipment installed after June 25, 2001). BACT leak action threshold does not apply to identical replacement of components existing prior to June 25, 2001. [District NSR Rule and Rule 4409] Federally Enforceable Through Title V Permit

25. Components subject to the BACT leak action level shall be cataloged, screened, and inspected with a minimum of 25% of the components inspected each quarter. Any leak greater than 500 ppmv for pump seals, and compressor seals and 100 ppmv for valves connectors and other components, when measured with a portable hydrocarbon detection instrument calibrated with methane in accordance with EPA Method 21 or leaking at a rate of greater than 3 drops of liquid per minute, shall be repaired in a manner consistent with the procedures specified in Rule 4409 (adopted April 20, 2005). This requirement shall not apply to inaccessible or unsafe-to-access components as identified in the revised Operator Management Plan required by Rule 4409. [District NSR Rule and Rule 4409] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

26. For components not subject to BACT leak action level, permittee shall comply with monitoring, inspection, maintenance, and recordkeeping, and reporting requirements of 40 CFR Part 60 Subpart KKK and Rule 4409. [40 CFR Part 60 Subpart KKK and District Rule 4409] Federally Enforceable Through Title V Permit

27. Component screening shall be performed in accordance with EPA reference Method 21. [District NSR Rule] Federally Enforceable Through Title V Permit

28. Portable hydrocarbon detection instrument shall be operated and calibrated in accordance with recommendations in CAPCOA/CARB's California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities (February, 1999). [District NSR Rule] Federally Enforceable Through Title V Permit

29. Flanges shall be monitored with a portable hydrocarbon detection instrument along the entire circumference of the flange-gasket interface. Threaded connections, tubing fittings, and other types of non-permanent joints shall be monitored along the entire circumference of joint interface. [District NSR Rule] Federally Enforceable Through Title V Permit

30. Valves shall be monitored with a portable hydrocarbon detection instrument where the stem comes through the packing gland, and at any attached or connected body flange(s), bonnet flange(s), or plug(s). [District NSR Rule] Federally Enforceable Through Title V Permit

31. All other components such as diaphragms, instruments, and meters shall be monitored at all points of possible emissions. [District NSR Rule] Federally Enforceable Through Title V Permit

32. The permittee shall not use any components that leak in excess of the applicable leak standards as specified in this permit. Components that have been found leaking in excess of the applicable leak standards of this rule may be used provided such leaking components have been identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this permit. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

33. For valves, threaded connections, flanges, pipes, pumps, compressors, and other components not specified in this permit; a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 1,000 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 2,000 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

34. For pressure relief devices (PRDs); a major gas leak is a detection of > 10,000 ppmv as methane; a minor gas leak is a detection of 200 to 10,000 ppmv as methane when the component is in liquid service; a minor gas leak is a detection of 400 to 10,000 ppmv as methane when the component is in gas/vapor service. [District Rule 4409, 5.1.1] Federally Enforceable Through Title V Permit

35. Each hatch shall be closed at all times except during sampling or adding of process material through the hatch, or during attended repair, replacement, or maintenance operations, provided such activities are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.2] Federally Enforceable Through Title V Permit

36. Leaks detected during quarterly operator inspections shall not be counted towards determination of compliance with the provisions of Rule 4409 provided the leaking components are repaired as soon as practicable but not later than the time frame specified in this permit. Leaks detected during quarterly operator inspections that are not repaired, replaced, or removed from operation as soon as practicable but not later than the time frame specified in this rule shall be counted toward determination of compliance with the provisions of Rule 4409. [District Rule 4409, 5.1.3.2.1 and 5.1.3.2.2] Federally Enforceable Through Title V Permit

37. Leaking components at this facility detected during annual operator inspections, as required by Rule 4409 for a specific component type, that exceed the leak standards specified in this permit, shall constitute a violation of this rule. This violation is regardless of whether or not the leaking components are repaired, replaced, or removed from operation within the allowable repair time frame specified in this permit. [District Rule 4409, 5.1.3.2.3] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

38. An open-ended line, or a valve located at the end of the line, that is not sealed with either a blind flange, a plug, a cap, or a second closed valve that is not closed at all times, except during attended operations requiring process fluid flow through the open-ended line is a leak. Attended operations include draining or degassing operations, connection of temporary process equipment, sampling of process streams, emergency venting, and other normal operational needs, provided such operations are done as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. [District Rule 4409, 5.1.4.1] Federally Enforceable Through Title V Permit

39. A major liquid leak from a component is when a visible mist or a continuous flow of liquid, that is not seal lubricant, leaks from the component. [District Rule 4409, 5.1.4.2] Federally Enforceable Through Title V Permit

40. A leak from a component is when gas emissions greater than 50,000 ppmv, as methane, leaks from the component. [District Rule 4409, 5.1.4.3] Federally Enforceable Through Title V Permit

41. A minor liquid leak from a component is when more than three drops of liquid per minute, that is not seal lubricant and is not a major liquid leak, leaks from the component. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

42. When 200 or fewer valves are inspected, a leak from a valve is when more than one valve has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 valves are inspected, a leak from a valve is when more than 0.5 % (rounded up to the nearest whole number) of the valves have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

43. When 200 or fewer threaded connections are inspected, a leak from a threaded connection is when more than one threaded connection has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 threaded connections are inspected, a leak from a threaded connection is when more than 0.5 % (rounded up to the nearest whole number) of the threaded connections have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

44. When 200 or fewer flanges are inspected, a leak from a flange is when more than one flange has a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. When greater than 200 flanges are inspected, a leak from a flange is when more than 0.5 % (rounded up to the nearest whole number) of the flanges have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

45. When 200 or fewer pumps are inspected, a leak from a pump is when more than two pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. When greater than 200 pumps are inspected, a leak from a pump is when more than 1.0 % (rounded up to the nearest whole number) of the pumps have a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

46. When compressors, PRDs, or other components not specified in this permit are inspected, a leak from these components is when more than one component has a minor liquid leak, a minor gas leak, or a gas leak greater than 10,000 ppmv and less than or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

47. When pipes at natural gas processing facilities are inspected, a leak from a pipe is when more than two have a minor liquid leak, a minor gas leak, or a gas leak > 10,000 ppmv and < or equal to 50,000 ppmv. [District Rule 4409, 5.1.4.4] Federally Enforceable Through Title V Permit

48. For manned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once every 24 hours except when operators do not report to the facility during a 24 hour period. [District Rule 4409, 5.2.1] Federally Enforceable Through Title V Permit

49. For unmanned facilities all accessible operating pumps, compressors, and PRDs, in service, shall be audio-visually inspected for leaks at least once per calendar week. [District Rule 4409, 5.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

50. All accessible operating pumps, compressors, and PRDs, in service, that are found to be leaking by audio-visual inspection shall be attempted to be repaired immediately. The leaking component shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.3] Federally Enforceable Through Title V Permit

51. Except for inaccessible components, unsafe-to-monitor components, or pipes, all components, in service, shall be tested for leaks at least once every calendar quarter. [District Rule 4409, 5.2.4] Federally Enforceable Through Title V Permit

52. All new, replaced, or repaired fittings, flanges, and threaded connections shall be tested for leaks immediately after being placed into service. [District Rule 4409, 5.2.5] Federally Enforceable Through Title V Permit

53. All inaccessible components shall be tested for leaks at least once every 12 months. [District Rule 4409, 5.2.6] Federally Enforceable Through Title V Permit

54. All unsafe-to-monitor components shall be tested for leaks during each turnaround. [District Rule 4409, 5.2.7] Federally Enforceable Through Title V Permit

55. All pipes shall be visually inspected for leaks at least once every 12 months. [District Rule 4409, 5.2.8] Federally Enforceable Through Title V Permit

56. All pipes, in VOC service, that are found to be leaking by visual inspection shall be attempted to be repaired immediately. The leaking pipe shall then be tested within 24 hours and, if found leaking again, shall be repaired as soon as practicable but not later than the timeframe specified in this permit. [District Rule 4409, 5.2.8.1] Federally Enforceable Through Title V Permit

57. The annual pipe inspection required by either the Department of Oil, Gas, and Geothermal Resources (DOGGR) pursuant to California Code of Regulation Title 14, Division 2, Subchapter 2, Section 1774 (Oilfield Facilities and Equipment Maintenance), or by the Spill Prevention Control and Countermeasure Plan (SPCC) pursuant to 40 Code of Federal Regulation Part 112 (Oil Prevention and Response: Non- Transportation-Related Onshore and Offshore Facilities) can be used as the annual pipe inspection required by District Rule 4409. [District Rule 4409, 5.2.8.2] Federally Enforceable Through Title V Permit

58. Except for pumps, compressors, and PRDs, the permittee may apply for written approval from the District to change the inspection frequency of accessible components from quarterly to annually for a specific component type provided the following two qualifying requirements are met. During the previous five consecutive quarterly inspections, for the specific component type, there shall be no more leaks than as allowed by this permit. The permittee also shall not have received a Notice of Violation (NOV) from the District during the previous 12 months for violating any provisions of District Rule 4409 for the specific component type. If these two qualifying requirements have not been met, then the inspection frequency shall revert back to quarterly. The written request shall include pertinent documentation to demonstrate that the operator has successfully met the two qualifying requirements. [District Rule 4409, 5.2.9 and 5.2.10] Federally Enforceable Through Title V Permit

59. The permittee shall notify the District in writing within five calendar days after changing the inspection frequency for a specific component type. The written notification shall include the reason(s) and date of change to a quarterly inspection frequency. [District Rule 4409, 5.2.11] Federally Enforceable Through Title V Permit

60. A PRD that releases to the atmosphere shall be inspected by the permittee for leaks as soon as practicable but not later than 24 hours after the time of the release. The permittee shall reinspect the PRD for leaks not earlier than 24 hours after the initial inspection but not later than 15 calendar days after the date of the initial release. If the PRD is found by the permittee to be leaking during either inspection, the PRD leak shall be treated as if the leak was found during the required quarterly operator inspections. [District Rule 4409, 5.2.12] Federally Enforceable Through Title V Permit

61. Except for PRDs, a component shall be inspected for leaks not later than 15 calendar days after repairing the leak or replacing the component. [District Rule 4409, 5.2.13] Federally Enforceable Through Title V Permit

62. District inspections shall not be counted as an operator inspection required by District Rule 4409. Any attempt by an operator to count such District inspections as part of the operator's mandatory inspections is considered a willful circumvention of the rule and is a violation of this rule. [District Rule 4409, 5.2.14] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

63. The operator, upon detection of a leaking component, shall affix to that component a weatherproof, readily visible tag, bearing the date and time when the leak was detected and the date and time of the leak measurement. For gaseous leaks, the tag shall indicate the leak concentration in ppmv. For liquid leaks, the tag shall indicate whether it is a major liquid leak or a minor liquid leak. The tag shall indicate, when applicable, whether the component is an essential component, an unsafe-to-monitor component, or a critical component. The tag shall remain in place until the leaking component is repaired or replaced and reinspected and found to be in compliance with the requirements of this rule. [District Rule 4409, 5.3.1] Federally Enforceable Through Title V Permit

64. The operator shall minimize all component leaks immediately, to the extent possible, but not later than one hour after detection of the leak in order to stop or reduce leakage to the atmosphere. If the leak has been minimized but the leak still exceeds the applicable leak standards specified in this permit, the operator shall do one of the following within the timeframes specified within this permit: 1) repair or replace the leaking component; 2) vent the leaking component to a closed vent system; 3) or remove the leaking component from operation. A closed vent system is a District approved system that is not open to the atmosphere. It is composed of hard-piping, ductwork connections and, if necessary, flow inducing devices that transport gas or vapor from a piece or pieces of equipment to a District approved control device that has a overall VOC collection and destruction or removal efficiency of at least 95%, or that transports gases or vapors back to a process system. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

65. The operator shall repair minor gas leaks within seven days. The operator shall repair major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, within three days. The operator shall repair major gas leaks, which are > 50,000 ppmv, within two days. The operator shall repair minor liquid leaks within three days. The operator shall repair major liquid leaks within two days. The leak rate measured after leak minimization has been performed shall be the leak rate used to determine the applicable repair period. The start of the repair period shall be the time of the initial leak detection. [District Rule 4409, 5.3.4 and 5.3.5] Federally Enforceable Through Title V Permit

66. For each calendar quarter, the operator may extend the repair period for a total number of leaking components, not to exceed 0.05 % of the number of components inspected, by type, rounded upward to the nearest whole number. The repair period for minor gas leaks can be extended by seven additional days. The repair period for major gas leaks, which are > 10,000 ppmv but < or equal to 50,000 ppmv, can be extended by two additional days. [District Rule 4409, 5.3.5] Federally Enforceable Through Title V Permit

67. If a leaking component is an essential component or a critical component and which cannot be shut down immediately for repairs, the operator shall do the following: 1) minimize the leak within one hour after detection of the leak; 2) and if the leak has been minimized, but the leak still exceeds the applicable leak standards of Rule 4409 as specified in this permit, the essential component or critical component shall be repaired or replaced to eliminate the leak during the next process unit turnaround. The repair shall occur no later than one year from the date of the original leak detection. [District Rule 4409, 5.3.6] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

68. For any component that has incurred five repair actions for major gas leaks or major liquid leaks, or a combination of major gas leaks and major liquid leaks within a continuous 12-month period, the operator shall do one of the following four options. Options 1a through 1f require written notification to the District, option 2 requires written notification to the District and written District approval, options 3 and 4 do not require written notification to the District: 1a) For compressors replace the existing seal with either a dual mechanical seal, an oil film seal, a gas seal, or a face-type seal; 1b) for pumps replace the pump with a seal-less pump or replace the seal with a dual mechanical seal; 1c) for PRDs replace the PRD and install a rupture disc in the line which precedes the PRD such that the PRD is in series with and follows the rupture disc; 1d) for valves replace the valve with a sealed bellows valve, or for seal rings install graphite or Teflon chevron seal rings in a live-loaded packing gland; 1e) for threaded connections weld the connections or replace threaded connections with flanges; 1f) for sampling connections replace the sampling connection with a closed-loop sampling system; 2) Replace the component with Achieved-in-Practice Best Available Control Technology (BACT) equipment; 3) Vent the component to a District approved closed-vent system; 4) Remove the component from operation. For any component that is accessible, is not unsafe-to-monitor, is not an essential component, or is not a critical component, the operator shall comply with these requirements as soon as practicable but not later than twelve months after the date of detection of the fifth major leak within a continuous 12-month period. For any component that is inaccessible, is unsafe-to-monitor, is essential, or is a critical component, the operator shall comply with these requirements as soon as practicable but not later than the next turnaround or not later than two years after the date of detection of the fifth major leak within a continuous 12-month period, whichever comes first. [District Rule 4409, 5.3.7] Federally Enforceable Through Title V Permit

69. All major components and critical components shall be physically identified clearly and visibly for inspection, repair, and recordkeeping purposes. The physical identification shall consist of labels, tags, manufacturer's nameplate identifier, serial number, or model number, or other system approved by the District that enables an operator or the District to locate each individual component. The operator shall replace physical identifications that become missing or unreadable as soon as practicable but not later than 24 hours after discovery. [District Rule 4409, 5.4.1] Federally Enforceable Through Title V Permit

70. The operator shall keep a copy of the District approved Operator Management Plan (OMP) at the facility and make it available to the District, ARB, and EPA upon request. [District Rule 4409, 6.1.2] Federally Enforceable Through Title V Permit

71. By January 30th of each year the operator shall submit to the District for approval, in writing, an annual report indicating any changes to the existing OMP on file at the District. [District Rule 4409, 6.1.4] Federally Enforceable Through Title V Permit

72. The operator shall maintain an inspection log that has been signed and dated by the facility operator responsible for the inspection, certifying the accuracy of the information recorded in the log. The inspection log shall contain, at a minimum, all of the following information: 1) The total number of components inspected, and the total number and percentage of leaking components found by component types; 2) The location, type, name or description of each leaking component and the description of any unit where the leaking component is found; 3) Date of the leak detection and method of the leak detection; 4) For gaseous leaks, record the leak concentration in ppmv, and for liquid leaks record whether the leak is a major liquid leak or a minor liquid leak; 5) The date of repair, replacement, or removal from operation of the leaking component(s); 6) The identification and location of essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes first; 7) The method(s) used to minimize the leak from essential components and critical components found leaking that cannot be repaired until the next process unit turnaround or not later than one year after leak detection, whichever comes earlier; 8) The date of re-inspection and the leak concentration in ppmv after the component is repaired or is replaced; 9) The inspector's name, business mailing address, and business telephone number. [District Rule 4409, 6.2.1] Federally Enforceable Through Title V Permit

73. Records of leaks detected during quarterly or annual operator inspections, and each subsequent repair and re-inspection, shall be submitted to the District, ARB, and EPA upon request. [District Rule 4409, 6.2.2] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

74. Records shall be maintained of each calibration of the portable hydrocarbon detection instrument utilized for inspecting components. The records shall include a copy of the current calibration gas certification from the vendor of the calibration gas cylinder, the date of calibration, the concentration of calibration gas, the instrument reading of calibration gas before adjustment, the instrument reading of calibration gas after adjustment, the calibration gas expiration date, and the calibration gas cylinder pressure at the time of calibration. [District Rule 4409, 6.2.3] Federally Enforceable Through Title V Permit

75. All records required by this permit shall be retained on-site for a minimum of five years and made available for District, ARB, and EPA inspection upon request. [District Rule 4409, 6.2.4] Federally Enforceable Through Title V Permit

76. All measurements of gaseous leak concentrations shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions not more than 30 days prior to its use. [District Rule 4409, 6.3.1] Federally Enforceable Through Title V Permit

77. FOR PURPOSES OF RULE 4409 COMPLIANCE, the VOC content by weight percent shall be determined using ASTM D-1945 for gases and South Coast Air Quality Management District (SCAQMD) Method 304-91 for liquids. [District Rule 4409, 6.3.2] Federally Enforceable Through Title V Permit

78. The percent by volume liquid evaporated at 302 øF (150 øC) shall be determined using ASTM D-86. [District Rule 4409, 6.3.3] Federally Enforceable Through Title V Permit

79. The TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D-323, and converting the RVP to TVP at the maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures specified in Appendix A of District Rule 4409. [District Rule 4409, 6.3.4] Federally Enforceable Through Title V Permit

80. The API gravity of crude oil or petroleum distillate shall be determined by using ASTM D-287 or ASTM 1298. Sampling for API gravity shall be performed in accordance with ASTM D-4057. [District Rule 4409, 6.3.5] Federally Enforceable Through Title V Permit

81. The control efficiency of any VOC control device, measured and calculated as carbon, shall be determined by EPA Method 25, except when the outlet concentration must be below 50 ppm in order to meet the standard, in which case EPA Method 25a may be used. EPA Method 18 may be used in lieu of EPA Method 25 or EPA Method 25a provided the identity and approximate concentrations of the analytes/compounds in the sample gas stream are known before analysis with the gas chromatograph and the gas chromatograph is calibrated for each of those known analyte/compound to ensure that the VOC concentrations are neither under- or over-reported. [District Rule 4409, 6.3.6] Federally Enforceable Through Title V Permit

82. Halogenated exempt compounds shall be analyzed by EPA Method 18 or ARB Method 422. [District Rule 4409, 6.3.7] Federally Enforceable Through Title V Permit

83. Permittee shall determine concentration of VOC in regeneration vent gas, regeneration vent gas flow rate, and regeneration vent gas VOC emissions (in lb/day) weekly for eight consecutive weeks. After demonstrating compliance for eight consecutive weeks VOC emissions testing may be conducted on a quarterly basis. If regeneration vent gas VOC emissions exceed 1.9 lb/day as measured on a quarterly basis, weekly sampling shall resume. Gas analysis shall be performed using ASTM D-3588, EPA Method 18, or EPA Method 25A. [District Rule 2201] Federally Enforceable Through Title V Permit

84. Permittee shall determine concentration of sulfur in regeneration vent gas, regeneration vent gas flow rate, and regenerator vent gas sulfur emissions (in lb/day) weekly for eight consecutive weeks. After demonstrating compliance for eight consecutive weeks testing may be conducted on a quarterly basis. If regeneration vent gas sulfur emissions exceed 0.4 lb/day as measured on a quarterly basis, weekly sampling shall resume. Weekly gas sampling shall be performed using Draeger tubes and quarterly gas analysis using ASTM method D3246 or double GC for H2S and mercaptans. [District Rule 1081 and 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

85. Sulferox regeneration vent stack shall be equipped with a valved or capped sampling extraction port or tubing accessible for District inspection upon request. [District Rule 1081 and 2201] Federally Enforceable Through Title V Permit

86. Permittee shall maintain records of weekly and quarterly measurements of concentration of sulfur and VOCs in regeneration vent gas, regeneration vent gas flow rate, and regeneration vent gas sulfur and VOC emissions. Such records will be made readily available for District inspection upon request for a period of five years. [District Rule 2201 and Rule 1070, 4.0] Federally Enforceable Through Title V Permit

87. Records of the sources and VOC content (mg/L) of utility wastewater and process wastewater in Sump JC-2 shall be kept and made available for District inspection upon request. [VOC content shall be determined by EPA Test Method 413.2, or 418.1 and/or, if necessary, EPA Test Method 8240. Hydrocarbons heavier than C14, as determined by Test Method ASTM E 260-85, may be excluded from the total concentration.] [District Rule 1070] Federally Enforceable Through Title V Permit

88. Permittee shall maintain for a period of five years, accurate records of fugitive inspection component counts, leak screening values in excess of 10,000 ppmv, leak screening values less than 10,000 ppmv, and shall, as approved by the District, calculate fugitive emissions using February 1999 CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities Table IV-2c. Permittee shall make records of component counts, screening values, and calculations readily available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

89. 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] Federally Enforceable Through Title V Permit

90. Annual average benzene emissions shall not exceed 1,980 pounds per year. [40 CFR 63.764(e)(ii), 40 CFR 63.765(a), and 40 CFR 63.762(e)] Federally Enforceable Through Title V Permit

91. The owner/operator shall not shut down equipment required for compliance with 40 CFR 63 subpart HH if the shutdown would contravene requirements based on subpart HH; unless: 1) the equipment is malfunctioning; or 2) the equipment must be shut down to avoid damage due to a startup, shutdown or malfunction of associated equipment. [40 CFR 63.762(b)] Federally Enforceable Through Title V Permit

92. During startups, shutdowns, and malfunctions when the requirements of 40 CFR 63 subpart HH do not apply pursuant to provision of this permit, the owner/operator shall implement measures to prevent or minimize emissions to the maximum extent practical as described in 40 CFR 63.762 (c). [40 C FR 63.762(c)] Federally Enforceable Through Title V Permit

93. Storage vessels with potential for flash emissions shall comply with 40 CFR 63.766. [40 CFR 63.766] Federally Enforceable Through Title V Permit

94. Each cover, closed-vent system, and control device installed and operated to control air emissions as required by the provisions of 40 CFR 63 subpart HH shall comply with section 40 CFR 63.771. [40 CFR 63.771] Federally Enforceable Through Title V Permit

95. The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc , Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1). [40 CFR 63.772(b)(2)] Federally Enforceable Through Title V Permit

96. Storage vessels with potential for flash emissions shall comply with the inspection and monitoring requirements of 40 CFR 63.773. [40 CFR 63.773] Federally Enforceable Through Title V Permit

97. The owner/operator shall maintain the records of actual average benzene emissions (in terms of benzene emission per year) as required by 40 CFR 63.772(b)(2). [40 CFR 63.774(d)(1)(ii)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

98. The owner/operator shall maintain all records required by 40 CFR 63.774. Records shall be maintained for a period of 5 years following the date of each occurrence, measurement, maintenance corrective action, report or period. All applicable records shall be maintained in hard copy or computer readable form in a manner such that they can be readily accessed. The most recent 12 months of records shall be maintained on site or shall be accessible from a central location by computer or other means that provides for access within 2 hours. The remaining 4 years of records may be retained offsite. [40 CFR 63.774] Federally Enforceable Through Title V Permit

99. The owner/operator shall notify and provide reports in accordance with 40 CFR 63.775. [40 CFR 63.775] Federally Enforceable Through Title V Permit

100. Compliance with Title V permit conditions for this unit shall be deemed compliance with applicable requirements of 40 CFR 60, Subpart KKK. A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit