



MAR 2 7 2017

Melinda Hicks Kern Oil & Refining 7724 East Panama Lane Bakersfield, CA 93307

RE: Final - Authority to Construct / Certificate of Conformity (Significant

Modification)

Facility Number: S-37

Project Number: S-1161823

Dear Ms. Hicks:

The Air Pollution Control Officer has issued the Authority to Construct permits to Kern Oil & Refining for installing two new organic liquid storage tanks, at 7724 East Panama Lane, Bakersfield. Enclosed are the Authority to Construct permits and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the Authority to Construct permits was published on October 17, 2016. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on October 17, 2016. All comments received following the District's preliminary decision on this project were considered. The comments and District responses are enclosed.

Prior to operating with the modifications authorized by the Authority to Construct, you must submit an application to modify the Title V permit as an administrative amendment in accordance with District Rule 2520, Section 11.5. Application forms have been enclosed for your use. These forms may also be found on the District's website at www.valleyair.org.

> Seved Sadredin Executive Director/Air Pollution Control Officer





Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely.

Arnaud Marjollet

Director of Permit Services

AM:dk

**Enclosures** 

cc: Tung Le, CARB (w/enclosure) via email

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

cc: James Birkelund, Climate Change Law Foundation (w/enclosure) via email:

james@climatechangelaw.org

cc: Maya Golden-Krasner, Center for Biological Diversity (w/enclosure) via email:

mgoldenkrasner@biologicaldiversity.org

cc: Tom Frantz, Association of Irritated Residents (w/enclosure) via email:

tom.frantz49@gmail.com

cc: Elly Benson, Sierra Club (w/enclosure) via email: elly.benson@sierraclub.org

Seyed Sadredin

Executive Director/Air Pollution Control Officer





# AUTHORITY TO CONSTRUCT

PERMIT NO: S-37-8-34

ISSUANCE DATE: 03/20/2017

LEGAL OWNER OR OPERATOR: KERN OIL & REFINING CO

MAILING ADDRESS:

7724 E PANAMA LN

BAKERSFIELD, CA 93307-9210

LOCATION:

PANAMA LN & WEEDPATCH HWY BAKERSFIELD, CA 93307-9210

SECTION: 25 TOWNSHIP: 30S RANGE: 28E

EQUIPMENT DESCRIPTION:

MODIFICATION OF ORGANIC LIQUID LOADING AREAS AND REFINERY VAPOR RECOVERY SYSTEM SERVING TANK S-37-150 AND INCLUDING COMPRESSOR(S), LOADING RACKS WITH 10 PRODUCT LINES AND 9 VAPOR RETURN LINES: CONNECT TANKS S-37-153 AND -154 TO VAPOR RECOVERY SYSTEM

## CONDITIONS

- 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
- 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
- Transfer Racks N and F may be used for loading and unloading. Transfer Racks A, K, and L shall be used only for loading. [District Rule 2201] Federally Enforceable Through Title V Permit
- All liquids and gases from the transfer operation shall be routed to one of the following systems: a vapor collection and control system; a fixed roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); a floating roof container that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a pressure vessel equipped with an APCO-approved vapor recovery system that meets the control requirements specified in Rule 4623 (Storage of Organic Liquids); or a closed VOC emission control system. [District Rules 4623 and 4624] 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

Arhaud Marjollet, Director of Permit Services

- 5. A floating roof container that meets the applicable control requirements of Section 5.0 of Rule 4623 (Storage of Organic Liquids) shall be considered not leaking when receiving unloaded liquids for compliance with Rule 4624. [District Rule 4624] Federally Enforceable Through Title V Permit
- 6. For the transfer of gasoline only, transfer to any stationary storage container with 250 gallon capacity or more, that is not subject to Rule 4623, shall not be allowed unless the container is equipped with a permanent submerged fill pipe and an ARB certified Phase I vapor recovery system, which is maintained and operated according to the manufacturer's specifications, or a vapor recovery system with 95% control approved by the District. [District Rule 4621] Federally Enforceable Through Title V Permit
- 7. All delivery tanks which previously contained organic liquids, including gasoline, with a TVP 1.5 psia or greater at the storage container's maximum organic liquid storage temperature shall be filled only at Class 1 or Class 2 loading facilities that meet the vapor collection and control requirements of District Rule 4624 or listed herein. [District Rule 4624] Federally Enforceable Through Title V Permit
- 8. Construction, reconstruction (as defined in District Rule 4001) or expansion of any top loading facility shall not be allowed. [District Rule 4624] Federally Enforceable Through Title V Permit
- 9. The organic liquid and gasoline loading operation shall be equipped with bottom loading equipment with a vapor collection and control system meeting the requirements listed in this permit. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 10. Transfer rack and vapor collection and control equipment shall be designed, installed, maintained in accordance with the manufacturers specifications, and operated such that there are no leaks or excess organic liquid drainage at disconnections as defined herein. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 11. During unloading of gasoline, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or a reading greater than 100 percent of the Lower Explosive Limit (21,000 ppmv as propane) in accordance with EPA Method 21. [District Rule 4621] Federally Enforceable Through Title V Permit
- 12. For components used in the gasoline loading operation, a leak shall be defined as the dripping of VOC-containing liquid at a rate of more than three drops per minute or the detection of organic compounds, in excess of 10,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. Excess liquid drainage shall be defined as exceeding 10 milliliters per average of 3 consecutive disconnects. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 13. For delivery vessels and components used in the organic liquid transfer operation, a leak shall be defined as the detection of organic compounds, in excess of 1,000 ppm as methane measured at a distance of one centimeter from the potential source in accordance with EPA Method 21. [District Rule 4624] Federally Enforceable Through Title V Permit
- 14. Equipment under vapor control shall not vent to atmosphere. [District Rules 4621 and 4624.] Federally Enforceable Through Title V Permit
- 15. The vapor collection and control system shall operate such that VOC emissions do not exceed 0.08 lb/1000 gallons of organic liquid loaded; maintains at least 95% capture and control efficiency of VOC and which operates so the delivery tank does not exceed 18 inches water column pressure nor 6 inches water column vacuum. [District Rule 4624] Federally Enforceable Through Title V Permit
- 16. No gasoline delivery vessel shall be used or operated unless it is leak-free. No gasoline delivery vessel shall be operated or loaded unless valid State of California decals are displayed on the cargo tank, attesting to the vapor integrity of the tank as verified by annual performance of CARB required Certification and Test Procedures for Vapor Recovery Systems for Cargo Tanks (Executive Order G-70-10-A) or EPA Method 27 for testing delivery vessels owned or operated by this facility. [District Rule 4621, Health & Safety Code, section 41962, and CCR, Title 17 section 94004] Federally Enforceable Through Title V Permit
- 17. Measurements of leak concentrations for organic liquid delivery vessels, including gasoline, shall be conducted according to the ARB Test Procedure for Determination of Leaks, TP-204.3, or EPA Method 21. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 18. VOC emission rate from diesel loading rack shall not exceed any of the following: Fugitive emissions: 0.12 lb/hr and vapor recovery system: 0.09 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit

- 19. VOC emission rate from fugitive components associated with the refinery vapor control system shall not exceed 6.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 20. During loading of a delivery vessel, the truck-mounted vapor return line shall be connected to the vapor recovery system listed on this permit. [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
- 21. A delivery vessel loading gasoline shall discontinue if its pressure relief valve opens. Corrective action shall be taken should this condition occur. [District Rules 2520 and 4621] Federally Enforceable Through Title V Permit
- 22. Switch loading shall not be conducted unless such transfer is made using an ARB certified vapor recovery system.

  [District Rules 2201 and 4621] Federally Enforceable Through Title V Permit
- 23. Operators shall conduct all performance tests required by the facility installation and operations manual as per the frequency outlined therein or as designated by the APCO. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 24. The operator shall perform and record the results of monthly leak and drainage inspections of the loading and vapor collection equipment at each loading arm. During the loading of gasoline or organic liquids, leak detection shall be conducted using EPA Method 21 measuring at a distance of one centimeter from the potential source. When not in current operation, excess drainage inspections shall be conducted before 10:00 am at the disconnect of each loading arm by collecting all drainage at disconnect in a container and determining the volume within one (1) minute of collection. [District Rules 2520, 40 CFR 60.502(j) and 4624] Federally Enforceable Through Title V Permit
- 25. The leak detection instrument shall be calibrated each day of its use, prior to use, by the procedures specified in Method 21 using the following calibration gases: A) Zero air (less than 10 ppm of hydrocarbon in air); and B) Mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane. [District Rules 2520, 9.3.2 and 4624] Federally Enforceable Through Title V Permit
- 26. Corrective steps shall be taken at any time the operator observes a leak or excess drainage at disconnect. All equipment found leaking shall be repaired or replaced within 72 hours. If the leaking component cannot be repaired or replaced within 72 hours, the component shall be taken out of service until such time the component is repaired or replaced. The repaired or replacement equipment shall be reinspected the first time the equipment is in operation after the repair or replacement. [District Rule 4624] Federally Enforceable Through Title V Permit
- 27. All inspections shall be documented within the inspection log. Inspection records shall include, at a minimum, 1) date of inspection, 2) location and description of any missing, loose, leaking, or damaged equipment and any malfunction requiring repair, 3) corrective steps taken to repair or replace the equipment, 4) test method and results for leak and drainage inspections, 5) location and description of any of equipment which shall be inspected upon commencing operation after repair or replacement and 6) inspector name and signature. [District Rules 4621 and 4624] Federally Enforceable Through Title V Permit
- 28. Records of daily throughput of each loading rack shall be maintained and made available to the APCO, ARB, or EPA during normal business hours. [District Rules 2201, 4621, and 4624] Federally Enforceable Through Title V Permit
- 29. The permittee shall maintain accurate records of exempt and non-exempt components and their associated function in the Operator Management Plan (OMP) as required in section 6.1 of Rule 4455. Permit holder shall update the Operator Management Plan when new components are installed. By January 30 of each year, an annual report indicating any changes to an existing Operator Management Plan shall be submitted to the APCO. [District Rule 4455] Federally Enforceable Through Title V Permit
- 30. Permit holder shall maintain accurate component count and resultant emissions according to CAPCOA's "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," Table IV-3a (Feb 1999), CAPCOA-Revised 1995 EPA Correlation Equations and Factors for Refineries and Marketing Terminals. Components shall be screened and leak rate shall be measured at least once each quarter. If compliance with the daily emission limit is shown during each of five (5) consecutive quarterly inspections, the inspection frequency may be changed from quarterly to annual. If any annual inspection shows non-compliance with the daily emission limit, then quarterly inspections shall be resumed. [District Rule 2201] Federally Enforceable Through Title V Permit

31. Copies of all records shall be retained for a minimum of five (5) years after the date of an entry. Such records shall be made available to the APCO, ARB, or US EPA upon request. [District Rules 1070, 4621, 4624, and 4455, 6.2.2, 6.2.3 & 6.2.4] Federally Enforceable Through Title V Permit





# **AUTHORITY TO CONSTRUCT**

PERMIT NO: S-37-153-0

**ISSUANCE DATE: 03/20/2017** 

LEGAL OWNER OR OPERATOR: KERN OIL & REFINING CO.

MAILING ADDRESS:

7724 E PANAMA I N

BAKERSFIELD, CA 93307-9210

LOCATION:

PANAMA LN & WEEDPATCH HWY BAKERSFIELD, CA 93307-9210

#### EQUIPMENT DESCRIPTION:

16,000 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (16005) SERVED BY VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

## CONDITIONS

- 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
- 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
- Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: VOC: 389 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
- ERC Certificate Numbers S-3693-1, S-4394-1, S-4649-1, and S-4662-1 (or certificates split from theses certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
- All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201 and 4623] 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

naud Marjollet, Director of Permit Services
7-153-0: Mar 20 2017 8:47AM -- KLEYANND : Joint Inspection NOT Required

- 6. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 8. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. Operator shall maintain records demonstrating compliance with fugitive VOC emissions limit of this permit within 60 days after the completion of the initial inspection of components and annually, thereafter. Compliance shall be demonstrated by calculation, using an accurate component count and the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. VOC fugitive emissions from the components affixed to the tank and on piping from tank to vapor control system trunk line shall not exceed 2.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit
- 15. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 16. Operator shall maintain an inspection log containing the following 1) Type of component leaking; 2) Date and time of leak detection, and method of detection; 3) Date and time of leak repair, and emission level of recheck after leak is repaired; 4) Method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 17. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit

- 18. The permittee shall maintain accurate records of exempt and non-exempt components and their associated function in the Operator Management Plan (OMP) as required in section 6.1 of Rule 4455. Permit holder shall update the Operator Management Plan when new components are installed. By January 30 of each year, an annual report indicating any changes to an existing Operator Management Plan shall be submitted to the APCO. [District Rule 4455] Federally Enforceable Through Title V Permit
- 19. The tank shall be connected to a vapor recovery system. [District Rule 4623] Federally Enforceable Through Title V Permit
- 20. Tank shall vent to system designed and operated to reduce inlet VOC emissions by 99 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions. [Rules 2201, 4623 and 40 CFR 60.112a(a)(3)] Federally Enforceable Through Title V Permit
- 21. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit





# **AUTHORITY TO CONSTRUCT**

PERMIT NO: S-37-154-0

**ISSUANCE DATE: 03/20/2017** 

LEGAL OWNER OR OPERATOR: KERN OIL & REFINING CO

7724 E PANAMA LN

MAILING ADDRESS:

BAKERSFIELD, CA 93307-9210

LOCATION:

PANAMA LN & WEEDPATCH HWY BAKERSFIELD, CA 93307-9210

#### **EQUIPMENT DESCRIPTION:**

16,000 BBL FIXED ROOF ORGANIC LIQUID STORAGE TANK (16006) SERVED BY VAPOR RECOVERY SYSTEM LISTED ON PERMIT S-37-8

## CONDITIONS

- 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. 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. Prior to operating equipment under this Authority to Construct, permittee shall surrender emission reduction credits for the following quantities of emissions: VOC: 389 lb/qtr. Offsets include the applicable offset ratio specified in Section 4.8 of Rule 2201 (as amended 2/18/16). [District Rule 2201] Federally Enforceable Through Title V Permit
- 4. ERC Certificate Numbers S-3693-1, S-4394-1, S-4649-1, and S-4662-1 (or certificates split from theses certificates) shall be used to supply the required offsets, unless a revised offsetting proposal is received and approved by the District, upon which this Authority to Construct shall be reissued, administratively specifying the new offsetting proposal. Original public noticing requirements, if any, shall be duplicated prior to reissuance of this Authority to Construct. [District Rule 2201] Federally Enforceable Through Title V Permit
- 5. All piping, valves, and fittings shall be constructed and maintained in a leak free condition. [District Rules 2201and 4623] Federally Enforceable Through Title V Permit

#### CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services

- 6. A leak free condition is defined as a condition without a gas leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623 and shall be reported as a deviation. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 7. Any tank gauging or sampling device on a tank vented to the vapor recovery system shall be equipped with a leak-free cover which shall be closed at all times except during gauging or sampling. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 8. If a component type for a given tank is found to leak above the 10,000 ppmv during an annual inspection, then quarterly inspections of that component type on the tank or system shall be conducted for four consecutive quarters. After four successful quarterly inspections in which the component type is found to leak less than 10,000 ppmv, inspections interval may revert to annual. [District Rule 4623] Federally Enforceable Through Title V Permit
- 9. Operator shall maintain records demonstrating compliance with fugitive VOC emissions limit of this permit within 60 days after the completion of the initial inspection of components and annually, thereafter. Compliance shall be demonstrated by calculation, using an accurate component count and the correlation equations, zero default and 10,000 ppmv pegged factors set forth in the CAPCOA California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, Table IV-3a, February 1999, and the average emission concentrations of total organic compounds measured for each component during all inspections conducted during the prior 365 day period. [District Rule 2201] Federally Enforceable Through Title V Permit
- 10. All piping, fittings, and valves directly affixed to the tank or associated with the tank vapor control system shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the provisions of this permit. [District Rule 4623] Federally Enforceable Through Title V Permit
- 11. VOC fugitive emissions from the components affixed to the tank and on piping from tank to vapor control system trunk line shall not exceed 2.9 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
- 12. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 13. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
- 14. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take on of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
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- 17. Except as otherwise provided in this permit, the operator shall ensure that the vapor recovery system is functional and is operating as designed at all times. [District Rule 2201] Federally Enforceable Through Title V Permit CONDITIONS CONTINUE ON NEXT PAGE

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- 21. All records required by this permit shall be retained for a minimum period of 5 years and shall be made available to the APCO, ARB and US EPA upon request. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

## **District Responses to Comments**

Public Comments on the Proposed Authority to Construct Permits for Kern Oil & Refining, District Facility ID No. S-37, Project S-1161823 (ATCs S-37-8-34, S-37-153-0, S-37-154-0)

On November 21, 2016, the District received comments from the Climate Change Law Foundation, Center for Biological Diversity, Association of Irritated Residents, and the Sierra Club on Kern Oil & Refining's project for the installation of 2 new organic liquid storage tanks. The comments and the District's response to each comment are presented below.

## **Public Comment #1:**

#### **ERC Certificate Number S-3693-1 Is Invalid**

ERC S-3693-1, for VOC reduction, states that it was issued for "[i]ncineration of the Fluid Coker exhaust in the CO boiler." The authority to construct for the identified CO boiler was issued on January 12, 1976, and operation of the CO boiler began in May 1977. However, under 40 C.F.R. § 51.165(a)(3)(ii)(C)(1)(ii), "in no event may credit be given for shutdowns that occurred before August 7, 1977." As the U.S. Environmental Protection Agency ("EPA") explained in comments on the proposed banking credit application in 1987:

The reductions occurred prior to August 7, 1977 and are therefore too old to be granted credit. EPA has previously advised the District that banking credit may not be awarded for any reductions which occurred prior to the Clean Air Act Amendments of August 7, 1977... EPA will not recognize these reductions as valid offsets for any source wishing to purchase these ERCs for offsetting purpose.<sup>3</sup>

### **District Response to Public Comment #1:**

It is worth noting, first, that this section of the CFR is implemented by the District's SIP-approved Rule 2201. If the commenter is objecting to the sufficiency of Rule 2201, the proper forum to do so is in a challenge to EPA's approval of Rule 2201, not in a project analyzed subsequent to EPA's approval of that rule into the SIP. However, the following is offered in an effort to be as fully responsive as possible:

40 CFR 51.165(a)(3)(ii)(C)(1) states:

- (C)(1) Emissions reductions achieved by shutting down an existing emission unit or curtailing production or operating hours may be generally credited for offsets if they meet the requirements in paragraphs (a)(3)(ii)(C)(1)(i) through (ii) of this section.
- (i) Such reductions are surplus, permanent, quantifiable, and federally enforceable. (ii) The shutdown or curtailment occurred after the last day of the base year for the SIP planning process. For purposes of this paragraph, a reviewing authority may choose to

consider a prior shutdown or curtailment to have occurred after the last day of the base year if the projected emissions inventory used to develop the attainment demonstration explicitly includes the emissions from such previously shutdown or curtailed emission units. However, in no event may credit be given for shutdowns that occurred before August 7, 1977.

ERC S-3693-1 represents emission reductions that were generated from adding controls to an existing emission unit, i.e. incineration of coker exhaust in a CO boiler. The referenced CFR section only applies to units with emission reductions resulting from being shut down or curtailed. Therefore, the referenced CFR section would not apply, even if District permitting actions had to directly conform to it.

### **Public Comment #2:**

Further, both the U.S. EPA and the California Air Resources Board ("CARB") pointed out in comments on the original application for banking credit that the credit was invalid because the application was submitted beyond the required time limits—a completed application for the banking credit was not submitted until October 1985, almost ten years after the reduction occurred.<sup>4</sup>

## **District Response to Public Comment #2:**

According to August 7, 1987 correspondence between the Kern County Air Pollution Control District and both the California Air Resources Board and EPA's Air Management Division, the Kern County banking rule in effect at the time (Rule 210.3) allowed filing of applications for banking certificates for emission reductions occurring before the date of rule adoption (April 25, 1983) to be filed within one year of adoption. The original banking application was filed on April 24, 1984; thus, Kern County Air Pollution Control District considered the original banking application to have been filed in a timely manner.

## Public Comment #3:

To this end, the proposed emissions credit comes from a shutdown or curtailment that occurred nearly four decades ago. Under District Rule 2201 and 2301, emission reductions used as ERCs must be "real, enforceable, quantifiable, surplus, and permanent." (Air District Rule 2201 § 3.2.1; Rule 2301 § 4.1.2.) Given the many changes that have occurred at the refinery since 1977, this decades-old reduction is no longer "real" and will not actually offset projected air emissions. As EPA noted even ten years after the event:

[T]he reductions from the installation of the CO boiler are quite old. The burden is on the District to verify in its analysis that these reductions have not been assumed elsewhere (in the emissions inventory, the latest [air quality management plan], the attainment demonstration) and therefore are indeed surplus. In all likelihood, these reductions are not surplus since they occurred so long ago and probably are already reflected in the District's records and plans. The District must verify that these reductions are not credited elsewhere.<sup>5</sup>

However, the Air District did not provide EPA with verification that these reductions had not been credited elsewhere. EPA previously warned that "any source which attempts to use these emission reductions as an offset may be subject to federal enforcement action." Because ERC S-3693-1 is invalid and "subject to federal enforcement action" if used, the Air District may not employ it to offset the project's VOC emissions here.

## District Response to Public Comment #3:

Prior of issuance of an Emission Reduction Credit (ERC) the District must determine if the emission reduction meets all of the criteria in Rule 2301, *Emission Reduction Credit Banking*, i.e. that the emission reductions be real, enforceable, quantifiable, surplus, and permanent. In addition, all originating ERC projects are subject to a 30-day EPA/CARB/Public comment period. Any and all comments must be addressed by the District prior to final issuance of an originating ERC certificate.

If an emission reduction does not meet these criteria, an ERC cannot be granted. Conversely, if an emission reduction meets the criteria in Rule 2301, the emission reduction qualifies for banking and an ERC is issued.

Once the ERC is issued, there is no requirement in Rule 2301 or Rule 2201, *New and Modified Stationary Source Review*, to re-evaluate the ERC when used to provide emission offsets required by an Authority to Construct (ATC).

This is critical to providing certainty for applicants, and for the District, that once an ERC has been issued it is valid as a means to provide emission offsets in Rule 2201. As such, it is not required that the District re-establish that ERCs are valid for use at the time that the ERCs are proposed to be used as offsets for an ATC.

Please note while Rule 2201 includes an explicit requirement that emission offsets be provided for every ATC that has an emission increase that exceeds the emission offset

thresholds, Rule 2201 includes additional provisions to ensure that the District's offset requirements as a whole are equivalent to the offset requirements prescribed by Federal regulations.

Rule 2201 section 7.0 Annual Offset Equivalency Demonstration and Pre-baseline ERC Cap Tracking System assesses the overall equivalency of Rule 2201 offset requirements with federal offset regulations on an annual basis. The details of this equivalency system have been included in Rule 2201 since December 19, 2002.

Each year an offset equivalency demonstration is performed by the District to show the District's offsetting requirements are as stringent, if not more stringent, than the Federal offsetting requirements. This demonstration examines NSR projects processed during the tracking year (August 20<sup>th</sup> of the previous year to August 19<sup>th</sup> of the current year). A successful demonstration allows the District to continue administering its offsetting program instead of directly implementing federal offsetting requirements. The District's annual offset equivalency demonstration is detailed in a report to EPA which includes a list of the Federal Major Modifications and new Major Source projects which would have required offsets under the federal offset program. Copies of these reports are located on the District's website, see

http://www.valleyair.org/busind/pto/annual offset report/annual offset report.htm.

This offset equivalency demonstration ensures that the District's offset system provides an equivalent quantity of "federal offsets" for all new Major Source and Federal Major Modifications (as in the case with the subject ATCs issued to Kern Oil & Refining) in a given year as would be required under a "Federal only" offset requirement. A successful annual offset equivalency demonstration indicates and confirms that all permitting performed during the 12-month period of the report complies with federal offsetting requirements, including the need to supply surplus credits for major project emission increases. This demonstration is valid regardless of the specific ERCs that are used to provide offsets for specific new major source and Federal major modification projects.

Therefore, the following responses to the Climate Change Law Foundation's comments do not attempt to demonstrate that the ERCs proposed to be used for the Kern Oil & Refining project meet, on an individual ERC basis, federal offsetting requirements. Rather, they demonstrate the legality of the specific ERCs used to satisfy Rule 2201 requirements for the use of such ERCs, while the annual offset equivalency report demonstrates the District NSR rule's programmatic compliance with federal offsetting requirements.

Moreover, the District does not claim, nor does Rule 2201 require, that these ERCs are surplus "at the time of use". As explained above, the surplus nature of emission reductions used to offset increases in emissions from federal major projects is demonstrated on an annual basis through the District's EPA-approved Offset Equivalency Demonstration Report process. Any discussion of the surplus nature of

individual credits used to satisfy the offsetting requirements of Rule 2201, the District's NSR rule, is not germane to the applicable regulations.

The Kern Oil & Refining ATCs result in a Federal Major modification for VOC emissions (but not for NOx, PM10, SOx, or CO emissions). As such, these emissions will be included in the 8/20/16 – 8/19/17 Offset Equivalency Report submitted to EPA in November 2017.

This report identifies each ATC project that constitutes a new Federal major source or a Federal major modification and the quantity of Federal offsets that would be required for that project under a Federal-only permitting program. The report requires two equivalency determinations – offset requirement equivalency and surplus at the time of use equivalency.

The offset requirement equivalency compares the offsets that would be required under a Federal NSR to the annual quantity of offsets required under Rule 2201 and includes any excess or shortfall from previous years. If there is an excess amount of emission reductions provided, the report demonstrates offset requirement equivalency.

The surplus at the time of use equivalency compares the offsets that would be required under a Federal NSR to the surplus value of creditable emission reductions used as offsets during the year and includes any excess or shortfall from previous years. If there is an excess amount of surplus emission reductions, the report demonstrates surplus at the time of use equivalency.

Lastly, the emission reductions represented by ERC S-3693-1 have not been "credited elsewhere". Under Rule 2201, *New and Modified Stationary Source Review*, the District is required to demonstrate mitigation of newly permitted major projects with federal surplus reductions on an annual basis, in our Annual Offset Equivalency Demonstration. The individual ERCs surrendered by an applicant to mitigate their project's emissions are not required by District regulations to satisfy federal offsetting requirements, and any statement by the commenter that they are required by law to be viewed in that context is purely fictional.

While the District does not stipulate that the ERCs being discussed are from the curtailment or shutdown of major sources, a full discussion and explanation of the District's position on this issue for each ERC is unnecessary, as, contrary to the commenter's position, the subject ERCs are "...included in an EPA-approved attainment plan." Each of these ERCs have been incorporated in the District's growth factors as being available to provide offsets for growth in emissions in attainment plans, including the EPA-approved 2007 8-hour ozone plan. Thus, these emissions are included in future year emissions calculations and modeling of future air quality. The attainment plans then provide for real-time mitigation to ensure contemporaneous air quality benefit, regardless of the date the credits were banked or used as offsets under the District's NSR rule. ERC S-3693-1 (listed as previously issued parent ERC S-2333-1) is included in the EPA approved 2007 ozone attainment plan (approved 3/1/2012,

see 77 FR 12652) in Appendix D, see <a href="http://www.valleyair.org/Air Quality Plans/AQ Final Adopted Ozone2007.htm">http://www.valleyair.org/Air Quality Plans/AQ Final Adopted Ozone2007.htm</a>.

The inclusion of these ERCs in the 2007 ozone attainment plan verifies that this emission reduction is not being used as "credit elsewhere".

Therefore, ERC S-3693-1 is valid, and its use to mitigate the proposed VOC emissions increase from the Kern Oil & Refining ATCs complies with District Rule 2201.