

April 30, 2026

Gabe Castro
Kern Energy
7724 E Panama Lane
Bakersfield, CA 93307

RE: Final - Authority to Construct / Certificate of Conformity (Significant Modification)
Facility Number: S-37
Project Number: S-1251187

Dear Mr. Castro:

The Air Pollution Control Officer has issued the Authority to Construct permit to Kern Energy to install a hydrogen power generation operation including fuels cells, hydrogen purification unit, hydrogenation and dehydrogenation process units, at 7724 E Panama Lane, Bakersfield, CA. Enclosed is the Authority to Construct permit and a copy of the notice of final action that has been posted on the District's website (<https://valleyair.org/>).

Notice of the District's preliminary decision to issue the Authority to Construct permit was posted on October 28, 2025. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on October 28, 2025. All comments received following the District's preliminary decision on this project were considered.

Comments received by the District during the public notice period resulted in typographical corrections and clarifications for transparency purposes. These changes were minor and did not trigger additional public notification requirements, nor did they have any impact upon the Best Available Control Technology determination or on the amount of offsets required for project approval.

Also enclosed is an invoice for the engineering evaluation fees pursuant to District Rule 3010. Please remit the amount owed, along with a copy of the attached invoice, within 60 days.

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

Samir Sheikh
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

Mr. Gabe Castro
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enclosed for your use. These forms may also be found on the District's website at <https://valleyair.org/>.

Thank you for your cooperation in this matter. If you have any questions, please contact Ms. Erin Scott at (661) 392-5500..

Sincerely,



Brian Clements
Director of Permit Services

BC:dk

Enclosures

cc: Courtney Graham, CARB (w/enclosure) via email
cc: EPA Region 9 Air Permitting Manager (w/enclosure) via EPS

AUTHORITY TO CONSTRUCT

PERMIT NO: S-37-178-0

ISSUANCE DATE: 4/30/2026

LEGAL OWNER OR OPERATOR: KERN ENERGY
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:

HYDROGEN RECOVERY UNIT CONSISTING OF HYDROGENATION, DEHYDROGENATION, AND HYDROGEN PURIFICATION EQUIPMENT INCLUDING REACTORS, COMPRESSORS, HEAT EXCHANGERS, PUMPS, MISCELLANEOUS VESSELS, AND 7 PERMIT EXEMPT HYDROGEN FUEL CELLS

CONDITIONS

1. 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 VOC emission reduction credits for the following quantity of emissions: 1st quarter - 181 lb, 2nd quarter - 181 lb, 3rd quarter - 181 lb, and fourth quarter - 182 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.9 (as amended 4/20/23) for the ERC specified below. VOC ERCs used to satisfy the offset quantity required under District Rule 2201 must be surplus at the time of issuance of this ATC and the total quantity of ERCs surrendered shall be calculated based on the ERC surplus value percent discount of each ERC certificate used. [District Rule 2201] 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.

Samir Sheikh, Executive Director / APCO



Brian Clements, Director of Permit Services

S-37-178-0 : 4/30/2026 9:41:35 AM -- KLEVANNND : Joint Inspection NOT Required

4. ERC Certificate Number C-1579-1 (or a certificate split from this certificate) 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. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 1.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. For valves, flanges and connectors, a leak is defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
7. For pumps and compressor seals a leak is defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. Permit holder shall maintain accurate component count and resultant emissions according to California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB Table IV-3a: CAPCOA -Revised 1995 EPA Protocol Refinery Correlation Equations. Permit holder shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
11. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit
12. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454] Federally Enforceable Through Title V Permit

Facility # S-37
KERN ENERGY
7724 E PANAMA LN
BAKERSFIELD, CA 93307-9210

AUTHORITY TO CONSTRUCT (ATC)

QUICK START GUIDE

1. **Pay Invoice:** Please pay enclosed invoice before due date.
2. **Modify Your Title V Permit:** Prior to operating the equipment authorized under this ATC, submit an application to modify your Title V permit. See application forms at <https://ww2.valleyair.org/permitting/title-v-operating-permits/application-forms/>.
3. **Fully Understand ATC:** Make sure you understand ALL conditions in the ATC prior to construction, modification and/or operation.
4. **Follow ATC:** You must construct, modify and/or operate your equipment as specified on the ATC. Any unspecified changes may require a new ATC.
5. **Notify District:** You must notify the District's Compliance Department, at the telephone numbers below, upon start-up and/or operation under the ATC. Please record the date construction or modification commenced and the date the equipment began operation under the ATC. You may NOT operate your equipment until you have notified the District's Compliance Department. A startup inspection may be required prior to receiving your Permit to Operate.
6. **Source Test:** Schedule and perform any required source testing. See <https://ww2.valleyair.org/compliance/source-testing> for source testing resources.
7. **Maintain Records:** Maintain all records required by ATC. Records are reviewed during every inspection (or upon request) and must be retained for at least 5 years. Sample record keeping forms can be found at <https://ww2.valleyair.org/compliance/recordkeeping-forms>.

By operating in compliance, you are doing your part to improve air quality for all Valley residents.

**For assistance, please contact District Compliance staff at
any of the telephone numbers listed below.**

Samir Sheikh
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

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Refinery Hydrogen Power

Facility Name: Kern Energy
Mailing Address: 7724 East Panama Lane
Bakersfield, CA 93307
Facility Contact Person: Gabe Castro
Contact Telephone: (661) 845-0761
Contact E-Mail: gcastro@kernenergy.com
Application #(s): S-37-178-0
Project #: S-1251187
Date Deemed Complete: May 29, 2025

Date: April 30, 2026
Engineer: Dan Klevann
Lead Engineer: Erin Scott

I. Proposal

Kern Energy (Kern) has requested an Authority to Construct (ATC) for a hydrogen recovery operation which includes using the hydrogen in one of seven permit exempt 3 MW fuel cells for onsite power generation or storing the hydrogen for future use. The draft ATC(s) are included in Appendix A.

Kern received their renewed Title V Permit on June 9, 2023. This modification can be classified as a Title V significant modification pursuant to Rule 2520, and can be processed with a Certificate of Conformity (COC). Since the facility has specifically requested that this project be processed in that manner, the 45-day EPA comment period will be satisfied prior to the issuance of the Authority to Construct. Kern must apply to administratively amend their Title V permit.

The District received public comments on this project and has made adjustments to this evaluation including typographical corrections and clarifications for transparency purposes. The District has also compiled the public comments along with District responses to the comments in Appendix M.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (4/20/23)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/20/24)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4454	Refinery Process Unit Turnaround (12/17/92)
Rule 4455	Components at Petroleum Refineries, Gas Liquids Processing Facilities and Chemical Plants (6/15/2023)

CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The facility is located at 7724 East Panama Lane, Bakersfield, CA. The equipment is not located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 is not applicable to this project.

IV. Process Description

Kern is engaged in the production of gasoline and various distillates, including diesel fuel. Kern is proposing to install a hydrogen recovery process unit to capture existing hydrogen already being co-produced in the process naphtha reformer and the platformer unit for use in the production of clean electricity to support the refinery power needs. A process flow diagram is shown in Appendix B.

The hydrogen system can operate in two different modes as described below:

- **Hydrogen Store & Release Mode:** Hydrogen produced in the reformers is purified in the hydrogen purification equipment of the hydrogen recovery process unit and chemically bound to toluene in a reactor through the hydrogenation process to generate methyl cyclohexane (MCH). The toluene and MCH will be stored in existing organic liquid storage tanks. Hydrogen from the MCH is released on-demand through the dehydrogenation process in a reactor to produce ultra-pure hydrogen that can then be used in the fuel cells to produce electricity or alternatively used to supplement facility operations, as needed. Any heat needs for the hydrogenation and dehydrogenation process are facilitated by refinery steam and heat exchangers.
- **Hydrogen Direct to Fuel Cell Mode:** Hydrogen produced in the reformers is supplied to the hydrogen purification equipment of the hydrogen recovery process unit, and then sent directly into the fuel cells for use in electricity production.

The new fuel cells are Purecell model 400 units. The fuel cells require H₂ for operation. Per the manufacturer (see Appendix B), the emissions from the fuel cells are zero emissions for NO_x, SO_x, CO, VOC. As the emissions are less than 2.0 lb/day for each pollutant, the fuel cells are permit exempt. For clarification purposes they will be listed on the new hydrogen recovery unit permit.

V. Equipment Listing

S-37-178-0: HYDROGEN RECOVERY UNIT CONSISTING OF HYDROGENATION, DEHYDROGENATION, AND HYDROGEN PURIFICATION EQUIPMENT INCLUDING REACTORS, COMPRESSORS, HEAT EXCHANGERS, PUMPS, MISCELLANEOUS VESSELS, AND 7 PERMIT EXEMPT HYDROGEN FUEL CELLS

VI. Emission Control Technology Evaluation

The Hydrogen Recovery Unit will be connected to the other equipment at the facility by way of piping. VOC emissions are expected to result from leaks in piping components (such as valves and flanges). While parts of the system will be in hydrogen service, the process will also have components expected to contain volatile organic compounds in excess of 10% by weight. The District will treat all new components as containing VOC. As such, components will be monitored and controlled in accordance with Rule 4455.

No changes to the components associated with the Naphtha Reformer Unit (S-37-119) or the Platformer Unit (S-37-4) is expected.

VII. General Calculations

A. Assumptions

The potential to emit from the new components associated with the hydrogen recovery project will be calculated using California Implementation Guidelines for Estimating Mass Emissions of fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB, February 1999. Applicant is proposing use of the correlation equation emission factors.

- Facility will operate 24 hours per day, 7 days per week, and 52 weeks per year.
- The fugitive emissions for all piping components are calculated using California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB, February 1999 correlation equation emission factors.
- Facility is limited by District Rule 4455 to less than 10,000 ppm for all components. Therefore, for pegged emissions value, 9,999 ppm will be used in the Correlation Equation to calculate the pegged value.

In accordance with District Policy SSP-2015, emissions have been estimated based on component counts and the emission factors from Table IV-3a (1995 EPA Correlation Equation Factors for Refineries and Marketing Terminals) of the "California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities," issued by the California Air Pollution Control Officers Association (CAPCOA) and the California Air Resources Board (ARB) in February 1999. The correlation equation method requires data from Method 21 leak monitoring inspections on these components, to establish the % Default Zero, % Pegged, and % within Correlation range.

B. Emission Factors

The emission factors used to estimate fugitive VOC emissions from equipment leaks at piping components associated with this new system is from Table IV-3a of the “California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities” (February 1999). Minor leak thresholds are based on compliance with Rule 4455, effective 7/1/2024.

Emission factors are determined depending on whether the components are leak free, are at the correlation equation values or are pegged emissions. Kern has proposed the number of components that are at each level. These component counts are shown in Appendix C.

The correlation equation values are determined using the correlation equation and the lower of either the BACT ppm limit or the Rule 4455 ppm limit for each component type.

A sample equation is shown below for valves using the correlation equation at the 100 ppmv leak threshold value being used.

Valves:

$$\begin{aligned}\text{VOC} &= 2.27\text{E-}6 (\text{SV})^{0.747} \\ &= 2.27\text{E-}6 (100)^{0.747} \\ &= 0.000071 \text{ kg/hr per component} \\ &= 0.00375 \text{ lb/day per component}\end{aligned}$$

The pegged component values are determined using the correlation equation and a pegged ppm value of 9,999 for each component type.

A sample equation is shown below for using the correlation equation at the 9,999 ppmv leak threshold value being used as the pegged value as Rule 4455 does not allow leaks over 10,000 ppmv.

Valves:

$$\begin{aligned}\text{VOC} &= 2.27\text{E-}6 (\text{SV})^{0.747} \\ &= 2.27\text{E-}6 (9,999)^{0.747} \\ &= 0.002 \text{ kg/hr per component} \\ &= 0.117 \text{ lb/day per component}\end{aligned}$$

The emission factors for the components are provided below:

Equipment Type	Default Zero Factor*	Rule 4455 Minor Leak Threshold	BACT leak threshold	Correlation Equation*	Pegged Component*
	(lb/component per day)	(ppm)	(ppm)	(lb/component per day)	(lb/component per day)
Valves	0.000413	400	100	0.00375	0.117
Pump Seals	0.001005	500		0.128	0.825
Others	0.000212	500		0.0249	0.170
Connectors	0.000397	400	100	0.007	0.071
Flanges	0.000016	400	100	0.016	0.159
Open-Ended Lines	0.000106	500		0.00904	0.079

*These values have been rounded for display purposes

These values are multiplied by the number of components and the percentage in that range. Example for valves using the correlation equation:

$$0.00375 \times 251 \times 9.5\% = 0.089323$$

C. Calculations

1. Pre-Project Potential to Emit (PE1)

Since this is a new emissions unit, PE1 = 0 for all pollutants.

2. Post-Project Potential to Emit (PE2)

The post-project potential to emit calculations are presented in Appendix C and summarized in the table below. Post-project potential to emit (PE2) calculations are calculated based on the fugitive component count associated with the new unit, applying the correlation equation method for estimating emissions. The component count and associated emissions are shown in Appendix C.

PE2		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NOx	0	0
SOx	0	0
PM10	0	0
CO	0	0
VOC	1.3	483

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site, including all ERCs held as certificates and all emission reduction credits sold or transferred.

The SSPE1 is calculated in Appendix G and presented in the following table.

SSPE1 (lb/year)					
	NOx	SOx	PM10	CO	VOC
SSPE1	122,606	66,206	39,995	335,489	268,814

4. Post-Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source, except for emissions units proposed to be shut down as part of a Stationary Source Project, and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site, including all ERCs held as certificates and all emission reduction credits sold or transferred.

The SSPE2 is calculated in Appendix H and presented in the following table.

SSPE2 (lb/year)					
	NOx	SOx	PM10	CO	VOC
SSPE2	122,606	66,206	39,995	335,489	269,297

5. Major Source Determination

Rule 2201 Major Source Determination:

Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status, the following shall NOT be included:

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months), pursuant to the Clean Air Act, Title 3, Section 302, US Codes 7602(j) and (z)

- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

This source is an existing Major Source for VOC emissions and will remain a Major Source for VOC. No change in other pollutants are proposed or expected as a result of this project.

Rule 2410 (Prevention of Significant Deterioration) Major Source Determination:

The facility or the equipment evaluated under this project is listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 100 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
	NO ₂	VOC	SO ₂	CO	PM*	PM10
Estimated Facility PE before Project Increase	61	134	33	167	20	20
PSD Major Source Thresholds	100	100	100	100	100	100
PSD Major Source?	No	Yes	No	Yes	No	No

*PM assumed to be equal to PM10.

As shown above, the facility is an existing PSD major source for at least one pollutant.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the Quarterly Net Emissions Change (QNEC), and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or
- Any Clean Emissions Unit, located at a Major Source.

otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

S-37-178-0:

Since this is a new emissions unit, BE = PE1 = 0 for all pollutants.

7. Senate Bill 288 Major Modification

A Senate Bill (SB) 288 Major Modification is a federal major modification under 40 CFR 51.165 as it existed on December 19, 2002. 40 CFR Part 51.165 (12/19/02) defines a Major Modification as any physical change in or change in the method of operation of an *existing major stationary source* that would result in a significant net emissions increase of any pollutant subject to regulation under the Act.

Per section VII.C.5 above, this facility is a major source for VOC. Thus, the project's PE2 is compared to the SB 288 Major Modification Thresholds in the following table in order to determine if further SB 288 Major Modification calculation is required.

As calculated in Section VII above:

SB 288 Major Modification Thresholds			
Pollutant	Project PE2 (lb/year)	Threshold (lb/year)	SB 288 Major Modification Calculation Required?
NO _x	0	50,000	No
SO _x	0	80,000	No
PM ₁₀	0	30,000	No
VOC	483	50,000	No

Since none of the SB 288 Major Modification Thresholds are surpassed with this project, this project does not constitute an SB 288 Major Modification and no further discussion is required.

8. Federal Major Modification / New Major Source

Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act. The significant net emission increase threshold for each criteria pollutant is included in Rule 2201.

The determination of Federal Major Modification is based on a two-step test. For the first step, only the emission *increases* are counted. In step 1, emission decreases cannot cancel out the increases. Step 2 allows consideration of the project's net emissions increase as described in 40 CFR 51.165 and the Federal Clean Air Act Section 182 (e), as applicable.

Step 1: Project Emissions Increase

For new emissions units, the increase in emissions is equal to the PE2 for each new unit included in this project:

Emission Increase = PE2

In conclusion, the project's combined total emission increases are summarized in the following table and are compared to the Federal Major Modification Thresholds in the following table.

Federal Major Modification Thresholds for Emission Increases			
Pollutant	Total Emissions Increases (lb/yr)	Thresholds (lb/yr)	Federal Major Modification?
NOx*	0	0	No
VOC*	483	0	Yes
PM10	0	30,000	No
PM2.5	0	20,000	No
SOx	0	80,000	No

*If there is any emission increases in NOx or VOC, this project is a Federal Major Modification and no further analysis is required.

Since there is an increase in VOC emissions, this project constitutes a Federal Major Modification. Consequently, as discussed below in the offset section of this evaluation, pursuant to Section 4.8.1.1 of District Rule 2201, VOC internal emission reductions (IER) or other actual emission reductions (AERs) used to satisfy the offset quantity required under District Rule 2201 must be surplus at the time of use (ATC issuance). Separately, Federal Offset Quantity is calculated below.

New Major Source

As demonstrated above, this facility is not becoming a Major Source as a result of this project, therefore, this facility is not a New Major Source pursuant to Section 3.30 of District Rule 2201.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination are listed in CFR 52.21 (b) (23). This project only affects VOC emissions which do not require a PSD evaluation per CFR 52.21(b)(23). No further discussion is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix I.

VIII. Compliance Determination

The Compliance Section shall document compliance with District Rules. List and discuss every relevant applicable rule. Discuss the basis for every condition that will be added to, modified or removed from the permit.

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

Pursuant to District Rule 2201, Section 4.1, BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

- a. Any new emissions unit with a potential to emit exceeding 2.0 pounds per day, or the relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding 2.0 pounds per day,
- b. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding 2.0 pounds per day, and/or
- c. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New or relocated emissions units – PE > 2.0 lb/day

As seen in Section VII.C.2 above, the applicant is proposing to install a hydrogen recovery operation with a PE less than 2.0 lb/day for VOC. Therefore, BACT is not triggered for VOC since the PE are not greater than 2.0 lb/day.

b. Modification of emissions units – AIPE > 2.0 lb/day

As discussed in Section I above, there are no modified emissions units associated with this project. Therefore BACT is not triggered.

c. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does constitute an SB 288 and/or Federal Major Modification for VOC emissions. Therefore, BACT is triggered for VOC for all emissions units in the project for which there is an emission increase.

2. BACT Guideline

BACT Guideline 7.2.2 (Petroleum Refining – Valves & Connectors) and BACT Guideline 7.2.3 (Petroleum Refining – Pump and Compressor Seals), applies to the hydrogen recovery operation. (See Appendix D).

3. Top-Down BACT Analysis

Per Permit Services Policies and Procedures for BACT, a Top-Down BACT analysis shall be performed as a part of the application review for each application subject to the BACT requirements pursuant to the District's NSR Rule.

Pursuant to the attached Top-Down BACT Analysis (see Appendix E), BACT has been satisfied with the following component types:

Valves and Connectors:

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

Pumps and compressor seals:

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

B. Offsets

1. District Emission Offset Requirements

a. District Offset Applicability

Pursuant to District Rule 2201, Section 4.5, District offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of District Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

District Offset Determination (lb/year)					
	NOx	SOx	PM10	CO	VOC
SSPE2	122,606	66,206	39,995	335,489	269,297
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets Triggered?	Yes	Yes	Yes	Yes	Yes

b. District Offset Quantity (DOQ) Required

As shown above, the SSPE2 is greater than the offset thresholds for NOx, SOx, PM10, CO and VOC; therefore, District offsets are triggered for NOx, SOx, PM10, CO and VOC under NSR. However, this project only has an increase in VOC emissions so the other pollutants will not be considered. Also, since this project is a Federal Major Modification or New Major Source for VOC, the District offset exemption from Section 4.6.10 and 4.6.11 of District Rule 2201 is applicable to this project, and District offsets for VOC are not required.

2. Federal Emission Offset Requirements

a. Federal Offset Applicability

Pursuant to District Rule 2201, Section 4.8, federal offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the project is a New Major Source or a Federal Major Modification.

As demonstrated in section VII.C.8 above, this project is a Federal Major Modification for VOC. Thus, federal offsets are triggered for this project.

b. Federal Offset Quantity (FOQ) Required

The District is designated as Extreme non-attainment for ozone (NOx and VOC emissions). As discussed above, the proposed project is to install a hydrogen recovery unit to provide hydrogen for power production and other refinery usage.

The Federal Offset Quantity (FOQ) is only calculated for the pollutants for which a project is a Federal Major Modification or a New Major Source as determined above.

Pursuant to Section 4.8.4 of District Rule 2201, the federal offset quantity is the sum of the annual emission changes for all new and modified emission units in a project calculated as the potential to emit after the modification (PE2) minus the federal baseline emissions (FBE) for each emission unit times the applicable offset ratio.

$$FOQ = \sum(PE2 - FBE) \times \text{offset ratio}$$

Federal Baseline Emissions

Pursuant to Section 3.19 of District Rule 2201, for a given pollutant, federal baseline emissions (FBE) = PE1 for:

- Any Highly-Utilized Emissions Unit,
- Any Fully-Offset Emissions Unit.

otherwise,

FBE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

Since this is a new unit, FBE = 0

Federal Offset Quantity (FOQ)

Since this project only includes new unit(s)

FOQ = PE2 x offset ratio

VOC		Offset Ratio	1.5
Permit No.	Post-Project Potential to Emit (PE2) (lb/year)	Federal Baseline Emissions (lb/year)	Emissions Change (lb/yr)
S-37-178-0	483	0	483
∑(PE2 – FBE) (lb/year):			483
Federal Offset Quantity (lb/year): ∑(PE2 – FBE) x 1.5			725
Federal Offset Quantity (tons/year): ∑(PE2 – FBE) x 1.5 ÷ 2,000			0.4

3. Federal Offset Equivalency Demonstration

Section 7.0 of District Rule 2201 provides the requirements for the District to demonstrate on an individual ATC issuance basis that the number of creditable emission reductions collected by the District equals or exceeds the amount of creditable emission reductions that would otherwise be required as offsets under a federal non-attainment NSR program meeting the applicable requirements of 40 CFR 51.165 and the CAA.

As discussed above, this project triggers a Federal Major Modification for VOC, and federal offset quantities are required for this project for VOC. Pursuant to section 4.8.1.1 of District Rule 2201, actual emission reductions used to satisfy federal offset quantities for VOC must be creditable and surplus at the time of use (ATC issuance).

Surplus at the Time Of Use Emission Reduction Credits

The applicant has stated that the facility plans to use ERC certificate C-1579-1 to satisfy the federal offset quantities for VOC required for this project. Pursuant to the ERC surplus analysis in Appendix K, the District has verified that the surplus credits from the ERC certificate provided by the applicant are sufficient to satisfy the federal offset quantities for VOC required for this project.

Therefore the appropriate quarterly emissions to be offset are summarized as follows:

Federal Offset Quantity (FOQ) Required (lbs)					
Pollutant	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total Annual
VOC	181	181	181	182	725

The applicant has proposed to use the following emission reduction certificates with the surplus value of credits summarized as follows:

Surplus VOC Credits Provided (lbs)					
ERC #	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter	Total Annual
C-1579-1	2,000	2,000	2,000	2,000	8,000

As discussed above, the facility has sufficient credits to fully offset the VOC emissions increases associated with this project.

Proposed Rule 2201 Federal Offset Permit Conditions

The following permit conditions will be added to the Authority(ies) to Construct:

- {GC# 4447 - edited} Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 181 lb, 2nd quarter - 181 lb, 3rd quarter - 181 lb, and fourth quarter - 182 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.9 (as amended 4/20/23) for the ERC specified below. VOC ERCs used to satisfy the offset quantity required under District Rule 2201 must be surplus at the time of issuance of this ATC and the total quantity of ERCs surrendered shall be calculated based on the ERC surplus value percent discount of each ERC certificate used. [District Rule 2201]

- {GC# 1983} ERC Certificate Number C-1579-1 (or a certificate split from this certificate) 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]

4. ERC Withdrawal Calculations

The applicant must identify the ERC Certificate(s) to be used to offset the increase of VOC emissions for the project. As previously indicated, the applicant is proposing to use ERC certificate #C-1579-1 to mitigate the increases of VOC emissions associated with this project. See Appendix L for detailed ERC Withdrawal Calculations.

C. Public Notification

1. Applicability

Pursuant to District Rule 2201, Section 5.4, public noticing is required for:

- New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
- Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
- Any project which results in the offset thresholds being surpassed,
- Any project with an SSIPE of greater than 20,000 lb/year for any pollutant,
- Any project at a minor source which results in an SSPE exceeding 80% of the major source threshold for any pollutant, and/or
- Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

As demonstrated in Section VII.C.7 of this evaluation, this project is a Federal Major Modification. Therefore, public noticing is required for this project for Federal Major Modification purposes.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. As seen in Section VII.C.2 above, this project does not include a new emissions unit which has daily emissions greater than 100 lb/day for any pollutant, therefore public noticing for PE > 100 lb/day purposes is not required.

c. Offset Threshold

Public notification is required if the pre-project Stationary Source Potential to Emit (SSPE1) is increased to a level exceeding the offset threshold levels. The following table compares the SSPE1 with the SSPE2 in order to determine if any offset thresholds have been surpassed with this project.

Offset Thresholds (lb/year)					
	NOx	SOx	PM10	CO	VOC
SSPE1	122,606	66,206	39,995	335,489	268,814
SSPE2	122,606	66,206	39,995	335,489	269,297
Offset Threshold	20,000	54,750	29,200	200,000	20,000
Public Notice Required?	No	No	No	No	No

As demonstrated above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District Rule 2201, the $SSIPE = SSPE2 - SSPE1$. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds (lb/year)					
	NOx	SOx	PM10	CO	VOC
SSPE2	122,606	66,206	39,995	335,489	269,297
SSPE1	122,606	66,206	39,995	335,489	268,814
SSIPE	0	0	0	0	483
SSIPE Public Notice Threshold	20,000	20,000	20,000	20,000	20,000
Public Notice Required?	No	No	No	No	No

As demonstrated above, the SSIPEs for all pollutants were less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. Minor Sources with SSPE Exceeding 80% of Major Source Threshold

Public notification is required for any project for new and/or modified stationary sources at minor source facilities that results in a SSPE exceeding 80% of the major source threshold.

As seen in Section VII.C.5, since the facility is a Major Source for all pollutants emitted by this project, public noticing for this purpose is not required.

f. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. Public Notice Action

As discussed above, public noticing is required for this project for being a Federal Major Modification. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be electronically published on the District's website prior to the issuance of the ATC for this equipment.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

DELs for the emission units in this project will be included on the ATCs in the form of fugitive component emissions limits in lb VOC/day. The permittee will be required to maintain accurate records of fugitive component counts and resulting emission calculations to validate the DEL.

Proposed Rule 2201 (DEL) Conditions:

- VOC emission rate from fugitive components associated with this emissions unit shall not exceed 1.3 lb/day [District Rule 2201]

E. Compliance Assurance

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required to demonstrate compliance with Rule 2201.

2. Monitoring

Kern currently has a fugitive emission monitoring program in place. The new fugitive components will be monitored under the same program.

3. Recordkeeping

Recordkeeping is required to demonstrate compliance with the offset, public notification and daily emission limit requirements of Rule 2201. The following condition(s) are listed on the permit to operate:

- Permit holder shall maintain accurate component count and resultant emissions from the components associated with this permit according to California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB Table IV-3a: CAPCOA -Revised 1995 EPA Protocol Refinery Correlation Equations. Permit holder shall update such records when new components are approved and installed. [District Rule 2201]

4. Reporting

No reporting is required to demonstrate compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

Section 4.15 of District Rule 2201 requires that an AAQA be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. Although an ambient air quality analysis (AAQA) was requested, the only emissions associated with the project are VOC emissions. There are currently no ambient air quality standards for VOCs, therefore, an AAQA was not performed.

G. Alternate Siting Analysis

The current project occurs at an existing facility. The applicant proposes to install a hydrogen recovery and hydrogen power generation operation.

Since the project recovers hydrogen from the refinery processes to be used at the same location, the existing site will result in the least possible impact from the project. Alternative sites would involve the relocation and/or construction of various support structures on a much greater scale, and would therefore result in a much greater impact.

H. Compliance Certification

Section 4.16.2 of this Rule requires the owner of a New Major Source or a source undergoing a Federal Major Modification to demonstrate to the satisfaction of the District that all other Major Sources owned by such person and operating in California are in compliance or are on a schedule for compliance with all applicable emission limitations and standards. As discussed in Section VIII above, this project does constitute a Federal Major Modification, therefore this requirement is applicable. Kern's compliance certification is included in Appendix J. The District reviewed the facility's compliance status as part of this project and found that the facility is currently in compliance with all applicable emission limitations and standards, i.e., there are no existing uncorrected Notices of Violation.

I. Visibility Impact Analysis

Section 4.16.3 of District Rule 2201 requires the District, in consultation with the designated Federal Land Manager (FLM), to assess the impact of the emissions from New Major Sources and Federal Major Modifications to visibility in the nearest or most affected Mandatory Class I Federal Area (MCFA). As shown in Section VII.C.8 above, this project is a Federal Major Modification for VOC; therefore, a visibility impact assessment under Section 4.16.3 is required. A visibility impact assessment evaluates the impact to visibility from a project's total NO_x, SO_x, PM₁₀, and sulfuric acid mist emissions to the nearest or most affected MCFA. However, since this project is not a source of NO_x, SO_x, PM₁₀, or sulfuric acid mist emissions, this project is presumed to have no adverse impact on visibility at any MCFA, and no further analysis is required.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a “permit amendment that does not qualify as a minor permit modification or administrative amendment.”

Section 3.21.5 states that a minor permit modification is a permit modification that is not a major modification, as defined in Rule 2201. As discussed above, this project triggers a Federal Major Modification. As a result, the proposed project constitutes a Significant Modification to the Title V Permit pursuant to Section 3.30.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Continued compliance with this rule is expected. The facility shall not implement the changes requested until the final permit is issued.

Rule 4001 New Source Performance Standards (NSPS)

This rule incorporates NSPS from Part 60, Chapter 1, Title 40, Code of Federal Regulations (CFR); and applies to all new sources of air pollution and modifications of existing sources of air pollution listed in 40 CFR Part 60.

40 CFR Part 60, Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced after January 4, 1983, and on or Before November 7, 2006

Kern has an inspection and repair program for the components at the refinery. The program is in compliance with subpart GGG. Note, this project is not subject to this subpart as it will be constructed after the applicable dates.

40 CFR Part 60 Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006.

Kern Energy does have equipment subject to this Subpart, and has an inspection and repair program for the components at the refinery. The program is in compliance with subpart GGGa. However, this project is not subject to this subpart as it is not an affected facility as the proposed equipment does not meet the definition of a process unit.

Process unit means components assembled to produce intermediate or final products from petroleum, unfinished petroleum derivatives, or other intermediates; a process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

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

40 CFR 63 Subpart CC - National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries

This subpart applies to petroleum refining process units and to related emissions points that are specified in paragraphs (c)(1) through (9) of this section that are located at a plant site that: (1) are located at a plant site that is a major source as defined in section 112(a) of the Clean Air Act; and (2) emit or have equipment containing or contacting one or more of the hazardous air pollutants listed in table 1 of this subpart.

A major source is a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. Kern is not a major source of HAP, and the facility's total stationary source HAP emissions are limited by a permit condition of the facilitywide permit S-37-0 to 10 tons in any consecutive 12 month period any HAP (as defined in 40 CFR 63.2) and 25 tons in any consecutive 12 month period of any combination of HAPs. Therefore, the facility is not subject to the requirements of this rule.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). Visible emissions are not expected from the hydrogen power generation equipment or its fugitive components. Therefore, compliance with this rule is expected.

Rule 4102 Nuisance

Rule 4102 prohibits discharge of air contaminants which could cause injury, detriment, nuisance or annoyance to the public. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. Therefore, compliance with this rule is expected.

California Health & Safety Code 41700 (Health Risk Assessment (HRA))

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

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification of an existing source shall not result in an increase in cancer risk greater than the District's significance level (20 in a million) and shall not result in acute and/or chronic risk indices greater than 1.

An HRA is not required for a project with a total facility prioritization score of less than or equal to one. According to the Technical Services Memo for this project, the total facility

prioritization score including this project was greater than or equal to one; therefore an HRA is required.

The resulting prioritization score for this project and facility is shown below.

Health Risk Assessment Summary	
	Worst Case Potential
Project Prioritization Score	0.003
Facility Prioritization Score	> 1

In accordance with District policy APR 1905, and based on the HRA, the project is approvable since the facility's cumulative acute and chronic indices and the cumulative cancer risk are below all significance thresholds; therefore, no further analysis is required to determine the impact from this project and compliance with the District's Risk Management Policy is expected.

Compliance with District Rule 4102 requirements is expected.

See Appendix F: Health Risk Assessment Summary

Discussion of T-BACT

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. T-BACT is not required for this project because the HRA indicates that the worst case cancer risk does not exceed one in one million; therefore, compliance with the District's Risk Management Policy is expected.

In accordance with District policy APR 1905, no further analysis is required, and compliance with District Rule 4102 requirements is expected.

See Appendix F: Health Risk Assessment Summary

Rule 4454 Refinery Process Unit Turnaround

The purpose of this rule is to limit VOC emissions from the purging, repair, cleaning, or otherwise opening or releasing pressure from a refinery vessel during a process unit turnaround. This rule applies to any refinery vessel that contains VOC.

This rule requires process vessels to be vented through a control device or otherwise controlled through incineration when depressurized for maintenance or repair. Conditions have been previously included on the permit to ensure the provisions of this rule are followed during such operations. Continued compliance is expected.

Rule 4455 Components at Petroleum Refineries, Gas Liquids Processing Facilities, and Chemical Plants

The purpose of this rule is to limit Volatile Organic Compound (VOC) emissions from leaking components at petroleum refineries, gas liquids processing facilities, and chemical plants. This rule shall apply to components containing or contacting VOC at petroleum refineries, gas liquids processing facilities, and chemical plants.

The operator has implemented an operator management plan for the refinery for the current roster of components in VOC service. As required by this rule, the operator management plan submitted by the permittee was reviewed and approved by the District. The essential requirement of the rule is that an operator not use any component that leaks in excess of the applicable leak criteria established by the rule, with the exception that leaking components may be used provided that they are identified with a tag for repair, are repaired, or are awaiting re-inspection after being repaired, within the applicable time period specified in this rule. Minor and major gas and liquid leaks are defined and leak standards are established for the following component types: flanges, valves, threaded connections, pumps, compressor, pressure relief devices, pipes and other. The rule establishes inspection, re-inspection and maintenance requirements for components.

Condition 11 of the draft ATC references facility wide permit conditions (S-37-0-4 conditions 102 through 136) that will ensure continued compliance with the rule.

California Health & Safety Code 42301.6 (School Notice)

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

California Environmental Quality Act (CEQA)

The County of Kern (County) acted as CEQA Lead Agency for the Project. The County issued Site Plan Review approval and filed a Notice of Exemption (NOE) pursuant to CEQA Guidelines §15062 identifying exemptions under Public Resources Code §21080(b)(1) and CEQA Guidelines §15268 (ministerial approvals) and §15301 (Existing Facilities).

The San Joaquin Valley Air Pollution Control District (District), has conducted a Preliminary Review pursuant to CEQA Guidelines §15060, and has determined that the Project is a discretionary project as defined under CEQA Guidelines §15357. In addition to the exemptions identified in the County's NOE, the administrative record supports applicability of: (a) CEQA Guidelines §15302, because equipment will be installed within the existing refinery to serve the same operational purpose with no expansion of overall capacity; (b) CEQA Guidelines §15303, because the Project installs discrete specialized mechanical/process equipment within an existing industrial facility without altering the underlying use; and (c) CEQA Guidelines §15061(b)(3), because the Project is entirely within the existing industrial footprint, does not expand the refinery's footprint or introduce a new industrial use, and, based on the record, will not result in significant environmental effects.

Substantial evidence demonstrates the Project: (i) occurs entirely within the existing refinery boundary with no site expansion; (ii) involves limited construction (foundations, piles, delivery and placement of seven pre-assembled fuel cell units and two skid-mounted systems) with minimal earthwork; (iii) has no transportation impact because existing on-site generated hydrogen is used on-site, and involves only temporary delivery trucking trips; and (iv) has no adverse water resource impacts and may reduce net groundwater demand through fuel-cell water production and reuse.

The exception for unusual circumstances (CEQA Guidelines §15300.2(c)) does not apply because the Project consists of routine equipment installation and process improvements within an existing industrial facility, without footprint expansion, and is subject to District permitting controls; there is no reasonable possibility of significant environmental effects due to unusual circumstances.

The District has independently reviewed the County's NOE and the Project record, as well as conducted its own Preliminary Review, and found no basis for additional CEQA review for the District's discretionary ATC action. Public notice for this ATC has been provided consistent with District Rule 2201 and Title V procedures; such noticing is independent of CEQA noticing and does not alter the District's reliance on the County's NOE, nor on the District's own Preliminary Review which has supports the applicability of the exemptions identified herein.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful NSR Public Noticing period, issue ATC S-37-178-0 subject to the permit conditions on the attached draft ATC in Appendix A.

X. Billing Information

Annual Permit Fees			
Permit Number	Fee Schedule	Fee Description	Annual Fee
S-37-178-0	3020-06	miscellaneous	\$139

XI. Appendices

- A: Draft ATC
- B: Process Flow Diagram
- C: Calculations
- D: BACT Guideline
- E: BACT Analysis
- F: HRA Summary
- G: SSPE1 Calculations
- H: SSPE2 Calculations
- I: Quarterly Net Emissions Change
- J: Compliance Certification
- K: ERC Surplus Determination
- L: ERC Withdrawal Calculations
- M: Public Comments and District Responses

APPENDIX A
Draft ATC

AUTHORITY TO CONSTRUCT

ISSUANCE DATE: DRAFT

DRAFT

PERMIT NO: S-37-178-0

LEGAL OWNER OR OPERATOR: KERN ENERGY
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:

HYDROGEN RECOVERY UNIT CONSISTING OF HYDROGENATION, DEHYDROGENATION, AND HYDROGEN PURIFICATION EQUIPMENT INCLUDING REACTORS, COMPRESSORS, HEAT EXCHANGERS, PUMPS, MISCELLANEOUS VESSELS, AND 7 PERMIT EXEMPT HYDROGEN FUEL CELLS

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Prior to operating equipment under this Authority to Construct, permittee shall surrender VOC emission reduction credits for the following quantity of emissions: 1st quarter - 181 lb, 2nd quarter - 181 lb, 3rd quarter - 181 lb, and fourth quarter - 182 lb. These amounts include the applicable offset ratio specified in Rule 2201 Section 4.9 (as amended 4/20/23) for the ERC specified below. VOC ERCs used to satisfy the offset quantity required under District Rule 2201 must be surplus at the time of issuance of this ATC and the total quantity of ERCs surrendered shall be calculated based on the ERC surplus value percent discount of each ERC certificate used. [District Rule 2201] 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.

Samir Sheikh, Executive Director / APCO

Brian Clements, Director of Permit Services

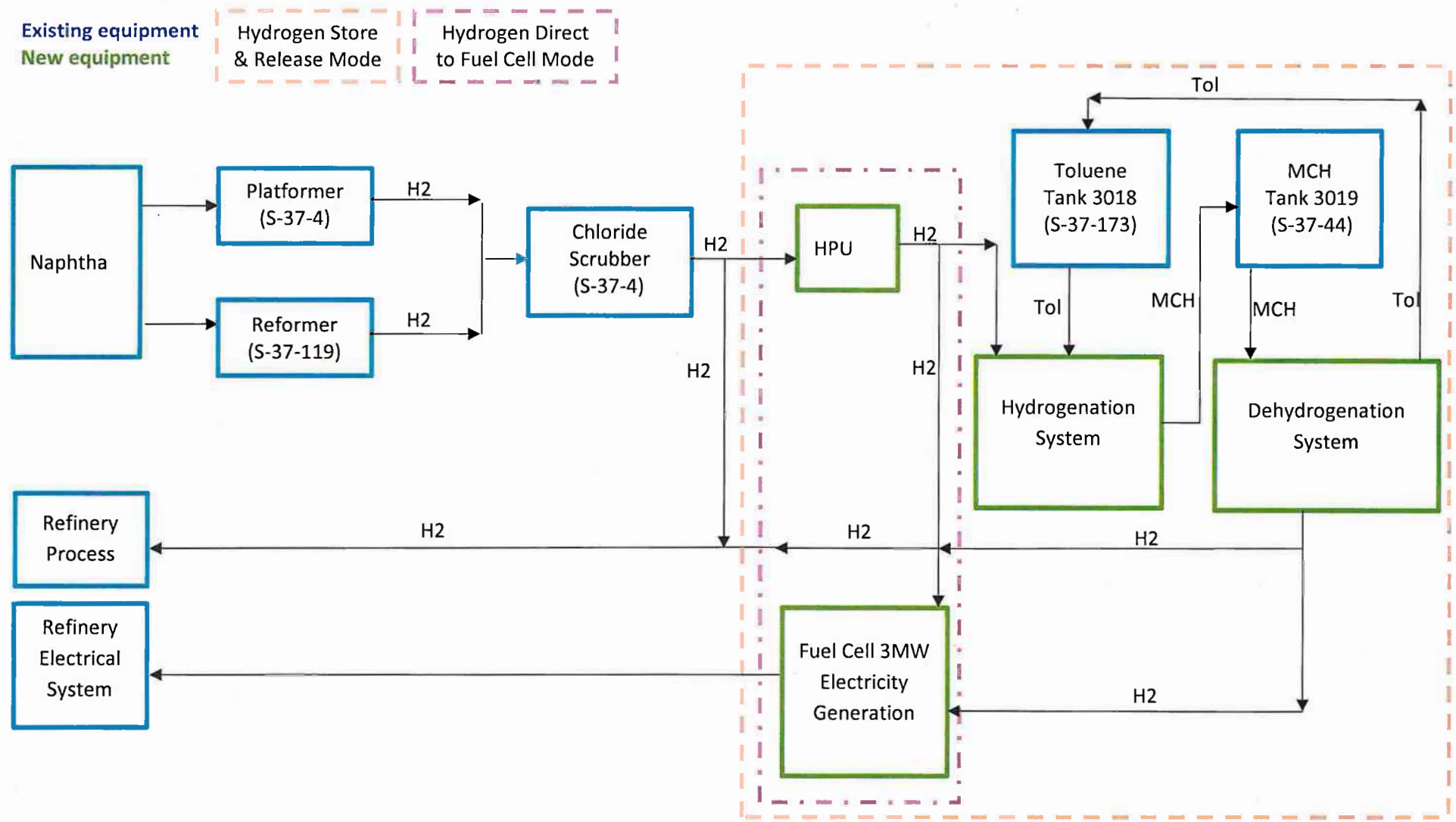
S-37-178-0 : 4/29/2026 9:31:32 AM -- KLEVANN : Joint Inspection NOT Required

4. ERC Certificate Number C-1579-1 (or a certificate split from this certificate) 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. VOC emission rate from fugitive components associated with this emissions unit shall not exceed 1.3 lb/day. [District Rule 2201] Federally Enforceable Through Title V Permit
6. For valves, flanges and connectors, a leak is defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
7. For pumps and compressor seals a leak is defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21. [District Rule 2201] Federally Enforceable Through Title V Permit
8. {520} The operator shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
9. Permit holder shall maintain accurate component count and resultant emissions according to California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB Table IV-3a: CAPCOA -Revised 1995 EPA Protocol Refinery Correlation Equations. Permit holder shall update such records when new components are approved and installed. [District Rule 2201] Federally Enforceable Through Title V Permit
10. This unit is subject to Rule 4455 Leak Detection and Repair Conditions on the facility wide permit S-37-0. [District Rule 4455] Federally Enforceable Through Title V Permit
11. Permittee shall comply with all applicable testing, recordkeeping, and reporting requirements specified in Rule 4001 - New Source Performance Standards, including but not limited to Subpart A. [District Rule 4001] Federally Enforceable Through Title V Permit
12. Operators shall not depressurize any vessel containing VOCs unless the process unit turnaround is accomplished by employing one of the following operating procedures: The organic vapors shall either be recovered, added to the refinery fuel gas system and combusted; or controlled and piped to an appropriate firebox or incinerated for combustion; or flared, until the pressure within the process vessel is as close to atmospheric pressure as is possible. All process vessels shall be depressurized into the control facilities to less than 1020 mm Hg (5 psig) before venting/opening to atmosphere. All organic compounds which emerge from a refinery process vessel during the purging of said vessel and which otherwise would be emitted to the atmosphere shall be either directed to a flare or incinerator or shall be used for fuel until such disposition of emissions is not technically feasible or is less safe than atmospheric venting. [District Rule 4454] Federally Enforceable Through Title V Permit

DRAFT

APPENDIX B

Process Flow Diagram



H2 - Hydrogen
 HPU - Hydrogen Purification Unit
 MCH - Methylcyclohexane
 Tol - Toluene

Figure 1: Hydrogen System Block Flow Diagram

PURECELL SYSTEM BENEFITS

Energy Security

Proven PAFC fuel cell technology that is setting durability records

Energy Productivity

Increased efficiency and continuous on-site generation reduces energy costs

Energy Responsibility

No emissions equals sustainability

PURECELL SYSTEM COMPETITIVE ADVANTAGES

Long Life

Industry leading 10-year cell stack life assures high availability and low service cost

Modular & Scalable

Solutions for multi-megawatt applications to meet growing energy demand

Experience

60+ years of fuel cell development

High Efficiency

Up to 90% total CHP Efficiency

Small Footprint

Highest power density among clean generation technologies

Flexible Siting

Indoor, outdoor, rooftop, multi-unit

RATED POWER OUTPUT: 440KW, 480VAC, 60HZ

Characteristic	Units	Value ¹
Electric Power Output	kW/kVA	440/517
Electrical Efficiency	%, LHV	50
Peak Overall Efficiency	%, LHV	90
Hydrogen Purity, Minimum ²	%	99.9
Hydrogen Input	Energy kW (MMBtu/h), HHV	1,039 (3.59)
	Volume ³ Nm ³ /h (SCFH)	295 (10,328)
	Mass kg/h (lbs/h)	26.4 (58.1)
Heat Output @ up to 121°C (250°F)	kW (MMBtu/h)	352 (1.20)

FUEL

Supply..... Hydrogen Gas
Inlet Pressure⁴ 5 ± 0.25 bar(g)

EMISSIONS

Zero emissions of CO₂, NO_x, SO_x, CO, and VOCs. Heat output can offset additional CO₂ from combustion heat generation (e.g., boilers).

OTHER

Ambient Operating Temp Max Power -20°F to 104°F (-29°C to 40°C)⁵
Sound Level < 65 dBA @ 33 ft. (10m)
Water Consumption None



Daesan Green Energy Project
50 MW | 114 Units | South Korea

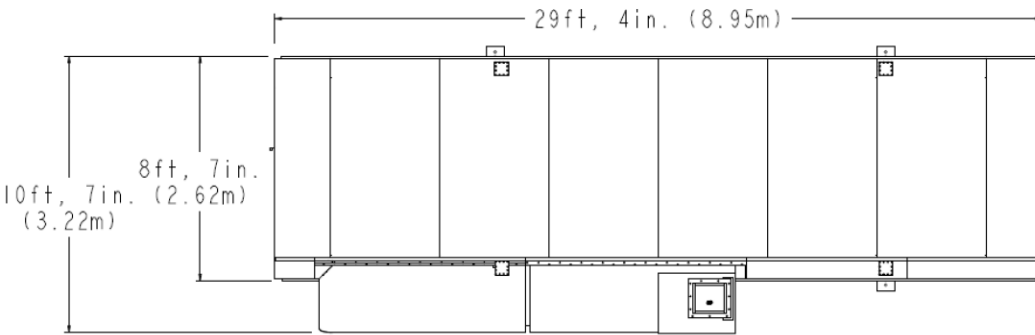
NOTES

1. Average performance during 1st year of operation. Refer to the Product Data and Applications Guide for performance over the operating life of the powerplant.
2. Contact HyAxiom for requirements on other gas constituents or for lower purity H₂.
3. Based on Hydrogen gas higher heating value of 343 Btu / SCF (12.8 MJ/Nm³).
4. Contact HyAxiom for lower inlet pressures.
5. Derate at ambient temperatures outside of specified range. Contact HyAxiom for details.

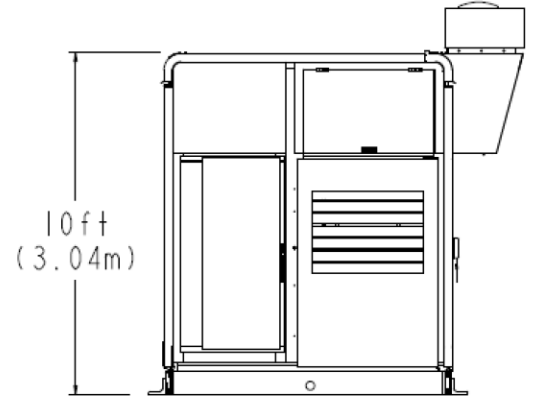
HyAxiom, Inc.
Corporate Headquarters
101 East River Drive
East Hartford, CT 06108
860.727.2253
www.hyaxiom.com

SYSTEM DIMENSIONS

Power Module

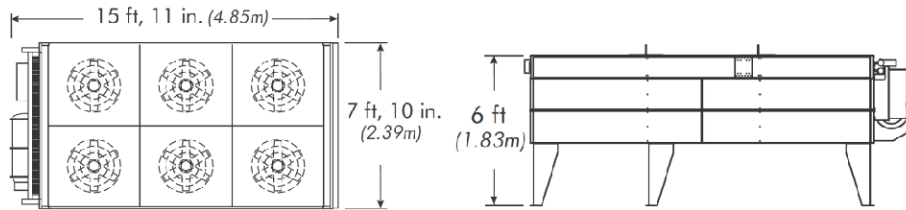


Top View



Side View

Cooling Module



Top View

Side View

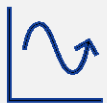
PHYSICAL SPECIFICATIONS

	Power Module	Cooling Module
Length	29' 4" (8.95m)	15' 11" (4.85m)
Width	8' 7" (2.62m)	7' 10" (2.39m)
Height	10' 0" (3.04m)	6' 0" (1.83m)
Weight	49,428 lb (22,420 kg)	3,190 lb (1,447 kg)

Typical outdoor applications require a 30' x 40' area, including for customer interface equipment. Larger installations typically require less area for subsequent units.

PureCell® ADVANTAGE

Take Control of Your Power



Load Following

Dynamically ramp power up & down based on demand



Continuous Operation

Operate with or without grid power and handle long-duration intermittency



Performance Monitoring

Manage performance with HyAxiom monitoring and service

Advance ESG Goals



Zero-Carbon

Zero CO₂ emissions helps you achieve challenging carbon footprint goals



Clean Heat

Eliminate or reduce carbon from combustion boilers by using both heat & power



Clean Air

- Zero NO_x & SO_x
- Zero CO
- Zero VOCs

Power Where You Need It



Flexible Siting

- Indoor / Outdoor
- Urban Environments
- Multi-story, Rooftop
- Scalable Building Block



Quiet Operation

65 dBA @ 33 ft., equivalent to normal conversation

HyAxiom, Inc.
Corporate Headquarters
101 East River Drive
East Hartford, CT 06108
860.727.2253
www.hyaxiom.com

APPENDIX C

Calculations

Kern Energy
S-1251187, Permit Unit S-37-178-0

Using 9,999 pegged values

Fugitive Emissions Using Correlation Equation Emission Factors

California Implementation Guidelines for Estimating Mass Emissions
of Fugitive Hydrocarbon Leaks at Petroleum Facilities

Table IV-3a: CAPCOA -Revised 1995 EPA Protocol Refinery Correlation Equations for Refineries and Marketing Terminals

Fields shaded yellow are application specific values.

Equipment Type	Service	Component Count	% Default Zeros	%Pegged (>9,999)	% in Correlation Range	Correlation Screening Value (ppm)	Default Zero Emissions (lb/day)	Pegged Emissions (lb/day)	Correlation Emissions (lb/day)	VOC emissions (lb/day)
Valves	All	251	90.0%	0.5%	9.5%	100	0.093229	0.146615	0.089323	0.33
Pump Seals	All	6	90.0%	0.5%	9.5%	500	0.005429	0.024754	0.072977	0.10
Others	All	36	90.0%	0.5%	9.5%	500	0.006857	0.030606	0.084982	0.12
Connectors	All	120	90.0%	0.5%	9.5%	100	0.042857	0.042693	0.027361	0.11
Flanges	All	467	90.0%	0.5%	9.5%	100	0.006894	0.373160	0.274587	0.65
Open-ended lines	All	0	90.0%	0.5%	9.5%	500	0.000000	0.000000	0.000000	0.00

Total VOC Emissions (lb/day) = 1.3
Total VOC Emissions (lb/yr) = 483

Factors Used in Calculations - For Reference				
Equipment Type	Service	Default Zero Factor (kg/hr)	Pegged Factor (kg/hr)	Correlation Equation (kg/hr)
Valves	All	7.800E-06	2.208E-03	2.27E-06(SV)^0.747
Pump Seals	All	1.900E-05	1.559E-02	5.07E-05(SV)^0.622
Others	All	4.000E-06	3.214E-03	8.69E-06(SV)^0.642
Connectors	All	7.500E-06	1.345E-03	1.53E-06(SV)^0.736
Flanges	All	3.100E-07	3.020E-03	4.53E-06(SV)^0.706
Open-ended lines	All	2.000E-06	1.495E-03	1.90E-06(SV)^0.724

APPENDIX D

BACT Guidelines

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.2.2*

Last Update: 7/22/2020

Petroleum Refining - Valves & Connectors

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

San Joaquin Valley
Unified Air Pollution Control District

Best Available Control Technology (BACT) Guideline 7.2.3*

Last Update: 7/22/2020

Petroleum Refining - Pump and Compressor Seals

Pollutant	Achieved in Practice or contained in the SIP	Technologically Feasible	Alternate Basic Equipment
VOC	Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a State Implementation Plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source**

APPENDIX E

BACT Analysis

Top Down BACT Analysis – Valves and Connectors

VOC emissions may occur from liquids and gases at valves and connectors from the refinery processes when piped to various operations at the refinery.

Step 1 - Identify All Possible Control Technologies

BACT Guideline 7.2.2 lists the controls that are considered potentially applicable to petroleum refining -valves and connectors. The VOC control measures are summarized below.

Achieved in Practice:

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 2 - Eliminate Technologically Infeasible Options

All of the above identified control options are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

Step 4 - Cost Effectiveness Analysis

The applicant is proposing the most effective control technology – Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455. Therefore, a cost effectiveness analysis is not required.

Step 5 - Select BACT

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 100 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

Top Down BACT Analysis – Pumps and Compressor Seals

VOC emissions may occur from liquids and gases at pumps and compressor seals from the refinery processes when piped to various operations at the refinery.

Step 1 - Identify All Possible Control Technologies

BACT Guideline 7.2.3 lists the controls that are considered potentially applicable to petroleum refining -valves and connectors. The VOC control measures are summarized below.

Achieved in Practice:

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455

Step 2 - Eliminate Technologically Infeasible Options

All of the above identified control options are technologically feasible.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

1. Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule.

Step 4 - Cost Effectiveness Analysis

The applicant is proposing the most effective control technology – Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455. Therefore, a cost effectiveness analysis is not required.

Step 5 - Select BACT

Leak defined as a dripping rate of more than three (3) drops per minute of liquid containing VOC or as a reading of methane, in excess of 500 ppmv above background when measured per EPA Method 21, for all components, and an Inspection and Maintenance Program pursuant to District Rule 4455.

APPENDIX F

Health Risk Assessment

San Joaquin Valley Air Pollution Control District

Risk Management Review

To: Dan Klevann – Permit Services
 From: Yu Vu – Technical Services
 Date: April 29, 2026
 Facility Name: KERN ENERGY
 Location: PANAMA LN & WEEDPATCH HWY, BAKERSFIELD
 Application #(s): S-37-178-0
 Project #: S-1251187

1. Summary

1.1 Risk Management Review (RMR)

Units	Prioritization Score	Acute Hazard Index	Chronic Hazard Index	Maximum Individual Cancer Risk	T-BACT Required	Special Permit Requirements
178	0.003	2.86E-03	7.95E-05	7.97E-09	No	No
Project Totals	0.003	2.86E-03	7.95E-05	7.97E-09		
Facility Totals	>1	9.60E-01	9.45E-02	1.82E-05		

1.2 Proposed Permit Requirements

To ensure that human health risks will not exceed District allowable levels; the following shall be included as requirements for:

Unit # 178-0

1. No special requirements.

2. Project Description

Technical Services received a request to perform a Risk Management Review (RMR) for the following:

- Unit -178-0: HYDROGEN RECOVERY UNIT

Although an ambient air quality analysis (AAQA) was also requested, the only emissions associated with the project are VOC emissions. There are currently no ambient air quality standards for VOCs, therefore, an AAQA was not performed.

3. RMR Report

3.1 Analysis

The District performed an analysis pursuant to the District's Risk Management Policy for Permitting New and Modified Sources (APR 1905, May 28, 2015) to determine the possible cancer and non-cancer health impact to the nearest resident or worksite. This policy requires that

an assessment be performed on a unit by unit basis, project basis, and on a facility-wide basis. If a preliminary prioritization analysis demonstrates that:

- A unit's prioritization score is less than the District's significance threshold and;
- The project's prioritization score is less than the District's significance threshold and;
- The facility's total prioritization score is less than the District's significance threshold

Then, generally no further analysis is required.

The District's significant prioritization score threshold is defined as being equal to or greater than 1.0. If a preliminary analysis demonstrates that either the units', the project's or the facility's total prioritization score is greater than the District threshold, a screening or a refined assessment is required.

If a refined assessment is greater than one in a million but less than 20 in a million for carcinogenic impacts (cancer risk) and less than 1.0 for the acute and chronic hazard indices (non-carcinogenic) on a unit by unit basis, project basis and on a facility-wide basis the proposed application is considered less than significant. For units that exceed a cancer risk of one in a million, Toxic Best Available Control Technology (TBACT) must be implemented.

Air toxics emissions for this project were calculated using the following methods:

- Per the project engineer, VOC emissions from this source can be attributed to two products; Marathon Petroleum Toluene and Chevron Philips Methylcyclohexane. Upon inspection of the safety data sheets for the two products, it was determined that only the Marathon Petroleum Toluene contained hazardous air pollutants (HAPs). The Marathon Petroleum Toluene contained Toluene (CAS# 108883, up to 100% by weight) and Benzene (CAS# 71432, up to 0.25% by weight). As a conservative assumption the worst-case weight percentages of each pollutant were applied to the total VOC emissions and then summed in order to determine the total HAP emissions.

These emissions were input into the San Joaquin Valley APCD's Hazard Assessment and Reporting Program (SHARP). In accordance with the District's Risk Management Policy, risks from the proposed unit's toxic emissions were prioritized using the procedure in the 2016 CAPCOA Facility Prioritization Guidelines. The prioritization score for this proposed facility was greater than 1.0 (see RMR Summary Table). Therefore, a refined health risk assessment was required.

The AERMOD model was used, with the parameters outlined below and meteorological data for 2008-2011 from Arvin (rural dispersion coefficient selected) to determine the dispersion factors (i.e., the predicted concentration or X divided by the normalized source strength or Q) for a receptor grid. These dispersion factors were input into the SHARP Program, which then used the Air Dispersion Modeling and Risk Tool (ADMRT) of the Hot Spots Analysis and Reporting Program Version 2 (HARP 2) to calculate the chronic and acute hazard indices and the carcinogenic risk for the project.

The following parameters were used for the review:

Source Process Rates					
Unit ID	Process ID	Process Material	Process Units	Hourly Process Rate	Annual Process Rate
178	1	VOC Emissions	lbs	0.05	483

Area Source Parameters					
Unit ID	Unit Description	Release Height (m)	X-Length (m)	Y -Length (m)	Area (m ²)
178	Hydrogen Recovery Unit	1.22	32.30	107.57	3474.51

4. Conclusion

4.1 RMR

The cumulative acute and chronic indices for this facility, including this project, are below 1.0; and the cumulative cancer risk for this facility, including this project, is less than 20 in a million. In addition, the cancer risk for each unit in this project is less than 1.0 in a million. **In accordance with the District's Risk Management Policy, the project is approved without Toxic Best Available Control Technology (T-BACT).**

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

5. Attachments

- A. Modeling request from the project engineer
- B. Additional information from the applicant/project engineer
- C. Prioritization score w/ toxic emissions summary
- D. Facility Summary

APPENDIX G

SSPE1 Calculations (SSPE1)

Permit #			Mod	NOx	SOx	PM10	CO	VOC
S	37	1	18	37844	17556	14716	116684	7573
S	37	2	10	0	0	0	0	13656
S	37	3	11	6990	4194	1771	8622	34067
S	37	4	20	15768	9461	3995	19447	40005
S	37	5	4	0	0	0	0	0
S	37	6	20	9000	257	684	27000	495
S	37	7	8	0	0	0	0	4025
S	37	8	38	0	0	0	0	4358
S	37	9	13	0	0	0	0	0
S	37	12	4	0	0	0	0	0
S	37	13	4	0	0	0	0	0
S	37	14	4	0	0	0	0	0
S	37	15	5	0	0	0	0	0
S	37	16	7	0	0	0	0	110
S	37	18	4	0	0	0	0	0
S	37	19	4	0	0	0	0	0
S	37	20	5	0	0	0	0	0
S	37	21	12	0	0	0	0	21170
S	37	22	12	0	0	0	0	21170
S	37	23	9	0	0	0	0	1205
S	37	24	6	0	0	0	0	297
S	37	25	5	0	0	0	0	0
S	37	26	5	0	0	0	0	0
S	37	27	5	0	0	0	0	275
S	37	28	6	0	0	0	0	37
S	37	31	8	0	0	0	0	339
S	37	34	7	0	0	0	0	371
S	37	38	13	1537	910	687	15899	2473
S	37	42	5	0	0	0	0	840
S	37	43	5	0	0	0	0	1752
S	37	44	6	0	0	0	0	137
S	37	46	7	0	0	0	0	11505
S	37	48	5	0	0	0	0	986
S	37	49	5	0	0	0	0	1022
S	37	50	6	0	0	0	0	219
S	37	51	6	0	0	0	0	1570
S	37	52	7	0	0	0	0	1095
S	37	53	6	0	0	0	0	694
S	37	56	5	0	0	0	0	365
S	37	57	8	0	0	0	0	1935
S	37	58	4	0	0	0	0	5519
S	37	59	6	0	0	0	0	329
S	37	61	8	0	0	0	0	475
S	37	65	6	0	0	0	0	183
S	37	66	6	0	0	0	0	197
S	37	67	5	0	0	0	0	2117
S	37	71	7	0	0	0	0	219
S	37	77	21	9490	5330	2410	11680	19489
S	37	78	5	0	0	0	0	0

S	37	79	5	0	0	0	0	183
S	37	80	4	208	0	8	77	6
S	37	81	4	496	0	20	184	15
S	37	82	5	99	0	1	162	1
S	37	83	5	247	0	2	405	3
S	37	90	6	0	0	0	0	1679
S	37	91	7	0	0	0	0	475
S	37	93	5	0	0	0	0	0
S	37	94	8	0	0	0	0	1273
S	37	95	9	0	0	0	0	475
S	37	96	8	0	0	0	0	475
S	37	97	6	0	0	0	0	1460
S	37	102	7	0	0	0	0	1643
S	37	107	5	0	0	0	0	0
S	37	108	4	0	0	0	0	1427
S	37	109	4	0	0	0	0	0
S	37	111	9	0	0	0	0	412
S	37	114	8	6826	2115	5120	10017	1929
S	37	116	7	4447	2063	618	21843	346
S	37	118	6	6332	3509	1578	23045	12160
S	37	119	8	13575	6994	3749	54694	400
S	37	120	4	0	0	0	0	938
S	37	121	5	0	0	0	0	913
S	37	122	8	4464	12718	300	4290	1069
S	37	123	4	1366	32	50	215	41
S	37	125	4	0	0	0	0	127
S	37	126	4	0	0	0	0	4552
S	37	127	5	0	0	0	0	551
S	37	130	6	0	0	0	0	2257
S	37	131	4	0	0	0	0	417
S	37	138	4	0	0	0	0	730
S	37	139	4	0	0	0	0	0
S	37	140	4	0	0	0	0	0
S	37	141	4	0	0	0	0	402
S	37	142	4	0	0	0	0	0
S	37	143	4	0	0	0	0	0
S	37	147	2	0	0	0	0	1115
S	37	148	2	0	0	0	0	5538
S	37	149	3	0	0	0	0	9473
S	37	150	2	0	0	0	0	241
S	37	153	1	0	0	0	0	1037
S	37	154	1	0	0	0	0	1037
S	37	155	1	0	0	0	0	1323
S	37	157	1	278	43	297	1891	232
S	37	158	1	1449	688	1835	4466	1304
S	37	159	1	365	56	359	2478	305
S	37	160	1	365	56	359	2478	305
S	37	161	1	365	56	359	2478	305
S	37	163	1	365	56	359	2478	305
S	37	164	1	365	56	359	2478	305
S	37	165	1	365	56	359	2478	305

S	37	166	0	0	0	0	0	2104
S	37	167	0	0	0	0	0	100
S	37	169	0	0	0	0	0	3431
S	37	171	0	0	0	0	0	198
S	37	172	0	0	0	0	0	258
S	37	173	0	0	0	0	0	157
S	37	174	1	0	0		0	256
S	37	175	0	0	0	0	0	438
S	37	176	0	0	0	0	0	109
SSPE1				122,606	66,206	39,995	335,489	268,814

APPENDIX H

SSPE2 Calculations (SSPE2)

Permit #			Mod	NOx	SOx	PM10	CO	VOC
S	37	1	18	37844	17556	14716	116684	7573
S	37	2	10	0	0	0	0	13656
S	37	3	11	6990	4194	1771	8622	34067
S	37	4	20	15768	9461	3995	19447	40005
S	37	5	4	0	0	0	0	0
S	37	6	20	9000	257	684	27000	495
S	37	7	8	0	0	0	0	4025
S	37	8	38	0	0	0	0	4358
S	37	9	13	0	0	0	0	0
S	37	12	4	0	0	0	0	0
S	37	13	4	0	0	0	0	0
S	37	14	4	0	0	0	0	0
S	37	15	5	0	0	0	0	0
S	37	16	7	0	0	0	0	110
S	37	18	4	0	0	0	0	0
S	37	19	4	0	0	0	0	0
S	37	20	5	0	0	0	0	0
S	37	21	12	0	0	0	0	21170
S	37	22	12	0	0	0	0	21170
S	37	23	9	0	0	0	0	1205
S	37	24	6	0	0	0	0	297
S	37	25	5	0	0	0	0	0
S	37	26	5	0	0	0	0	0
S	37	27	5	0	0	0	0	275
S	37	28	6	0	0	0	0	37
S	37	31	8	0	0	0	0	339
S	37	34	7	0	0	0	0	371
S	37	38	13	1537	910	687	15899	2473
S	37	42	5	0	0	0	0	840
S	37	43	5	0	0	0	0	1752
S	37	44	6	0	0	0	0	137
S	37	46	7	0	0	0	0	11505
S	37	48	5	0	0	0	0	986
S	37	49	5	0	0	0	0	1022
S	37	50	6	0	0	0	0	219
S	37	51	6	0	0	0	0	1570
S	37	52	7	0	0	0	0	1095
S	37	53	6	0	0	0	0	694
S	37	56	5	0	0	0	0	365
S	37	57	8	0	0	0	0	1935
S	37	58	4	0	0	0	0	5519
S	37	59	6	0	0	0	0	329
S	37	61	8	0	0	0	0	475
S	37	65	6	0	0	0	0	183
S	37	66	6	0	0	0	0	197
S	37	67	5	0	0	0	0	2117
S	37	71	7	0	0	0	0	219
S	37	77	21	9490	5330	2410	11680	19489
S	37	78	5	0	0	0	0	0
S	37	79	5	0	0	0	0	183

S	37	80	4	208	0	8	77	6
S	37	81	4	496	0	20	184	15
S	37	82	5	99	0	1	162	1
S	37	83	5	247	0	2	405	3
S	37	90	6	0	0	0	0	1679
S	37	91	7	0	0	0	0	475
S	37	93	5	0	0	0	0	0
S	37	94	8	0	0	0	0	1273
S	37	95	9	0	0	0	0	475
S	37	96	8	0	0	0	0	475
S	37	97	6	0	0	0	0	1460
S	37	102	7	0	0	0	0	1643
S	37	107	5	0	0	0	0	0
S	37	108	4	0	0	0	0	1427
S	37	109	4	0	0	0	0	0
S	37	111	9	0	0	0	0	412
S	37	114	8	6826	2115	5120	10017	1929
S	37	116	7	4447	2063	618	21843	346
S	37	118	6	6332	3509	1578	23045	12160
S	37	119	8	13575	6994	3749	54694	400
S	37	120	4	0	0	0	0	938
S	37	121	5	0	0	0	0	913
S	37	122	8	4464	12718	300	4290	1069
S	37	123	4	1366	32	50	215	41
S	37	125	4	0	0	0	0	127
S	37	126	4	0	0	0	0	4552
S	37	127	5	0	0	0	0	551
S	37	130	6	0	0	0	0	2257
S	37	131	4	0	0	0	0	417
S	37	138	4	0	0	0	0	730
S	37	139	4	0	0	0	0	0
S	37	140	4	0	0	0	0	0
S	37	141	4	0	0	0	0	402
S	37	142	4	0	0	0	0	0
S	37	143	4	0	0	0	0	0
S	37	147	2	0	0	0	0	1115
S	37	148	2	0	0	0	0	5538
S	37	149	3	0	0	0	0	9473
S	37	150	2	0	0	0	0	241
S	37	153	1	0	0	0	0	1037
S	37	154	1	0	0	0	0	1037
S	37	155	1	0	0	0	0	1323
S	37	157	1	278	43	297	1891	232
S	37	158	1	1449	688	1835	4466	1304
S	37	159	1	365	56	359	2478	305
S	37	160	1	365	56	359	2478	305
S	37	161	1	365	56	359	2478	305
S	37	163	1	365	56	359	2478	305
S	37	164	1	365	56	359	2478	305
S	37	165	1	365	56	359	2478	305
S	37	166	0	0	0	0	0	2104

S	37	167	0	0	0	0	0	100
S	37	169	0	0	0	0	0	3431
S	37	171	0	0	0	0	0	198
S	37	172	0	0	0	0	0	258
S	37	173	0	0	0	0	0	157
S	37	174	1	0	0		0	256
S	37	175	0	0	0	0	0	438
S	37	176	0	0	0	0	0	109
S	37	178	0	0	0	0	0	483
SSPE2				122,606	66,206	39,995	335,489	269,297

APPENDIX I
Quarterly Net Emissions Change (QNEC)

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

$QNEC = PE2 - PE1$, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.

PE2 = Post-Project Potential to Emit for each emissions unit, lb/qtr.

PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

Using the values in Sections VII.C.2 and VII.C.1 in the evaluation above, quarterly PE2 and quarterly PE1 can be calculated as follows:

$$\begin{aligned} PE2_{\text{quarterly}} &= PE2_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 483 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 120.75 \text{ lb VOC/qtr} \end{aligned}$$

$$\begin{aligned} PE1_{\text{quarterly}} &= PE1_{\text{annual}} \div 4 \text{ quarters/year} \\ &= 0 \text{ lb/year} \div 4 \text{ qtr/year} \\ &= 0 \text{ lb VOC/qtr} \end{aligned}$$

Quarterly NEC [QNEC]			
Pollutant	PE2 (lb/qtr)	PE1 (lb/qtr)	QNEC (lb/qtr)
NOx	0	0	0
SOx	0	0	0
PM10	0	0	0
CO	0	0	0
VOC	483	0	121

APPENDIX J

Compliance Certification



San Joaquin Valley Air Pollution Control District



TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

ADMINISTRATIVE AMENDMENT MINOR MODIFICATION SIGNIFICANT MODIFICATION

COMPANY NAME: Kern Energy	FACILITY ID: S-37
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: Kern Energy	
3. Agent to the Owner:	

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

- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true, accurate, and complete.
- For minor modifications, this application meets the criteria for use of minor permit modification procedures pursuant to District Rule 2520.

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

3/13/2025

Date

Melinda Palmer

Name of Responsible Official (please print)

VP-Regulatory & Public Affairs

Title of Responsible Official (please print)

APPENDIX K

ERC Surplus Determination

San Joaquin Valley Air Pollution Control District Surplus ERC Analysis

Facility Name: Kern Energy	Date: September 15, 2025
Mailing Address: 7724 East Panama Lane Bakersfield, CA 93307	Engineer: Dan Klevann
	Lead Engineer: Erin Scott
Contact Person: Gabe Castro	
Telephone: (661) 845-0761	
ERC Certificate #: C-1579-1	
Project #: C-1251187	

I. Proposal

Kern Energy has requested the District to perform an analysis of the current surplus value of the following Emission Reduction Credit (ERC) certificate:

Proposed ERC Certificate	
Certificate #	Criteria Pollutant
C-1579-1	VOC

The purpose of this analysis is to ensure that the emission reductions on this ERC certificate are surplus of all applicable Federal requirements; therefore, this analysis establishes the surplus value of the ERC certificate as of the date of this analysis. The current face value and surplus value of the ERC certificate evaluated in this analysis are summarized in the following table:

Criteria Pollutant Summary: VOC

ERC Certificate C-1579-1				
Pollutant	1 st Qtr. (lb/qtr)	2 nd Qtr. (lb/qtr)	3 rd Qtr. (lb/qtr)	4 th Qtr. (lb/qtr)
Current Value	2,000	2,000	2,000	2,000
Surplus Value	2,000	2,000	2,000	2,000

II. Individual ERC Certificate Analysis

ERC Certificate C-1579-1

A. ERC Background

Criteria Pollutant: VOC

ERC Certificate C-1579-1 is a certificate that was split out from parent ERC Certificate C-3-1. Original ERC Certificate C-3-1 was issued to Fruehauf Trailer Corporation (subsequently Fruehauf Trailer Services Inc., Facility C-2268; now defunct) on November 5, 1992 under Project C-92003. The ERCs were generated from the shutdown of a truck trailer coating operation. The following table summarizes the values of the original parent certificate and the current value of the subject certificate proposed to be utilized as a part of the current District analysis:

ERC Certificates C-3-1 and C-1579-1				
Pollutant	1 st Qtr. (lb/qtr)	2 nd Qtr. (lb/qtr)	3 rd Qtr. (lb/qtr)	4 th Qtr. (lb/qtr)
Original Value of Parent Certificate C-3-1	5,547	6,575	4,753	6,696
Current Value of ERC Certificate C-1579-1	2,000	2,000	2,000	2,000

B. Applicable Rules and Regulations at Time of Original Banking Project

Based on the application review for the original ERC banking project, the following rules and regulations were evaluated to determine the surplus value of actual VOC emission reductions generated by the reduction project.

1. District Rules

Rule 220.1 – New and Modified Stationary Source Review

Rule 230.1 – Emission Reduction Credit Banking

Rule 230.2 – Community Bank

Rule 460.3 – Surface Coating of Metal Parts and Products

The application review for the original ERC banking project demonstrated that the ERC credit complied with the requirements of these rules at the time it was issued.

2. Federal Rules and Regulations

There were no applicable federal rules or regulations identified that applied at the time of this original ERC banking action; therefore, no further discussion is required.

C. New or Modified Rule and Regulations Applicable to the Original Banking Project

All District and federal rules and regulations that have been adopted or amended since the date the original banking project was finalized will be evaluated below:

1. District Rules:

Rule 2201 – New and Modified Stationary Source Review (4/20/2023)

Rule 2301 – Emission Reduction Credit Banking (4/20/2023)

Rule 2302 – Community Bank (12/17/1992)

District Rules 220.1, 230.1, and 230.2 have been renamed 2201, 2301, and 2302, respectively, since the original ERC certificate was issued. Rules 2201 and 2301 have also been amended. However, the requirements of these rules only applied at the time of the original banking action. Thus, no further evaluation of these rules will be conducted in this analysis.

Rule 4603 – Surface Coating of Metal Parts and Products, Plastic Parts and Products, and Pleasure Crafts (9/17/2009)

District Rule 460.3 has been renamed 4603, and amended, since the original ERC certificate was issued. However, the applicable requirements in the amended rule (i.e. VOC content limit of 2.8 lb/gal and application method transfer efficiency of 65%) have not changed. The original ERC therefore remains surplus of the requirements of this rule.

Rule 4612 – Motor Vehicle and Mobile Equipment Coating Operations (10/21/2010)

The requirements of this rule would have been applicable to the operation that was shut down since truck trailers are mobile equipment. However, the applicable requirements in this rule (i.e. VOC content limit of 2.8 lb/gal for single-stage coatings and application method transfer efficiency of 65%) are equivalent to the corresponding requirements in Rule 4603, which were evaluated during the original banking action. The original ERC therefore remains surplus of the requirements of this rule.

2. Federal Rules and Regulations:

40 CFR Part 63 Subpart MMMM – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

Pursuant to §63.3881(c)(16), this subpart does not apply to surface coating of assembled on-road vehicles that meet the applicability criteria for the assembled on-road vehicle subcategory in plastic parts and products surface coating (40 CFR part 63, subpart PPPP).

Pursuant §63.3981, assembled on-road vehicle coating means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

The original ERC therefore remains surplus of the requirements of this subpart.

40 CFR Part 63 Subpart PPPP – National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products

Pursuant §63.4481(a)(5), the assembled on-road vehicle coating subcategory includes surface coating of fully assembled motor vehicles and trailers intended for on-road use, including, but not limited to: automobiles, light-duty trucks, heavy duty trucks, and busses that have been repaired after a collision or otherwise repainted; fleet delivery trucks; and motor homes and other recreational vehicles (including camping trailers and fifth wheels). This subcategory also includes the incidental coating of parts, such as radiator grilles, that are removed from the fully assembled on-road vehicle to facilitate concurrent coating of all parts associated with the vehicle. The assembled on-road vehicle coating subcategory does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. The assembled on-road vehicle coating subcategory also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles. Body fillers used to correct small surface defects and rubbing compounds used to remove surface scratches are not considered coatings subject to this subpart.

Pursuant to §63.4481, this subpart is applicable to new, reconstructed, or existing operations that use 100 gallons per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of plastic parts and products and that are major sources of HAP emissions. A major source of HAP emissions is any stationary

source with the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year. Although HAP potential to emit for the subject stationary source has not been determined, compliance with the requirements of this subpart will be evaluated for expediency.

Pursuant §63.4482(c), new sources are those that commenced construction after December 4, 2002 by installing new coating equipment. Since subject operation was shut down in 1992, it would have been classified as an existing source.

Pursuant to §63.4490(a)(4), existing assembled on-road vehicle coating affected sources are required to limit organic HAP emissions to no more than 1.34 lb of organic HAP emitted per lb of coating solids used during each 12-month compliance period.

The original ERC was based on a VOC content of 2.8 lb/gal for all coatings used. The worst-case possible organic HAP content is therefore 2.8 lb/gal. Thus, the minimum solids content required for compliance is 2.09 lb/gal (i.e. $[2.8 \text{ lb-HAP/gal}] / [1.34 \text{ lb-HAP/lb-Solids}]$). According to the information provided in the original ERC banking evaluation, the coatings used were generally high solids coatings. Currently available information indicates that the lowest solids contents for such coatings range from 2.8 lb/gal to 6.1 lb/gal. Thus, based on the worst-case assumptions, any potential HAP emission rate from the subject operation would have been clearly below the limit required by this subpart. The original ERC therefore remains surplus of the requirements of this subpart.

40 CFR Part 63 Subpart HHHHHH – National Emission Standards for Hazardous Air Pollutants: Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources

This subpart specifies work practice standards to limit methylene chloride emissions from paint stripping solvents. The subpart also requires the use of enclosed paint booths with filters and HVLP spray technology for the control of particulate matter emissions. The subpart does not contain any VOC content limits or other specific standards or requirements that could be applicable to VOC emissions from coatings. The original ERC therefore remains surplus of the requirements of this subpart.

D. Surplus at Time of Use Adjustments to ERC Quantities

As demonstrated in the section above, the emissions reductions from permit units in the original banking project continue to be surplus of all applicable District and Federal Rules and Regulations. Therefore, no discounting to the ERC values are necessary for surplus at time of use considerations.

E. Surplus Value of ERC Certificate

The emissions continue to be Surplus of all District and Federal Rules and Regulations; therefore, no adjustments to the ERC values are necessary.

ERC Certificate C-4160-1 – Criteria Pollutant VOC					
		1 st Qtr. (lb/qtr)	2 nd Qtr. (lb/qtr)	3 rd Qtr. (lb/qtr)	4 th Qtr. (lb/qtr)
(A)	Current ERC Quantity	2,000	2,000	2,000	2,000
(B)	Percent Discount	0%	0%	0%	0%
(C) = (A) x [1 – (B)]	Surplus Value	2,000	2,000	2,000	2,000

RULE 460.3 SURFACE COATING OF METAL PARTS AND PRODUCTS
(Adopted April 11, 1991; Amended September 19, 1991)

I. Applicability

The provisions of this rule shall apply to the surface coating of metal parts or products.

II. Definitions

- A. Aerospace Vehicles: the completed unit of any aircraft, helicopter, missile or space vehicle.
- B. Air Dried: a process whereby the coated object is cured or dried at ambient temperature or at a temperature up to a maximum of 90°C (194°F).
- C. Baked: a process whereby the coated object is heated above ambient temperature to a temperature above 90°C (194°F) for the purpose of curing or drying.
- D. Brush Coating: the manual application of coatings using brushes or rollers.
- E. Camouflage Coating: a coating applied on military equipment to conceal such equipment from detection.
- F. Coils: metal sheets or strips which are rolled into coils for further industrial or commercial use.
- G. Continuous Coating: a enclosed coating system where spray nozzles coat metal parts and products as they are conveyed through the enclosure. Water wash zones control the inlet and outlet of the enclosure. Excess coating drains into a recirculation system.
- H. Dip Coating: the process in which a substrate is immersed in a solution (or dispersion) containing the coating material, and then withdrawn.
- I. Electrodeposition: a dip coating application method where the paint solids are given an electrical charge which is then attracted to a substrate.
- J. Electrostatic Application: a method of spray application of coatings where an electrostatic potential is created between the parts to be coated and the paint particles.

- K. Extreme Performance Coating: a coating used on a metal surface where the coated surface is, in its intended use, exposed to any of the following:
1. Industrial grade detergents, cleaners, or abrasive scouring agents.
 2. Unprotected shipboard conditions.
 3. Temperatures consistently in excess of 95°C (203°F) or continuous exposure to corrosive environmental conditions.

L. Flow Coating: a coating application system where paint flows over the part and the excess coating drains back into the collection system.

M. Grams of VOC per Liter of Coating Applied, Excluding Water and Exempt Compounds: the weight of VOC per combined volume of VOC and coating solids and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Coating Applied Excluding Water and Exempt Compounds} = \frac{W_s - W_w - W_{ec}}{V_m - V_w - V_{ec}}$$

Where:

- W_s = weight of volatile compounds in grams
- W_w = weight of water in grams
- W_{ec} = weight of exempt compounds in grams
- V_m = volume of material in liters
- V_w = volume of water in liters
- V_{ec} = volume of exempt compounds in liters

N. Grams of VOC per liter of Material: the weight of VOC per volume of material and can be calculated by the following equation:

$$\text{Grams of VOC per Liter of Material} = \frac{W_s - W_w - W_{ec}}{V_m}$$

Where:

- W_s = weight of volatile compounds in grams
- W_w = weight of water in grams
- W_{ec} = weight of exempt compounds in grams
- V_m = volume of material in liters

O. High Performance Architectural Coating: a coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturers Association publication number AAMA 605.2-1980.

- P. Heat Resistant Coating: any coating which during normal use must withstand temperatures of at least 204°C (400°F).
- Q. High Gloss Coating: any coating which achieves at least 85% reflectance on a 60° meter when tested by ASTM Method D-523.
- R. High Temperature: any coating applied to a substrate which during normal use must withstand temperatures of at least 560°C (1000°F).
- S. High Volume, Low Pressure Spray: spray equipment used to apply a coating by means of a gun which operates between 0.1 and 10.0 psig air pressure.
- T. Light-Duty Truck: any truck having a manufacturer's maximum gross vehicle weight rating of under 6,001 pounds.
- U. Magnet Wire: wire used in electromagnetic field application in electrical machinery and equipment such as transformers, motors, generators, and magnetic tape recorders.
- V. Marine Vessel: any tugboat, tanker, freighter, passenger ship, barge, or other boat, ship, or watercraft. This includes both salt water and fresh water vessels.
- W. Metal Containers or Closures: the interior or the exterior of formed metal cans, drums, pails, or crowns; or flat metal sheets which are intended to be formed into cans, drums, pails, lids, or crowns.
- X. Metallic/iridescent Topcoat: any coating which contains more than 5 g/l (0.042 lb/gal) of metal or iridescent particles, as applied, where such particles are visible in the dried film.
- Y. Metal Parts and Products: any component or complete unit fabricated from metal, except those subject to the coating provisions of other source specific rules.
- Z. Motor Vehicle: a vehicle which is self-propelled and is a device by which any person or property may be propelled, moved or drawn upon a highway, excepting a device moved by human power or used exclusively upon stationary rails or tracks.

- AA. Pretreatment Wash Primer: any coating which contains no more than 12% solids by weight, and a minimum of 0.5% acid by weight, is necessary to provide surface etching, and is applied directly to bare metal surfaces to provide corrosion resistance and adhesion.
- BB. Repair: recoating portions of previously coated product to cover mechanical damage to the coating following normal painting operations.
- CC. Roll Coating: the application of coatings from a paint trough to a flat surface by a mechanical series of rollers.
- DD. Silicone Release: a coating which contains silicone resin and has as its primary function the release of food products from metal surfaces such as baking pans.
- EE. Solar Absorbent Coating: a coating which has as its primary purpose the absorption of solar radiation.
- FF. Touch Up: that portion of the coating operation which is incidental to the main coating process but necessary to cover minor imperfections or to achieve coverage as required.
- GG. Volatile Organic Compound (VOC): any compound containing at least one atom of carbon except for the following exempt compounds:

methane,
carbon monoxide,
carbon dioxide,
carbonic acid,
metallic carbides or carbonates,
ammonium carbonates,
methylene chloride,
methyl chloroform (1,1,1-trichloroethane),
CFC-113 (trichlorotrifluoroethane),
CFC-11 (trichlorofluoromethane),
CFC-12 (dichlorodifluoromethane),
CFC-22 (chlorodifluoromethane),
FC-23 (trifluoromethane),
CFC-114 (dichlorotetrafluoroethane),
CFC-115 (chloropentafluoroethane),
HCFC-123 (dichlorotrifluoroethane),
HFC-134a (tetrafluoroethane),
HCFC-141b (dichlorofluoroethane), and
HCFC-142b (chlorodifluoroethane).

III. Exemptions

- A. The requirements of this rule, except for Subsection VI.B, shall not apply to coatings which emit or may emit volatile organic compounds in excess of the specified limits provided that the total facility emissions from the use of such coatings do not exceed 15 pounds in any one day. Once a facility exceeds this exemption threshold it shall become subject to the requirements of this rule.
- B. The requirements of this Rule shall not apply to touch-up and repair.
- C. Any source which is in full compliance with the provisions of this Rule shall be exempt from otherwise applicable portions of the Organic Solvents Rule.
- D. The requirements of this Rule shall not apply to the application of coatings to automobiles, light-duty trucks, aircraft, aerospace vehicles, marine vessels, can, coils, and magnetic wire.
- E. The provisions of this Rule shall not apply to an operation subject to the requirements of Rule 460.2 - Motor Vehicle and Mobile Equipment Refinishing Operations.

IV. Requirements

- A. **General Limits:** Except as otherwise provided by this Rule, no person shall apply to any metal part or product any coating with a VOC content in excess of the following limits, expressed as grams of VOC per liter (or pounds per gallon) of coating applied, (less water and exempt compounds):

Baked Coating	275 g/l (2.3 lb/gal)
Air-Dried Coating	340 g/l (2.8 lb/gal)

- B. **Specialty Coating Limitations:** A person shall not apply to any metal part or product any specialty coating with a VOC content in excess of the limits, expressed as grams of VOC per liter (or pounds per gallon) of coating applied, (less water and exempt compounds):

Effective November 1, 1991

<u>Coating</u>	<u>Baked</u>	<u>Air-Dried</u>
Camouflage	360 g/l (3.0 lb/gal)	420 g/l (3.5 lb/gal)
Extreme Performance	420 (3.5)	420 (3.5)
Heat Resistant	360 (3.0)	420 (3.5)
High Gloss	360 (3.0)	420 (3.5)
High Performance Architectural	420 (3.5)	420 (3.5)
High Temperature	550 (4.6)	550 (4.6)
Metallic Topcoat	420 (3.5)	420 (3.5)
Pretreatment Wash Primer	780 (6.5)	780 (6.5)
Silicone Release	700 (5.8)	700 (5.8)
Solar Absorbent	360 (3.0)	420 (3.5)

- C. **Control Requirements:** The requirements of Subsections IV.A. and IV.B. shall not apply to any person who installs and operates air pollution control equipment with a minimum overall capture and control efficiency of 90 percent or more on a mass basis as determined in Subsection V.C. The control equipment shall be under District permit. The overall efficiency shall be equivalent or greater than those emission reduction levels achieved by any requirement specified in Subsections IV.A. or IV.B.

- D. **Evaporative Loss Minimization:** Effective November 1, 1991, a person shall:
1. only use solvents with a VOC content of less than 200 grams VOC per liter of material (1.67 lbs/gal) for cleanup surface preparation, excluding cleaning of coating application equipment;
 2. use closed containers for the storage or disposal of solvent-laden cloth or paper used for surface preparation and cleanup. Containers shall be nonabsorbent;
 3. store fresh or spent solvent, coating, adhesive, catalyst, or thinner in closed containers; and
 4. not use VOC-containing materials for spray equipment cleanup unless an enclosed system or equipment proven to be equally effective is used for cleaning. An enclosed system must totally enclose spray guns, cups, nozzles, bowls, and other parts during washing, rinsing and draining procedures.
- E. **Application Equipment Requirements:** A person shall not use or operate any coating application equipment on any metal parts and products subject to the provisions of this rule unless one of the following methods is used:
1. Electrostatic Application;
 2. Electrodeposition;
 3. High Volume, Low Pressure Spray;
 4. Flow Coating;
 5. Roll Coating;
 6. Dip Coating;
 7. Brush Coating; or
 8. Continuous Coating
- F. **Prohibition of Specification:** No person shall solicit or require for use or specify the application of a coating subject to this Rule if such use or application results in a violation of any of the provisions of this Rule. The prohibition of this Subsection shall apply to all written or oral contracts under the terms of which any coating is to be applied to any metal part or product at any physical location within the District.

V. Administrative Requirements

A. Labeling Requirements:

1. **VOC Content:** Each container or accompanying data sheet of any coating subject to this Rule and manufactured after (one year from the date of adoption) shall display the maximum VOC content of the coating, as applied, and after any thinning as recommended by the manufacturer. VOC content shall be displayed as grams of VOC per liter of coating (less water and exempt compounds). VOC content displayed may be calculated using product formulation data, or may be determined using the test method in Subsection V.C.
2. **Thinning Recommendations:** Each container or accompanying data sheet of any coating subject to this rule and manufactured after (one year from date of adoption) shall display a statement of the manufacturer's recommendation regarding thinning of the coating. This requirement shall not apply to the thinning of coatings with water.

B. Record keeping:

Any person subject to Section IV. or exempt by Subsection III.A. shall comply with the following requirements:

1. Maintain a current list of coatings and solvents in use which contains all of the coating data necessary to evaluate compliance, including the following information, as applicable:
 - a. Mix ratio of components used.
 - b. VOC content and specific chemical constituents of coatings as applied.
 - c. VOC content and specific chemical constituents of solvents used for surface preparation and cleanup.
2. Maintain records which include the following information:
 - a. Volume coating/solvent mix ratio,
 - b. VOC content of coating (pounds/gallon),
 - c. Volume of each coating used (gallons), and

d. Quantity of cleanup solvent used (gallons).

Consistent records may be kept in grams/liter and liters instead of pounds/gallon and gallons. Facilities subject to the requirements of Section IV. shall maintain such records on a daily basis.

Facilities which are exempt by Subsection III.A. may maintain such records on an extended basis provided the records substantiate emissions are less than 15 pounds per day for the entire extended period.

3. Such records shall be retained and made available for inspection by the Control Officer for the previous 24 month period.

C. Test Methods

1. Analysis of Samples: Samples of VOC as specified in this Rule shall be analyzed by EPA Method 24 and analysis of halogenated exempt compounds shall be analyzed by ARB Method 432.
2. Determination of Emissions: Emissions of VOC shall be measured by EPA Method 25, 25a, or 25b, as applicable, and analysis of halogenated exempt compounds shall be analyzed by ARB Method 422.
3. Capture efficiency shall be determined using methods in 55 Federal Register (FR) 26865 (June 29, 1990) as described under (a)(4)(iii) - Capture System Efficiency Test Protocols and Appendix B - Volatile Organic Material Measurement Techniques for Capture Efficiency. The procedure described under (a)(4)(iii)(2) of the above referenced FR shall be modified as follows: If a stationary source owner or operator uses a control device designed to collect and recover VOC (e.g., a carbon adsorber), an explicit measurement of capture efficiency is not necessary if the conditions described in 55 FR 26865 are met. The overall emission reduction efficiency shall be determined each day by directly comparing the input liquid VOC to the recovered liquid VOC. The procedure for use in this situation is specified in 40 CFR 60.433 with additional modifications described in 55 FR 26865.

4. The quantification of coating as a metallic/iridescent topcoat shall be determined by South Coast Air Quality Management District "Spectrographic Method for the Analysis of Carbon Dust and Carbon Laminates", December 1985.
5. Acid Content: Measurement of acid content of Pre-Treatment Wash Primers shall be conducted and reported in accordance with South Coast Air Quality Management District "Laboratory Methods of Analysis for Enforcement Samples, ASTM D1613-81 Standard Test Method for Acidity in Volatile Solvents and Chemical Intermediates used in Paint, Varnish, Lacquer, and Related Products", December, 1986.
6. Determination of emissions of VOC from spray gun cleaning systems shall be made using South Coast Air Quality Management District "General Method for Determining Solvent Losses from Spray Gun Cleaning Systems", dated 10/3/89.

VI. Compliance Schedule:

- A. Any person who becomes subject to the requirements of this Rule through loss of exemption shall comply with the following increments of progress:
 1. Within 6 months from date the exemption was lost, submit a complete application for an Authority to Construct, if necessary.
 2. Within 12 months from date the exemption was lost, be in full compliance with the requirements of this Rule.
- B. The owner or operator of any surface coating of metal parts and products operation which is subject to the requirements of this Rule and which is installed or constructed on or after April 11, 1991, shall be in full compliance with the requirements of this Rule at the time of initial operation.

APPENDIX L

ERC Withdrawal Calculations

VOC	1st Quarter (lb)	2nd Quarter (lb)	3rd Quarter (lb)	4th Quarter (lb)
ERC C-1579-1	2,000	2,000	2,000	2,000
Offsets Required (Includes distance offset ratio)	181	181	181	182
Amount Remaining	1,819	1,819	1,819	1,818
Credits reissued under ERC C-YYYY-1	1,819	1,819	1,819	1,818

APPENDIX M
Public Comments and District Response

Public Comment #1 (Leadership¹):

The VOC emission data listed in Appendices H and I is inconsistent with the rest of the evaluation.

District Response to Public Comment #1:

The commenter correctly identified inconsistencies in the VOC emissions data presented in Appendices H and I. The correct post-project Potential to Emit (PE2) for VOC emissions under Authority to Construct (ATC) S-37-178-0 is 483 lb/year and 1.3 lb/day, as shown in the project evaluation and Appendix C. The inconsistent values appearing in Appendices H and I were clerical errors and have been corrected. These corrections do not change the District's substantive conclusions regarding the project.

Public Comment #2 (Leadership):

Emission calculations rely on outdated guidelines, *California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities*, (Correlation Equation) published by CAPCOA and CARB in 1999. Suggestions to use *Emissions Estimation Protocol for Petroleum Refineries – Version 3.0* (Version 3), published by EPA in 2015, and 40 CFR Part 60, Subparts OOOOb and OOOOc (OOOOb/c) were received. Additionally, when using the Correlation Equation, site-specific screening values must be used.

District Response to Public Comment #2:

The District disagrees that the emissions analysis relied on an inappropriate methodology. The 1999 California Implementation Guidelines were developed specifically for petroleum facilities in California and remain a valid guidance document for estimating fugitive hydrocarbon emissions. Both the 1999 California Implementation Guidelines and EPA's 2015 Emissions Estimation Protocol for Petroleum Refineries rely on EPA's 1995 equipment-leak protocol as the underlying framework for estimating refinery equipment-leak emissions. Accordingly, the 2015 EPA document does not identify a separate refinery equipment-leak methodology that replaces that underlying framework.

The District also disagrees that 40 CFR Part 60, Subparts OOOOb and OOOOc provide the applicable emissions-calculation methodology for this project. Those subparts apply to the crude oil and natural gas source category, not to a petroleum refinery unit. Neither subpart provides the applicable fugitive VOC emissions-estimation methodology for this petroleum refinery project.

For this preconstruction analysis, the District used the CAPCOA-revised correlation equations and factors together with projected component counts to estimate fugitive VOC emissions from the new unit. Because the project involves a new emissions unit, actual component-specific screening data do not yet exist. The District therefore used assumed screening values for the preconstruction estimate, as reflected in Appendix C. Those assumed values correspond to the applicable leak thresholds used in the evaluation and thus represent the maximum screening values allowed before a component would be considered leaking under the applicable requirements. The new components will be monitored under the facility's fugitive monitoring program after installation. The District concludes that this was a reasonable method for preparing a preconstruction emissions estimate for the proposed unit and that the use of leak-threshold screening values for the estimate was conservative.

Public Comment #3 (Leadership and Angelica Lopez):

The Public Notice Package was not made available to the AB 617 Arvin/Lamont Community Steering Committee or made available in Spanish. Suggestion received to post notices on homes and businesses.

¹Comments received within letter jointly representing Leadership Counsel for Justice & Accountability, Center on Race, Poverty & the Environment, Central Valley Air Quality Coalition, Central California Environmental Justice Network, Comite Progreso de Lamont, and Committee for a Better Arvin (Leadership)

District Response to Public Comment #3:

The District provided public notice for this Authority to Construct application in accordance with the applicable state and federal air permitting public notice requirements contained in the District's federally approved permitting rules. In accordance with the District's standard public notice procedures, the notice was posted on the District's website and distributed to interested persons who had subscribed to receive public notices by email, text message, or standard mail.

Consistent with the District's standard practice, the public notice itself was provided in both English and Spanish. In addition, after a member of the community requested a public hearing, the District scheduled that hearing, notified the Arvin/Lamont Community Steering Committee of the hearing, provided simultaneous interpretation services and Spanish-language materials at the hearing, and extended the public comment period to allow for additional community engagement. The District recognizes the importance of language access and community participation for projects of interest to nearby residents.

Public Comment #4 (Leadership):

The technical details in the engineering evaluation of the existing storage tanks and the new fuel cells are incomplete. Additionally, if a piece of equipment, such as a fuel cell, is exempt from permitting but is part of a process, the permit exemption determination shall be included in the engineering evaluation. Without this information, proper CEQA review cannot be conducted.

District Response to Public Comment #4:

The District disagrees that the engineering evaluation omitted information necessary to evaluate the air permitting aspects of the project. With respect to the existing storage tanks, the engineering evaluation states that toluene and methyl cyclohexane (MCH) will be stored in existing organic liquid storage tanks and that the project does not change the operation of existing components associated with the refinery units supplying the hydrogen stream. The existing tanks are already permitted organic liquid storage tanks connected to the refinery's existing vapor recovery systems, and they will continue to be used to store organic liquids. Because the tanks will continue to perform the same storage function and no change to their permitted operation was proposed as part of this project, the District did not treat the tanks as modified emissions units under this permitting action.

With respect to the fuel cells, the engineering evaluation identifies the fuel cells as PureCell Model 400 units and states that, based on manufacturer information included in Appendix B, emissions from the fuel cells are zero for NO_x, SO_x, CO, and VOC. The evaluation further states that, because emissions are less than 2.0 lb/day for each pollutant, the fuel cells are permit exempt, although they are listed on the new hydrogen recovery unit permit for clarification purposes.

The District therefore concludes that the engineering evaluation included sufficient information to address the air permitting issues presented by the existing tanks and the fuel cells for this project. See Response to Public Comment #5 regarding the commenters' CEQA-related arguments.

Public Comment #5 (Leadership):

Kern County did not prepare nor certify an environmental document under CEQA. Project may require a discretionary conditional use permit.

District Response to Public Comment #5:

According to CEQA Guidelines §21067, Kern County acted as the Lead Agency for CEQA, since they are the public agency with the principal responsibility for approving the project. The County determines whether the project may be constructed and operated at the proposed location and establishes the conditions necessary to authorize the project as a whole.

Under the County's Zoning Ordinance, building permits for improvements consistent with applicable zoning standards are issued ministerially. As a ministerial action, it follows a fixed permitting process without discretionary decision-making per Public Resources Code 21080(b)(1). Ministerial projects are exempt from CEQA per CEQA Guidelines §15268. Therefore, the County filed a Notice of Exemption from CEQA.

Additionally, the District has conducted its own Preliminary Review pursuant to CEQA Guidelines §15060, has determined that the Project is a discretionary project as defined under CEQA Guidelines §15357, and has determined that in addition to the exemptions identified in the County's NOE, the administrative record supports applicability of other exemptions per CEQA Guidelines §15301, 15302, 15303 and 15061(b)(3). These exemptions reinforce the County's determination that the project is exempt from CEQA and do not require further environmental review.

Public Comment #6 (Leadership):

District incorrectly assumed minimal public concern for project.

District Response to Public Comment #6:

The District acknowledges that this project has generated community interest and concern. The District's permitting review, however, is based on the project's emissions, health impacts, and compliance with applicable permitting requirements. As reflected in the engineering evaluation, the District determined that project-specific stationary source emissions would be below the District's significance thresholds for criteria pollutants, and the health risk evaluation concluded that the project's cancer and non-cancer health impacts would be below applicable District significance levels.

Public Comment #7 (Leadership):

The ERC being proposed in the project is not valid as the emission reductions from the banking action are not permanent. The ERC is also not surplus of all applicable rules.

District Response to Public Comment #7:

The District disagrees that the proposed ERC is invalid. To be eligible for banking, emission reductions must be real, surplus, permanent, quantifiable, and enforceable. ERC Certificate C-1579-1 was generated from the shutdown of a truck trailer coating operation. As described in Appendix K, the original banking action was based on a manufacturing operation that ceased operation, surrendered its permit to operate, and removed the associated equipment from the facility. The emission reductions were quantified based on coating usage, coating VOC content, and application method. The District disagrees that the original banking action failed the permanence requirement merely because similar work could theoretically occur elsewhere; the banking action was based on the shutdown and removal of the permitted source operation that generated the reduced emissions. Accordingly, the District concluded that the original banking action generated valid bankable emission reductions.

For this permitting action, the District separately evaluated whether ERC Certificate C-1579-1 remains surplus of all applicable District and federal requirements at the time of use. Appendix K concludes that no discounting is required because the underlying emission reductions remain surplus of the applicable rules and regulations evaluated in that analysis.

With respect to the coating-rule arguments raised in the comment, the District reviewed the original banking basis and the current surplus status under the applicable surface-coating rules. The original banking action was based on coatings with a VOC content of 2.8 lb/gal, and the District determined that this remains surplus of the applicable current requirements evaluated in Appendix K. The District further

determined that no discounting was required for Rule 4612. Accordingly, the District concluded that ERC Certificate C-1579-1 remains valid and surplus for use in this project.

Public Comment #8 (Leadership and Luis Casablanca):

Safety is a concern as hydrogen infrastructure is built out. The issuance of ATCs for hydrogen projects should be discontinued until specific rules for their operations are adopted.

District Response to Public Comment #8:

The District acknowledges the commenters' concern regarding safety and the broader development of hydrogen-related projects. This permitting action, however, concerns a specific project at an existing refinery that recovers hydrogen from existing refinery processes for use in fuel cells or other refinery operations. The District's review in this proceeding is limited to the project's air emissions, health impacts, and compliance with applicable air permitting requirements.

The District does not agree that issuance of Authorities to Construct for projects involving hydrogen must be suspended unless and until hydrogen-specific District rules are adopted. The District evaluates each project under the rules and permitting requirements currently applicable to the equipment and emissions involved. As reflected in the engineering evaluation, the District reviewed the project for emissions, health risk, offsets, and applicable permitting requirements and concluded that compliance with all applicable rules and regulations is expected.

With respect to site-specific operational safety, those matters are generally governed by other regulatory authorities, including occupational and process-safety requirements outside the District's air permitting authority. The District will continue to review existing and emerging technologies, including projects involving hydrogen, through its applicable air permitting framework in support of air quality planning and attainment efforts.

Public Comment #9 (Leadership and Luis Casablanca):

The issuance of an ATC violates Arvin/Lamont AB 617 Community Emissions Reduction Plan (CERP). The Community Steering Committee for the AB 617 community of Arvin/Lamont has ongoing concerns about the short- and long-term health impacts from this project and Kern Energy's flaring, sulfur odors, the addition of diesel truck transportation of hydrogen, and previously issued Notices of Violation (NOV).

District Response to Public Comment #9:

The District disagrees that issuance of the proposed ATC would violate the Arvin/Lamont AB 617 Community Emissions Reduction Program (CERP). The CERP is a community-driven plan developed under AB 617 to identify and implement emission reduction, enforcement, outreach, and partnership strategies within the community. It does not establish a separate permitting standard for facilities located in the community or alter the District's obligation to evaluate ATC applications under the applicable state, federal, and District permitting requirements.

The District recognizes that the Arvin/Lamont CSC and community members have ongoing concerns regarding Kern Energy, including concerns about flaring, sulfur odors, truck traffic, and the facility's compliance history. The CERP itself identifies industrial sources and heavy-duty trucks among the community's sources of concern and includes measures such as enhanced inspections, truck-related incentive and rerouting efforts, stationary source rulemaking, and expedited AB 2588 review to address those concerns.

This permitting action, however, concerns a specific project, and the District's review is limited to the project proposed in the application. As evaluated in the engineering evaluation, this project does not involve flaring or sulfur emissions, and the project as proposed does not include diesel truck

transportation of hydrogen. With respect to potential health impacts, the District completed a health risk review using approved methods and concluded that the project's cancer and non-cancer health impacts are below applicable District significance levels.

With respect to the commenters' concerns regarding existing facility operations and Notices of Violation, those matters are addressed through separate compliance, enforcement, and AB 2588 processes. For this permitting action, the District independently reviews facility compliance status as part of its major source permitting review. If unresolved violations exist, the District must determine before permit issuance that the underlying issues have been corrected and the facility has returned to compliance, or that the facility is operating under a binding compliance schedule that addresses the issue. Historical violations that have been resolved do not, by themselves, preclude issuance of a new permit. The District reviewed the facility's compliance status as part of this project and found that the facility is currently in compliance with all applicable emission limitations and standards, i.e., there are no existing uncorrected Notices of Violation.

Public Comment #10 (Leadership and Luis Casablanca):

The District is responsible for conducting and reporting a facility risk assessment audit per SB 2588. The District should conduct a reassessment of cumulative air toxics that can result from the co-operation of oil refining, hydrogen recovery, hydrogenation and dehydrogenation processes.

District Response to Public Comment #10:

The District implements AB 2588 (Air Toxics "Hot Spots") in accordance with state law and CARB guidance for existing facilities. Under that program, facility-wide toxic emissions are reported and evaluated based on actual emissions from existing operations. The facility's AB 2588 review was completed in 2025 and resulted in an intermediate-risk status, which requires continued periodic update summary submittals under the program. Consistent with the AB 2588 process, the results were reported through the District's annual air toxics reporting.

The District does not agree that AB 2588 requires a separate cumulative facility risk reassessment as part of this ATC proceeding based on potential emissions from equipment that has not yet been installed. AB 2588 addresses existing-facility emissions, while this permitting action separately evaluated the proposed project's potential health impacts through the District's permitting risk review process. For this project, the District completed a health risk review using approved methods and concluded that the project's cancer and non-cancer health impacts are below applicable District significance levels.

Actual emissions from the project, once installed and operating, would be reflected in future facility-wide emissions reporting and evaluation under the AB 2588 program, as applicable.

Public Comment #11 (Leadership):

The VOC emission calculations are not accurate as they are based on outdated calculation methodology. The operational and leak measuring practices are no longer relevant. Studies using data collected by oilfield companies should not be used by regulators. Suggestion to use OOOOb/c calculation methodology. The Correlation Equation should not be used for new construction.

District Response to Public Comment #11:

See Response to Public Comment #2 regarding the District's use of the correlation-equation framework and the inapplicability of 40 CFR Part 60, Subparts OOOOb and OOOOc to this refinery project.

With respect to the commenters' assertion that the underlying leak-measurement practices are no longer relevant, EPA Method 21 remains a current EPA method for determining VOC leaks and continues to be referenced in EPA's regulatory materials for leak detection. The District's analysis relied on agency

guidance documents, including the California Implementation Guidelines and EPA's equipment-leak framework, rather than on raw unreviewed source data. The California Implementation Guidelines themselves reflect CAPCOA/CARB review of the EPA 1995 protocol and California-specific corrections and adjustments to that methodology.

To the extent the comment argues that the Correlation Equation should not be used for new construction, the District's response is the same as stated in Response to Public Comment #2: for this preconstruction analysis, the District used the CAPCOA-revised correlation equations and factors together with projected component counts to estimate fugitive VOC emissions from the new unit. Because the project involves a new emissions unit, actual component-specific screening data do not yet exist, so the District used assumed screening values for the preconstruction estimate, as reflected in Appendix C, and the new components will be monitored under the facility's fugitive monitoring program after installation. The District concludes that this was a reasonable method for preparing a preconstruction emissions estimate for the proposed unit.

Public Comment #12 (Leadership):

The existing permit units that are involved with the project (platformer, reformer and tanks) should be undergoing a permit modification under District Rule 2201.

District Response to Public Comment #12:

The District disagrees that the existing permit units identified in the comment are modified emissions units under this project. The engineering evaluation states that no changes to the components associated with the Naphtha Reformer Unit (S-37-119) or the Platformer Unit (S-37-4) are expected as part of this project. The project instead adds a new hydrogen recovery unit and associated new piping and components, and those new components were evaluated in the engineering review.

With respect to the tanks, the project uses existing permitted organic liquid storage tanks to store toluene and methyl cyclohexane (MCH). Those tanks are existing organic liquid storage tanks that continue to serve a storage function and remain subject to their existing permit requirements and vapor control requirements. The District did not determine that this project proposed a change to the permitted operation of those existing tanks that would make them modified emissions units for purposes of this permitting action.

Public Comment #13 (Leadership):

What are the changes to the refinery process and electrical system that will receive the final products of hydrogen and electricity?

District Response to Public Comment #13:

The District did not identify any modification to existing refinery process units or the refinery electrical system, other than the addition of the new hydrogen recovery unit, associated new piping, and the new fuel cells included in this project. As described in the engineering evaluation, existing hydrogen from refinery processes will be routed by new piping to the hydrogen recovery/fuel cell system, and no changes to the components associated with the Naphtha Reformer Unit or the Platformer Unit are expected as part of this project. The electricity produced by the new fuel cells will be used to support refinery power needs.

Public Comment #14 (Leadership):

The process description for the new permit does not detail the interactions between existing permit units nor how the proposed equipment works, specifically the Hydrogen Purification Unit, Hydrogenation System, the Dehydrogenation System and the fuel cells.

District Response to Public Comment #14:

The District disagrees that the process description is inadequate for purposes of this permitting action. The engineering evaluation describes the project's two operating modes and explains how hydrogen produced in the existing refinery processes is purified and then either: (1) chemically bound to toluene through the hydrogenation process, stored as methyl cyclohexane (MCH), and later released through the dehydrogenation process for use in the fuel cells or refinery operations; or (2) sent directly from the hydrogen purification equipment to the fuel cells for electricity production. The evaluation also identifies the fuel cells as PureCell Model 400 units and explains that they are used to support refinery power needs. In addition, the evaluation states that no changes to the components associated with the Naphtha Reformer Unit or the Platformer Unit are expected as part of this project.

Public Comment #15 (Leadership):

The Pre-Project Stationary Source Potential to Emit (SSPE1) was not calculated in detail for all permit units.

District Response to Public Comment #15:

The District disagrees that SSPE1 was not calculated in detail. The evaluation identifies the SSPE1 and SSPE2 totals in the body of the document, and the detailed permit-unit values supporting those totals are provided in Appendices G and H. While the evaluation does not restate a separate narrative calculation for each permit unit in the main text, the underlying calculations for the new permit unit were included in the appendices and are sufficient for this permitting action.

Public Comment #16 (Leadership):

Suggestion to use OOOOc in Top-down BACT analysis that would result in a leak threshold of zero ppm rather than the 100 ppm and 500 ppm thresholds approved for the project.

District Response to Public Comment #16:

The commenter misinterprets Subpart OOOOc as establishing a zero-ppm leak threshold. Subpart OOOOc does not define leaks at zero ppm. Rather, when Method 21 is used, Subpart OOOOc defines an instrument reading of 500 ppmv or greater above background as a leak, and a repaired component is confirmed by a Method 21 reading of less than 500 ppmv above background.

Accordingly, Subpart OOOOc does not support the commenter's assertion that the top-down BACT analysis should have used a zero-ppm leak threshold. For this project, the District applied BACT leak definitions of 100 ppmv above background for valves, flanges, and connectors, and 500 ppmv above background for pumps and compressor seals, consistent with the applicable BACT guidelines identified in the engineering evaluation. The 100 ppmv threshold applied to valves and connectors is more stringent than the 500 ppmv threshold referenced in Subpart OOOOc.

Public Comment #17 (Leadership):

The engineering evaluation fails to evaluate compliance with the following rules: District Rules 4454 and 4455, 40 CFR Part 60, Subpart GGG and GGGa, and 40 CFR Part 63, Subpart CC.

District Response to Public Comment #17:

The District disagrees that the engineering evaluation failed to address the cited rules. Each of the identified rules is discussed in Section VIII, Compliance Determination, of the engineering evaluation.

With respect to District Rules 4454 and 4455, the engineering evaluation explains that the project is subject to those rules and identifies permit conditions and existing facility-wide requirements that ensure continued compliance.

With respect to 40 CFR Part 60, Subparts GGG and GGGa, the engineering evaluation addresses those requirements and states that Kern Energy has an inspection and repair program for applicable refinery components. The facility is subject to 40 CFR Part 60, Subparts GGG and GGGa for certain existing operations; however, this particular project is not subject to these subparts. This has been clarified in the final version of the application review.

40 CFR Part 63, Subpart CC applies to major hazardous air pollutant (HAP) sources. Kern Energy is not a major HAP source because the facility's total stationary source emissions are limited by permit condition to less than 10 tons in any consecutive 12-month period of any single HAP and less than 25 tons in any consecutive 12-month period of any combination of HAPs. Actual emissions inventory records demonstrate compliance with these limits. Therefore, Kern Energy is not subject to this NESHAP.

Public Comment #18 (Leadership):

The District did not provide documentation showing Kern Energy has the ability to engage in hydrogen energy production by land use right or through a conditional use permit.

District Response to Public Comment #18:

See Response to Public Comment #5 for the response.

Public Comment #19 (Leadership):

The Health Risk Assessment listed in Appendix F states that the following are attachments: Modeling request from the project engineer; Additional information from the applicant/project engineer; Prioritization score w/ toxic emission summary; and Facility Summary. However, they are not listed in the document. Request to include these four documents in the public notice package.

District Response to Public Comment #19:

The commenter is correct that Appendix F identifies four supporting attachments to the Health Risk Assessment memorandum, and those attachments were not included in the public notice package. Public notice requirements require disclosure of the proposed action and the basis for the District's preliminary decision, but do not require inclusion of all underlying technical working documents. The District conducted a Health Risk Assessment (HRA) consistent with Office of Environmental Health Hazard Assessment (OEHHA), and the engineering evaluation and Appendix F provide the methodology, assumptions, and results relied upon for the District's review. The supporting technical documents referenced in Appendix F are part of the administrative record and are available for public review upon request.

Public Comment #20 (Leadership):

The proposed ERCs are not permanent emissions reductions nor surplus of any applicable regulatory requirement. The original Fresno County Rule 460.3 limit and language are not available for review. The evaluation does not include what type of coating was being applied.

District Response to Public Comment #20:

See Response to Public Comment #7 regarding the District's conclusion that ERC Certificate C-1579-1 is based on permanent emission reductions and remains surplus of applicable regulatory requirements. In response to the commenter's additional concern regarding the original rule basis, Appendix K has been supplemented to include Fresno County Rule 460.3 for review. The District also reviewed the original banking information regarding the coatings used and determined that the banking action was based on coatings with a VOC content of 2.8 lb/gal. Based on that information and the surplus analysis in Appendix K, the District concluded that no discounting of the ERC is required and that the ERC remains valid and surplus for use in this project.

Public Comment #21 (Leadership):

The permit exemption determination must be included in the evaluation.

District Response to Public Comment #21:

See Response to Public Comment #4. As discussed there, the engineering evaluation identifies the fuel cells, states that manufacturer information indicates zero emissions for NO_x, SO_x, CO, and VOC, and explains that the fuel cells are permit exempt because emissions are less than 2.0 lb/day for each pollutant. The fuel cells were nevertheless listed on the new hydrogen recovery unit permit for clarification purposes.

Public Comment #22 (Leadership):

The appendices list PE2 incorrectly.

District Response to Public Comment #22:

See Response to Public Comment #1 regarding the correction of the PE2 values in the appendices.

Public Comment #23 (Jennifer Martinez):

There was no community consultation for this project. The public hearing had to be requested by the public rather than a part of established District procedures. There were no hybrid options available for attending the public hearing.

District Response to Public Comment #23:

See Responses to Public Comments #3 and #6 regarding public notice, language access, and community concern. The District processed this project in accordance with the applicable state and federal air permitting public notice procedures contained in the District's federally approved permitting rules. In accordance with the District's standard public notice procedures, the notice was posted on the District's website and distributed to interested persons who had subscribed to receive public notices by email, text message, or standard mail.

For this type of permitting action, the public has the right to request a hearing, and a public hearing was scheduled after such a request was made. The District also notified the Arvin/Lamont Community Steering Committee of the hearing, provided simultaneous interpretation services and Spanish-language materials at the hearing, and extended the public comment period to allow for additional community engagement.

With respect to the hearing format, the hearing was held in person, in the community, at a location, date, and time coordinated with the parties requesting the hearing in order to facilitate participation by community members.

Public Comment #24 (Jennifer Martinez):

The environmental and health risk assessments were not serious enough.

District Response to Public Comment #24:

The District disagrees that the environmental and health risk reviews for this project were inadequate. The District conducted its permitting review in accordance with the applicable air permitting requirements, including evaluation of the project's emissions, health impacts, and compliance with applicable rules and regulations. With respect to health risk, the District completed a project-specific risk management review using approved methods and concluded that the project's cancer and non-cancer health impacts are below applicable District significance levels. See response to Public Comment #10 regarding AB 2588 and facility-wide toxics review, and response to Public Comment #5 regarding CEQA-related issues.

Public Comment #25 (Jennifer Martinez):

This project was not discussed with the AB 617 Arvin/Lamont Community Steering Committee.

District Response to Public Comment #25:

See Response to Public Comment #3. The District processed this project in accordance with the applicable state and federal air permitting public notice procedures contained in the District's federally approved permitting rules. In accordance with the District's standard public notice procedures, the notice was posted on the District's website and distributed to interested persons who had subscribed to receive public notices by email, text message, or standard mail. The District notes that AB 617 community engagement and the permitting public notice process are distinct processes. The applicable permitting notice requirements for this project did not require presentation of the project to the AB 617 Arvin/Lamont Community Steering Committee before issuance of the public notice. After a public hearing was requested, the District notified the Community Steering Committee of the hearing and extended the comment period to allow for additional community engagement.

Public Comment #26 (Jennifer Martinez and Yesenia G.):

The residents of the community surrounding Kern Energy are exposed to benzene, hydrogen sulfide, ammonia, and nitrogen dioxide on a near daily basis. The exposure threatens the community. The District is not effectively preventing exposure from these hazards and does not require additional fence-line monitoring.

District Response to Public Comment #26:

The District recognizes that community members have concerns regarding ongoing exposure to air pollutants associated with existing refinery operations, including pollutants detected through existing monitoring programs. Those concerns are addressed through separate compliance, enforcement, fence-line monitoring, and AB 2588 processes applicable to existing operations. See Responses to Public Comments #10 and #24 regarding existing-facility toxics review and project-specific health risk review, respectively.

Petroleum refinery fence-line monitoring is required under District Rule 4460, which establishes continuous monitoring requirements for specified air pollutants at refinery boundaries. That monitoring program applies to the facility independently of this permitting action.

For this project, the District evaluated the proposed emissions and health impacts and concluded that project-specific stationary-source emissions are below applicable significance thresholds and that the project's cancer and non-cancer health impacts are below applicable District significance levels. In addition, the new piping components and associated refinery components are subject to fugitive emissions control requirements, including inspection and repair requirements under the applicable leak detection and repair program.

Additional fence-line monitoring for this project was not required, as no applicable rule or permitting requirement was triggered that would require monitoring beyond the existing requirements of District Rule 4460.

Public Comment #27 (Jennifer Martinez, Gina Lopez, Sandra Angel, Anonymous, Ribelino Oros, and Lucia Alcalá):

Hydrogen leaks are dangerous and highly explosive. Additionally, the hydrogenation and dehydrogenation processes present risks as well. The District did not address these dangers in their evaluation.

District Response to Public Comment #27:

See Response to Public Comment #8 regarding the District's consideration of safety-related concerns associated with hydrogen projects. The District acknowledges the commenters' concerns regarding potential hazards associated with hydrogen, including leaks and process-related risks. The District's review of this permitting action, however, is limited to evaluation of the project's emissions, health impacts, and compliance with applicable air permitting requirements. Site-specific process safety, emergency response, and operational hazard considerations are regulated by other agencies and regulatory programs outside the District's air permitting authority.

See Response to Public Comment #4 regarding the storage and handling of toluene and methylcyclohexane (MCH) in existing permitted storage tanks.

Public Comment #28 (Jennifer Martinez, Anonymous and Minerva Contreras):

The refinery must develop emergency response and evacuation plans.

District Response to Public Comment #28:

The District acknowledges the commenters' concern regarding emergency response and evacuation planning. The District's evaluation of this permitting action is limited to air quality and associated public health impacts. Emergency response planning and process safety requirements are regulated by other agencies, including EPA, OSHA, and CalEPA programs, and are outside the scope of the District's air permitting authority.

Public Comment #29 (Jennifer Martinez and Yesenia G.):

Our water is contaminated and it is exacerbated by Kern Energy.

District Response to Public Comment #29:

The District's evaluation of this permitting action is limited to air quality and associated public health impacts. Issues related to groundwater or drinking water contamination are regulated by other state and local agencies and are outside the scope of the District's air permitting authority.

Public Comment #30 (Jennifer Martinez):

The health risk management review is not explained in sufficient detail.

District Response to Public Comment #30:

The District disagrees that the health risk management review is not sufficiently explained. The engineering evaluation and Appendix F describe the methodology, assumptions, and results of the Health Risk Assessment conducted for this project using approved methods. That review concluded that the project's cancer and non-cancer health impacts are below applicable District significance levels. Also, see Responses to Public Comments #10 and #24 regarding existing-facility toxics review and project-specific health risk review, respectively.

Public Comment #31 (Anonymous):

Will this project allow Kern Energy to refine crude oil for a longer period of time?

District Response to Public Comment #31:

This project does not authorize or extend crude oil refining operations at the facility. The project leverages hydrogen that is already produced by existing refinery processes and uses it to generate electricity in hydrogen fuel cells or for other refinery operations. The project does not increase crude oil refining capacity or change the permitted operation of existing refinery process units.

Public Comment #32 (Minerva Contreras):

The District's evaluation is too difficult to understand.

District Response to Public Comment #32:

The District acknowledges that engineering evaluations can be complex. The analysis performed by the District is designed to ensure compliance with federal, state, and local air quality requirements, which require the use of technical terminology and regulatory language. To assist with public understanding, the District provided presentations and supporting materials at the public hearing, made staff available to answer questions regarding the project, and provided a project summary in both English and Spanish.

Public Comment #33 (Lucia Alcalá):

The residents of the community surrounding Kern Energy have been requesting the District to reduce emissions from the refinery.

District Response to Public Comment #33:

The District regulates emissions from refinery operations through its permitting and rulemaking programs. Constructing, altering, replacing, or operating any source operation that emits or may emit air pollutants requires an Authority to Construct (ATC) or Permit to Operate (PTO). Upon receipt of an application, the District evaluates whether the project meets all applicable federal, state, and local rules and regulations. The District is required to issue an ATC or PTO for a proposed project that demonstrates compliance with all applicable rules and regulations.

In addition, existing operations are subject to a comprehensive set of prohibitory rules that are periodically updated and made more stringent over time as required by law. These rules require facilities, including Kern Energy, to comply with increasingly stringent emission limits, monitoring requirements, and, where applicable, installation of control technologies to reduce emissions.

Public Comment #34 (Leadership Supplemental²):

The District is required under CEQA to step in as lead agency to conduct an environmental review.

District Response to Public Comment #34:

See Response to Public Comment #5.

Public Comment #35 (Leadership Supplemental):

An adequate emergency plan is missing.

District Response to Public Comment #35:

See Response to Public Comment #28. The District's evaluation of this permitting action is limited to air quality and associated public health impacts. Emergency response planning and process safety requirements are regulated by other agencies, including EPA, OSHA, and CalEPA programs, and are outside the scope of the District's air permitting authority.

Public Comment #36 (Leadership Supplemental):

The jobs created by this project are not going to local workers.

² Comments received within a supplemental letter sent jointly representing Leadership Counsel for Justice & Accountability, Center on Race, Poverty & the Environment, and Comité Progreso de Lamont (Leadership Supplemental)

District Response to Public Comment #36:

The District's evaluation of this permitting action is limited to air quality and associated public health impacts. Employment, hiring practices, and workforce considerations are outside the scope of the District's air permitting authority.

Public Comment #37 (Jesus Perez):

I support this project & request that SJVAPCD grant them the permits requested by Kern Energy without further delays or studies imposed.

District Response to Public Comment #37:

The District acknowledges the commenter's support for the project. After review of the application and all comments received, the District issued the Authority to Construct (ATC) in accordance with applicable federal, state, and District rules and regulations.

Public Comment #38 (CHBC³):

The District's analysis is limited to air quality impacts from the project. This project does not produce hydrogen, but purifies and uses hydrogen already generated onsite.

District Response to Public Comment #38:

The District agrees with the commenter. The District's analysis for this permitting action is limited to air quality impacts. As described in the engineering evaluation, the project does not produce hydrogen, but instead purifies and utilizes hydrogen that is already generated onsite as part of existing refinery operations.

Public Comment #39 (CHBC):

This project improves safety at the refinery through the replacement of equipment.

District Response to Public Comment #39:

The District acknowledges the commenter's statement regarding potential safety-related benefits. The District's authority for this permitting action is limited to evaluating air quality impacts and ensuring compliance with applicable air quality rules and regulations. Safety-related considerations, including workplace and process safety, are regulated by other agencies and are outside the scope of the District's permitting authority.

Public Comment #40 (CHBC):

This project will result in nine permanent jobs.

District Response to Public Comment #40:

The District acknowledges the commenter's statement regarding potential job creation. See Response to Public Comment #36 regarding the District's permitting authority, which is limited to evaluating air quality impacts.

Public Comment #41 (CHBC):

This project aligns with California's clean energy transition.

District Response to Public Comment #41:

The District acknowledges the commenter's statement. The District's evaluation of this permitting action focused on the project's air quality and associated public health impacts in accordance with applicable rules and regulations.

³ California Hydrogen Business Council

Public Comment #42 (CHBC):

This project improves refinery operations by lowering combustion-related emissions, reducing grid-related flaring events, and modernizing equipment that handles hydrogen.

District Response to Public Comment #42:

The District acknowledges the commenter's statement regarding potential operational and emission-related benefits of the project. The District's evaluation of this permitting action focused on the project's air quality and associated public health impacts from the installation of the new equipment. The District's review did not include an analysis of electrical grid operations or sources of grid power.

Public Comment #43 (B3K⁴):

The installation of this technology will help Kern Energy reduce its carbon footprint and improve the current facility's efficiency.

District Response to Public Comment #43:

The District acknowledges the commenter's statement regarding potential efficiency and greenhouse gas benefits. The District's evaluation of this permitting action focused on the project's air quality and associated public health impacts from the installation of the new equipment in accordance with applicable rules and regulations.

Public Comment #44 (B3K):

This project will create better-paying jobs in Kern County.

District Response to Public Comment #44:

The District acknowledges the commenter's statement regarding potential job creation. See Response to Public Comment #36 regarding the District's permitting authority, which is limited to evaluating air quality impacts.

⁴ A Better Bakersfield and Boundless Kern: Regional Action for Economic Prosperity, (B3K)