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SAN JOAQUIN VALLEY AIR DISTRICT HEARING BOARD

184 COMMUNITY ACTION GROUP, an
unincorporated association; COMITÉ
PROGRESO DE LAMONT, an unincorporated
association,

Petitioners,

v.

SAN JOAQUIN VALLEY AIR POLLUTION
CONTROL DISTRICT,

Respondent.

KERN ENERGY,

S.R.H.B. Case No.: S-26-11A

**TRIAL BRIEF FOR HEARING AND
APPEAL OF APPROVAL OF
AUTHORITY TO CONSTRUCT
PERMIT FOR KERN ENERGY
REFINERY PROJECT NO. S-1251187**

I. INTRODUCTION

The San Joaquin Valley Air Pollution Control District (“District”) illegally issued an Authority to Construct (“ATC Permit”) in violation of its own rules and the law, thereby endangering the health and safety of hundreds of San Joaquin Valley residents and impeding attainment of federal and state air quality requirements. Petitioners 184 Community Action Group (“184 CAG”) and Comité Progreso de Lamont (“CPL,” collectively “Petitioners”) thus seek the revocation of the ATC Permit for Project No. S-1251187 (“Project”) granted to Kern Energy Oil & Refining Company (“Kern Energy”). This Project, which involves electricity and heat generation via hydrogen fuel cells, will increase air pollution and risks for nearby communities. The District illegally cut corners, improperly calculated projected emissions, and failed to abide by federally-mandated Clean Air Act requirements when conducting its ATC Permit Application Review, all in violation of District Rule 2201 (“Rule 2201”). Specifically, the District violated Rule 2201 by: (1) incorrectly calculating Project emissions; (2) failing to consider all modified emission units; (3) failing to comply with federal Best Available Control Technology requirements; and (4) improperly banking Emission Reduction Credits (“ERCs”) to offset emission increases from the Project.

The improper issuance of the ATC Permit risks public health impacts in nearby disadvantaged communities—risks that are particularly severe because these communities are already overburdened with pollution. Kern Energy, a refinery that produces gasoline and diesel fuels, is located within the boundaries of the Arvin/Lamont AB 617 Community Emission Reduction Program (“CERP”).¹ The adoption of an AB 617 CERP for these communities is

¹ Exhibit A. Arvin/Lamont Community Emission Reduction Program.

1 significant because CERPs are intended to “reduce air pollution[] and improve public health in
2 communities that experience disproportionate burdens from exposure to air pollutants.”² Kern
3 Energy is the largest source of air pollution in the community,³ a fact that residents have identified
4 for decades⁴ in requesting stronger protections.⁵ At the same time, residents struggle to secure
5 access to safe and reliable water because their groundwater source is contaminated with
6 1,2,3-Trichloropropane and other drinking water contaminants.⁶

7
8 Kern Energy’s existing operations contribute to the pollution and risks that nearby
9 communities face on a daily basis. It has an extensive history of regulatory violations under
10 various environmental and public health statutes, including the Clean Air Act, the Clean Water
11 Act, the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the
12 California Accidental Release Prevention Program.⁷ At the same time, the Kern County Grand
13 Jury recently found that current disaster preparedness plans for unincorporated Kern County are
14 insufficient to ensure the safety of Kern County’s most vulnerable communities in the event of a
15 disaster.⁸ As recently as the August 12, 2026 hearing in this matter, residents have expressed
16 alarm at the risks that Kern Energy’s history of unsafe operations poses.

17
18 It is in this context of unacceptable existing health and safety risks and public exposure to
19 pollution that the District improperly granted Kern Energy the authority to construct a Project that
20 will make things worse. It is undisputed that Kern Energy’s Project will increase local Volatile

21
22 ² Exhibit A, p. 5.

23 ³ Exhibit BB. Arvin/Lamont CERP Appendix C: Source Apportionment and Community Inventories (June 9, 2022).

24 ⁴ Exhibit B. Declaration of Olivia Muñoz; see *also* Community Identified Sources of Air Pollution (July 28, 2021),
25 <https://valleyair.mysocialpinpoint.com/arvinlamont-community-engagement#/>.

26 ⁵ Exhibit A, p. 142.

27 ⁶ Fuller Acres Mutual Water Company and Athal Mutual Water Company provide water to residents immediately
28 north of Kern Energy and are designated failing water systems. Lamont Public Utilities District provides water to
residents immediately south of Kern Energy and is designated as an at-risk water system. State Water Resources
Board SAFER Dashboard,
https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/saferdashboard.html (accessed October 8,
2026).

⁷ Exhibit S. CalEPA Kern Energy August 2024 and June 2026 Activity Logs.

⁸ Exhibit T. 2025-2026 Kern County Grand Jury Report on Kern County Fire Department Office Of Emergency
Services Disaster Readiness.

1 Organic Compounds (“VOC”) emissions, which are harmful to human health. The Project’s use
2 of toluene and methyl cyclohexane (“MCH”) heighten the risk of groundwater contamination due
3 to spills, hazardous vapor releases, and health impacts associated with exposure.⁹ The Project also
4 introduces the risk of hydrogen leaks and explosions. Hydrogen gas should not be transported via
5 pipelines intended for other gases because hydrogen is the smallest and lightest molecule in the
6 world, is extremely flammable and susceptible to combustion, can cause “embrittlement” of
7 pipes, and is a colorless and odorless gas that makes detection of leaks very difficult.¹⁰

8
9 Residents living in Fuller Acres, Lamont, and other nearby communities deserve to live in
10 safe communities where their families and children can thrive. The Project will exacerbate the
11 existing environmental burdens and make this dream harder to realize. For the reasons discussed
12 below and because the ATC Permit was improperly issued, the Southern Region Hearing Board
13 must revoke the Permit.

14 **II. FACTUAL & PROCEDURAL BACKGROUND**

15 **A. The Petitioners & the Impacted Communities**

16
17 As set forth in the Petition, 184 CAG is an unincorporated association of residents
18 of Fuller Acres and the surrounding area. Members of 184 CAG reside immediately near Kern
19 Energy with some members living within 1,000 feet of Kern Energy’s active refining operations.
20 Petitioner CPL is an unincorporated association that represents residents of Lamont, California.
21 CPL members live, travel, and work near Kern Energy and are concerned about the facility’s
22 history of violations of federal, state, and local laws, the health impacts from its operations on
23

24 ⁹ Toluene affects the central nervous system, eyes, skin, respiratory system, liver, kidneys. Breathing high levels of
25 toluene during pregnancy has been shown to result in children with birth defects and to retard mental abilities and
26 growth. There is evidence that exposure to toluene at work is associated with spontaneous abortion. *See* Toluene -
27 Health Hazards and Protective Measures, United States Occupational Safety and Health Administration,
28 <https://www.osha.gov/toluene/hazards-protective-measures>. Types of exposure to MCH include inhalation, ingestion,
and/or skin or eye contact, with the potential of risk to target organs such as the eyes, skin, respiratory system, central
nervous system. *See* Methylcyclohexane, National Institute for Occupational Safety and Health, United States Center
for Disease Control, <https://www.cdc.gov/niosh/npg/npgd0406.html>.

¹⁰ Exhibit CC. Sasan Saadat and Sara Gersen, *Reclaiming Hydrogen for a Renewable Future: Distinguishing Oil &
Gas Industry Spin from Zero-Emission Solutions* (2021), p. 20.

1 nearby communities, and the lack of emergency planning.

2 Lamont, Fuller Acres, and the other communities surrounding Kern Energy suffer
3 substantial pollution burdens and historical disinvestment. This area was selected by the
4 California Air Resources Board (“CARB”) to develop a CERP and Community Air Monitoring
5 Plan under AB 617, as a community with cumulative pollution burdens and persistent air quality
6 concerns.¹¹ Kern Energy contributes a significant amount to these existing concerns through its
7 current petroleum refinery operations, fuel and chemical handling, and heavy-duty transportation
8 activities.¹² However, Kern Energy is not the sole industrial source contributing to pollution in the
9 area. Numerous oil and gas facilities operate nearby and contribute to cumulative impacts on air
10 quality and public health. Two natural gas pipelines operate in the immediate vicinity and run
11 through Lamont and Fuller Acres,¹³ as well as a crude oil pipeline that services the refinery.¹⁴
12 Extensive oil and gas fields in the surrounding area contribute significantly to air emissions
13 alongside Kern Energy.¹⁵
14
15

16 Pollution from oil and gas operations is associated with respiratory, cardiac, neurologic,
17 reproductive, pulmonary, and mental health impacts.¹⁶ The extensive oil and gas operations in the
18 area cumulatively impact public health conditions in the surrounding community, including
19
20

21 ¹¹ Exhibit A, p. 5.

22 ¹² Arvin-Lamont Stationary Source List ArcGIS Map,
<https://sjvaped.maps.arcgis.com/apps/instant/sidebar/index.html?appid=2c8ad5b3044d417899b1f256fc5322c0?id=918e82e790e04e2aa64044243b95836b> (accessed on October 6, 2026).

23 ¹³ FracTracker,
https://experience.arcgis.com/experience/b5608246b8ef4b1fa3463eede0b54ed9/#data_s=id%3AdataSource_6-19277008531-layer-20%3A23717 (accessed May 29, 2026).

24 ¹⁴ PHMSA, National Pipeline Mapping System, <https://pvnpm.phmsa.dot.gov/PublicViewer/> (accessed October 5, 2026).

25 ¹⁵ California Oil and Gas Rulemaking Scientific Advisory Panel, Public Health Dimensions of Upstream Oil and Gas
26 Development in California: Scientific Analysis and Synthesis to Inform Science-Policy Decision Making (2024),
https://www.conservation.ca.gov/calgem/Documents/Public%20Health%20Panel%20Final%20Report_20240621.pdf
27 ; California Department of Conservation, California Geologic Energy Management Division, Well Finder,
<https://maps.conservation.ca.gov/calgem/FindWells/>; FracTracker, Oil and Gas Wells in California (2025),
<https://ft.maps.arcgis.com/apps/instant/sidebar/index.html?appid=04d78fd9433c4ca6b71eca1282e8c583>.

28 ¹⁶ FracTracker, Environmental Justice Analysis of Oil Extraction in Los Angeles Communities (2024),
<https://www.fractracker.org/2025/03/environmental-justice-analysis-of-oil-extraction-in-los-angeles-communities/>

1 respiratory and pulmonary issues.¹⁷ This Project would further contribute to those cumulative
2 impacts by facilitating continued refinery-related operations and increasing VOC emissions
3 within the community, ultimately contradicting AB 617's purpose to reduce VOC emissions in
4 selected communities. VOCs are chemicals such as formaldehyde, benzene, and toluene that
5 easily become inhalable gases and cause irritation, difficulty breathing and nausea, damage to the
6 central nervous system and organs, and cancer.¹⁸ VOCs also react with nitrogen oxide when
7 emitted outdoors to create ozone, which can cause respiratory damage and worsen asthma
8 symptoms.¹⁹

10 **B. The Proposed Project**

11 Kern Energy proposes an expansion of its operations to recover hydrogen produced as part
12 of the refining process and divert part of this hydrogen into new equipment to generate electricity
13 and heat for the refinery.²⁰ The Project proposes piping recovered hydrogen gas into scrubbing
14 and processing equipment units, and then either: (1) feeding the purified hydrogen gas directly
15 into fuel cells to generate electricity; or (2) storing it as an organic liquid in storage tanks.²¹
16 Liquid storage will involve blending the hydrogen gas with toluene, a toxic chemical, to store the
17 hydrogen in the form of MCH.²² The MCH would then be dehydrogenated before the hydrogen
18 gas is piped into fuel cells.²³ Electricity produced by the fuel cells will be used to power Kern
19 Energy's refining operations.²⁴

21 This new process involves the installation of seven fuel cells, each roughly the size of a
22

24 ¹⁷ See Exhibit B, ¶¶ 59-60.

25 ¹⁸ American Lung Association, Volatile Organic Compounds ,
<https://www.lung.org/clean-air/indoor-air/indoor-air-pollutants/volatile-organic-compounds> (accessed Oct. 8, 2026).

26 ¹⁹ Ibid; California Air Resources Board, Ozone & Health, <https://ww2.arb.ca.gov/resources/ozone-and-health>
(accessed Oct. 8, 2026).

27 ²⁰ Exhibit C. Finalized ATC Permit Approval Engineer's Report (April 30, 2026), p. 36.

28 ²¹ Exhibit C, p. 30.

²² Id., at p. 2.

²³ Ibid.

²⁴ Ibid.

1 standard shipping container,²⁵ and numerous hydrogenation, dehydrogenation, and hydrogen
2 purification equipment including reactors, compressors, heat exchangers, pumps, and
3 miscellaneous vessels.²⁶ The Project will also modify the current operations of numerous existing
4 pipes, valves, pumps, and miscellaneous vessels.²⁷ While Kern Energy has indicated where some
5 of the equipment will be located, the ATC provides no information on the location of key pieces
6 of equipment, such as the toluene and MCH tanks and the chloride scrubber.²⁸

8 **C. The Kern County Site Plan Review**

9 On March 13, 2025, Kern Energy submitted a Site Plan Review Application to the Kern
10 County Planning and Natural Resources Department (“Kern County”).²⁹ The location of the
11 Project’s fuel cells in relation to the refinery’s existing equipment is provided in Figure 3. In
12 conjunction with the Application, Kern Energy requested the issuance of a Notice of Exemption
13 under the California Environmental Quality Act (“CEQA”). On April 24, 2024, Kern County
14 approved the Site Plan Review and issued a Notice of Exemption. On May 2, 2025, the Kern
15 County Clerk posted the Notice of Exemption for public review on its website.³⁰ Petitioners were
16 not made aware of these actions at the time.

18 **D. The Authority to Construct Permit**

19 On May 29, 2025, Kern Energy completed its application to the District for a ATC Permit
20 for the Project as required by Rule 2201 (the “Application”). The District completed its
21 Application review, including an Engineer’s Report, on September 15, 2025. On October 28,
22 2025, the District posted a Notice of Intent to Issue the ATC Permit, along with the Engineer’s

25 ²⁵ Id., at p. 37.

26 ²⁶ Exhibit C, p. 8; Exhibit D. Kern Energy’s Site Plan Review Application to the Kern County Planning and Natural
Resources Department., p. 12.

27 ²⁷ See Exhibit C, p. 35; Exhibit U. Kern Oil & Refining Co., Permit Application for Authority to Construct for a
Modification of Emission Unit with Valid PTO/Valid ATC, Application No. S-37-77-10 (Apr. 23, 2004), pp. 5-6.

28 ²⁸ See Exhibit C.

²⁹ Exhibit D.

³⁰ Exhibit E. Kern County Clerk Environmental Document for Site Plan Review 16, Map 124 Kern Energy.

Report, and a solicitation for public comment to be submitted by December 1, 2025.³¹

E. The Request for Public Hearing and December 1, 2025 Comment Letter

On November 14, 2025, Leadership Counsel for Justice and Accountability (“LCJA”) requested a public hearing regarding the proposed issuance of the ATC Permit.³² Petitioner CPL, along with LCJA, Center on Race, Poverty and the Environment (“CRPE”), Central Valley Air Quality Coalition, Central California Environmental Justice Network, and Committee for a Better Arvin, submitted a timely comment letter to the District on December 1, 2025.³³ The comment letter included, among other things, concerns regarding the improper calculation of VOC emissions and failure to authenticate the proposed Emission Reduction Credits (“ERCs”). On December 11, 2025, the District provided notice of a public hearing on January 12, 2026 in Lamont, California³⁴ and extended the deadline for public comment to January 27, 2026.³⁵

F. Petitioners’ January 2026 Public Comments

On January 12, 2026, residents of Fuller Acres, Lamont, and communities surrounding the refinery, including members of Petitioners, attended the District’s public hearing. Public commenters expressed, among other things, opposition to the Project in light of health and safety concerns. Then, on January 27, 2026, Petitioner CPL, along with LCJA and CRPE, submitted a supplemental public comment letter to the District,³⁶ urging the District not to issue the ATC Permit.

G. Issuance of the ATC Permit

³¹ Exhibit G. Notice of Preliminary Decision for the Issuance of Authority to Construct and the Proposed Significant Modification of Federally Mandated Operating Permit (October 28, 2025).

³² Exhibit H. Letter to District Regarding Notice of Preliminary Decision for the Issuance of Authority to Construct Project No. S-1251187 (November 14, 2025).

³³ Exhibit I. Letter to District Regarding Comments on Notice of Preliminary Decision for the Issuance of Authority to Construct Project No. S-1251187 (December 1, 2025).

³⁴ Exhibit J. Notice of Public Hearing on Proposed Preliminary Decision to Issue Authority to Construct Permit to Kern Energy for Hydrogen Fuel Cell Power Generation Project. (December 11, 2025).

³⁵ Exhibit K. Notice of Preliminary Decision for the Issuance of Authority to Construct and the Proposed Significant Modification of Federally Mandated Operating Permit (December 11, 2025).

³⁶ Exhibit L. Letter to District Regarding Supplemental Comments on Notice of Preliminary Decision for the Issuance of Authority to Construct Project No. S-1251187 (January 27, 2026).

1 On April 30, 2026, the District posted a public notice of issuance of the ATC Permit, an
2 updated Engineer's Report, and its responses to public comments associated with the Project.³⁷
3 The updated Engineer's Report contained a revised CEQA discussion, adjusted values associated
4 with the Project's Health Risk Assessment and Source Project Rates, and a revised ERC
5 certification discussion.
6

7 **H. Petitioners Appeal Issuance of ATC Permit**

8 On May 29, 2026, Petitioners filed a petition ("Petition") to the Southern Region Hearing
9 Board for the hearing and appeal of the ATC Permit, contending that the issuance of the ATC
10 Permit was improper because the District did not comply with Rule 2201, it did not comply with
11 CEQA, and it did not comply with the Arvin/Lamont CERP that it adopted in accordance with
12 AB 617. The Petition requests revocation of the ATC Permit pursuant to Health and Safety Code
13 section 42309.
14

15 **I. The Motion to Strike**

16 On July 15, 2026, the District filed a Motion to Strike claims related to CEQA compliance
17 and consistency with the Arvin/Lamont CERP. By order issued August 18, 2026, and following a
18 hearing on August 12, 2026, the Hearing Board granted the District's Motion to Strike the CEQA
19 and CERP claims.
20

21 **III. LEGAL BACKGROUND**

22 The District is a public agency tasked with the authority and responsibility to implement
23 and enforce federal Clean Air Act requirements for stationary sources of air pollution within its
24 jurisdiction. (Health & Saf. Code § 40000.) The District is also required to implement and enforce
25 California state laws as applicable. (Health & Saf. Code § 40001.) The District is directed to
26 adopt rules and regulations to carry out these mandates. (Ibid.) Major stationary sources of air
27 pollution, including the Kern Energy refinery, are subject to the federal Title V permit program,
28

³⁷ Exhibit C.

1 which requires the District to deploy heightened regulatory requirements to ensure compliance
2 with federal requirements.³⁸ Kern Energy is a major stationary source of air pollution within the
3 District’s jurisdiction and is thus subject to Rules and Title V permit program requirements.³⁹

4 The Hearing Board may revoke the ATC Permit if it finds that refusal of a permit would
5 be justified or that the District violated any part of the Health and Safety Code, order, rule, or
6 regulation of the District, and “shall...render a decision on whether the permit was properly
7 issued.” (Health & Saf. Code § 42309 subd. (e)(2), (4); see also § 42302.1.)

8 **IV. STANDARD OF REVIEW**

9 The Hearing Board must use its independent judgment to determine whether an ATC
10 permit was properly issued. (*Valero Refining Co.—California v. Bay Area Air Quality*
11 *Management Dist. Hearing Bd.* (2020) 49 Cal.App.5th 618, 638, partially overturned on other
12 grounds, *Meinhardt v. City of Sunnyvale* (2024) 16 Cal.5th 643 [“We start with the general
13 principle that the hearing board was required to exercise its independent judgment in deciding
14 Valero’s appeal. It could not blindly ratify the APCO’s decision but, rather, was required to decide
15 the merits of the issues for itself.”], see also *id.* at 639 citing *Quintanar v. County of Riverside*,
16 (2014) 230 Cal.App.4th 1226, 1235 [“the power to take evidence, hear from witnesses, entertain
17 argument and render a decision” indicates that independent judgment review applies]].) While the
18 District’s action is presumed to be correct, the presumption is overcome by a mere preponderance
19 of the evidence. (*Id.* at 630; *TAMCO v. South Coast Air Quality Management District* (2014)
20 SCAQMD Hearing Board Decision Case No. 5972-1, p. 8.)⁴⁰ As opposed to under a substantial
21 evidence standard, the Hearing Board should consider whether the District’s determinations are
22
23
24

25 ³⁸ Environmental Protection Agency Basic Information about Operating Permits,
26 <https://www.epa.gov/title-v-operating-permits/basic-information-about-operating-permits> (accessed on May 29,
27 2026).

³⁹ See Exhibit C, p. 8.

⁴⁰ Exhibit DD. *TAMCO v. South Coast Air Quality Management District* (2014) SCAQMD Hearing Board Decision
28 Case No. 5972-1.

1 reasonable based on careful review of the evidence in the record. (See, e.g., *Marsh v. Oregon*
2 *Natural Resources Council* (1989) 490 U.S. 360, 378). In other words, the Hearing Board must
3 exercise independent judgment in considering the law and evidence, and if it determines that the
4 ATC was more likely than not improperly issued, it must vacate the ATC permit.

5 **V. DISCUSSION**

6
7 A permit cannot be granted for a major modification of a Title V permitted facility unless
8 the proposed modification complies with Rule 2201. (Health & Saf. Code § 42300; Rule 2201
9 part 1.) In its issuance of the ATC Permit to Kern Energy, the District violated Rule 2201 in at
10 least four ways. First, the District erroneously determined compliance with federal offset
11 requirements as required by Rule 2201 part 4.8 because it incorrectly calculated the post-project
12 Potential to Emit (“PE2”) for VOCs. Second, the District improperly allowed Kern Energy to rely
13 on Emission Reduction Credits (“ERCs”) in alleged satisfaction of federal offset requirements
14 because the banked ERCs are not surplus, real or permanent. Third, the District’s ATC Permit
15 evaluation considered an incomplete permit unit that excluded emission units that would be
16 modified by the Project. Fourth, the District failed to comply with federal Best Available Control
17 Technology (“BACT”) requirements because its cost-effectiveness analysis did not consider all
18 applicable equipment units nor an accurate post-project PE2 quantity for VOCs. The following
19 sections discuss each violation in turn.
20

21 **A. The District Incorrectly Calculated VOC Emissions**

22 The PE2 calculation serves as a foundational input for multiple permitting determinations
23 under Rule 2201, including offset requirements and risk evaluations.⁴¹ Because those
24

25
26 ⁴¹ Rule 2201 part 4.13. “Actual Emission Reductions shall be calculated, on a pollutant-by-pollutant basis, as follows:
27 AER = HAE-PE2[,] Where HAE = Historic Actual Emission [and] PE2 = Post-project Potential to Emit.” *See also*
28 District Policy APR 1905 part VIII.C. “For the purpose of determining compliance with [requirements to control
emissions of hazardous air pollutants], the Increase in Permitted Emissions of a hazardous air pollutant is to be
determined as the difference between the baseline and proposed Potential to Emit for the pollutant.” Here, VOC
emissions from toluene contain hazardous air pollutants.

1 determinations rely on the PE2 value, an understated PE2 calculation will materially affect the
2 District's conclusions regarding the Project's regulatory compliance and environmental impacts.
3 Strict adherence to PE2 calculation methods is required because health risk evaluations depend
4 entirely upon PE2 values. PE2 calculations resulting in underestimated emissions invalidate any
5 health risk assessments ("HRAs") that relied on the incorrect calculations. Additionally, the San
6 Joaquin Valley basin is designated Extreme nonattainment for federal ozone standards, and VOCs
7 are a precursor to ozone formation.⁴² The District's calculation of PE2 for VOCs thus has direct
8 implications for ozone attainment goals.
9

10 Because the District erroneously calculated the PE2 value for the Project, it did not
11 comply with Rule 2201.

12 **1. The District Violated The CAPCOA/CARB Guidelines, Its Controlling**
13 **Authority For Calculation Of PE2 Emissions**
14

15 The District is required to calculate a project's PE2 on a pollutant-by-pollutant basis.
16 (Rule 2201 part 4.) District Policy SSP 2015 establishes the District's methodology for
17 calculating the PE2 value of VOC emissions at petroleum and synthetic organic chemical
18 manufacturing facilities for purposes of Rule 2201 permitting analyses. (District Policy SSP 2015
19 part II.) The District adopted SSP 2015 to implement Rule 2201. (*Id.*) Pursuant to SSP 2015, the
20 "approved methods for calculating fugitive emissions are those contained in EPA's 'Protocol for
21 Equipment Leak Emission Estimate' dated 11/95 (EPA-453/R-94-017) and 'California
22 Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at
23 Petroleum Facilities' dated 2/99 ['CAPCOA document' or 'CAPCOA/CARB Guidelines']. " (SSP
24 2015 part III.) The CAPCOA/CARB Guidelines were developed as part of a joint commitment
25 between local air districts, including this District, and CARB to more accurately calculate
26

27 ⁴² Ambient Air Quality Standards & Attainment Status, San Joaquin Valley Air Pollution Control District,
28 <https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainment-status/> (accessed on
May 28, 2026).

1 emissions from refinery equipment components.⁴³ SSP 2015 further provides that “[e]mission
2 factors in the CAPCOA document or emission factors in the EPA document shall be used for new
3 or modified units. However, the emission factors in the CAPCOA document will take precedent
4 [*sic*] over emission factors in the EPA document.” (SSP 2015 part IV.) Having adopted SSP 2015
5 to implement Rule 2201, the District’s permitting analysis was required to be consistent with the
6 methodologies incorporated through SSP 2015, including the CAPCOA/CARB Guidelines
7 governing fugitive VOC emissions calculations for new or modified units. The District appears to
8 concede this point, stating that it will comply with the CAPCOA/CARB Guidelines in its
9 Engineer’s Report.⁴⁴ However, the District applied a different method in which it adopted several
10 methods proposed by Kern Energy without justifying its departure from the CAPCOA/CARB
11 Guidelines.⁴⁵

12 13 **2. The District Relied On Method 3, But The CAPCOA/CARB** 14 **Guidelines Require Method 1**

15
16 The District’s calculation of the Project’s PE2 value for VOC emissions did not conform
17 with the CAPCOA/CARB Guidelines because the District relied on the Correlation Equation
18 Emission Factor Method (“Method 3”) rather than the Average Emission Factor Method
19 (“Method 1”).⁴⁶ The CAPCOA/CARB Guidelines permits four methodologies for calculating
20 fugitive VOC emissions, but Method 3 relies on site-specific screening values obtained from
21 operating equipment components.⁴⁷ Under the CAPCOA/CARB Guidelines incorporated through
22 SSP 2015, Method 1—not Method 3—was the appropriate methodology for calculating fugitive
23

24 ⁴³ Exhibit M. California Implementation Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at
25 Petroleum Facilities (February 1999), pp. 3, 6.

26 ⁴⁴ “The potential to emit from the hydrogen recovery project will be calculated using California Implementation
27 Guidelines for Estimating Mass Emissions of Fugitive Hydrocarbon Leaks at Petroleum Facilities, CAPCOA/CARB,
28 February 1999.” Exhibit C, p. 8.

⁴⁵ The District’s discussion of its calculation methodology references adoption of Kern Energy’s propositions in
several sections. See Exhibit C. p. 8, “Applicant is proposing use of the correlation equation emissions factors.” See
also p. 9, “Kern [Energy] has proposed the number of [piping] components that are at each level.”

⁴⁶ Exhibit M.

⁴⁷ Exhibit N. Declaration of Christian Bisher at ¶ 12.

VOC emissions for the Project because the new piping has no site-specific screening values, which is required for Methods 2, 3, and 4. Method 1 exists only for new equipment without site-specific screening values.⁴⁸

The District's improper use of Method 3 materially understated the Project's VOC emissions. The Engineer's Report estimated project VOC emissions at approximately 483 pounds annually. Expert Declarant, however, concludes that application of Method 1 under the CAPCOA/CARB Guidelines would yield substantially higher fugitive VOC emissions estimates, including approximately 145,955 pounds annually.⁴⁹

By failing to follow the CAPCOA/CARB Guidelines, the District thus underestimated Project emissions by more than 145,000 pounds annually. Using Method 1, as the CAPCOA/CARB Guidelines requires, would result in more than 300 times the emissions estimated by the District. Compounding the problem, a greater PE2 value for VOCs would result in different conclusions for all analyses that incorporate the PE2 value, including offset requirements and health-risk evaluations, and would violate the District's obligation to ensure that permitted sources do not interfere with the attainment of applicable air quality standards. (*See* Health & Saf. Code § 42301.) The District's Health Risk Analysis and Risk Management Review rely on the underestimated PE2 value to conclude that no Toxic Best Available Control Technology or special permits are required for the Project.⁵⁰ These conclusions must be re-evaluated with reliance on an accurate PE2 value.

Because the District used the wrong method in calculating the PE2 value for VOC emissions, the ATC Permit was improperly issued.

3. Even Assuming The District Had Discretion To Use Method 3, The Record Does Not Support That Choice

⁴⁸ *Id.*

⁴⁹ *Id.* at ¶ 20.

⁵⁰ Exhibit C, pp. 47-49.

1 Even assuming *arguendo* that the District has the discretion to choose which
2 CAPCOA/CARB Guidelines method to utilize when conducting a permit evaluation (though
3 Petitioners contend it does not), reliance on Method 3 is entirely unreasonable when the proposed
4 equipment includes new piping with no site-specific screening values. Method 3 calculations
5 materially understate the Project's fugitive VOC emissions as compared to the emissions
6 estimates produced under Method 1.⁵¹ The record further reflects that the District chose to use
7 Method 3 to calculate the Project's PE2 value for VOCs at Kern Energy's request, despite the
8 absence of site-specific screening values for the new or modified equipment units. Under these
9 circumstances, and particularly given the District's current extreme nonattainment ozone
10 designation and the baseline environmental conditions of the surrounding community, the District
11 is required to provide a more substantial explanation for relying on a methodology that produced
12 materially lower emissions estimates for purposes of Rule 2201 permitting analyses. Accurate
13 emissions calculations are particularly important in an extreme ozone nonattainment area and
14 within an AB 617 community, where Rule 2201 permitting determinations directly affect the
15 District's broader air quality and emissions-reduction obligations.
16
17

18 **4. The District Failed to Implement Method 3 Consistent with the** 19 **CAPCOA/CARB Guidelines**

20 Even if the District's choice to use Method 3 was authorized and reasonable under the
21 circumstances, though it was not, the District failed to implement Method 3 consistent with the
22 CAPCOA/CARB Guidelines. Christian Bisher, who provides an expert declaration in support of
23 this petition, explains that Method 3 requires the use of organic vapor analyzer-measured
24 concentrations ("screening values") for individual equipment components.⁵² Because the Project
25 involves new or modified equipment units, however, site-specific screening values were not
26
27

28 ⁵¹ Exhibit N at ¶ 20.

⁵² *Id.* at ¶¶ 14-17.

1 available.⁵³ Bisher further explains that the District's implementation of Method 3 departed from
2 the CAPCOA/CARB Guidelines in multiple respects. Specifically, he concludes that the District
3 improperly grouped components together rather than calculating emissions for individual
4 components, failed to apply the pegged-factor methodology contemplated by the
5 CAPCOA/CARB Guidelines, and instead relied on assumed screening values tied to regulatory
6 leak limits rather than actual measured leak data.⁵⁴ According to Bisher, those assumptions
7 materially understated the Project's fugitive VOC emissions.⁵⁵ Under these circumstances, the
8 District did not calculate PE2 value for VOC emissions consistently with the methodology
9 incorporated through SSP 2015 and the CAPCOA/CARB Guidelines. Those methodological
10 deficiencies independently undermine the District's emissions calculations and the permitting
11 analyses that rely upon them.
12

13 **B. The Emission Reduction Credits Banked Are Invalid**

14 Rule 2201 part 4.8.1.1 requires the banking of ERCs to offset emission increases
15 associated with a major modification to a Title V permitted facility. The District erroneously
16 allowed for the banking of ERC certificate C-1579-1 to offset the increased VOC emissions
17 associated with the Project in violation of Rule 2201. Consequently, the ERC utilized in Kern
18 Energy's ATC is not creditable as it fails to meet federal requirements and District Rules.
19

20 State Implementation Plans for nonattainment areas must include a permitting program for
21 the construction and operation of new or modified major stationary sources that emit pollutants
22 over a threshold amount. 42 U.S.C. § 7502(c)(5). This permit program, called federal New Source
23 Review, requires new or modified major stationary sources to offset their emissions so that
24 aggregate emissions decrease in nonattainment areas. 42 U.S.C. § 7503(a)(1)(A). Here, the
25
26

27 ⁵³ *Id.* at ¶¶ 12, 16.

28 ⁵⁴ *Id.* at ¶¶ 17-19.

⁵⁵ *Id.* at ¶¶ 18-20.

1 Project is a major modification to the existing facility.⁵⁶ As a major modification, an ERC is
2 required and thus the validity of the ERC is necessary for the ATC permit to be properly granted
3 by the Air District. Rule 2201 parts 4.8.1.1 and 4.8.1.7.

4 Kern Energy relies on ERC certificate C-1596-1 to offset VOC emissions from the
5 Project. To generate an ERC, an emission reduction must be “creditable,” which Rule 2201
6 defines as real, quantifiable, surplus, permanent, and enforceable. 42 U.S.C. 7503; 40 C.F.R.
7 51.165(a)(3)(ii); Rule 2201 3.2, 4.1.1. A District Advisory on Federal Offset Equivalency states
8 that “[a]ll ATCs issued for new major sources or federal major modifications triggering offsets for
9 NOx or VOC are required to provide ERCs that are surplus *at time of ATC issuance* for the full
10 federal offset quantity as calculated in 40 CFR 51.165(a)(3)(ii)(J),” [italics added] further
11 iterating the surplus requirement.⁵⁷ These factors have not been confirmed at the time of the ATC
12 approval, therefore the ERC is not creditable.

13
14 The ERC C-1596-1 banking action from 1992 did not comply with this Rule 2201
15 requirement; specifically, the banking action did not comply with the "real, enforceable,
16 quantifiable, surplus, and permanent” requirements. The District states ERC C-1596-1 originates
17 from the shutdown of truck trailer coating operation, Fruehauf Trailer Corporation in 1992.⁵⁸
18 However, the Air District has not demonstrated that the emission reductions from the shutdown of
19 operations are real, permanent or surplus. Emission reductions are “real” if they result in actual
20 reductions in air emissions.⁵⁹ Permanence requires affirmation that the emission reductions are
21 “not temporary, intermittent, or short-lived”⁶⁰ The mere closure of Fruehauf Trailer Corporation
22 does not ensure these emissions did not shift to other facilities. Source shifting invalidates the
23 “real” and "permanent" requirements, and there is no indication the number of trucks in need of
24
25

26 ⁵⁶ Exhibit AA. Environmental Protection Agency Emission Reduction Banking Manual, p. 8.

27 ⁵⁷ Exhibit R. San Joaquin Valley Air Pollution Control District, Federal Offset Equivalency, District Advisory (2022).

28 ⁵⁸ Exhibit C, p. 64.

⁵⁹ See Exhibit AA, p. 10.

⁶⁰ *Id.*

1 coating lessened when the Fruehauf Trailer Corporation shutdown in 1992 and trucks did not
2 instead get coated at other facilities.⁶¹

3 In order to be surplus emissions, the closure must result in emission reductions not due to
4 another state or federal emission reduction requirement. Federal New Source Review determines
5 the surplus value at the time a source uses the ERC to satisfy the offsets requirement (time of
6 use). Rule 2201 part 4.8.1.1. While the specific truck trailer coating operation closed, the Air
7 District has not provided evidence that the closure was not a result of other rules, regulations,
8 control measures, or air quality plan requirements or that these emissions would have been
9 otherwise captured by rules and regulations adopted since the ERC was banked in 1992 nor have
10 they provided the rules and regulations created since 1992. Therefore, it cannot claim that the
11 ERC emissions are surplus. The ATC evaluates surplus at the time of use in Rule 4612 only for
12 single stage coating. Without showing what the company was permitted to spray in the original
13 permit, the District cannot show the more stringent coating requirements of Rule 4612 do not
14 discount the ERCs value. Therefore, surplus at time of use is not properly evaluated.

15
16
17 The Federal Offset District Advisory states that the District must demonstrate the ERCs
18 are valid in order to demonstrate that the program is valid under federal requirements. The
19 Advisory states, “As included in the District’s EPA-approved rule, the District is required to
20 demonstrate ongoing equivalency with the federal offsetting requirements on a programmatic
21 level, and, if the system is unable to demonstrate equivalency with federal requirements,
22 immediate and specified remedies are required to be enacted to ensure federal offsetting
23 obligations are met.”⁶² The failure to comply with Rule 2201 and demonstrating the validity of
24 the ERC at the time of the ATC approval indicates the ERC is not aligned with federal
25 requirements.
26

27 ⁶¹ Exhibit Q, CARB’s Review of the San Joaquin Valley Air Pollution Control District Emission Reduction Credit
28 System (2020), p. 29.

⁶² Exhibit R.

1 Kern Energy’s ERC for the Project lacks legitimacy in line with the pattern of illegitimacy
2 identified in the California Air Resources Board’s audit of the Air District’s ERC program. In
3 CARB’s 2020 audit of the District’s ERC program, it advised the District to be more transparent
4 to the public with regards to the ERC program and to review and revise underlying assumptions
5 as needed.⁶³ CARB also identified consistent inflation by the District in the assignment of ERCs,
6 issues with surplus at the time of ERC issuance, and source shifting.⁶⁴ The results of this audit
7 bolster the concern that the ERCs offsetting the VOC emissions from the Project is inauthentic.
8

9 **C. Modified Emission Units Are Improperly Excluded From The District**
10 **Analysis**

11 This Project is a major shift in how hydrogen is currently handled and used at the refinery,
12 as described in more detail in Section II. Excess hydrogen, rather than being flared, will now
13 either support the refining process or be piped into the chlorine scrubber and then the hydrogen
14 purification unit for processing. The hydrogen gas then would either be supplied to the fuel cells
15 or piped to bind with toluene and produce MCH, which will be stored until the hydrogen gas is
16 separated again through hydrogenation and supplied to the fuel cells. This requires an entirely
17 new continuous product flow. Even emission units that already operate at the refinery—such as
18 the platformer and reformer—will operate differently as they connect to other equipment to
19 produce electricity in addition to refining crude oil into petroleum-based fuels. However, the
20 District’s Engineer’s Report only evaluates “new” equipment, running counter to the District’s
21 own guidance for defining the scope of a permitted project.
22

23 The District acknowledges in its analysis of Kern Energy’s application that the Project
24 requires the installation of new equipment, including several fuel cells, a hydrogen purification
25 unit, a hydrogenation system, and a dehydrogenation system.⁶⁵ However, the District: (1) fails to
26

27 ⁶³ Exhibit Q, p. 2.

28 ⁶⁴ *Id* at 28-30.

⁶⁵ Exhibit C, pp. 2-3.

1 apply its own permit determination guidance in identifying the equipment that makes up the
2 Project; and (2) excludes emission units that will be “modified” by the Project. The exclusion of
3 the emission units that make up the full continuous process for processing, storing, and using
4 hydrogen means that the District’s analysis remains incomplete and likely underestimates
5 emissions from the complete permit unit.

6 7 **1. The Project Proposes a New Continuous Process for Hydrogen**

8 The District clarifies its New Source Review permit process in APR 1025: Permit Unit
9 Determination. This District guidance dictates how staff decides what equipment must be
10 analyzed in a permit. District staff must consider whether single or group emission units can
11 operate independently and whether they operate in a connected and continuous manner. APR
12 1025 defines a permit unit as a “single or group of emissions units that operate independently of
13 any other permitted unit. The permit unit includes all associated control device(s) and material
14 transport devices that serve the emissions unit or emission units.” (APR 1025, p. 1.) A continuous
15 process is defined as a “process involving more than one emission unit connected physically (by
16 conveyors, pipes, ducts, etc.) that operates as a single functioning unit to produce a product.”
17 (Ibid.)

18
19 APR 1025 instructs staff to combine all emission units that compose a continuous process
20 when evaluating a permit. (APR 1025, p. 2.) Even if the emission unit is shared with other
21 emitting equipment, it must be included “with each permit unit that it is shared.” (Ibid.) While
22 APR 1025 also states that there is “management discretion,” the guidance clearly demonstrates
23 the intent to evaluate continuous processes, such as the continuous process that will be created by
24 Kern Energy’s Project, in their entirety – not in smaller pieces.

25
26 Use of hydrogen in the refining process is nothing new, but the Project proposes a major
27 shift in how hydrogen moves through different equipment to produce an entirely new product
28

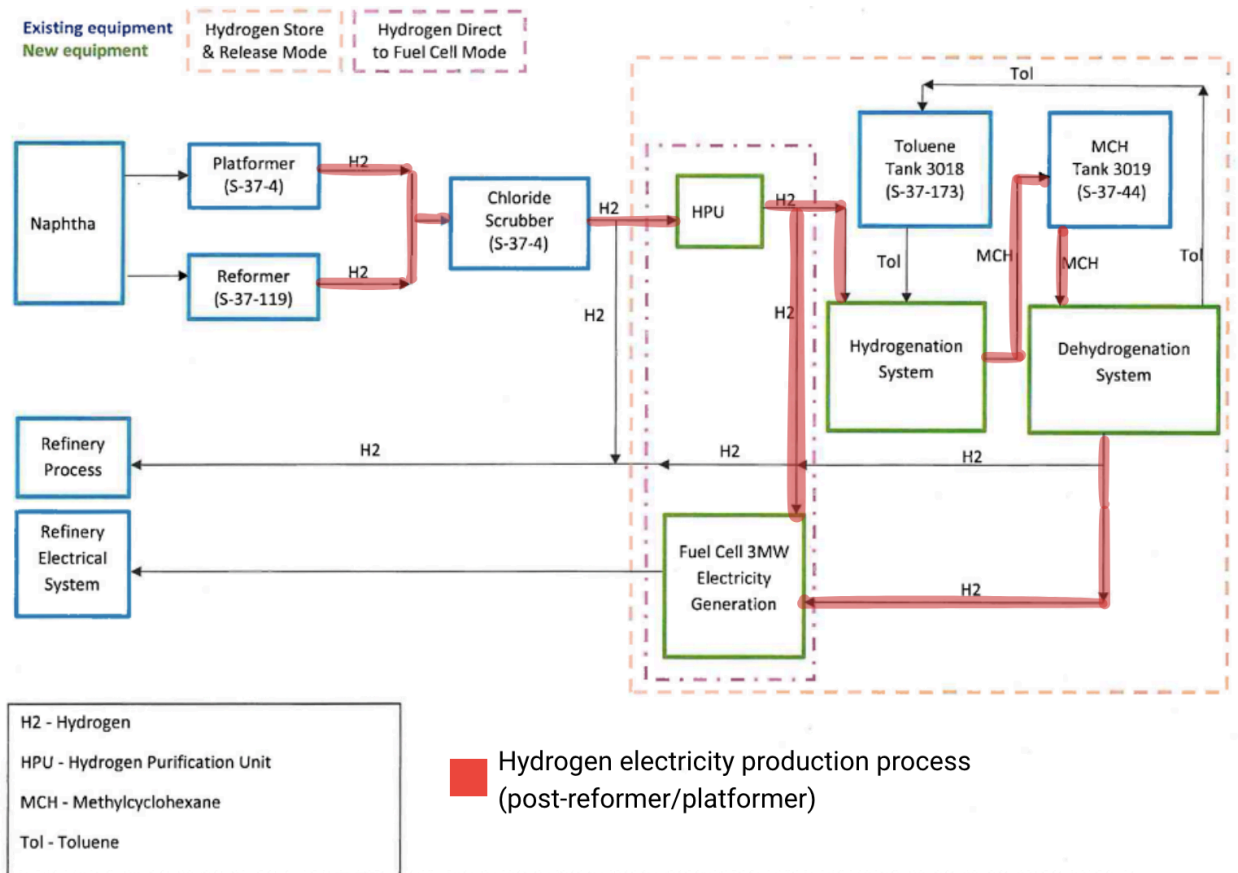


Figure 2. Annotated Hydrogen Energy Production Flow Diagram.

While we cannot be entirely confident this is a complete picture of the hydrogen recovery and energy production permit unit, the following is a non-comprehensive list of emission units and conveyances that must be considered by the District as part of the permit unit, per District guidance:

Name of Unit	Unit No.	Conveyances
Naptha Reformer	S-37-119	Piping to chloride scrubber (as well as to unionfiner and/or diesel hydrotreater (DHT) if there have been modifications)
Platformer	S-37-4	Piping to chloride scrubber (as well as to unionfiner and/or diesel hydrotreater (DHT) if there have been modifications)
Chloride Scrubber	S-37-4	Piping to hydrogen purification unit
Hydrogen purification unit	S-37-178	Piping to fuels cells and hydrogenation unit(s)

Toluene Tank	S-37-173	Piping to hydrogenation unit(s)
MCH Tank	S-37-44	Piping to dehydrogenation unit(s)
Hydrogenation Unit(s)	S-37-178	Piping to MCH tank
Dehydrogenation Unit(s)	S-37-178	Piping to toluene tank and fuel cells (as well as piping to refining system(s), if modified)
Hydrogen Fuel Cells	N/A	N/A

2. Modification of Emission Units

Rule 2201 establishes the District's New Source Review for new and modified stationary source projects to ensure the source will not interfere with attainment or maintenance of state and federal air quality standards. (Rule 2201 part 1.0; *see also* 40 C.F.R 51.165.) Rule 2201 defines a stationary source project as a "single permitting action involving the modification, addition or shutdown of one or more emissions units." (Rule 2201 part 3.44.) The definition of modification includes "[a]ny change in hours of operation, production rate, or method of operation of an existing emissions unit, which would necessitate a change in permit conditions," "[a]ny structural change or addition to an existing emissions unit which would necessitate a change in permit conditions," "[a]ddition of any new emissions unit which is subject to District permitting requirements," and "[a] Federal Major Modification."⁶⁷ (Rule 2201 parts 3.29.1.1; 3.29.1.2; 3.29.1.4; 3.20.1.6.) An emission unit is "an identifiable operation or piece of process equipment such as a source operation which emits, may emit, or results in the emissions of any affected pollutant directly or as fugitive emissions." (Rule 2201 part 3.18.)

⁶⁷ "Federal Major Modifications" are "any physical change in or change in the method of operation of a major stationary source that would result in: [a] significant emissions increase of a regulated NSR pollutant ... and [a] significant net emissions increase of that pollutant from the major stationary source." 40 C.F.R. § 51.165(a)(1)(v)(A), (B). "Any physical change in, or change in the method of operation of, a major stationary source of volatile organic compounds that results in any increase in emissions of volatile organic compounds from any discrete operation, emissions unit, or other pollutant emitting activity at the source shall be considered a significant net emissions increase and a major modification for ozone, if the major stationary source is located in an extreme ozone nonattainment area that is subject to subpart 2, part D, title I of the Act." 40 C.F.R. § 51.165 a)(1)(v)(F).

1 The ATC Permit approval involves a substantially different purpose—hydrogen electricity
2 generation—than the existing structures and equipment, which are focused on the production of
3 gasoline and other petroleum products.⁶⁸ While modern refineries do utilize hydrogen recovery,
4 the typical purpose of installing hydrogen recovery units is to assist with petroleum production by
5 breaking down or building up hydrocarbon chains. Here, however, the Engineer’s Report
6 expressly states that the proposed equipment is intended to deploy hydrogen to generate
7 electricity.⁶⁹ Currently, the use of hydrogen at the refinery is for petroleum production, so any
8 equipment that is required to recover hydrogen, process it, and supply it to the new fuel cells to
9 generate electricity would either be new or existing equipment with a changed “method of
10 operation.” (Rule 2201 part 3.29.1.1.)
11

12 At least these five additional emission units should have been included in the ATC Permit
13 evaluation because they make up the new continuous product flow for capturing, processing,
14 storing, and using hydrogen to produce electricity: (1) Naphtha Reformer; (2) Platformer; (3)
15 Chloride Scrubber; (3) Toluene Tank 3018; and (4) MCH Tank 3019.⁷⁰ Kern Energy’s hydrogen
16 energy Project requires the modification of each unit, per the above definition. The Project’s ATC
17 Permit evaluation is incomplete without the inclusion of these additional emission units.
18

19 The proposed Project will also require a “modification” of “the method of operation” for
20 the Naphtha Reformer and the Platformer that will result in net emission increases in VOCs from
21 the new continuous process to generate energy using hydrogen captured and scrubbed in these
22 two emission units. Before the proposed Project, hydrogen produced and captured as part of the
23 refining process would re-circulate through the Reformer and Platformer—as well as other
24 equipment—to cycle some hydrogen back into the refining process and send the remainder
25 through a flare for combustion. See e.g., **Figure 1**. The Project proposes a new process through
26

27 ⁶⁸ Exhibit C, p. 2.

28 ⁶⁹ *Ibid.*

⁷⁰ Exhibit C, p. 30.

1 which hydrogen will leave these emissions units to channel through new and modified equipment,
2 requiring a change in permit conditions.

3 The Chloride Scrubber will also change its “method of operation.” The 2025 ATC permit
4 for the chloride scrubber does not describe or anticipate use of this emission unit to support a
5 continuous process to advance hydrogen energy generation – in fact, the ATC makes no mention
6 of Kern Energy as a refinery that also generates electricity using hydrogen.⁷¹ Therefore despite
7 the recent permitting there will still be a change in the “method of operation” of the chloride
8 scrubber unit when it becomes part of the hydrogen product flow. Moreover, the new piping
9 between the chloride scrubber and the new hydrogen purification unit is an “[a]ddition of any new
10 emissions unit which is subject to District permitting requirements,” which is another
11 modification to the chloride scrubber. (Rule 2201 part 3.29.1.4.)
12

13 The timing of the chloride scrubber is also suspect. The permit for the emission unit was
14 submitted and approved between February and April 2025. Kern Energy submitted its application
15 for a Site Plan Review to the Kern County Planning and Natural Resources Department on March
16 13 2025.⁷² This demonstrates that when Kern Energy described the chloride scrubber as being
17 “designed to process the hydrogen gas downstream of the catalytic platformer and reformer,”⁷³ it
18 planned for downstream equipment to include emission units related to hydrogen electricity
19 generation. Given the amount of planning that goes into the equipment purchasing in major
20 operations such as petroleum refineries and the timing in permitting and installing the
21 equipment,⁷⁴ Kern Energy clearly anticipated that the chloride scrubber would be part of a future
22 hydrogen energy generation project. Nevertheless, there is no reference to this intent in the
23
24

25 ⁷¹ See Exhibit V. San Joaquin Valley Air Pollution Control District, Final Authority to Construct, Application No.
26 S-37-4-22 (April 8, 2025); Exhibit W. San Joaquin Valley Air Pollution Control District, Proposed Authority to
Construct, Application No. S-37-4-22 (February 19, 2025)

27 ⁷² Exhibit D.

28 ⁷³ Exhibit W, p. 2.

⁷⁴ Chloride removal in refineries, <https://www.digitalrefining.com/article/1000407/chloride-removal-in-refineries>
(accessed October 8, 2026).

1 Platformer/Chloride Scrubber ATC. Therefore, the 2025 chloride scrubber ATC fails to capture
2 the modification of the chloride scrubber required as a result of the hydrogen energy Project.

3 The Project will also require a change in the “method of operation” for the organic liquid
4 tanks that will hold toluene and MCH. The tanks will be used for entirely new functions—to store
5 MCH for the generation of hydrogen electricity.⁷⁵ The current purpose of either emission unit is
6 not clear from the ATC, but it is also possible that there is a further change in the method of
7 operation if toluene is moved in and out of the tank as part of the continuous hydrogen energy
8 generation process. Additionally, since the process will also require the generation of MCH, this
9 is also a “structural...addition to an existing emissions unit,” which is a modification under the
10 federal regulations. (Rule 2201 part 3.29.1.2.)
11

12 Lastly, there may even be further modifications that Petitioners are not aware of, as the
13 District does not provide a sufficiently detailed schematic. The schematic and Project description
14 provided in the Engineer’s Report exclude relevant details regarding the location and connections
15 to the platformer, chloride scrubber, reformer, and organic liquid storage tanks. Kern Energy
16 provided a map of the fuel cells and hydrogenation equipment in the Project Plot Plan submitted
17 to the County (**Figure 3**) that demonstrates that substantial piping will be required to connect the
18 fuel cells to other parts of the permit unit, which must be reflected in the permit determination.
19 Not only did Kern Energy fail to provide this information to the District, but the District also
20 failed to request it. This information is necessary to understand the operational changes to
21 existing equipment. Changes could include the reversal of transportation pathways, a change in
22 the substance transported through existing piping, or changes in connections.
23
24
25
26
27

28 ⁷⁵ Exhibit C, p. 2

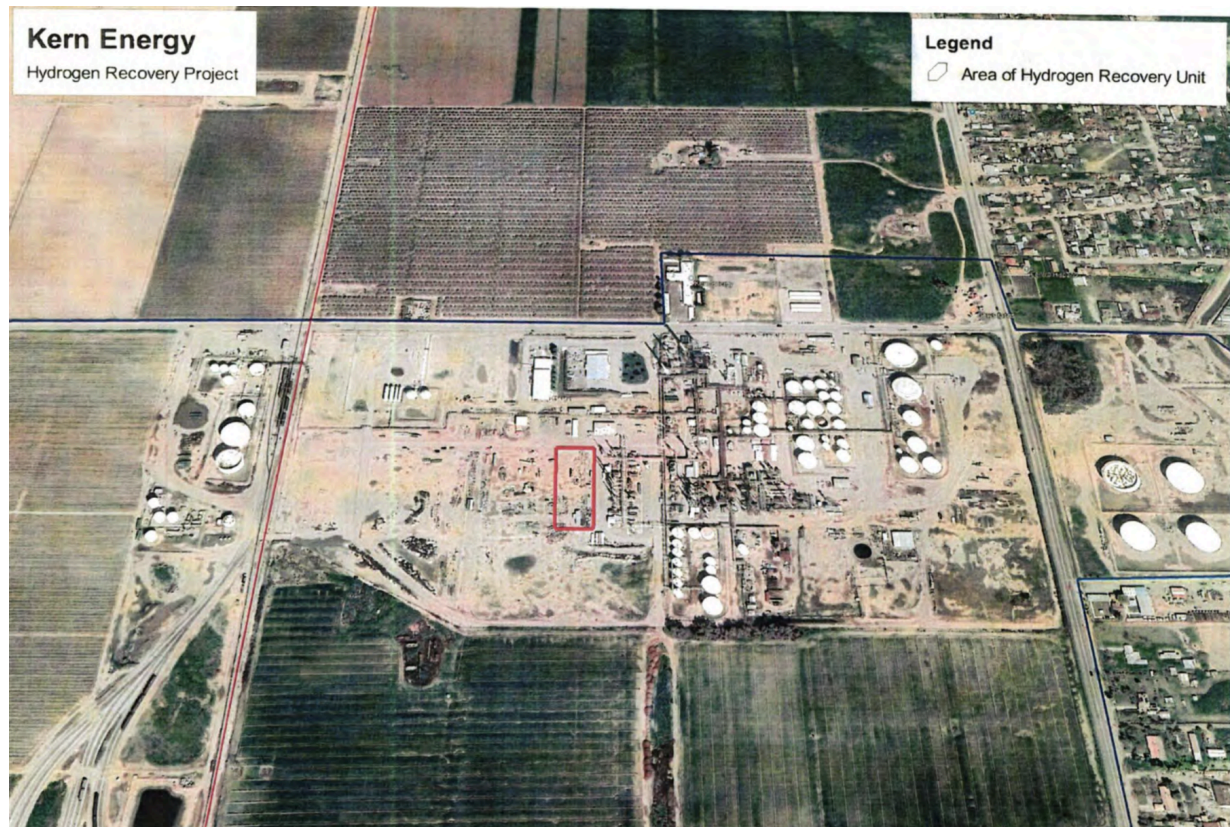


Figure 3. Map of Hydrogen Recovery Project, *Exhibit D*.

The District's exclusion of these five emission units is also inconsistent with the District's own permit determination diagram (**Figure 4**). Application of the diagram to each emission unit unequivocally results in the determination that they should be part of the same permit unit:

- The Naphtha Reformer can be operated independently and serves a continuous process. Thus, it must be included in the permit unit for the continuous process.
- The Platformer can be operated independently and serves a continuous process. Thus, it must be included in the permit unit for the continuous process.
- The Chloride Scrubber cannot be operated independently. Thus, it cannot be permitted separately.
- The Toluene Tank cannot be operated independently. Thus, it cannot be permitted separately.

- The MCH Tank cannot be operated independently Thus, it cannot be permitted separately.

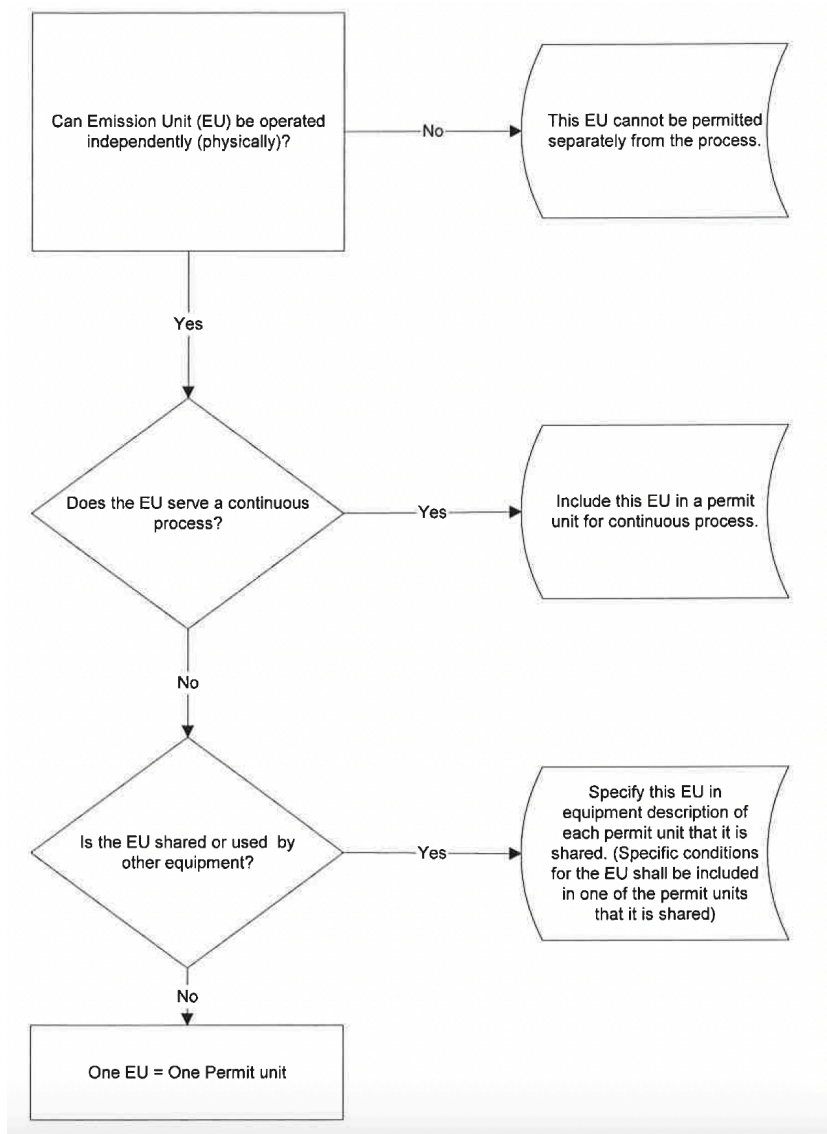


Figure 4. APR 1025 Permit Determination Diagram.

In conclusion, the District improperly excluded several emission units from the Project permit that would be modified pursuant to federal and state law and that will be part of a continuous process to generate electricity using hydrogen. The exclusion of modified emissions units has far-reaching implications for the District's emissions analysis and determinations because the resulting probable emissions increases (including fugitive emissions from pipelines)

1 from excluded emissions units are omitted from overall calculations and from the District's
2 BACT analysis, as explained below.

3 **D. The District Did Not Comply with Best Available Control Technology**
4 **Analysis Requirements**

5 Pursuant to Rule 2201, the District must comply with federal Best Available Control
6 Technology ("BACT") requirements. (Rule 2201 part 4.1.) BACT requirements are triggered on
7 a pollutant-by-pollutant basis when there is a major modification of a stationary source. Id. BACT
8 requires the adoption of the most stringent limitation or control technique of the following:

- 9
- 10 (1) Achieved in practice for such class or category of source;
 - 11 (2) Contained in any State Implementation Plan approved by the
12 Environmental Protection Agency for such class or category of
13 source. A specific limitation or control technique shall not apply if
14 the owner of the proposed emissions unit demonstrates to the
15 satisfaction of the APCO that such a limitation or control
16 technique is not presently achievable; or
 - 17 (3) Contained in an applicable federal New Source Performance
18 Standard; or
 - 19 (4) Any other emission limitation or control technique, including
20 process and equipment changes of basic or control equipment,
21 found by the APCO to be cost effective and technologically
22 feasible for such class or category of sources or for a specific
23 source.

24 (Rule 2201 part 3.10.) Control technologies for new and modified sources are compiled by the
25 District in a BACT Clearinghouse.⁷⁶ (APR 1305, page 4.)

26 In its Engineer's Review, the District recognized that "BACT is triggered for VOC for all
27 emissions units in the project for which there is an emissions increase."⁷⁷ But, the District failed
28 to comply with BACT requirements for each emission unit.

⁷⁶ District Policy APR 1305 requires the District to take a proactive approach to updating the BACT Clearinghouse and to take into consideration new control technologies or emission limitations that are found to be technologically feasible for a class or category of sources. District Policy 1305 part VI.A. While the District's failure to take this proactive approach is beyond the scope of this appeal, Petitioners urge the District to comply with its guidance as an out-dated Clearinghouse contributes to inadequate BACT Analysis.

⁷⁷ Exhibit C, p. 16.

1 First, the BACT analysis is incomplete without the inclusion of all emission units that are
2 part of the hydrogen energy product flow. Due to this exclusion, not all top-down analysis has
3 been completed except for pursuant to BACT Guideline 7.2.2 and 7.2.3.⁷⁸ For example, the
4 District failed to complete a Top-Down BACT Analysis of Mobile Degassing Operation for
5 Storage Tanks and Pipelines⁷⁹ despite the Project involving two organic liquid storage tanks.

6
7 Additionally, in the Top-Down BACT Analysis that was conducted, the District failed to
8 analyze—much less require—a more stringent, technologically feasible method for Pumps and
9 Compressors. The Engineer’s Report failed to consider that a more stringent control option was
10 identified by the Bay Area Air Quality Management District (“BAAQMD”).⁸⁰ The BAAQMD
11 has adopted guidelines that identify 100 ppm as a technologically feasible and cost-effective
12 emissions limitation for VOC leakage from pumps and compressors at petroleum refineries.
13 Nevertheless, the District’s Top-Down BACT Analysis only considered a fugitive VOC leakage
14 limitation of 500 ppm and made no reference to the BAAQMD control technique.⁸¹ The District’s
15 BACT analysis did not consider the cost-effectiveness of a 100-ppm limitation and thus violated
16 Rule 2201 and District Policy APR 1305.

17
18 Lastly, the District’s BACT Analysis was deficient because it relied on inaccurate VOC
19 emissions calculations, as explained above.

20 Because the District failed to comply with BACT requirements, the ATC Permit was
21 improperly issued.

22 VI. CONCLUSION

23
24
25 ⁷⁸ *Id.* at pp. 44-45.

26 ⁷⁹ Exhibit X. San Joaquin Valley Air Pollution Control District, BACT Guidance for Petroleum Refineries and
Chemical Plants, p. 7.1.8.

27 ⁸⁰ Exhibit Y. Bay Area Air Quality Management District Best Available Control Technology (BACT) Guideline
Petroleum Refinery Fugitive Emissions–Pumps; Exhibit Z. Bay Area Air Quality Management District Best
Available Control Technology (BACT) Guideline Petroleum Refinery Fugitive Emissions–Compressors.

28 ⁸¹ Exhibit C, Appendix E, BACT Analysis.

1 Based on the foregoing, the ATC Permit was improperly issued and revocation is thus
2 both required and justified. Kern County has some of the worst air quality in the country.⁸² CARB
3 has identified the Arvin/Lamont area as one of areas in California most disproportionately
4 impacted by air pollution exposure.⁸³ Adherence to all District Rules in permitting actions within
5 the Arvin/Lamont CERP boundaries is legally required and necessary to protect the health and
6 safety of residents who live nearby. Residents of Fuller Acres, Lamont, and the surrounding
7 communities deserve better than the District's woefully inadequate regulatory analysis.
8

9
10 Dated: October 9, 2026

LEADERSHIP COUNSEL FOR
JUSTICE AND ACCOUNTABILITY

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12
13 By: /s/ Vivyana Prado

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Michael Claiborne

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16 184 COMMUNITY ACTION
GROUP

17
18 Dated: October 9, 2026

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23 Attorneys for Petitioner
24 COMITÉ PROGRESO DE
LAMONT

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27 ⁸² American Lung Association, Most Polluted Cities (2026),
<https://www.lung.org/research/sota/city-rankings/most-polluted-cities> (accessed October 9, 2026).

28 ⁸³ Exhibit A, p. 5.