

ENGINEERING EVALUATION AUTHORITY TO CONSTRUCT

Facility Name: Mountain Empire Unified School District

Application Number: APCD2026-APP-009184

Equipment Type: Retail Gas Station – 26C; Increase annual usage from 30,000 gallons per year to 50,000 gallons per year

Facility ID: APCD1982-SITE-02075

Equipment Address: 3291 Buckman Springs Rd
Pine Valley, CA 91962

Facility Contact: Charles Townsend
Company Affiliation: Director of Transportation
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Permit Engineer: John Lee

X

Allison Weller
Senior Engineer

Senior Engineer:

1.0 BACKGROUND

- 1.1 Type of Application – This application is for a modification to an existing non-retail gas station equipped with Phase I and NVR-1 controls.

Proposed modification includes:

- 1) Increasing the annual gasoline throughput from 30,000 gallons to 50,000 gallons.

- 1.2 Permit History –

Application ID	Description
APCD1986-APP-850979	Initial application
APCD2020-APP-006179	Install NVR-1, increase gasoline throughput from 2,000 gallons per month to 2,500 gallons per month
APCD2022-APP-007164	Replacement of dispensers
APCD2026-APP-009184	Current application; increase gasoline throughput from 30,000 gallons per year to 50,000 gallons per year

- 1.3 Facility Description – This is a non-retail gasoline dispensing facility at a school.

- 1.4 Other Background Information – N/A

2.0 PROCESS DESCRIPTION

- 2.1 Equipment Description –

Current Equipment Description:

Gasoline Dispensing Facility (Non-Retail):

Two (2) nozzles, as listed in the Executive Order (E.O.) specified below, with one (1) grade per nozzle;

Approved low permeation hose assembly and nozzles per ARB E.O. NVR-1;

Phase I EVR: Two point OPW Phase I EVR system per ARB E.O. VR-102;

Tank: One (1) 20,000 gallon split (10,000 gallons gasoline/10,000 gallons diesel) underground storage tank.

Gasoline Throughput Limit: 30,000 gallons/year

Proposed Equipment Description:

Gasoline Dispensing Facility (Non-Retail):

Two (2) nozzles, as listed in the Executive Order (E.O.) specified below, with one (1) grade per nozzle;

Approved low permeation hose assembly and nozzles per ARB E.O. NVR-1;

Phase I EVR: Two point OPW Phase I EVR system per ARB E.O. VR-102;

Tank: One (1) 20,000 gallon split (10,000 gallons gasoline/10,000 gallons diesel) underground storage tank.

Gasoline Throughput Limit: 50,000 gallons/year

- 2.2 Process – This is a facility equipped with gasoline tanks and the associated equipment to receive, store and dispense gasoline.

- 2.3 Emissions Controls – This facility is equipped with Phase I and NVR-1 controls.

- 2.4 Attachments – Refer to applicable Executive Order and/or Installation, Operation and Maintenance Manual for supporting information.

3.0 EMISSIONS

- 3.1 Emission Estimate Summary – The District’s standard calculation method, L02-G11, is used. The emission estimate summary is shown in the following table:

Table 1: VOC PTE

Emission Rate	Post	Pre	d(PTE)
lb TOG/hour loading (MAX)	1.50	1.50	0
lbs TOG/day	0.044	0.026	0.018
lb TOG/year	16.1	9.7	6.4
Tons TOG/year	0.0081	0.0048	0.0032

Table 2: TAC PTE

Gasoline Speciation	CAS	Post PTE		Pre PTE		d(PTE)	
		lb/hour	lb/year	lb/hour	lb/year	lb/hour	lb/year
Benzene	71432	6.0E-03	7.9E-02	6.0E-03	4.8E-02	2.7E-06	3.2E-02
Ethyl Benzene	100414	1.5E-03	5.4E-02	1.5E-03	3.2E-02	2.2E-06	2.1E-02
Hexane	110543	2.1E-02	2.4E-01	2.1E-02	1.4E-01	7.6E-06	9.4E-02
Toluene	108883	1.7E-02	3.5E-01	1.7E-02	2.1E-01	1.3E-05	1.4E-01
Xylene	1330207	6.0E-03	1.1E-01	6.0E-03	6.9E-02	4.3E-06	4.6E-02

- 3.2 Emission Estimate Assumptions –
1. Maximum hourly emissions are based on the worst case scenario: during a given hour, the facility is dispensing gasoline while an empty storage tank(s) is being filled to its full capacity. Actual maximum hourly emissions are expected to be lower, as tanks are not allowed to be filled past 90% and most deliveries do not fill an entirely empty tank.
 2. Average hourly emissions are based on the projected annual gasoline throughput (gallons per year), assuming continuous operation over 365 days per year and 24 hours per day.
- 3.3 Emission Calculations – See the attached calculation sheet.
- 3.4 Attachments – VR Emission Calculations

4.0 APPLICABLE RULES

4.1 Prohibitory Rules

Rule 61.3 – Transfer of Volatile Organic Compounds into Stationary Storage Tanks

The facility will be subject to Rule 61.3.1, which is more stringent than this rule. Compliance with 61.3.1 is expected as outlined below.

Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks

Conditions are included in the ATC and PTO to further ensure compliance.

The CARB certified Phase I EVR system is installed. The Authority to Construct (ATC) and Permit to Operate (PTO) will incorporate conditions pertaining to the allowable replacement parts and identification, installation, maintenance, repairs, operation, required testing and recordkeeping.

Rule 61.4 – Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks

The facility will be subject to Rule 61.4.1, which is more stringent than this rule. Compliance with 61.4.1 is expected as outlined below.

Rule 61.4.1 – Transfer of Gasoline from stationary underground storage tanks into vehicle fuel tanks

Except as otherwise provided in Section (b), this rule is applicable at the following gasoline dispensing facilities where gasoline is transferred from stationary underground storage tanks into any motor vehicle fuel tank with a capacity greater than 5 gallons (18.9 liters):

(2) Any non-retail gasoline dispensing facility where:

- (i) Gasoline is dispensed into motor vehicle fuel tanks from any stationary underground storage tank with a capacity greater than 550 gallons (2,080 liters), and*
- (ii) More than 2,000 gallons (7,570 liters) of gasoline are transferred into motor vehicle fuel tanks in any calendar month on the parcel of land where the gasoline dispensing facility is located. This parcel of land includes any adjoining parcels of land under common ownership or entitlement to use.*

(b) Exemptions

(5) Transfer of gasoline from any stationary underground storage tank into a vehicle fuel tank at any non-retail gasoline dispensing facility where 95 percent of vehicles refueled are equipped with Onboard Refueling Vapor Recovery (ORVR) provided that the Phase II vapor recovery system, if previously installed, has been properly removed. Any person claiming this exemption shall maintain records of the make, model year, vehicle identification number and any other information indicating whether the vehicle is equipped with ORVR, for all vehicles refueled at such facility. These records shall be maintained on site for at least three years and be made available to the District upon request.

Permit conditions include these requirements. Compliance is expected.

Rule 61.5 – Visible Emissions Standards for Vapor Control Systems

No person shall discharge, or allow to be discharged, into the atmosphere from any vapor control system used to meet the requirements of Rules 61.1, 61.2, 61.3, 61.4 or 61.7, air contaminants in such a manner that the opacity of the emission is:

- (1) Greater than 10% for a period or periods aggregating more than one (1) minute in any 60 consecutive minutes; or*
- (2) Greater than 40% at any time.*

Compliance is expected given the nature of the process.

Rule 61.6 – NSPS Requirements for Storage of Volatile Organic Compounds

Any person owning or operating any source subject to the provisions of any federal New Source Performance Standard (NSPS), the enforcement of which has been delegated to

the San Diego County Air Pollution Control District must, in addition to complying with Rules 61.1 through 61.5 and 61.7 and 61.8, comply with Regulation X.

This source is not subject to NSPS requirements.

Rule 61.7 – Spillage and Leakage of Volatile Organic Compounds

This rule is applicable to the spillage and fugitive liquid leaks associated with the transfer and storage of volatile organic compounds.

(1) Except as provided for in Section (b) above, no person shall:

- (i) Spill, allow the spillage or cause spillage of such compounds during the disconnection of fittings used for transfer, except for spillage which would normally occur with equipment handled in a manner designed to minimize spillage.*
- (ii) Use or allow equipment to be used to transfer fuel unless the equipment is free of defects and properly maintained in a manner designed to minimize spillage, and*
- (iii) No person shall allow fugitive liquid leaks along the liquid transfer path, including any storage tank.*

The facility is expected to comply. Conditions will be added to the permit to limit spillage and fugitive liquid leaks. Compliance with Rule 61.7 will be verified during inspections, and performance tests will be required on an annual basis in order to verify the vapor recovery systems comply with Rule 61.7.

Rule 61.8 – Certification Requirements for Vapor Control Equipment

This rule is applicable to all vapor recovery systems installed after July 1, 1976, which are subject to the certification requirements of Division 26, Part 4, Chapter 3, Article 5, of the State of California Health and Safety Code.

(c) STANDARDS

No person shall install, provide, sell or sell for use within the County of San Diego a gasoline vapor control system or system component subject to the certification requirements of Division 26, Part 4, Chapter 3, Article 5, of the State of California Health and Safety Code unless it has been certified by the California Air Resources Board.

Complies, the facility is equipped with a Phase I vapor recovery system certified per CARB Executive Order VR-102 and a Phase II vapor recovery system certified per CARB Executive Order NVR-1.

4.2 New Source Review (NSR)

Rule 20.1 New Source Review – General Provisions

This rule is applicable to any new or modified stationary source or emission unit if the stationary source is not a major stationary source. A federal major stationary source, as defined in Rule 20.1(c)(30), means “any emission unit, project or stationary source which has, or will have after issuance of an Authority to Construct or modified Permit to Operate, an aggregate potential to emit one or more air contaminants in amounts equal to or greater than any of the emission rates listed below in Table 20.1 –5b”.

TABLE 20.1 – 5b
Federal Major Stationary Source

<u>Air Contaminant</u>	<u>Emission Rate (Ton/yr)</u>
Fine Particulate Matter (PM _{2.5})	100
Particulate Matter (PM ₁₀)	100
Oxides of Nitrogen (NOx)*	
marginal or moderate	100
serious	50
severe	25
extreme	10
Volatile Organic Compounds (VOC)*	
marginal or moderate	100
serious	50
severe	25
extreme	10
Oxides of Sulfur (SOx)	100
Carbon Monoxide (CO)	100
Lead (Pb)	100

* based on EPA's ozone nonattainment designation for the San Diego Air Basin in 40 CFR 81.305

District Rule 20.1 outlines the terms and definitions for New Source Review.

NSR is applicable since there is an increase in emissions of criteria/precursor air contaminants. The aggregate VOC potential to emit (PTE) is less than 25 tons per year, therefore the source is not a major stationary source as given in Table 20.1-6 and is subject to the non-major source requirements of Rule 20.2.

Rule 20.2 – Non-Major Stationary Sources

(d)(1)(i) BACT for New or Modified Emission Units

Any new or modified emission unit which has any increase in its potential to emit particulate matter (PM₁₀), oxides of nitrogen (NOx), volatile organic compounds (VOC) or oxides of sulfur (SOx) and which unit has a post-project potential to emit of 10 pounds per day or more of PM₁₀, NOx, VOC, or SOx shall be equipped with Best Available Control Technology (BACT) for each such air contaminant.

The potential to emit for VOC is less than 10 pounds per day. However, the facility is equipped with CARB-certified Phase I and Phase II NVR-1 systems, which are considered BACT and T-BACT.

(d)(2)(i) AQIA for New or Modified Emission Units

For each project which results in an emissions increase equal to or greater than any of the amounts listed in Table 20.2 - 1, the applicant shall demonstrate to the satisfaction of the Air Pollution Control Officer through an AQIA that the project will not:

- (A) cause a violation of a state or national ambient air quality standard anywhere that does not already exceed such standard, nor*
- (B) cause additional violations of a national ambient air quality standard anywhere the standard is already being exceeded, nor*

(C) cause additional violations of a state ambient air quality standard anywhere the standard is already being exceeded, except as provided for in Subsection (d)(2)(v), nor (D) prevent or interfere with the attainment or maintenance of any state or national ambient air quality standard.

TABLE 20.2 - 1
AQIA Trigger Levels

<u>Air Contaminant</u>	<u>Emission Rate</u>		
	<u>(lb/hr)</u>	<u>(lb/day)</u>	<u>(tons/yr)</u>
Particulate Matter (PM ₁₀)	---	100	15
Fine Particulate Matter (PM _{2.5})	---	67	10
Oxides of Nitrogen (NO _x)	25	250	40
Oxides of Sulfur (SO _x)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6

The facility emissions are below the levels listed in Table 20.2-1, therefore an AQIA is not required.

This subsection and all subsequent provisions ((d)(3) and (d)(4)) of Rule 20.2 do not apply because emissions fall below the thresholds requiring an AQIA as summarized in Table 20.2-1 and (d)(4) (VOC emissions increase of 250 pounds per day or 40 tons per year).

4.3 Toxic New Source Review- Rule 1200

Rule 1200 applies to any new, relocated or modified emission unit which results in any increase in emissions of one or more toxic air contaminant(s), and for which an Authority to Construct or Permit to Operate is required. This rule requires health risks be reviewed to ensure the risks are below one in one million for cancer (with T-BACT installed), and that the health hazard index is less than one from chronic non-cancer and acute toxic air contaminants.

The applicant has proposed an increase in the annual gasoline throughput, which results in an increase in toxic air contaminant (TAC) emissions. Therefore, Rule 1200 applies. The screening analysis indicates that the increases in health risk are below the Rule 1200 thresholds, as shown in the table below.

Screening HRA Results		Threshold	Number of Sources: 1
Resident Cancer Risk:	0.0	10.0	Pass
Resident Chronic HHI:	0.0	1.0	Pass
Worker Cancer Risk:	0.0	10.0	Pass
Worker Chronic HHI:	0.0	1.0	Pass
Acute HHI:	0.0	1.0	Pass



Figure 1: Aerial map and equipment location. Equipment is on school property (Mountain Empire Highschool).



Figure 2: Residential receptor is approximately 77.59 meters.

4.4 Air Toxics Hot Spots - Rule 1210

This amended Rule 1210 in general requires that if the owner or operator of a facility is notified by the District that the most recent approved Health Risk Assessment (HRA) shows that the facility's health risks are equal to or greater than the significant risk thresholds, as specified in Amended Rule 1210, the facility owner or operator is required, within 180 days of receipt of such notice from the District, to submit a RRAP application to the District for completeness review and approval (Rule 1210(e)(1)).

The site has not previously triggered a refined HRA. It is not expected to exceed the significant risk thresholds, therefore, it is not subject to Rule 1210.

4.5 AB3205

AB3205 requires a public notice prior to issuing an Authority to Construct for equipment emitting hazardous air contaminants at a facility within 1000 feet of a school.

Mountain Empire Highschool is within 1,000 ft of the emission source; therefore AB3205 notification is required.

4.6 NESHAPS, NSPS and ATCMs

NESHAP: CFR Part 63, Subpart CCCCCC, NESHAP for Area Source Categories: Gasoline Dispensing Facilities

This NESHAP is applicable to all gasoline dispensing facilities. Date of Promulgation: January 1, 2008

All of the applicable requirements for this regulation are currently met by the EVR Phase I and Phase II equipment and operating practices required under the various CARB Executive Orders and SDAPCD District Rules 61.3.1 and 61.4.1 for gasoline dispensing facilities.

NSPS: None

ATCM: Subchapter 7.5, Section 93101 Benzene Airborne Toxic Control Measure – Retail Service Stations

Complies, CARB Certified Phase I and Phase II NVR-1 are installed.

4.7 California Environmental Quality Act (CEQA) –

CEQA requires government agencies, such as air districts, to consider the environmental consequences of their actions before approving plans and policies or committing to a course of action on a project

The project being permitted is exempt from the requirements of the California Environmental Quality Act (CEQA) due to its designation as a ministerial action. Pursuant to CEQA Guidelines Section 15268, ministerial projects are not subject to environmental review because they involve decisions that are guided by fixed standards or regulations, with no allowance for discretionary judgment. The scope of this project falls within routine procedures that are strictly governed by established regulation, thereby precluding any need for subjective evaluation or interpretation. Consequently, the project is exempt from CEQA review.

4.8 Title V – This is not a Title V facility.

4.9 Attachments – N/A.

5.0 RECOMMENDATION & CONDITIONS

It is expected that the gdf will comply with all of the applicable requirements, and it is recommended that an ATC be issued with the current permit conditions

6.0 RECOMMENDED CONDITIONS

It is expected that the gdf will comply with all of the applicable requirements, and it is recommended that an ATC be issued with the current permit conditions, APCD2020-CON-001755.