ENGINEERING EVALUATION
AUTHORITY TO CONSTRUCT

Facility Name:	70th Street Chevron (Permitted as Sunco Fuel)
Application Number:	APCD2023-APP-007777 for a new E85 station, APCD2023-APP-007778 for modification of existing GDF
Equipment Type:	New E85 Tank – 26C Installing a new underground E85 storage tank, four (4) E85 nozzles Modification of an existing Gas Dispensing Facility-26A
Facility ID:	APCD1981-SITE-00779
Equipment Address:	7006 El Cajon Bl, San Diego, CA 92115
Site Phone:	619-234-7989
Facility Contact:	Jesse Kirk
Company Affiliation:	MIT Engineering & Construction, Inc
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10/19/2023

Senior Engineer:

X Nicholas Horres

Nicholas Horres
Senior Engineer
Signed by: NHorres

1.0 BACKGROUND

1.1 Type of Applications –

70th Street Chevron, permitted as Sunco Fuel, a retail gasoline service station, is applying for permits for a new E85 station and a modification of an existing Gasoline Dispensing Facility to replace the majority of the equipment (tanks, dispensers and emission controls) with similar. Hence this engineering evaluation consists of two applications for an E85 dispensing facility and a gasoline dispensing facility.

E85: APCD2023-APP-007777:

A permit application to install one 12,000 gallons underground storage tank (UST), and dispensing equipment to store and dispense E85 fuel. The new installation will include four (4) new nozzles and the connecting piping to connect the new UST to the E85 fuel dispensers. Phase I is proposed and shall be installed for the emissions control purpose. E85 is exempt from Phase II requirements as per CARB (Executive Order G-70-212), the District Rule 61.4 (b)(6) and Rule 61.4.1 (b)(6)). The estimate annual throughput is 1,200,000 gallons and monthly throughput is 100,000 gallons.

Gasoline: APCD2023-APP-007778:

In an addition, the applicant is applying for an ATC to install replacement gasoline dispensing equipment with one 20,000 gallons and one 8000 gallons gasoline underground storage tanks, connecting piping to connect the new USTs, and eight (8) existing nozzles to dispense gasoline. The facility will install new Phase I, Phase II systems and utilize a Healy carbon canister for the emission control of their gasoline dispensing operation. The estimated annual throughput for gasoline is 2,400,000 gallons and monthly throughput is 200,000 gallons.

Installation, operation, and maintenance conditions will be incorporated into the ATC and PTO to ensure compliance with all requirements, regulations and standards in the applicable CARB Executive Order, relevant Installation, Operation and Maintenance Manual (IOMs) and District Rules and Regulations.

1.2 Permit History –

These are initial ATC applications for a new E85 permit and an existing gasoline dispensing facility with an active PTO:

Record ID	Status	Opened Date	Description
APCD2023-APP-007777	Open	5/25/2023	New E85 station
APCD2023-APP-007778	Open	5/25/2023	Modify existing gasoline dispensing equipment: storage tanks replacement, new Phase I and Phase II, ISD system: Veeder Root.
APCD2008-PTO-007244	Active	7/31/2009	Gasoline Dispensing Facility (Retail) : Eight (8) nozzles, as listed in Exhibit 1 of the Phase II Executive Order specified below, with three (3) grades per nozzle

			Phase II VRS: Healy Vacuum Assist per ARB EO VR-202-H Flow limiter installed on fueling point 1 ISD System: FFS INCON Software Version 1.1.0 CAS Configuration: Vertical Position per Figure 2B-2, Exhibit 2 of ARB EO VR-202-H Phase I VRS: Two Point OPW per ARB EO VR-102-E Tanks: Two (2) 10,000 gallon, gasoline, underground
APCD2021-APP-006631	Approved	2/11/2021	Modification Application: Healy to Balance
APCD2008-APP-987265	Approved	9/30/2008	Phase II EVR upgrade
APCD2004-APP-982324	Approved	12/15/2004	MAL PO#7244 - PHASE I EVR UPGRADE
APCD2004-APP-981373	Approved	5/26/2004	- PH-II upgrade: pre-ORVR Healy/Franklin VP-1000 (G-70-183-AA) to ORVR compatible system (G-70-191-AA) Le. replace Healy 600 nozzles with Healy 800 nozzles and witness vapor valve integrity test (per 'reduced fee' agreement with New West); -retain existing pre-EVR PH-I; will upgrade at later date prior to 01-April-04 number of fueling points remains the same at 08
APCD2000-APP-975202	Approved	7/1/2000	Replace Phase II system with Healy VP1000
APCD1998-APP-972624	Approved	12/11/1998	To install new dispensers and change one tank to Diesel
APCD1997-APP-970395	Approved	9/23/1997	Install turbine sumps and boots on flex lines
APCD1992-APP-910718	Approved	1/3/1992	To add six nozzles at this site

1.3 Facility Description –
This facility is a an existing retail gasoline service station, which stores, and dispenses E85 and gasoline to mobile vehicles.

1.4 Other Background Information –
There is no record on permit denial, legal settlement, or nuisance complaint associate with this facility and this is not a Title V facility. Nonetheless, the facility was issued the

following list of Notice of Violations, Notice to complies and Notice to Repairs, which are resolved and closed.

Record ID	Status	Opened Date	Description
APCD2022-NOV-000976	Closed - Paid	11/29/2022	Permit Condition #24: Failure to conduct the annual vapor recovery tests as referenced in Attachment L at least once every calendar year within sixty (60) calendar days prior to the permit expiration.
APCD2022-NOV-000822	Closed - Paid	10/19/2022	failed to conduct annual vapor recovery tests. The testing window was the 60 days prior to the permit expiration. The District notes that the vapor recovery testing was conducted late in February of 2023 and passed.
APCD2021-NOV-000065	Deferred-Small Penalty	1/27/2021	The site had installed and operated a Phase II vapor recovery system without written authorization, in violation of District Rule 10. The contractor who performed the installation also received a NOV for installing the unauthorized vapor recovery system. The District notes that the District's permitting process provides several points for important submittals and communications between the owner/contractor and the District, all of which were missed in this case.
APCD2020-NTC-00072	Closed-Certified Compliance	2/28/2020	R21#17, Failure to maintain and promptly record all info relating to the alarm events on Attachment I, ISD alarm tests (warnings clears, etc.) during winter fuel months are not logged/ recorded.
APCD2020-NTR-00056	Closed	2/28/2020	Nozzles assembly seal ring damaged/ partially missing.
APCD2020-NOV-000181	Closed - Paid	2/26/2020	the annual vapor recovery test was not conducted before the permit's expiration date.
APCD2018-NTC-00297	Closed-Certified Compliance	10/29/2018	R10(C) Failure to maintain a current copy of PTO with expired date.

			R21#25, R61.4.1 (g)(7) Failure to maintain monthly flow rate checks for each grade point of gasoline.
APCD2016-NTC-00191	Closed-Certified Compliance	9/12/2016	Rule 21, PTO condition(1), EO VR-102, Operating an OPW EVR Phase I system that is not maintained in accordance with EO VR-102. The 91 fill and vapor spill box mounting rings are loose. Rule 10(C) Failure to post the PTO.
APCD2016-NTR-00120	Closed	9/1/2016	All fueling points, no grounding points are installed and labelled on any dispenser, but should be on each dispenser. No dispenser has prominently displayed nozzle operating instructions with the statement, “Do not top off” and toll free complaint phone number.
APCD2015-CAR-00020	Closed	4/16/2015	R21,#34, R61.4.1(f)(2), By failing to pass annual test within 45 calendar days prior to 7/4/2014.
APCD2015-NTR-00018	Open	4/16/2015	Vapor cap gasket missing, ink cartridge reports are unreadable, hoses shall not have wire strands visible and shall be replaced.
APCD2015-NTC-00078	Closed-Certified Compliance	4/14/2015	R21, #32, R61.3.1(g)(4), R61.4.1(g)(4), By failing to maintain monthly gasoline throughput records on District Attachment C or an equivalent form. Specifically, failing to maintain monthly throughput records on site.

History of change of ownership of the facility

Record ID	Status	Opened Date	Description
APCD2008-OWC-987556	A	12/1/2008	OWC PO 7244 OLD OWNER EXXON #1036 NEW OWNER SUNCO FUEL
APCD1998-OWC-972623	A	12/11/1998	OWC PO# 7244
APCD1996-OWC-951105	A	6/10/1996	OWC PO#007244
APCD1994-OWC-940105	A	8/11/1994	OWNERSHIP CHANGE PO#007244

2.0 PROCESS DESCRIPTION

2.1 Equipment Description –

APCD2023-APP-007777
E85 Dispensing Facility (Retail):
Four (4) nozzles, as listed in Exhibit 1 of the Phase II Executive Order (E.O.) specified below, with one (1) grade (E85) per nozzle;
Phase I VRS: OPW per ARB EO VR-102;
Phase II VRS: Exempt per Rule 61.4.1 (b)(6);
Tanks: One (1) 12,000 gallon E85, underground;
E85 Throughput Limit: 1,200,000 gallons per year (consecutive twelve (12) month period) and 100,000 gallons per month.

APCD2023-APP-007778
Existing Equipment Description:
Gasoline Dispensing Facility (Retail): Eight (8) nozzles, as listed in Exhibit 1 of the Phase II Executive Order specified below, with three (3) grades per nozzle
Phase II VRS: OPW balance per ARB EO VR-204;
ISD System: Compliant FFS INCON Software Version;
CAS Configuration: Vertical Position per Figure 2B-2, Exhibit 2 of ARB EO VR-202;
Phase I VRS: Two Point OPW per ARB EO VR-102;
Tanks: Two (2) 10,000 gallon, gasoline, underground.

Updated Equipment Description:
Gasoline Dispensing Facility (Retail) (BACT): Eight (8) nozzles, as listed in Exhibit 1 of the Phase II Executive Order (E.O.) specified below, with three (3) grades per nozzle;
Phase II VRS: Balance per ARB E.O. VR-204;
ISD System: Compliant Veeder-Root Version;
CAS Configuration: Vertical Position per Exhibit 2B-16 of ARB E.O. VR-204;
Phase I VRS: Two Point OPW per ARB E.O. VR-102;
Tanks: One (1) 20,000 gallon gasoline tank, One (1) 8,000 gallon gasoline tank, underground {manifolded underground and aboveground}

2.2 Process –
This is a retail gasoline dispensing facility installing new E85 and modifying existing gasoline dispensing equipment, underground storage tanks and the associated equipment to receive, store, and dispense E85 and gasoline. E85 is a different formulation of gasoline that contains a minimum of 85% ethanol fuel and is subject to different vapor control requirements and therefore permitted separately.

2.3 Emissions Controls –
This proposed E85 station shall be equipped with Phase I control and exempt from Phase II control.
The proposed retail gasoline dispensing facility shall be equipped with CARB certified Two Point OPW Phase I and Balance Phase II vapor recovery systems.

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 –
Emissions increase from the installation of E85 and gasoline dispensing facility is expected.

Emissions increase estimated for the **E85 dispensing operation as shown in Table 1**.
Table 1: Emissions increase estimated for E85 dispensing operations.

	Emission increase	Units
Annual VOC Emissions	2338.80	lbs TOG/year
Annual VOC Emissions (in tons)	1.17	Tons TOG/year
Daily VOC Emissions	6.41	lbs TOG/day
Average Hourly Emissions	0.27	lbs TOG/hour (Avg)
MAX Hourly Emissions	2.05	lbs TOG/hour loading (Max)

Emission increase estimated for **gasoline dispensing operation as shown in Table 2.**
Table 2: Emissions increase estimated for gasoline dispensing operations.

	Post-Project	Pre-Project	Emission increase	Units
Annual VOC Emissions	1228.80	1228.80	0.00	lbs TOG/year
Annual VOC Emissions (in tons)	0.61	0.61	0.00	Tons TOG/year
Daily VOC Emissions	3.37	3.37	0.00	lbs TOG/day
Average Hourly Emissions	0.14	0.14	0.00	lbs TOG/hour (Avg)
Maximum Hourly Emissions	4.30	3.10	1.2	lbs TOG/hour loading (Max)

Note: MAX Hourly Emissions are based on the assumption that the worst case scenario for one (1) hour is dispensing gas while the tank is being loaded with gas from a delivery (to full max tank capacity). However, the actual max hourly emissions are expected to be lower. Facilities are not allowed to fill tanks past 90% and most full deliveries are not filling an empty tank (fuel deliveries are typically ordered in advance before tanks run "dry"). Average volume of bulk tank delivery also varies.

Average Hourly Emissions are based on the projected annual gasoline throughput (gallons per year) over a time period of 365 days per year and 24 hours per day.

3.2 Emission Estimate Assumptions –

Calculation Procedure:
The SDCAPCD Emission Calculation Procedures were used to calculate the annual VOC emissions (located at APCD-G11-Underground-Storage-w-Phase-I-and-II-EVR (sdapcd.org)).

Equations:

$$E_a = U_a \times EF_t \times C_i$$
$$E_h = T \times EF_l \times C_i$$

Variables:

E_a	Annual emissions of gasoline vapor (lbs/year)
E_h	Maximum hourly emissions of gasoline vapor (lbs/hour)
U_a	Annual gasoline throughput (gallons/year)
T	Maximum one-hour bulk gasoline delivery
EF_t	Emission factor (combined) for throughput (lbs/gallon)
EF_l	Emission factor for underground tank loading (lbs/gallon)
C_i	Concentration of each listed substance in the gasoline vapor (lbs/lb)

Emission Factors:
The above SDAPCD methodology requires the input of emission factors from CARB's Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities dated December 23, 2013 were used (https://ww3.arb.ca.gov/vapor/gdf-emisfactor/gdfumbrella.pdf), which are shown in Table 3, Table 4 and Table 5:

Table 3: E85 Emission Factors

Sub-Category	Revised (lbs/1000 gal)	EF Source
	EVR	
Phase II Fueling (with ORVR Vehicles UEF)	0.42	CARB 2013 Updated Emission Factors Table I-I
Phase I Bulk Transfer Losses	0.15	CARB 2013 Updated Emission Factors Table I-I
*Pressure Driven Losses (Breathing Loss) UEF	0.76	CARB 2013 Updated Emission Factors Table I-I
Gasoline Dispensing Hose Permeation (Year 2017)	0.009	CARB 2013 Updated Emission Factors Table I-I
Phase II Fueling – Spillage UEF	0.61	CARB 2013 Updated Emission Factors Table I-I
Total (lbs/1000 gal)	1.949	

*UEF: Uncontrolled Emission Factor

Table 4: Gasoline Emission Factors for Pre-project

Sub-Category	Revised (lbs/1000 gal)	Source
	EVR	

Phase I Bulk Transfer Loss	0.15	CARB 2013 Updated Emission Factors Table I-I
Pressure Driven Loss (Breathing Loss)	0.024	CARB 2013 Updated Emission Factors Table I-I
*Phase II fueling	0.089	CARB 2013 Updated Emission Factors Table I-I
Hose Permeation, low perm hose (2017)	0.009	CARB 2013 Updated Emission Factors Table I-I
Spillage	0.24	CARB 2013 Updated Emission Factors Table I-I
Total (lbs/1000 gal)	0.512	

Table 5: Gasoline Emission Factors for Post-project

Sub-Category	Revised (lbs/1000 gal)	Source
	EVR	
Phase I Bulk Transfer Loss	0.15	CARB 2013 Updated Emission Factors Table I-I
Pressure Driven Loss (Breathing Loss)	0.024	CARB 2013 Updated Emission Factors Table I-I
*Phase II fueling	0.089	CARB 2013 Updated Emission Factors Table I-I
Hose Permeation, low perm hose (2017)	0.009	CARB 2013 Updated Emission Factors Table I-I
Spillage	0.24	CARB 2013 Updated Emission Factors Table I-I
Total (lbs/1000 gal)	0.512	

*The Phase II Fueling emission factor for Non-ORVR and ORVR vehicles was calculated based on the "Gasoline Service Station Industrywide Risk Assessment Technical Guidance (Dated: 2/18/2022)." The document suggested the percentage of gasoline dispensed to ORVR vehicles verses non-ORVR vehicle in 2018 was 83 percent ORVR vehicles and 17 percent non-ORVR vehicles. The weighted average calculation is as follows:

(% Non-ORVR x Non-ORVR EVR Emission Factor) + (% ORVR X ORVR EVR Emission Factor)

$$\left((1-0.83)\times 0.42\ \frac{lbs}{1000\ gallons}\right)+\left(0.83\times 0.021\ \frac{lbs}{1000\ gallons}\right)$$

$$=0.089\ \frac{lbs}{1000\ gallon}$$

3.3 Emission Calculations –

Table 6: Emissions Increase from the new E85 and Gasoline Dispensing Facility

Variable	E85	Gasoline	Aggregate	Units	Description
U_A	1,200,000	0.0	1,200,000	gallons/year	Annual E85 and Gasoline Throughput (increase only)
EF_T	1.949	0.512	NA	lbs/1000 gallons	Total Emission Factor
C_i	1	1	NA	lbs/lb	Concentration of VOCs in gasoline vapor
E_A	2338.80	0.00	2338.80	lbs/year	Annual VOC Emissions: $U_A * EF_T * C_i$
E_A	1.17	0.00	1.17	tons/year	Annual VOC Emission: E_A * (1 ton/2000 lbs)
E_D	6.41	0.00	6.41	lbs/day	Daily VOC Emissions: E_A*(1 year/365 days)
$E_{Haverage}$	0.27	0.00	0.27	lbs/hour	Average Hourly VOC Emissions: E_D*(1 day/24 hours)
E_{Hmax}	2.05	1.20	3.25	lbs/hour	MAX Hourly VOC Emissions: (Tank capacity* EF Phase I transfer loss) + ((EA – Average Phase I EVR/Loading Emissions) / (day/yr*hr/yr))

3.4 Attachments –

APCD2023-APP-007777, APCD2023-APP-007778 VR Emission Calculations

4.0 APPLICABLE RULES

4.1 Prohibitory Rules

Rule 50 – Visible Emissions

Requirement	Explanation:	Condition
Visible emissions cannot exceed 20% opacity for more than 3 minutes in any consecutive 60-minute period.	Facility is expected to comply based on similar operations.	n/a

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

Requirement	Explanation:	Condition

Rule 61.3 outlines the standards and requirements for the transfer of VOCs into stationary storage tanks.	Complies – the equipment related to gasoline and E85 is subject to and complies with Rule 61.3.1, which is more stringent than Rule 61.3.	n/a

Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks

(d) Equipment and Operation Requirements			
Section	**Requirement**	**Explanation:**	**Condition**
(d)(1)	*Non-certified Phase I vapor recovery systems are prohibited from being sold, supplied and installed. Components installed shall be a Phase I vapor recovery system certified by CARB with the identification depicting manufacturer name, model number, and serial number unless exempt by CARB*	Compliance is expected. A CARB certified Phase I EVR system per the VR-102 series is proposed for E85 and the gasoline dispensing equipment.	ATC condition(s): E85: 2-C29151, 4-30369 Gas: 8
(d)(2)	*Post 9/1/2006, all contractors and installers must successfully complete the corresponding manufacturers' training program for installing, modifying or repairing the Phase I vapor recovery system. Documentation of successful completion must be available upon District request.*	Compliance is expected. The ATCs and PTO will incorporate conditions regarding the requirement for Phase I equipment certified contractors and installers.	ATC condition(s): E85:7-C29213 Gas: 10
(d)(3)	*Gas stations shall not be operated unless the following are met:*		
(d)(3)(i)	*Each underground storage tank (UST) is equipped with a CARB certified drop tube.*	The facility is expected to comply. The E85 and gasoline tanks will be required to have submerged fill pipes installed that meet the necessary distance requirements (within 6 inches from highest cut to the bottom of the tank). Verification will be conducted during the inspections and drop tube photos will be required.	ATC condition(s): E85: 16 Gas: 20
(d)(3)(ii)	*Minimum gasoline vapor control efficiency: 98.0% by volume*	Expected to comply, a CARB certified Phase I	ATC condition(s): E85: 4

	Mass emission factor: Not exceeding 0.15 lbs gasoline vapor per 1,000 gallons of gasoline dispensed.	EVR system is proposed for the E85 and gasoline tanks.	Gas: 8
(d)(3)(iii)	*Phase I vapor recovery system is maintained and operated accordingly to the CARB Executive Order (E.O.) and manufacturer Installation, Operation and Maintenance (IOM) manual. Also free of defects per Title 17.*	The facility is expected to comply. The ATCs and PTOs will incorporate a condition regarding handling repair and defects in equipment.	ATC condition(s): E85: 17 Gas: 16
(d)(3)(iv)	*When required by the applicable CARB Executive Order, the Phase I vapor recovery system is equipped with:*	Expected to comply, a CARB certified Phase I EVR system is proposed for the E85 and gasoline tanks. The ATC and PTO will incorporate a condition requiring all components listed in the applicable CARB Executive Order be installed	ATC condition(s): E85: 4 Gas: 17, 20, 36
(d)(3)(iv)(A)	*CARB certified gasoline vapor and liquid anti-rotational couplers or rotatable adaptors. Static rotation shall not exceed 108 pound-inch (9 pound-foot).*		
(d)(3)(iv)(B)	*CARB certified poppeted dry breaks or other CARB certified poppeted fittings on the vapor return coupler that are vapor tight when closed;*		
(d)(3)(iv)(C)	*CARB certified pressure/vacuum (P/V) valve(s) on the stationary underground storage tank vent pipe(s). The tank vent pipes shall be manifolded when required by the most recent applicable CARB Executive Order;*		
(d)(3)(iv)(D)	*CARB certified spill boxes each having an integral drain valve or other devices that are certified by CARB to return spilled gasoline to the stationary underground storage tank. Each spill box shall be maintained free of standing gasoline and free of any debris that may interfere with the seating of the drain valve. Spill boxes used exclusively for Phase I vapor connections shall not have drain valves.*		
(d)(3)(v)	*All components shall be maintained free of liquid leaks*	The facility is expected to comply. A CARB certified	ATC condition(s):

	and vapor tight unless otherwise specified by CARB.	Phase I EVR system is proposed for the E85 and gasoline equipment which have specified allowable leak rates for certain components. Startup inspection and annual compliance test will be required to ensure compliance.	E85: 8, 10 Gas: 18
(d)(3)(vi)	*The gasoline liquid delivery hose shall only be connected or disconnected when the vapor return hose is connected during gasoline delivery.*	The facility is expected to comply with subsections (d)(3)(vi) and (d)(3)(vii). The ATCs and PTOs will incorporate a condition regarding the proper transfer connections and order during fuel bulk delivery to prevent leakage during a delivery and disconnection.	ATC condition(s): E85: 11-C29220 13-C29221 Gas: 32
(d)(3)(vii)	*There shall be no liquid leaks of the gasoline delivery hose and vapor return hose during a delivery and disconnection.*		
(e) Inspection and Maintenance Program			
(e)(1)	*Periodic inspections shall be conducted per Table 1 of Rule 61.3.1 and include all components but not limited to:*	The facility is expected to comply. The ATCs and PTOs will incorporate a condition regarding the inspection requirements.	ATC condition(s): E85 11, 14 Gas: 17, 31
(e)(1)(i)	*All stationary UST fill caps and gaskets, to verify the components are in place and in good condition.*		
(e)(1)(ii)	*All stationary UST poppeted dry breaks, gasoline vapor and liquid adaptors, to verify they are operable and sealing properly.*		
(e)(1)(iii)	*All stationary UST spill boxes, to verify there is no standing gasoline or debris in the spill boxes and that drain valves are seating properly*		
(e)(2)	*Annual inspection to ensure compliance with all applicable District rules, regulations and permit conditions.*	The facility is expected to comply. The ATCs and PTOs will incorporate a condition regarding the annual compliance inspection requirements and schedule.	ATC condition(s): E85 16 Gas: 16, 22
(e)(2)(i)	*The District permit is current and posted.*		
(e)(2)(ii)	*The facility complies with all permit conditions.*		
(e)(2)(iii)	*The Phase I vapor recovery system is properly installed and*		

	complies with the most recent applicable CARB certification procedures and CARB Executive Orders.		
(e)(2)(iv)	*All stationary USTs have gasoline submerged drop-tubes installed and not damaged. A re-inspection shall be conducted each time specific components are removed or replaced.*		
(e)(2)(v)	*The vent pipes are equipped with the required pressure/vacuum valves and each such valve is properly installed. A re-inspection shall be conducted each time specific components are removed or replaced.*		
(e)(3)	*Maintenance Procedures*	The facility is expected to comply with subsections (e)(3) and (e)(4). The ATCs and PTOs will incorporate a condition regarding maintenance issues and requirements.	ATC condition(s): E85 17-C29157 Gas: 16
(e)(3)(i)	*Any component not in working order or good condition shall be repaired, replaced or adjust within 7 calendar days to bring the facility into compliance. An additional 7 day extension may be requested.*		
(e)(3)(ii)	*Components having a Title 17 defect shall not be used.*		
(e)(4)	*Any additional alternative maintenance procedures by CARB E.O.s or IOMs.*		
(f) Source Testing			
(f)(1)	*Initial compliance test shall be conducted within 60 calendar dates for new installations or modifications.*	The facility is expected to comply. The ATCs will require an initial startup inspection with applicable testing per the CARB Executive Orders.	ATC condition(s): E85: 29 Gas: 65, 66
(f)(2)	*Annual compliance source test required. Additional tests may be required.*	The facility is expected to comply. The ATCs and PTOs will incorporate a condition regarding the compliance test schedule.	ATC condition(s): E85:30 Gas: 66
(f)(3)	*Contractors/technicians conducting tests are required to complete the SCAQMD orientation class, alternative District approved classes/training,*	Compliance with subsections (f)(3), (f)(4) and (f)(5) is expected. The ATCs and PTOs will incorporate conditions regarding certification	ATC condition(s): E85: 5, 7 Gas: 21

	training/certificates by CARB or the systems manufacturer.	requirements and testing time frames as required.	
(f)(3)(i)	*A copy of a current certificate from the South Coast Air Quality Management District, CARB, system manufacturer and/or from other approved training.*		ATC condition(s): E85: 5, 7 Gas:21
(f)(3)(ii)	*Records of equipment calibrations performed as required by the applicable test procedures.*		ATC condition(s): E85: 5, 7 Gas: 21
(f)(4)	*Tests shall be conducted per the ATC, PTO, and applicable CARB EO and Certification Procedures.*		ATC condition(s): E85: 5, 7 Gas: 21
(f)(5)	*Test and/or re-test reports shall be submitted to the owner or operator within 15 calendar days.*		ATC condition(s): E85: 32 Gas: 63, 64
(g) Recordkeeping			
(g)(1)	*Records of inspections performed as required by Section (e) of this rule.*	The facility is expected to comply. The ATCs and PTOs will incorporate a condition regarding the requirements for recordkeeping as outlined.	ATC condition(s): E85: 6, 15, 29, 30, 31, 32, 37 Gas: 22,50,64
(g)(2)	*Records of all malfunctioning components, including the date(s) such components were identified and repaired or replaced, and any other records and information required by the most recent applicable CARB Executive Orders.*		
(g)(3)	*Records of initial and periodic compliance source tests, which include at a minimum:*		
(g)(3)(i)	*Date and time of each test;*		
(g)(3)(ii)	*Name, affiliation, address, and phone number of the person(s) who performed the test;*		
(g)(3)(iii)	*For a retest following a failed initial or periodic compliance source test, description of repairs performed;*		
(g)(3)(iv)	*Copies of all test reports, including test equipment calibration date(s), test results*		

	and failed test data, in District-approved format and, for a test that fails, a description of the reasons for the test failure.		
(g)(4)	*Monthly gasoline throughput records.*		ATC condition(s): E85:15 Gas: 11

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

Requirement	Explanation:	Condition
Rule 61.4 outlines the standards and requirements for the transfer of VOCs into stationary storage tanks.	Complies – the equipment related to gasoline is subject to and complies with Rule 61.4.1, which is more stringent than Rule 61.4.	n/a

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

(a) Applicability		
Section	**Requirement**	**Explanation:**
(a)(1)	*Except as otherwise provided in Section (b), this rule is applicable at any gasoline dispensing facility where gasoline is dispensed into motor vehicle fuel tanks from any stationary underground storage tank with a capacity of 250 gallons (946 liters) or more…*	The facility's retail gasoline station is subject to this rule. The capacity of the underground storage tanks is more than 250 gallons of gasoline.

(b) Exemptions			
Section	**Requirement**	**Explanation:**	**Conditions(s)**
(b)(6)	*Transfer of E85 from any stationary underground storage tank into a Flexible Fuel Vehicle tank at any retail of non-retail gasoline dispensing facility.*	The E85 equipment is exempt from the requirements of Rule 61.4.1, thus a Phase II system is not required for the E85 station. The gasoline equipment will be required to install the corresponding Phase II EVR equipment.	n/a

(d) Equipment and Operation Requirements			
Section	**Requirement**	**Explanation:**	**Condition(s)**

(d)(1)	*Non-certified Phase II vapor recovery systems are prohibited from being sold, supplied and installed. Components installed shall be a Phase I vapor recovery system certified by CARB with the identification depicting manufacturer name, model number, and serial number unless exempt by CARB.*	The E85 equipment is exempt from the requirements. The GDF is expected to comply. A CARB certified Phase II EVR system per the VR-204 series is proposed.	ATC condition(s): E85: n/a Gas: 4, 8, 9
(d)(2)	*Post 9/1/2006, all contractors installing, modifying, and repairing Phase II vapor recovery systems must have successfully completed the applicable manufacturer's training program. Documentation of successful complete shall be made available if requested.*	The E85 equipment is exempt from the requirements. Gas: Compliance is expected. The ATC and PTO will incorporate conditions regarding the requirement for Phase II equipment certified contractors and installers.	ATC condition(s): E85: n/a Gas: 10
(d)(3)	*Gas stations shall not be operated unless the following are met:*	The E85 equipment is exempt from the requirements. Gas: The facility is expected to comply Phase I EVR System per Executive Order VR-102 series and Phase II EVR System per Executive Order VR-204 series are proposed.	ATC condition(s): E85: n/a Gas: 6, 8, 9
(d)(3)(i)	*A CARB certified Phase II vapor recovery system is installed and compatible with the CARB certified Phase I system at the gas station.*		
(d)(3)(ii)	*By the applicable dates…*		
(d)(3)(ii)(A)	*Summer fuel: a gasoline vapor control efficiency of at least 95% by weight and a mass emission factor not exceeding 0.38 pounds of gasoline vapors per 1,000 gallons of gasoline dispensed.*		
(d)(3)(ii)(B)	*Winter fuel: a gasoline vapor control efficiency of at least 95% by weight and a mass emission factor not exceeding 0.38 pounds of gasoline vapors per 1,000 gallons of gasoline dispensed.*		
(d)(3)(iii)	*The Phase II vapor recovery system is installed, maintained and operated per the applicable CARB certifications, CARB E.O. and manufacturer I.O.M.*		
(d)(3)(iv)	*The Phase II vapor recovery system is free of Title 17 defects.*		ATC condition(s):

			E85: n/a Gas: 16
(d)(3)(v)	*All applicable Phase II vapor recovery system and components shall be free of leaks and are vapor tight unless an otherwise specified by CARB.*		ATC condition(s): E85: n/a Gas: 18
(d)(3)(vi)	*All liquid removal devices installed shall have a minimum liquid removal rate of 5 mL per gallon of gasoline dispensed unless otherwise specified by CARB.*		ATC condition(s): 44
(d)(3)(vii)	*The gas station has posted:*		ATC condition(s): 20
(d)(3)(vii)(A)	*Nozzle operating instructions and a toll-free number to report problems.*		
(d)(3)(vii)(B)	*A warning sign that topping off is prohibited and may cause spillage.*		
(d)(3)(viii)	*The Phase II vapor recovery system is CARB certified and compatible with ORVR.*		ATC condition(s): n/a
(d)(3)(ix)	*Facilities that dispense > 600,000 gallons of gasoline must be equipped with a CARB certified ISD system.*	The E85 equipment is exempt from the requirements. Gas: Complies, Phase II EVR per CARB Executive Order VR-204 series with compatible Veeder-Root ISD Software are proposed by the facility.	ATC condition(s): E85: n/a Gas: 46
(d)(3)(x)	*New or replacement dispensers must be unihose. Existing dispensers can be replaced with the same type of dispensers due to damage, accidents, or vandalism.*	The facility is expected to comply. Verification will occur during the startup inspection.	n/a
(e) Inspection and Maintenance Program			
(e)(1)	*Periodic inspections shall be conducted per Table 1 of Rule 61.4.1 and include all components but not limited to:*	The E85 equipment is exempt from the requirements. Gas: The facility is expected to comply. The ATC and PTO will incorporate a condition regarding the annual compliance inspection requirements and schedule.	ATC condition(s): E85: n/a Gas: 14,16, 18
(e)(1)(i)	*Vapor guards (if required) are intact.*		
(e)(1)(ii)	*Breakaway couplings have not separated.*		

(e)(1)(iii)	*Nozzle boots are free of holes, slits and rips that are Title 17 defects.*	The weekly draining requirement will be phased out, Rule 61.4.1 is pending a Rule update.	
(e)(1)(iv)	*Vapor recovery hoses, swivels, nozzles, hold-open latches and faceplates are in good working conditions. Gas station components outside each dispenser are also free of liquid leaks and Title 17 defects.*		
(e)(2)	*Balance system: Weekly draining of any retained gasoline from the coaxial hoses. Volume of gasoline removed shall be recorded.*		ATC condition(s): n/a
(e)(3)	*Dispensing flow rate shall be verified monthly per the CARB E.O. or Title 17 CCR requirements.*		ATC condition(s): Gas: 44
(e)(4)	*An annual inspection shall verify and ensure compliance with applicable rules, regulations and permit conditions.*		ATC condition(s): E85: n/a Gas: 65-67
(e)(4)(i)	*District permit and the signs required under subsection (d)(3)(vii) of this rule are current and posted.*		
(e)(4)(ii)	*Gas station complies with all permit conditions.*		
(e)(4)(iii)	*The Phase II vapor recovery system is properly installed and complies the applicable CARB certification procedures and CARB E.O.*		
(e)(4)(iv)	*All connections and fittings inside dispensers are free of liquid leaks.*		
(e)(4)(v)	*Dispenser hoses are compliant with the required lengths and installation arrangements per the applicable CARB E.O.*		
(e)(5)	*Maintenance Procedures*		
(e)(5)(i)	*Any component not in working order or good condition shall be repaired, replaced or adjust within 7 calendar days to bring the facility into compliance. An*	The E85 equipment is exempt from the requirements. The facility is expected to comply. The ATC and PTO will incorporate a condition	ATC condition(s): E85: n/a Gas: 10, 16

	additional 7 day extension may be requested.	regarding maintenance issues and requirements.	
(e)(5)(ii)	*Components having a Title 17 defect shall not be used.*		
(e)(6)	*Any additional alternative maintenance procedures by CARB E.O.s or IOMs.*		
(f) Source Testing			
(f)(1)	*Initial compliance test shall be conducted within 60 calendar dates for new installations or modifications.*	The E85 equipment is exempt from the requirements. Gas: The facility is expected to comply. The applicable tests referenced in Attachment L shall be successfully conducted within 60 days after startup of the equipment authorized herein.	Gas: 63
(f)(2)	*Annual compliance source test required. Additional tests may be required.*		ATC condition(s): E85: n/a Gas: 65
(f)(3)	*Contractors/technicians conducting tests are required to complete the SCAQMD orientation class, alternative District approved classes/training, training/certificates by CARB or the systems manufacturer.*		ATC condition(s): E85:n/a Gas: 10
(f)(3)(i)	*A copy of a current certificate from the South Coast Air Quality Management District, CARB, system manufacturer and/or from other approved training.*		ATC condition(s): E85: Gas: 10
(f)(3)(ii)	*Records of equipment calibrations performed as required by the applicable test procedures.*		ATC condition(s): E85: n/a Gas: 6
(f)(4)	*Tests shall be conducted per the ATC, PTO, and applicable CARB EO and Certification Procedures.*		ATC condition(s): E85: 7 Gas: 6
(f)(5)	*Test and/or re-test reports shall be submitted to the owner or operator within 15 calendar days.*		ATC condition(s): E85: n/a Gas 65
(g) Recordkeeping			
(g)(1)	*Records of inspections performed as required by Section (e) of this rule.*	The E85 equipment is exempt from the requirements. Gas: The facility is expected to comply. The ATC and PTO will incorporate a	ATC condition(s): E85: 6, Gas: 22,50,64
(g)(2)	*Records of all malfunctioning components, including the*		

	date(s) such components were identified and repaired or replaced, and any other records and information required by the most recent applicable CARB Executive Orders.	condition regarding the requirements for recordkeeping as outlined.	
(g)(3)	*Records of initial and periodic compliance source tests, which include at a minimum:*		
(g)(3)(i)	*Date and time of each test;*		
(g)(3)(ii)	*Name, affiliation, address, and phone number of the person(s) who performed the test;*		
(g)(3)(iii)	*For a retest following a failed initial or periodic compliance source test, description of repairs performed;*		
(g)(3)(iv)	*Copies of all test reports, including test equipment calibration date(s), test results and failed test data, in District-approved format and, for a test that fails, a description of the reasons for the test failure.*		
(g)(4)	*Monthly gasoline throughput records.*		ATC condition(s): E85: n/a Gas: 11

Rule 61.5 – Visible Emissions Standards for Vapor Control Systems

Requirement	Explanation:	Condition
Rule 61.5 states: *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.*	The facility is expected to comply based on facility's ongoing and similar operations.	n/a

Rule 61.6 – NSPS Requirements for Storage of Volatile Organic Compounds

Requirement	Explanation:	Condition

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.	Not applicable, this source is not subject to any NSPS.	n/a

Rule 61.7 – Spillage and Leakage of Volatile Organic Compounds

Requirement	Explanation:	Condition
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 based on similar operations. 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.	ATC condition(s): E85:14 Gas: 13, 14, 17, 18, 20

Rule 61.8 – Certification Requirements for Vapor Control Equipment

Requirement	Explanation:	Condition
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.	E85: Complies, Phase I vapor recovery system certified per CARB Executive Order VR-102 series is proposed for E85. Gas: Complies, Phase I vapor recovery system certified per CARB Executive Order VR-102 series and Phase II vapor recovery system certified per CARB EO VR-204 are proposed for gasoline dispensing equipment.	ATC condition(s): E85:2, 4 Gas: 6

4.2 New Source Review

Rule 20.1 New Source Review – General Provisions

This application is subject to District NSR rules. This site is considered a non-major stationary source, for each pollutant, as shown in the Table 7, and is therefore subject to District Rule 20.2. Calculation of emissions and determination of applicable requirements is performed in accordance with District Rule(s) 20.1 through 20.3.

Table 7: Classification of Major/PSD Source and Modification New Source Review (NSR) Requirements

	NOx	VOC	PM-10	SOx
Major Source Threshold (ton/year)	*25*	*25*	*100*	*100*
Federal Major Source Threshold (ton/year)	*25**	*25**	*100*	*100*
Major Modification Threshold (ton/year)	*25*	*25*	*15*	*50*
Major?	**No**	**No**	**No**	**No**
Contemporaneous Calculations Performed?	**No**	**No**	**No**	**No**
Major New or Modification?	**No**	**No**	**No**	**No**
PSD Threshold (ton/year)	*250*	*250*	*250*	*250*
PSD Modification Threshold (ton/year)	*40*	*40*	*15*	*40*
PSD New or Modification?	**No**	**No**	**No**	**No**

*based on EPA's ozone nonattainment designation for the San Diego Air Basin in 40 CEF81.305

District Rule 20.2 contains requirements for Best Available Control Technology (BACT), Air Quality Impact Assessment (AQIA), Prevention of Significant Deterioration (PSD) and public notification.

New Source Review Discussion				
Rule/Requirement	**Requirement**	**Applies?**	**Discussion**	**Condition(s)**
Applicability	Rule 20.2 applies to non-major sources.	Yes	This is not a major source, so rule 20.2 applies.	n/a
Type of application	New installation for E85 station, existing for gasoline station		n/a	n/a
Exemptions	No exemptions apply to this equipment		n/a	n/a
20.2(d)(1) - BACT				
BACT - NOx	Installation of BACT is required if emissions of NOx exceed 10 lb/day	No	The potential to emit for this pollutant from this equipment does not exceed this trigger level, so BACT is not required.	n/a
BACT - VOC	Installation of BACT is required if emissions of	Yes	The potential to emit VOC from the E85 and Gasoline operation is	ATC cond: E85:2

	VOC exceed 10 lb/day		6.41 lbs TOG/day. The value does not exceed the 10 lbs/day limit. The facility proposed to install a CARB certified Phase I EVR system with the new E85 equipment which is considered T-BACT for E-85. The facility proposed to install Phase I and Phase II systems with the new gasoline equipment, which are considered T-BACT for GDF.	
BACT - PM-10	Installation of BACT is required if emissions of PM-10 exceed 10 lb/day	No	The potential to emit for this pollutant from this equipment does not exceed this trigger level, so BACT is not required.	n/a
BACT - SOx	Installation of BACT is required if emissions of SOx exceed 10 lb/day	No	The potential to emit for this pollutant from this equipment does not exceed this trigger level, so BACT is not required.	n/a
20.2(d)(2) - AQIA				
AQIA - NOx	Required for project emission increases in excess of 25 lb/hr, 250 lb/day or 40 ton/yr of NOx calculated as NO2	No	The increase in emission of this air contaminant from this project does not exceed any of these levels, and AQIA is not required.	n/a
AQIA - PM-10	Required for project emission increases in excess of 100 lb/day or 15 ton/yr of PM-10	No	The increase in emission of this air contaminant from this project does not exceed any of these levels, so no AQIA is required.	n/a
AQIA - SOx	Required for project emission increases in excess of 25 lb/hr, 250 lb/day or 40 ton/yr of SO_x calculated as SO_2	No	The increase in emission of this air contaminant from this project does not exceed any of these levels, so no AQIA is required.	n/a
AQIA - CO	Required for project emission	No	The increase in emission of this air contaminant	n/a

	increases in excess of 100 lb/hr, 550 lb/day or 1000 ton/yr of CO		from this project does not exceed any of these levels, so no AQIA is required.	
20.2(d)(3) - PSD	Applicable to source that may have a significant impact on a class I area	n/a	This is not a PSD source and emissions are not expected to impact a class I area	n/a
20.2(d)(4) - Public Notice	Requires 30 day public notice if an AQIA was required or if increase in VOC emissions from the project exceed 250 lb/day or 40 ton/year	n/a	AQIA was not required and VOC emission increase from this project does not exceed these levels.	n/a

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. However, gasoline service stations are exempt from this rule if the cancer risks are below 100 in one million for cancer (with T-BACT installed), and that the health hazard index is less than 10 from chronic non-cancer and acute toxic air contaminants.

The replacement of the gasoline tanks and dispensers will not increase the annual VOC emissions. However, it leads to an increase in maximum hourly emissions associated with an increase in tank capacity and has negative impact on the acute health index. Therefore, the emissions increase from adding a E85 station and the acute health index from gasoline station will be evaluated for the health risk assessment. The proposed E85 station is equipped with a CARB certified Phase I EVR system and used with ORVR only and it is considered T-BACT.

The generic GDF HRA was conducted to calculate the associated risks allowed up to the maximum exemption limit of 100 in one million under the new 2015 OEHHA risk assessment guidelines and Rule 1200 §(b). Although the emission factors between E85 and gasoline are different, E85 is only between 15-30% gasoline. Thus, the generic GDF HRA was used as a conservative basis. The throughput of E85 was used to compare to the generic GDF HRA. The increased throughput of gasoline and E85 was estimated at 1.2 million gallons/year.

The main drivers of the risks are due to benzene and ethyl benzene, accounting for 86% and 14% of the total risk, respectively. Results are based on a conservative assumption of operating 24 hours a day and 365 days per year. Relevant results are shown in Table 8:

Table 8: Cancer Risk Thresholds

Distance (m)	Maximum Throughput for Residential Receptor (Million gallons per year)	Maximum Throughput for Worker Receptor (Million gallons per year)	Cancer Risk (in one million)
10	2.8	33.6	99
20	7.0	84.6	99
30	12.1	145.5	99
40	18.2	217.3	99
50	25.0	299.0	99
60	32.7	389.3	99
70	40.9	487.5	99
80	49.9	596.5	99
90	59.4	707.4	99
100	69.8	832.3	99

The closest worker receptors are at least 100 meters away (indicated by blue row). The closest resident receptors are at least 10 meters away. Distances are measured from the dispensers, as spillage and refueling contributed to the majority of the risk, blue shaded row in the Table 8 corresponds to worker receptor and green shaded row to residential receptor. The throughput increases from the projects is 1.2 million gallons, which is within the allowable maximum throughput thresholds of 832.3 and 2.8 million gallons for the worker and residential receptors, respectively. This demonstrates that Rule 1200 does not apply to this project.

As a secondary check of health risk, the industry wide emissions estimate tool developed by the California Air Resources Board (CARB) was also used (https://ww2.arb.ca.gov/resources/documents/gasoline-service-station-industrywide-risk-assessment-guidance). From the Risk Assessment Look-up Tool as shown in Table 9 and Table 10, the increase in maximum incremental cancer risk from the E85 operation is 24.61 in one million for residents and 0.12 in one million for workers, which are within the allowable Rule 1200 exemption limit of 100 in one million for gasoline station equipped with T-BACT. Chronic health index from E85 operation is 0.10 in one million and acute non-cancer hazard indexes from E85 and Gasoline station, 0.77 + 0.44 = 1.21 in one million is less than the threshold limit of 10. Additionally while possible, this scenario likely would not occur since it represents the emissions if both gasoline and E-85 storage tanks are filled simultaneously.

The E85 and the GDF under consideration are equipped with T-BACT and the associated emissions fall within the Rule 1200 §(d) requirements. Therefore, the GDF is exempt from the Standards in Rule 1200 §(d) as allowed by the subsection (b)(1)(v)(B).

Table 9: Gasoline Service Station Risk Assessment for E85 station.

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool Version 1.0 - February 18, 2022		
Required Value	**User Defined Input**	**Instructions**
Annual Throughput (gallons/year)	1200000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	700	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Diego	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	19.32	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)	108.17	Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	10	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	VR Phase I only & ORVR vehicles on	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	no	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.
Risk Value	**Results**	
Max Residential Cancer Risk (chances/million)	24.61	
Max Worker Cancer Risk (chances/million)	0.12	
Chronic HI	0.10	
Acute HI	0.77	

Table 10: Gasoline Service Station Risk Assessment

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	2400000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	700	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Diego	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met
Distance to Nearest Resident (meters)	19.32	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)	108.17	Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	10	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance)
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	no	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.

Risk Value	Results
Max Residential Cancer Risk (chances/million)	15.37
Max Worker Cancer Risk (chances/million)	0.07
Chronic HI	0.06
Acute HI	0.44

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool Version 1.0-February 18,2022
Source: California Air resources Board Gasoline Service Station Industrywide Risk Assessment Guidance under the Gas Station Risk Assessment Screening Tools.
Link:
https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fww2.arb.ca.gov%2Fsites%2Fdefault%2Ffiles%2F2022-02%2FLook-up%2520Tool%2520Version%25201.0%25202_18_22.xlsm&wdOrigin=BROWSELINK

4.4 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.
The facility is within 1000 feet of a K-12 school and there will be increase in emissions associate with the projects. Therefore, AB3205 applies, and school notices will be sent out for public commenting on the projects.

4.5 NESHAPS 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

NESHAP CCCCCC outlines management practices to minimize emissions/spillage, equipment specifications and notification requirements.

E85 station will be equipped with a CARB certified Phase I EVR system. E85 is not currently subject to Phase II vapor requirements if 95% of vehicle fleet is equipped with ORVR per CARB and EPA (please see CARB Executive Order G-70-212 for specific language). Flex fuel vehicles are the only type of vehicles compatible with E85 fuel and these vehicles are expected to equip with ORVR.
Gasoline station will be equipped with CARB certified Phase I and Phase II EVR system. Therefore, the E85/ Gasoline dispensing facility is expected to comply with the NESHAP requirements.

NSPS*:* None

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

Complies, ARB certified Phase I VRS and a Phase II VRS are installed for the new gasoline related equipment.

E85 will be equipped with a CARB certified Phase I EVR system, E85 is not currently subject to Phase II vapor requirements if 95% of vehicle fleet is equipped with ORVR per CARB and EPA (please see CARB Executive Order G-70-212 for specific language). Flex fuel vehicles (FFVs) are the only type of vehicles compatible with E85 fuel and these vehicles are expected to equip with ORVR.

4.6 Attachments –
N/A

4.7 Title V –
The facility is not a Title V facility.

5.0 RECOMMENDATION & CONDITIONS

It is expected that the E85 and Gasoline dispensing facility shall comply with all the applicable requirements, and it is recommended that Authority to Constructs be issued with standard conditions for E85 and Gasoline equipment.

6.0 RECOMMENDED CONDITIONS

APCD2023-APP-007777-E85 station

The recommended condition set is APCD2019-CON-001537 for E85 station.

	Condition	Descriptions
ATC Cond	NEW003	Prior to any deviation of the information submitted on the application forms for this Authority to Construct, the applicant shall submit the proposed changes in writing and request and wait for a written approval from the District. (Rule 21)
ATC Cond	NEW039	"A maintenance log for the manufacturer's scheduled maintenance, including any repairs performed and drive offs, shall be kept onsite for at least three (3) years and made available to the District upon request. The maintenance log shall itemize at a minimum: a. the date of each inspection and test; b. any defect, damage; c. loose connections, or leaks found during the inspections or tests; d. any test failure; e. the make and model number of any component that is replaced, maintained or repaired as a result of these inspections or tests; f. the date of repair/replacement; and g. the affiliation and name of the person performing the inspections, tests, and repair/replacement. (Rules 61.3.1 and 61.4.1)"

APCD2023-APP-007778-Gasoline station

The recommended PTO and ATC conditions are listed:

Condition sets	Descriptions
APCD2014-CON-000795	Vapor Recovery-General ATC Conditions 100s (con 4-15)
APCD2014-CON-000796	Vapor Recovery-Maintenance ATC Conditions 200s (con 16-22)
APCD2014-CON-000797	Vapor Recovery-Piping ATC Conditions 300s (con 23-29)
APCD2014-CON-000794	Vapor Recovery-Phase I ATC Conditions 400s (con 30-36)
APCD2014-CON-000802	Vapor Recovery-VST CAS ATC Conditions 500/800s (con 37-45)
APCD2014-CON-000798	Vapor Recovery-ISD ATC Conditions 600s (con 46-58)
APCD2014-CON-000793	Vapor Recovery-Prebackfill ATC Conditions 700s (con 59-61)
APCD2014-CON-000799	Vapor Recovery-Annual Testing ATC Conditions 900s (con 62-67)
PTO-Conditions	Standard PTO Conditions (con 1-3)

End of Document