# ENGINEERING EVALUATION AUTHORITY TO CONSTRUCT

G&M Oil Co LLC #138
APCD2024-APP-008328; Modification to retail gas station (26A) APCD2024-APP-008364; New E85
Retail Gas Station with Phase I and II – 26A
APCD1980-SITE-02614
5103 Waring Rd San Diego, CA 92120
Hortensia Navarro G&M Oil Company Facility contact (714) 375-4700
Craig McLaren GSD&D Services Contractor (805) 710-2006 <u>camclaren@hotmail.com</u>

**Permit Engineer:** 

John Lee

11/20/2024

X Allison Weller

Allison Weller Senior Engineer Signed by: 7a51c2d8-5153-429a-95e3-77708dfe69fb

Senior Engineer:

#### 1.0 BACKGROUND

Type of Application – G&M Oil Company is applying for permit modification to: 1.1

1) Remove all underground storage tanks (USTs) and existing Phase I and II system, and 2) Install four (4) 12kgal USTs, two for gasoline, one for diesel, and one for E85 and new Phase I VR-102 and Phase II VR-204, see equipment description below for details.

Storage and transfer equipment for diesel is exempt from permitting per Rule 11(d)(17)(i) and is not listed in the equipment description. E85 is evaluated in a separate application, APCD2024-APP-008364.

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 - APCD2006-PTO-860169.
- 1.3 Facility Description – After this project, this will be a retail gasoline/e85 dispensing facility.

#### 1.4 Other Background Information -

E- Q APCD1980-SITE-02614 --> [LUEG-APCD,Administrative,Site,NA]; Status: Active APCD2005-OWC-983383 --> [LUEG-APCD,Administrative,Change,Ownership] : Status: A APCD2024-APP-008364 --> [LUEG-APCD,Permit App,Vapor Recovery,EVR Phase II Exempt] ; Status: Open APCD2006-PTO-860169 --> [LUEG-APCD,Administrative,Permit To Operate,NA] ; Status: Active APCD2002-APP-977609 --> [LUEG-APCD.Permit App.Vapor Recovery.EVR Phase II OTC] ; Status: Approved APCD2005-APP-983698 --> [LUEG-APCD.Permit App.Vapor Recovery.EVR Phase II OTC] : Status: Approved APCD2008-APP-986498 --> [LUEG-APCD,Permit App,Vapor Recovery,EVR Phase II OTC] ; Status: Approved APCD2011-VRT-0938 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: Reviewed - Inspector APCD2012-VRT-1028 --> [LUEG-APCD.Compliance,Vapor Recovery,Test Notification] : Status: Reviewed - Inspector APCD2013-VRT-0932 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: Reviewed - Inspector APCD2014-VRT-0882 --> [LUEG-APCD.Compliance,Vapor Recovery,Test Notification] ; Status: APCD2015-VRT-0881 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: APCD2016-VRT-0769 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: APCD2017-VRT-0884 --> [LUEG-APCD.Compliance,Vapor Recovery,Test Notification] ; Status: APCD2018-NOV-000027 --> [LUEG-APCD.Compliance.Notice of Violation.NA] : Status: Closed - Paid ----- APCD2018-VRT-0554 --> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] : Status: APCD2018-VRT-0811 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: ---- D > APCD2018-APP-005329 --> [LUEG-APCD,Permit App,Vapor Recovery,EVR Phase II OTC] ; Status: Approved APCD2019-NTC-00187 --> [LUEG-APCD.Compliance.Notice to Comply.NA] : Status: Closed-Certified Compliance APCD2019-VRT-0845 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: ----- APCD2020-VRT-0859 --> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] ; Status: ---- D > APCD2021-VRT-0819 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: Reviewed-Inspector APCD2022-VRT-0881 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: APCD2023-VRT-0938 --> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: APCD2024-APP-008328 --> [LUEG-APCD.Permit App.Vapor Recovery\_EVR Phase II OTC] ; Status: Open APCD1994-APP-931007 --> [LUEG-APCD,Permit App,Vapor Recovery,NA] ; Status: Approved APCD1994-HBD-02957 --> [LUEG-APCD, Variance App, Variance, NA] ; Status: Closed APCD1999-OWC-972974 --> [LUEG-APCD,Administrative,Change,Ownership] ; Status: A APCD2024-APP-008364 - E85 Application

#### 2.0 PROCESS DESCRIPTION

#### 2.1 Equipment Description –

#### **Existing 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: VST Balance per ARB E.O. VR-204; ISD System: Veeder-Root; CAS Configuration: Vertical Position per Exhibit 2 of ARB E.O. VR-204; Phase I VRS: Two Point Phil-Tite per ARB E.O. VR-101; Tanks: One (1) 12,000 gallon, (1) 8,000 gallon, & one (1) 10,000 gallon, gasoline, underground {manifolded underground and aboveground}

#### **Post-project 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 Software Version; CAS Configuration: Vertical Position per E.O. VR-204; Phase I VRS: OPW per ARB E.O. VR-102; Tanks: Two (2) 12,000 gallon gasoline, underground {manifolded underground and aboveground}

- 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 Phase II 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 –

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	Annual VOC Emissions	1599	lbs/year	
	Annual VOC Emissions (in tons)	0.80	tons/year	
	Daily VOC Emissions	4.4	lbs/day	
	Average Hourly Emissions	0.2	lbs/hour	
	MAX Hourly Emissions	3.7	lbs/hour (MAX)	

#### Table 1a: Post-project Potential to Emit (PTE) from Gasoline

Table1b: Change in Potential to Emit (PTE) from Gasoline (Pre-Post Project)

Annual VOC Emissions	0	lbs/year
Annual VOC Emissions (in tons)	0	tons/year
Daily VOC Emissions	0	lbs/day
Average Hourly Emissions	0	lbs/hour
MAX Hourly Emissions	-0.9	lbs/hour (MAX)

<b>Emission Rates</b>	Gasoline	E85	Gas + E85	Units
Annual VOC	0	1456	1456	lbs/year
Emissions				
Annual VOC	0	0.7	0.7	tons/year
Emissions				
Daily VOC	0	4.0	4.0	lbs/day
Emissions				
Average Hourly	0	0.2	0.2	lbs/hour
Emissions				
MAX Hourly	-0.9	1.9	1.0	lbs/hour (MAX)
Emissions				

Table 1c: Emission Increases Post-project

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 equations based on maximum throughput proposed by the facility.

The SDCAPCD Emission Calculation Procedures were used to calculate the annual VOC emissions (located at

https://www.sdapcd.org/content/dam/sdc/apcd/PDF/Misc/EFT/Gasoline\_Dispensing\_Fac ilities/APCD\_Submerged\_Fill\_of\_Underground\_Tank\_with\_Phase\_I\_Controls\_Only.pdf ).

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)
Ua	Annual gasoline throughput (gallons/year)
Т	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 (lb/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 (<u>https://ww3.arb.ca.gov/vapor/gdf-emisfactor/gdfumbrella.pdf</u>), which are shown in the following table:

Table 2: Emission Factors:

Sub Category	Revised (lbs/1000 gal)
Sub Category	EVR
Phase II Fueling	0.11
Phase I Bulk Transfer Losses	0.15
Pressure Driven Losses	0.024
Phase II Fueling – Spillage	0.24
Gasoline Dispensing Hose Permeation	0.009
Year 2017	0.009
Total	0.53

The Phase II Fueling emission factor for Non-ORVR and ORVR vehicles was calculated based on a weighted average per the "Engineering Manager Assigned Task – GDF Risk Assessment Report (Dated: 7/22/2014)." The document assumed ARB's 2015 ORVR saturation rate of 0.78 for the state. The weighted average calculation is as follows:

$$\left( (1 - 0.78) \times 0.42 \frac{lbs}{1000 \ gallons} \right) + \left( 0.78 \times 0.021 \frac{lbs}{1000 \ gallons} \right)$$
$$= 0.11 \frac{lbs}{1000 \ gallon}$$

3.3 Emission Calculations –

**Emissions Post Construction:** 

Variable	Value	Units	Description
UA	3,000,000	gallons/year	Annual Gasoline Throughput
EFT	0.53	lbs/1000	Total Emission Factor
		gallons	
Ci	1	lbs/lb	Concentration of VOCs in gasoline
			vapor
EA		lbs/year	Annual VOC Emissions: U <sub>A</sub> * EF <sub>T</sub> *
	1599		Ci

EA		tons/year	Annual VOC Emission: EA * (1
	0.8		ton/2000 lbs)
ED		lbs/day	Daily VOC Emissions: E <sub>A</sub> *(1 year/365
	4.4		days)
EHaverage	0.2	lbs/hour	Average Hourly VOC Emissions:
			$E_D$ *(1 day/24 hours)
E <sub>Hmax</sub>	3.7	lbs/hour	MAX Hourly VOC Emissions: (Tank
			capacity* EFI* Ci) + (EA – Average
			Phase I EVR/Loading Emissions)

## 3.4 Attachments – VR Emission Calculations

# 4.0 APPLICABLE RULES

# 4.1 **Prohibitory Rules**

<u>Rule 61.3 – Transfer of Volatile Organic Compounds into Stationary Storage Tanks</u> 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.

<u>Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks</u> Before issuance of the PTO, the engineering inspection will ensure the equipment is installed in compliance with this rule. Conditions will be included in the ATC and PTO to further ensure compliance.

Phase I VR-102 will be 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.

<u>Rule 61.4 – Transfer of Volatile Organic Compounds into Vehicle Fuel Tanks</u> (5) VOC's from any stationary storage tank into a vehicle fuel tank at any non-retail service station 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.

Compliance is expected. This gas station will have Phase II EVR equipment installed. The dispensers will incorporate CARB certified Phase II EVR equipment.

<u>Rule 61.4.1 – Transfer of Gasoline from stationary underground storage tanks into</u> vehicle fuel tanks

(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.

Compliance is expected. This gas station will have Phase II EVR equipment installed. The dispensers will incorporate CARB certified Phase II EVR equipment.

<u>Rule 61.5 – Visible Emissions Standards for Vapor Control Systems</u> 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.

<u>Rule 61.6 – NSPS Requirements for Storage of Volatile Organic Compounds</u>

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.

<u>Rule 61.7 – Spillage and Leakage of Volatile Organic Compounds</u> *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.

<u>Rule 61.8 – Certification Requirements for Vapor Control Equipment</u> 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, Phase I vapor recovery system certified per CARB Executive Order VR-102 series and Phase II vapor recovery system certified per CARB Executive Order VR-204 series is proposed.

## 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".

rederal Major Stationary Source	
	Emission Rate
Air Contaminant	(Ton/yr)
Fine Particulate Matter (PM <sub>2.5</sub> )	100
Particulate Matter (PM <sub>10</sub> )	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
	I

TABLE 20.1 – 5b Federal Major Stationary Source

\* 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 the facility is adding an emission unit (GDF). The proposed 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.

<u>Rule 20.2 – Non-Major Stationary Sources</u>

(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 this pollutant from this equipment can exceed this trigger level, so BACT is required. The facility will be installing CARB certified Phase I and Phase II EVR systems with compatible ISD software, which is considered 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.

	igger Levels		
	Emission Rate		
Air Contaminant	<u>(lb/hr)</u>	(lb/day)	(tons/yr)
Particulate Matter (PM <sub>10</sub> )		100	15
Fine Particulate Matter (PM2.5)		67	10
Oxides of Nitrogen (NOx)	25	250	40
Oxides of Sulfur (SOx)	25	250	40
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds		3.2	0.6

<u>TABLE 20.2 - 1</u> AQIA Trigger Levels

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.

This gasoline and E85 dispensing facility (GDF) is subject to Rule 1200. CARB certified vapor control systems will be installed and are considered T-BACT as required by Rule 1200.

#### Rule 1200 (b) EXEMPTIONS

(1) The standards of Section (d) shall not apply to:
(v) The following emission units provided the resulting increase in maximum incremental cancer risk at every receptor location is less than 100 in one million, the total acute noncancer health hazard index is less than 10 and the total chronic noncancer health hazard index is less than 10:

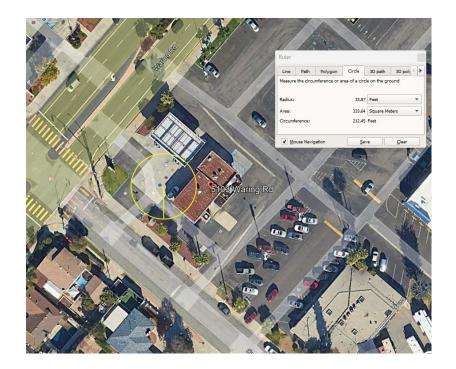
(B) Gasoline service station emission units, provided that T-BACT will be installed.

The GDF will be equipped with certified Phase I and Phase II vapor recovery controls, which are considered T-BACT.

Since the hourly and annual emissions from gasoline decreased or remained the same post-project, health risks associated with gasoline are not considered, see emissions calculation Table 1b for details.

E85 annual throughput is expected to be 1.2 million gallons. According to U.S. Department of Energy, E85 refers to ethanol-gasoline blends containing 51% to 83% ethanol. For the purposes of HRA, it is assumed that E85 is 51% ethanol and 49% gasoline, which is the most conservative assumption given that ethanol is not a Toxic Air Contaminant (TAC).

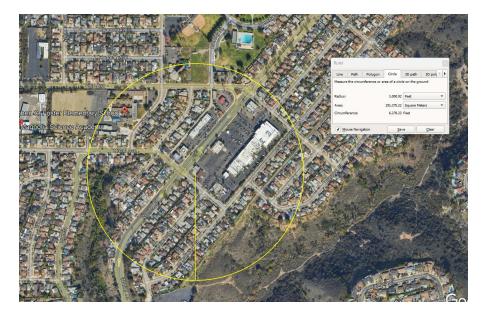
De minimis is performed with 1.2 million gallons of annual throughput for E85 with max hourly throughputs calculated from Section 3, closest receptor distance of 33ft and emission release height of 5ft. As shown in the aerial photo below, there is no receptor within 33ft of the emission source and the emission point is expected to be equal to or higher than 5ft due to height specification of vents per CARB EOs. De minimis shows that the health indices and cancer risk involved with this operation are within the standards of Rule 1200.



# 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 law also requires the District to consider any comments before authorizing construction.

Stephen C. Foster Elementary school is within 1,000ft of the source. AB3205 is required.



# 4.5 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 that will be installed at this location 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 EVR will be installed.

- **4.6** Title V This is not a Title V facility.
- 4.7 Attachments N/A.

# 5.0 **RECOMMENDATION & CONDITIONS**

It is expected that the gasoline dispensing facility will comply with all applicable requirements, and it is recommended that an Authority to Construct be issued at the end of the AB3205 comment period with standard conditions, including pre backfill requirements for a modified gas station, unless comments received would result in necessary changes to the project.

## 6.0 **RECOMMENDED CONDITIONS**

ATC Conditions for Gasoline APCD2024-APP-008328

Record ID:	Title/Org
APCD2014-CON-000795	Vapor Recovery – General ATC Conditions 100s
APCD2014-CON-000796	Vapor Recovery – Maintenance ATC Conditions 200s
APCD2014-CON-000797	Vapor Recovery – Piping ATC Conditions 300s
APCD2014-CON-000794	Vapor Recovery – Phase I ATC Conditions 400s
APCD2014-CON-000802	Vapor Recovery – CAS ATC 500/800s
APCD2014-CON-000798	Vapor Recovery – ISD ATC Conditions 600s
APCD2014-CON-000793	Vapor Recovery – Prebackfill ATC Conditions 700s
APCD2014-CON-000799	Vapor Recovery – Annual Testing ATC Conditions 900s Note: Using Only
	CON "Att L NEW" which is use for requirements related to attachment L
	for new GDFs
CHW001	Access, facilities, utilities and any necessary safety equipment for source
	testing and inspection shall be provided upon request of the Air Pollution
	Control District.
CHW002	This Air Pollution Control District Permit does not relieve the holder from
	obtaining permits or authorizations required by other governmental
	agencies.
CHW003	The permittee shall, upon determination of applicability and written
	notification by the District, comply with all applicable requirements of the
	Air Toxics "Hot Spots" Information and Assessment Act (California Health
	and Safety Code Section 44300 et seq.)

# ENGINEERING EVALUATION AUTHORITY TO CONSTRUCT

Facility Name:	G&M Oil Co LLC #138
<b>Application Number:</b>	APCD2024-APP-008364; New E85 APCD2024-APP-008328; Modification to retail gas station (26A)
Equipment Type:	New E85 dispensing facility – 26C
Facility ID:	APCD1980-SITE-02614
Equipment Address:	5103 Waring Rd San Diego, CA 92120
Facility Contact: Company Affiliation: Contact Title: Contact Phone: Email:	Hortensia Navarro G&M Oil Company Facility contact (714) 375-4700
Facility Contact: Company Affiliation: Contact Title: Contact Phone: Email:	Craig McLaren GSD&D Services Contractor (805) 710-2006 <u>camclaren@hotmail.com</u>
Permit Engineer:	John Lee

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11/20/2024

Allison Weller

Allison Weller Senior Engineer Signed by: 7a51c2d8-5153-429a-95e3-77708dfe69fb

**Senior Engineer:** 

## **1.0 BACKGROUND**

1.1 Type of Application – New installation of E85 dispensing equipment, which includes Phase I OPW VR-102 and a 12,000-gallon UST. E85 is exempt from Phase II requirements as per the District Rule 61.4.1 (b)(6).

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 This is an initial application for a new E85 permit.
- 1.3 Facility Description This is a retail gasoline & E85 dispensing facility.

#### 1.4 Other Background Information –

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APCD1980-SITE-02614> [LUEG-APCD,Administrative,Site,NA] ; Status: Active
APCD2005-OWC-983383> [LUEG-APCD.Administrative.Change.Ownership] ; Status: A
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APCD2017-VRT-0884> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] : Status:
D > APCD2018-NOV-000027> [LUEG-APCD.Compliance,Notice of Violation.NA] : Status: Closed - Paid
APCD2018-VRT-0554> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] : Status:
APCD2018-VRT-0811> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status:
D APCD2018-APP-005329> [LUEG-APCD,Permit App,Vapor Recovery,EVR Phase II OTC] ; Status: Approved
D > APCD2019-NTC-00187> [LUEG-APCD.Compliance.Notice to Comply.NA] : Status: Closed-Certified Compliance
APCD2019-VRT-0845> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] ; Status:
APCD2020-VRT-0859> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] ; Status:
D > APCD2020-APP-006500> [LUEG-APCD,Permit App,Vapor Recovery,EVR Phase II OTC] ; Status: Approved
D APCD2021-VRT-0819> [LUEG-APCD,Compliance,Vapor Recovery,Test Notification] ; Status: Reviewed-Inspector
APCD2022-VRT-0881> [LUEG-APCD_Compliance_Vapor Recovery_Test Notification] : Status:
APCD2023-VRT-0938> [LUEG-APCD.Compliance.Vapor Recovery.Test Notification] : Status:
APCD2024-APP-008328> [LUEG-APCD.Permit App,Vapor Recovery.EVR Phase II OTC] : Status: Open
APCD1994-APP-931007> [LUEG-APCD,Permit App,Vapor Recovery,NA] ; Status: Approved
APCD1994-HBD-02957> [LUEG-APCD, Variance App, Variance, NA]; Status: Closed

# 2.0 PROCESS DESCRIPTION

- 2.1 Equipment Description –
  E85 Dispensing Facility (Retail):
  Phase II VRS: Exempt per Rule 61.4.1 (b)(6);
  Phase I VRS: OPW per ARB Executive Order (E.O.) VR-102;
  Tank: One (1) 12,000 gallon, underground tank
  E85 Throughput Limit: 1,200,000 gallons per year (consecutive twelve (12) month period).
- 2.2 Process This is a facility equipped with storage tanks and the associated equipment to receive, store and dispense gasoline and E85.
- 2.3 Emissions Controls The proposed E85 station will be equipped with Phase I control.
- 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 is expected for new E85 installation.

<b>Emission Rates</b>	Gasoline	E85	Gas + E85	Units
Annual VOC	0	1456	1456	lbs/year
Emissions				
Annual VOC	0	0.7	0.7	tons/year
Emissions				
Daily VOC	0	4.0	4.0	lbs/day
Emissions				
Average Hourly	0	0.2	0.2	lbs/hour
Emissions				
MAX Hourly	-0.9	1.9	1.0	lbs/hour (MAX)
Emissions				

 Table 1: Emissions Estimate Increase

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

https://www.sdapcd.org/content/dam/sdapcd/documents/permits/emissions-calculation/gasoline-dispensing/APCD-Splash-Fill-of-Underground-Tank-with-No-Controls.pdf).

Equations:

$$\begin{aligned} E_a &= U_a \times EF_t \times C_i \\ E_h &= T \times EF_l \times C_i \end{aligned}$$

Variables:

$E_a$	Annual emissions of gasoline vapor (lbs/year)
$E_h$	Maximum hourly emissions of gasoline vapor (lbs/hour)
U <sub>a</sub>	Annual gasoline throughput (gallons/year)
Т	Maximum one-hour bulk gasoline delivery
$EF_t$	Emission factor (combined) for throughput (lbs/gallon)
EFl	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 (<u>https://ww3.arb.ca.gov/vapor/gdf-emisfactor/gdfumbrella.pdf</u>), which are shown in the

following table:

Table 2: E85 Emission Factors:

	<b>Revised (lbs/1000 gal)</b>	EF Source
Sub Category	EVR	
Phase II Fueling (with ORVR		CARB 2013 Updated
Vehicles UEF)	0.42	Emission Factors Table I-I
Phase I Bulk Transfer Losses		CARB 2013 Updated
	0.15	Emission Factors Table I-I
Pressure Driven Losses (Breathing		CARB 2013 Updated
Loss)	0.024	Emission Factors Table I-I
		CADD 2012 U. 1 / 1
Phase II Fueling – Spillage UEF	0.61	CARB 2013 Updated
	0.61	Emission Factors Table I-I
Gasoline Dispensing Hose		CARB 2013 Updated
Permeation		Emission Factors Table I-I
remeation	0.009	Emission Factors Table 1-1
Year 2017		
Total	1.213	

UEF: Uncontrolled Emission Factor

# 3.3 Emission Calculations –

E11112210112	mercase.		
Variable	Value	Units	Description
UA	1,200,000	gallons/year	Annual Gasoline Throughput (increase only)
EFT	1.213	lbs/1000 gallons	Total Emission Factor
Ci	1	lbs/lb	Concentration of VOCs in gasoline vapor
EA	1456	lbs/year	Annual VOC Emissions: U <sub>A</sub> * EF <sub>T</sub> * C <sub>i</sub>
EA	0.7	tons/year	Annual VOC Emission: E <sub>A</sub> * (1 ton/2000 lbs)
ED	4.0	lbs/day	Daily VOC Emissions: E <sub>A</sub> *(1 year/365 days)
E <sub>Haverage</sub>	0.2	lbs/hour	Average Hourly VOC Emissions: E <sub>D</sub> *(1
			day/24 hours)
E <sub>Hmax</sub>	1.9	lbs/hour	MAX Hourly VOC Emissions: (Tank
			capacity* EFI* Ci) + (EA – Average Phase I
			EVR/Loading Emissions)

#### Emissions Increase:

# 3.4 Attachments – APCD2024-APP-008364 VR Emission Calculations

# 4.0 APPLICABLE RULES

# 4.1 Prohibitory Rules

#### Rule 50 – Visible Emissions

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

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

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

#### **Rule 61.3.1 – Transfer of Gasoline into Stationary Underground Storage Tanks**

(d) Equipmen	(d) Equipment and Operation Requirements				
Section	Requirement	Explanation:	Condition(s)		
(d)(1)	Non-certified Phase I vapor recovery systems are prohibited from being sold, supplied and installed. Components	Compliance is expected. A CARB certified Phase I EVR system per the VR-102 series is proposed for E85.	ATC condition(s):		
	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		E85: 2, 4		
(d)(2)	Post 9/1/2006, all contractors and installers must successfully complete the corresponding manufacturers' training program for installing, modifying or	Compliance is expected. The ATCs and PTO will incorporate conditions regarding the requirement for Phase I equipment certified contractors and	ATC condition(s): E85: 7		
	repairing the Phase I vapor recovery	installers.			

	system. Documentation of successful completion must be available upon District request.		
(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 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: 12
(d)(3)(ii)	Minimum gasoline vapor control efficiency: 98.0% by volume Mass emission factor: Not exceeding 0.15 lbs gasoline vapor per 1,000 gallons of gasoline dispensed.	Expected to comply, a CARB certified Phase I EVR system is proposed for the E85 tanks.	ATC condition(s): E85: 4
(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
(d)(3)(iv)	When required by the applicable CARB Executive Order, the Phase I vapor recovery system is equipped with:		ATC condition(s):
(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).		E85: 4
(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;	Expected to comply, a CARB	
(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;	certified Phase I EVR system is proposed for the E85 tanks. The ATC and PTO will incorporate a condition requiring all components listed in the applicable CARB Executive Order be installed	
(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 and vapor tight unless otherwise specified by CARB.	The facility is expected to comply. A CARB certified Phase I EVR system is proposed for the E85 equipment which have specified allowable leak rates for certain components. Startup inspection and annual compliance	ATC condition(s): 8, 10

		test will be required to ensure	
(d)(3)(vi)	The gasoline liquid delivery hose shall only be connected or disconnected when the vapor return hose is connected during gasoline delivery.	compliance. 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	ATC condition(s): 11, 13
(d)(3)(vii)	There shall be no liquid leaks of the gasoline delivery hose and vapor return hose during a delivery and disconnection.	proper transfer connections and order during fuel bulk delivery.	
(e) Inspection	n 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:		ATC condition(s):
(e)(1)(i)	All stationary UST fill caps and gaskets, to verify the components are in place and in good condition.	The facility is expected to comply.	14
(e)(1)(ii)	All stationary UST poppeted dry breaks, gasoline vapor and liquid adaptors, to verify they are operable and sealing properly.	The ATCs and PTOs will incorporate a condition regarding the inspection requirements.	
(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.		ATC condition(s):
(e)(2)(i)	The District permit is current and posted.		
(e)(2)(ii)	The facility complies with all permit conditions.		16
(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.	The facility is expected to comply. The ATCs and PTOs will incorporate	
(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.	a condition regarding the annual compliance inspection requirements and schedule.	
(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		ATC
(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.	The facility is expected to comply with subsections (e)(3) and (e)(4). The ATCs and PTOs will incorporate a condition regarding maintenance	condition(s): 17
(e)(3)(ii)	Components having a Title 17 defect shall not be used.	issues and requirements.	
(e)(4)	Any additional alternative maintenance procedures by CARB E.O.s or IOMs.		

(f)(1)	Initial compliance test shall be conducted	The facility is expected to comply.	ATC
	within 60 calendar dates for new	The ATCs will require an initial	condition(s):
	installations or modifications.	startup inspection with applicable	•
		testing per the CARB Executive Orders.	29
(f)(2)	Annual compliance source test required.	The facility is expected to comply.	ATC
	Additional tests may be required.	The ATCs and PTOs will incorporate	condition(s):
		a condition regarding the compliance	
(0,(2))		test schedule.	29
(f)(3)	Contractors/technicians conducting tests are required to complete the SCAQMD	Compliance with subsections $(f)(3)$ , $(f)(4)$ and $(f)(5)$ is expected. The	ATC condition(s):
	orientation class, alternative District	ATCs and PTOs will incorporate	condition(s).
	approved classes/training,	conditions regarding certification	5,7
	training/certificates by CARB or the	requirements and testing time frames	,
	systems manufacturer.	as required.	
(f)(3)(i)	A copy of a current certificate from the		ATC
	South Coast Air Quality Management		condition(s):
	District, CARB, system manufacturer		5 7
(f)(3)(ii)	<i>and/or from other approved training.</i> <i>Records of equipment calibrations</i>	4	5, 7 ATC
())(3)(11)	performed as required by the applicable		conditions(s):
	test procedures.		conditions(s).
			5,7
(f)(4)	Tests shall be conducted per the ATC,	]	5, 7 ATC
	PTO, and applicable CARB EO and		condition(s):
	Certification Procedures.		
(f)(F)		-	5, 7 ATC
(f)(5)	Test and/or re-test reports shall be submitted to the owner or operator within		condition(s):
	15 calendar days.		condition(3).
			32
(g) Recordke			1.770
(g)(l)	Records of inspections performed as	The facility is expected to comply.	ATC
(g)(2)	required by Section (e) of this rule. Records of all malfunctioning	The ATCs and PTOs will incorporate a condition regarding the	condition(s):
(g)(2)	components, including the date(s) such	requirements for recordkeeping as	6, 15, 29, 30, 31,
	<i>components were identified and repaired</i>	outlined.	32
	or replaced, and any other records and		
	information required by the most recent		
( ) (2)	applicable CARB Executive Orders.	-	
(g)(3)	Records of initial and periodic		
	<i>compliance source tests, which include at a minimum:</i>		
(g)(3)(i)	Date and time of each test;	-	
(g)(3)(i) (g)(3)(ii)	Name, affiliation, address, and phone	1	
	number of the person(s) who performed		
	the test;		
(g)(3)(iii)	For a retest following a failed initial or		
	periodic compliance source test,		
$(\alpha)(3)(in)$	description of repairs performed;	4	
(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):

	15
	15

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

(b) Exemption	S		
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 or non- retail gasoline dispensing facility.	E85 is exempt from Phase II requirement.	n/a

#### <u>Rule 61.4.1 – Transfer of Gasoline from stationary underground storage tanks into vehicle fuel</u> <u>tanks</u>

(b) Exemption	ns		
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 or non- retail gasoline dispensing facility.	E85 is exempt from Phase II requirement.	n/a

#### Rule 61.5 – Visible Emissions Standards for Vapor Control Systems

Rule 61.5 states:The facility is expected to comply based on similar operations.n/aNo 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.The facility is expected to comply based on similar operations.	Requirement	Explanation:	Condition
aggregating more than one (1) minute in any 60 consecutive minutes; or (2) Greater than 40% at any time.	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	The facility is expected to comply based on	e on antion

#### 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:	The facility is expected to comply based on	ATC
	similar operations. Conditions will be added to	condition(s):

<ul> <li>(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.</li> <li>(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</li> <li>(iii) No person shall allow fugitive liquid leaks along the liquid transfer path, including any storage tank.</li> </ul>	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.	14
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#### Rule 61.8 – Certification Requirements for Vapor Control Equipment

No person shall install, provide, sell or sellComplies, Phase I vapor recovery systemATCfor use within the County of San Diego a gasoline vapor control system or systemcertified per CARB Executive Order VR-102condition(s):	Requirement	Explanation:	Condition
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	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		condition(s):

#### 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 following table, 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 5: 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
<b>Contemporaneous Calculations Performed?</b>	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

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

	Table 6: New	Source Rev	iew Discussion	
Rule/Requirement	Requirement	Applies?	Discussion	Condition(s)
	Rule 20.2 applies to non-		This is not a major source, so rule	
Applicability	major sources.	Yes	20.2 applies.	n/a
Type of application	Replacement (Amendment)		n/a	n/a
Enormations	No exemptions apply to this			
Exemptions	equipment		n/a	n/a
20.2(d)(1) - BACT			The notential to emit for this	
	Installation of BACT is		The potential to emit for this pollutant from this equipment does	
			not exceed this trigger level, so	
BACT - NOx	exceed 10 lb/day	No	BACT is not required.	n/a
DHCI IVOX	exceed 10 lorday	110	Drie i is not required.	ATC
	Installation of BACT is		Phase I EVR system will be installed	conditions:
			for E85 which is considered BACT	
BACT - VOC	exceed 10 lb/day	Yes	for E-85.	2
			The potential to emit for this	
	Installation of BACT is		pollutant from this equipment does	
	required if emissions of PM-		not exceed this trigger level, so	
BACT - PM-10	10 exceed 10 lb/day	No	BACT is not required.	n/a
			The potential to emit for this	
	Installation of BACT is		pollutant from this equipment does	
DACT SO-	required if emissions of SOx	N	not exceed this trigger level, so	
BACT - SOx	exceed 10 lb/day	No	BACT is not required.	n/a
20.2(d)(2) - AQIA		r		
	Required for project emission		The increase in emission of this air	
	increases in excess of 25		contaminant from this project does	
AQIA - NOx	lb/hr, 250 lb/day or 40 ton/yr of NOx calculated as NO2	No	not exceed any of these levels, so no AQIA is required.	n/a
AQIA - NOX	of NOX calculated as NO2	NO	The increase in emission of this air	II/a
	Required for project emission		contaminant from this project does	
	increases in excess of 100		not exceed any of these levels, so no	
AQIA - PM-10	lb/day or 15 ton/yr of PM-10	No	AQIA is required.	n/a
	Required for project emission		The increase in emission of this air	
	increases in excess of 25		contaminant from this project does	
	lb/hr, 250 lb/day or 40 ton/yr		not exceed any of these levels, so no	
AQIA - SOx	of SOx calculated as SO2	No	AQIA is required.	n/a
	Required for project emission		The increase in emission of this air	
	increases in excess of 100		contaminant from this project does	
	lb/hr, 550 lb/day or 1000		not exceed any of these levels, so no	1
AQIA - CO	ton/yr of CO	No	AQIA is required.	n/a
	Applicable to source that may		This is not a PSD source and	
20.2(d)(3) - PSD	have a significant impact on a class I area	NA	emissions are not expected to impact a class I area	n/a
20.2(u)(3) - 1 3D	Requires 30 day public notice			11/ a
	if an AQIA was required or if			
	increase in VOC emissions		AQIA was not required and VOC	
20.2(d)(4) - Public	from the project exceed 250		emission increase from this project	
Notice	lb/day or 40 ton/year	NA	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. 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 GDF will be equipped with certified Phase I and Phase II vapor recovery controls, which are considered T-BACT.

Since the hourly and annual emissions from gasoline decreased or remained the same post-project, health risks associated with gasoline are not considered, see emissions calculation (APP-008328) for details.

E85 annual throughput is expected to be 1.2 million gallons. According to U.S. Department of Energy, E85 refers to ethanol-gasoline blends containing 51% to 83% ethanol. For the purposes of HRA, it is assumed that E85 is 51% ethanol and 49% gasoline, which is the most conservative assumption given that ethanol is not a Toxic Air Contaminant (TAC).

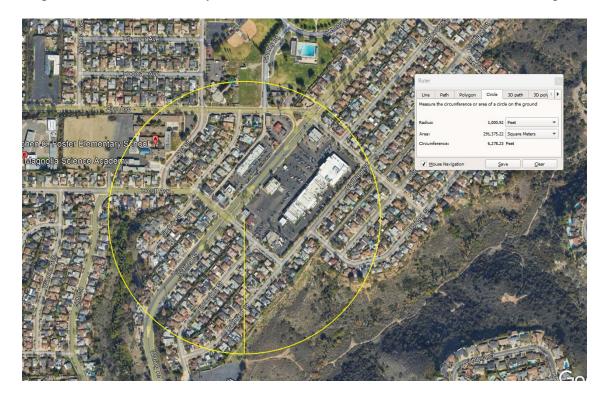
De minimis is performed with 1.2 million gallons of annual throughput for E85 with max hourly throughputs calculated from Section 3, closest receptor distance of 33ft and emission release height of 5ft. As shown in the aerial photo below, there is no receptor within 33ft of the emission source and the emission point is expected to be equal to or higher than 5ft due to height specification of vents per CARB EOs. De minimis shows that the health indices and cancer risk involved with this operation are within the standards of Rule 1200.



# 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 law also requires the District to consider any comments before authorizing construction.

Stephen C. Foster Elementary school is within 1,000ft of the source. AB3205 is required.



# 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 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 be equipped with ORVR.

NSPS: None

ATCM:

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

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 be equipped 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 dispensing facility will comply with all the applicable requirements, and it is recommended that an Authority to Construct be issued at the end of the AB3205 comment period with standard conditions with standard conditions for E85 equipment unless comments received would result in necessary changes to the project.

# 6.0 **RECOMMENDED CONDITIONS**

The recommended condition set is standard ATC for E85, APCD2019-CON-001537.