

# San Joaquin Valley Air Pollution Control District

## Authority to Construct Application Review

### Motor Vehicle Refueling-Gasoline Dispensing Facility

Facility Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_ Engineer/Specialist: \_\_\_\_\_  
Lead Engineer/Specialist: \_\_\_\_\_  
Contact Person: \_\_\_\_\_  
Telephone: \_\_\_\_\_  
Email or Fax: \_\_\_\_\_  
Application #(s): \_\_\_\_\_  
Project #: \_\_\_\_\_  
Deemed Complete: \_\_\_\_\_

#### I. Proposal

Notes: Please read the following notes carefully before processing:

- This evaluation applies only to GDFs with Underground tanks at non-major sources.
- If GDF is exempt from Phase I or II, do not use this GEAR, instead use the Phase II exempt GDF template posted on AirNet under GDF source category (EE Templates).
- Current ARB certified EVR Phase II vapor recovery systems are summarized below:

System Type	Vacuum Assist System	Balance Systems					
Manufacturer	Healy	VST				Emco Wheaton	
Most Prominent System Component	Healy Clean Air Separator	VST Green Machine	Veeder-Root Vapor Polisher	VST Membrane Processor	Hirt VCS 100 Thermal Oxidizer	Healy Clean Air Separator	Hirt VCS 100 Thermal Oxidizer
Executive Order # Without ISD	<b>VR-201</b>	<b>VR-203</b>			<b>VR-203</b> (previously VR-205)	<b>VR-203</b> (previously VR-209)	<b>VR-207</b>
Executive Order # With ISD	<b>VR-202</b>	<b>VR-204</b>			<b>VR-204</b>	<b>VR-204</b>	<b>VR-208</b>
ISD Type	Veeder-Root or INCON	Veeder-Root only			Veeder-Root only	Veeder-Root or INCON*	INCON only

\*EMCO Nozzle for use with FFS Clean Air Separator is not allowed with INCON ISD System.

- *VST system has several options, it is very important to verify which option is proposed and address accordingly.*
- *For systems without Hirt burner (VCS 100 Thermal Oxidizer), use the other gear evaluation for underground tanks without Hirt burner.*
- *A project cannot be deemed complete without verifying the proposed vapor recovery components listed in applicable Executive Orders. Some equipment may be certified under approval letters. Click the following link to review ARB's executive orders & approval letters: <http://www.arb.ca.gov/vapor/eo.htm>. Indicate components verification by check boxes in the supplemental application and attach a copy of second page in Appendix B.*
- *As of September 1, 2010, all GDFs with no ISD are required to install ISD or accept an annual throughput limit of 600,000 gallons per year.*
- *Use ATC Issuance Letter posted on AirNet under GDF Source Category with final ATC.*

*For a NEW facility, use the following otherwise delete:*

Facility Name requests an Authority to Construct (ATC) to install a new retail/non-retail motor vehicle gasoline dispensing facility (GDF). The applicant proposes to install <Number and Capacity of Tanks by Fuel Type> served by <New Phase I System> Phase I vapor recovery system, single/double fill configuration (<New EO>), and XX fueling points with XX gasoline dispensing nozzles served by [VST or Emco Wheaton] EVR Phase II vapor recovery system including Hirt VCS 100 Thermal Oxidizer [with or without] In-Station Diagnostics (ISD) System (VR-203 or VR-207 or VR-208).

*For an EXISTING facility, use one of the following and delete the others:*

*For VR-203 with Hirt burner (NO ISD) use this, otherwise delete:*

Facility Name requests an Authority to Construct (ATC) to modify an existing retail/non-retail motor vehicle gasoline dispensing facility (GDF). The applicant proposes to upgrade the Phase II Vapor Recovery System from <Current System> (<Current EO>) to VST EVR including Hirt VCS 100 Thermal Oxidizer without In-Station Diagnostics (ISD) System (VR-203).

*For VR-204 with Hirt burner (WITH ISD) use this, otherwise delete:*

Facility Name requests an Authority to Construct (ATC) to modify an existing retail/non-retail motor vehicle gasoline dispensing facility (GDF). The applicant proposes to upgrade the Phase II Vapor Recovery System from <Current System> (<Current EO>) to VST EVR including Hirt VCS 100 Thermal Oxidizer with In-Station Diagnostics (ISD) System (VR-204).

*For VR-207 use this, otherwise delete:*

Facility Name requests an Authority to Construct (ATC) to modify an existing retail/non-retail motor vehicle gasoline dispensing facility (GDF). The applicant proposes to upgrade the Phase II Vapor Recovery System from <Current System> (<Current EO>) to Emco Wheaton

EVR including Hirt VCS 100 Thermal Oxidizer without In-Station Diagnostics (ISD) System (VR-207).

*For VR-208 use this, otherwise delete:*

[Facility Name](#) requests an Authority to Construct (ATC) to modify an existing [retail/non-retail motor vehicle gasoline dispensing facility \(GDF\)](#). [The applicant proposes to upgrade the Phase II Vapor Recovery System from <Current System> \(<Current EO>\)](#) to Emco Wheaton EVR including Hirt VCS 100 Thermal Oxidizer with In-Station Diagnostics (ISD) System (VR-208).

[See Appendix A: Current Permit to Operate](#)

## II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule ( <a href="#">4/21/11</a> )
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4102	Nuisance (12/17/92)
Rule 4621	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants ( <a href="#">12/19/13</a> )
Rule 4622	Transfer of Gasoline into Vehicle Fuel Tanks ( <a href="#">12/19/13</a> )
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)  
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

## III. Project Location

*Note: If GDF is located within 1,000 ft of a K-12 school AND the project results in increase in emissions (e.g., new GDF, increase in throughput, installing a Hirt burner, etc.), a school notice MUST be performed and HRA will also be required.*

*For a Non-School Notice project – no increase in emissions:*

The project is located at [<Location Address>](#) in [<Location City>](#), California. Pursuant to California Health and Safety Code 42301.6, since this project will not result in an increase in emissions, a school notice is not required.

*For a Non-School Notice project - > 1,000 feet.*

The project is located at [<Location Address>](#) in [<Location City>](#), California. The District has verified that the equipment [is not](#) located within 1,000 feet of the outer boundary of a K-12 school. Therefore, the public notification requirement of California Health and Safety Code 42301.6 [is not](#) applicable to this project.

*For a School Notice project - < 1,000 feet.*

The project is located at [<Location Address>](#) in [<Location City>](#), California. The District has verified that the equipment [is](#) located within 1,000 feet of the outer boundary of [<School Name>](#). Therefore, the public notification requirement of California Health and Safety Code 42301.6 [is](#) applicable to this project.

#### IV. Process Description

Gasoline is delivered to the storage tank(s) via a delivery vessel. Gasoline is then dispensed from the storage tank(s) into motor vehicle tanks during vehicle refueling.

#### V. Equipment Listing

*FOR NEW INSTALLATIONS USE THE FOLLOWING, OTHERWISE DELETE:*

*Note: To ensure that the most current equipment is installed, use the most recent revision letter of executive order at: <http://www.arb.ca.gov/vapor/eo.htm>*

*For VR-203 (with Hirt burner and NO ISD) use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY VST EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER NOT INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-203-X)

*For VR-204 (with Hirt burner and WITH ISD) use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY VST EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-204-X)

*For VR-207 use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY EMCO WHEATON EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER NOT INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-207-X)

*For VR-208 use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY EMCO WHEATON EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER INCLUDING INCON IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-208-X)

**FOR MODIFICATIONS USE THE FOLLOWING, OTHERWISE DELETE:**

Pre-Project Equipment Description:

X-XXXX-X-X: Copy and paste equipment description of current PTO from PAS.

ATC Equipment Description:

Note: Rules 4621 and 4622 define Major Modification as follows:

*Phase I (Rule 4621)*

- The addition, replacement, or removal of an underground storage container, or a modification that causes the container top to be unburied.

*Phase II (Rule 4622)*

- Addition, replacement, or removal of 50 percent or more of the buried vapor piping
- The replacement of dispensers. The replacement of a dispenser is not a major modification when the replacement is occasioned by end user damage to a dispenser.

*Please note that this is NOT Rule 2201 Major Mod. Also note that Major Mod for Phase I and Phase II are independent of each other. Thus if Major Mod is triggered for Phase II only, it has no effect on Phase I.*

*Once Major Mod is triggered, the existing system MUST meet the New installation requirements. Change the revision letters of Phase I and/or Phase II executive order(s) to the latest revision as found at: <http://www.arb.ca.gov/vapor/eo.htm>*

*Example of Major Mod on Phase II (delete if not applicable):*

X-XXXX-X-X: MODIFICATION OF A GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY CURRENT SYSTEM PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY CURRENT SYSTEM PHASE II VAPOR RECOVERY SYSTEM (CURRENT EO); REPLACE EXISTING 4 DISPENSERS WITH 4 NEW GILBARCO ENCORE 700 SERIES DISPENSERS; CONSTITUTES A MAJOR MOD SO THAT PHASE II VAPOR RECOVERY SYSTEM MUST BE UPGRADED TO [CURRENT SYSTEM] EVR (CURRENT EO WITH LATEST REVISION LETTER)

*Example of other modifications that don't constitute Major Mod (delete if not applicable):*

X-XXXX-X-X: MODIFICATION OF A GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY CURRENT SYSTEM PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY CURRENT SYSTEM PHASE II VAPOR RECOVERY SYSTEM (CURRENT EO):  
*(please modify to fit your project)* RELOCATE VAPOR VENT STACK

Post Project Equipment Description:

*For VR-203 (with Hirt burner and NO ISD) use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY VST EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER NOT INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-203-X)

*For VR-204 (with Hirt burner and WITH ISD) use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY VST EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-204-X)

*For VR-207 use this, otherwise delete:*

X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY EMCO WHEATON EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER NOT INCLUDING IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-207-X)

*For VR-208 use this, otherwise delete:*



X-XXXX-X-X: GASOLINE DISPENSING OPERATION WITH TWO 10,000 GALLON [AND ONE 12,000 GALLON SPLIT (6,000 GALLON GASOLINE/6,000 GALLON DIESEL)] UNDERGROUND STORAGE TANK(S) SERVED BY [CURRENT SYSTEM] PHASE I VAPOR RECOVERY SYSTEM, SINGLE FILL CONFIGURATION (CURRENT EO), AND XX FUELING POINT(S) WITH XX GASOLINE DISPENSING NOZZLE(S) SERVED BY EMCO WHEATON EVR PHASE II VAPOR RECOVERY SYSTEM WITH HIRT VCS 100 THERMAL OXIDIZER INCLUDING INCON IN-STATION DIAGNOSTICS (ISD) SYSTEM (VR-208-X)

See [Appendix B](#): Supplemental Application

## VI. Emission Control Technology Evaluation

The motor vehicle refueling operation will use Air Resources Board (ARB) certified Phase I and Phase II vapor recovery systems designed to reduce VOC emission by at least 98% during storage tank filling and 95% during motor vehicle refueling.

## VII. General Calculations

### A. Assumptions

- This facility may operate 24 hr/day and 365 day/yr [Conservative estimate]
- Max gasoline dispensed is 1,800 gallons/fueling point/day [District GEAR 1 Policy]
- The HIRT Burner may operate 24 hr/day and 365 day/yr [Conservative estimate]
- Max burner heat input is 0.051 MMBtu/hr [Hirt Combustion Engineering, Inc]
- VOC emissions are based on CARB-Certified VRS emission factors [GEAR 1 Policy]

*For facilities WITH ISD, use the following otherwise delete:*

- Post-project annual VOC emissions are calculated based on the maximum annual throughput limit of X,XXX,XXX gallons per year. This throughput is calculated based on the number of fueling points using above assumptions in Section VII.C below.

*For facilities WITHOUT ISD, use the following otherwise delete:*

- Since the proposal does not include ISD, the annual throughput will be limited to 600,000 gallons per year. [District Rule 4622]

*For facilities with the throughput limited by the HRA, use the following otherwise delete:*

- Post-project annual VOC emissions are calculated based on the maximum annual throughput limit of X,XXX,XXX gallons per year. This throughput limit is based on the results of the Health Risk Assessment (Appendix D).

*For facilities with VR-203 (with Hirt burner), VR-207, or VR-208, use the following six assumptions, otherwise delete:*

- Maximum sulfur content of gasoline is 30 ppm (by weight) as required by California Reformulated Gasoline (CaRFG) Phase 3 Standard effective December 31, 2005.
- Density of gasoline = 6.17 lb/gal [AP-42 (1/95) Appendix A (page A-6)]
- Gasoline heating value = 130,000 Btu/gallon [AP-42 (1/95) Appendix A (page A-5)]

- Fuel oil #2 heating value = 140,000 Btu/gallon [AP-42 (1/95) Appendix A (page A-5)]

**B. Emission Factors**

VOC Emission Factor:

- VOC emissions for the GDF with a CARB-certified vapor recovery system using a Hirt Burner are 0.949 lb·VOC/1,000 gallons [District GEAR 1 Policy]
- Controlled emissions in lb·VOC per fueling point per day is calculated as follows:

$$\frac{0.949 \text{ lb} \cdot \text{VOC}}{1,000 \text{ gallons}} \times \frac{1,800 \text{ gallons}}{\text{FP} \cdot \text{day}} = 1.71 \frac{\text{lb} \cdot \text{VOC}}{\text{FP} \cdot \text{day}}$$

Combustion Emission Factors:

The combustion emission factors for NO<sub>x</sub> and CO emissions from Hirt VCS 100 thermal oxidizer were determined by ARB as part of the certification procedure of Executive Order VR-205 (later merged with VR-203). *For VR-207 and VR-208 include the following sentence, otherwise delete: Since Phase II EVR vapor recovery system [VR-207 or VR-208] uses the same Hirt VCS 100 thermal oxidizer, the NO<sub>x</sub> and CO emission factors are also the same.*

SO<sub>x</sub> emission factor is calculated based on 30 ppm gasoline fuel sulfur content limit of California Reformulated Gasoline (CaRFG) Phase 3 Standard effective December 31, 2005.

Currently there is no published data available for PM<sub>10</sub> emissions from external combustion of gasoline vapors. Since fuel oil #2 is a higher petroleum fraction than gasoline, AP-42 PM<sub>10</sub> emission factor for fuel oil #2 external combustion will be used as a conservative estimate. The following table summarizes the combustion emission factors:

Hirt Burner Combustion Emission Factors (EF)				
Pollutant	lb/hr	lb/1,000 gal	lb/MMBtu	Source
NO <sub>x</sub>	0.013	-	-	ARB Determination
SO <sub>x</sub>	-	-	0.00285 <sup>(1)</sup>	Mass Balance Equation Below
PM <sub>10</sub>	-	3.3 <sup>(2)</sup>	0.0236 <sup>(3)</sup>	AP-42 (9/98) Table 1.3-1
CO	0.0036	-	-	ARB Determination
VOC	see note (4) below			

(1) SO<sub>x</sub> emission factor is calculated as follows:

$$\frac{30 \text{ lb} \cdot \text{S}}{1,000,000 \text{ lb} \cdot \text{fuel}} \times \frac{6.17 \text{ lb} \cdot \text{fuel}}{\text{gallon}} \times \frac{2 \text{ lb} \cdot \text{SO}_2}{1 \text{ lb} \cdot \text{S}} \times \frac{1 \text{ gallon}}{130,000 \text{ Btu}} \times \frac{1,000,000 \text{ Btu}}{\text{MMBtu}} = 0.00285 \frac{\text{lb} \cdot \text{SO}_x}{\text{MMBtu}}$$

(2) PM<sub>10</sub> emission factor includes both filterable (2 lb/10<sup>3</sup> gallon) and condensable (1.3 lb/10<sup>3</sup> gallon) emissions.

(3) PM<sub>10</sub> emission factor in lb/MMBtu is calculated as follows:



$$\frac{3.3 \text{ lb} \cdot \text{PM}_{10}}{1,000 \text{ gallons fuel}} \times \frac{1 \text{ gallon} \cdot \text{fuel}}{140,000 \text{ Btu}} \times \frac{1,000,000 \text{ Btu}}{\text{MMBtu}} = 0.0236 \frac{\text{lb} \cdot \text{PM}_{10}}{\text{MMBtu}}$$

- (4) VOC emissions from the combustion are included within the overall VOC emission factor for the gasoline dispensing operation as indicated in the previous table.

## C. Calculations

### 1. Pre-Project Potential to Emit (PE1)

*For a new units use the following, otherwise delete.*

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

*For modified units use this, otherwise delete.*

Daily Emissions:

$$\begin{aligned} \text{Daily PE1} &= \text{Number of FP} \times \text{EF lb-VOC/FP} \cdot \text{day} \\ &= 8 \text{ FP} \times 1.71 \text{ lb-VOC/FP} \cdot \text{day} \\ &= 13.7 \text{ lb-VOC/day} \end{aligned}$$

*If the pre-project facility has a Phase II EVR vapor recovery system WITH Hirt burner, add the following, otherwise delete:*

Daily Combustion Emissions:

Daily Pre-Project Combustion Emissions				
Pollutant	Emission Factors (EF1)	EF1 Units	PE1 Calculations	PE1 (lb/day)
NO <sub>x</sub>	0.013	lb/hr	0.013 lb/hr × 24 hr/day =	0.3
SO <sub>x</sub>	0.00285	lb/MMBtu	0.00285 lb/MMBtu × 0.051 MMBtu/hr × 24 hr/day =	0.0
PM <sub>10</sub>	0.0236	lb/MMBtu	0.0236 lb/MMBtu × 0.051 MMBtu/hr × 24 hr/day =	0.0
CO	0.0036	lb/hr	0.0036 lb/hr × 24 hr/day =	0.1
VOC	0.019*	lb/1,000 gallon	See note below	

\*VOC emissions from combustion are included within the emission factor for the gasoline dispensing.

Annual Emissions:

*If annual throughput is based on the number of fueling points, use the following, otherwise delete.*

$$\begin{aligned} \text{Annual throughput (gal/yr)} &= \text{Number of FP} \times 1,800 \text{ (gal/FP} \cdot \text{day)} \times 365 \text{ (days/yr)} \\ &= 8 \times 1,800 \text{ (gal/FP} \cdot \text{day)} \times 365 \text{ (days/yr)} \\ &= 5,256,000 \text{ gal/yr} \end{aligned}$$

$$\begin{aligned} \text{Annual PE1} &= \text{Annual throughput (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\ &= 5,256,000 \text{ (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\ &= 4,988 \text{ lb-VOC/yr} \end{aligned}$$

*If annual throughput is proposed or based on a Rule limit, use the following, otherwise delete.*

$$\begin{aligned} \text{Annual PE1} &= \text{Annual throughput (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\ &= 600,000 \text{ (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\ &= 569 \text{ lb-VOC/yr} \end{aligned}$$

*If the pre-project facility has a Phase II EVR vapor recovery system WITH Hirt burner, add the following, otherwise delete:*

Annual Combustion Emissions:

Annual combustion emissions are calculated based on a worst case operating schedule of 24 hr/day and 365 day/year (8,760 hr/year). Thus:

Annual Pre-Project Combustion Emissions				
Pollutant	Emission Factors (EF1)	EF1 Units	PE1 Calculations	PE1 (lb/yr)
NO <sub>x</sub>	0.013	lb/hr	0.013 lb/hr × 8,760 hr/yr =	114
SO <sub>x</sub>	0.00285	lb/MMBtu	0.00285 lb/MMBtu × 0.051 MMBtu/hr × 8,760 hr/yr =	1
PM <sub>10</sub>	0.0236	lb/MMBtu	0.0236 lb/MMBtu × 0.051 MMBtu/hr × 8,760 hr/yr =	11
CO	0.0036	lb/hr	0.0036 lb/hr × 8,760 hr/yr =	32
VOC	0.019*	lb/1,000 gallon	See note below	

\*VOC emissions from combustion are included within the emission factor for the gasoline dispensing.

*For all facilities, use the following and add pre-project combustion factors if necessary.*

Emissions Summary:

Pre-Project Potential to Emit (PE1)		
	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	0.0	0
SO <sub>x</sub>	0.0	0
PM <sub>10</sub>	0.0	0
CO	0.0	0
VOC	13.7	4,988

**2. Post Project Potential to Emit (PE2)**

Daily Emissions:

$$\begin{aligned} \text{Daily PE2} &= \text{Number of FP} \times \text{EF lb-VOC/FP-day} \\ &= 8 \text{ FP} \times 1.71 \text{ lb-VOC/FP-day} \\ &= 13.7 \text{ lb-VOC/day} \end{aligned}$$

Daily Combustion Emissions:

Daily Post-Project Combustion Emissions				
Pollutant	Emission Factors (EF2)	EF2 Units	PE2 Calculations	PE2 (lb/day)
NO <sub>x</sub>	0.013	lb/hr	0.013 lb/hr × 24 hr/day =	0.3
SO <sub>x</sub>	0.00285	lb/MMBtu	0.00285 lb/MMBtu × 0.051 MMBtu/hr × 24 hr/day =	0.0
PM <sub>10</sub>	0.0236	lb/MMBtu	0.0236 lb/MMBtu × 0.051 MMBtu/hr × 24 hr/day =	0.0
CO	0.0036	lb/hr	0.0036 lb/hr × 24 hr/day =	0.1
VOC	0.019*	lb/1,000 gallon	See note below	

\*VOC emissions from combustion are included within the emission factor for the gasoline dispensing.

Annual Emissions:

*If annual throughput is based on number of fueling points, use the following otherwise delete.*

$$\begin{aligned}
 \text{Annual throughput (gal/yr)} &= \text{Number of FP} \times 1,800 \text{ (gal/FP-day)} \times 365 \text{ (days/yr)} \\
 &= 8 \times 1,800 \text{ (gal/FP-day)} \times 365 \text{ (days/yr)} \\
 &= 5,256,000 \text{ gal/yr}
 \end{aligned}$$

$$\begin{aligned}
 \text{Annual PE2} &= \text{Annual throughput (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\
 &= 5,256,000 \text{ (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\
 &= 4,988 \text{ lb-VOC/yr}
 \end{aligned}$$

*If annual throughput is NOT based on number of fueling points, use the following otherwise delete.*

$$\begin{aligned}
 \text{Annual PE2} &= \text{Annual throughput (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\
 &= 600,000 \text{ (gal/yr)} \times 0.949 \text{ (lb-VOC/1,000 gal)} \\
 &= 569 \text{ lb-VOC/yr}
 \end{aligned}$$

*For all facilities, use the following:*

Annual Combustion Emissions:

Annual combustion emissions are calculated based on a maximum operating schedule of 24 hr/day and 365 day/year (8,760 hr/year). Thus:

Annual Post-Project Combustion Emissions				
Pollutant	Emission Factors (EF2)	EF2 Units	PE2 Calculations	PE2 (lb/yr)
NO <sub>x</sub>	0.013	lb/hr	0.013 lb/hr × 8,760 hr/yr =	114
SO <sub>x</sub>	0.00285	lb/MMBtu	0.00285 lb/MMBtu × 0.051 MMBtu/hr × 8,760 hr/yr =	1
PM <sub>10</sub>	0.0236	lb/MMBtu	0.0236 lb/MMBtu × 0.051 MMBtu/hr × 8,760 hr/yr =	11
CO	0.0036	lb/hr	0.0036 lb/hr × 8,760 hr/yr =	32
VOC	0.019*	lb/1,000 gallon	See note below	

\*VOC emissions from combustion are included within the emission factor for the gasoline dispensing.

Emissions Summary:

Post-Project Potential to Emit (PE2)		
Pollutant	Daily Emissions (lb/day)	Annual Emissions (lb/year)
NO <sub>x</sub>	0.3	114
SO <sub>x</sub>	0.0	1
PM <sub>10</sub>	0.0	11
CO	0.1	32
VOC	13.7	4,988

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

Pursuant to Section 4.9 of District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

*For a new facility use the following, otherwise delete:*

Since this is a new facility, the SSPE1 = zero.

**SSPE1 = 0 lb/yr**

*Otherwise, if this is an existing facility with only one permit unit use the following.*

Since this is an existing facility with only one permit unit, SSPE1 is equal to the PE1, and is posted in the following table.

*If this facility has one existing unit that is a GDF, and it has no Hirt burner, replace the lb/yr in the NO<sub>x</sub> - CO rows with 0.*

SSPE1	
Pollutant	(lb/year)
NO <sub>x</sub>	114
SO <sub>x</sub>	1
PM <sub>10</sub>	11
CO	32
VOC	4,988

*If this facility has more than 1 other unit, make a chart.*

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

Pursuant to Section 4.10 of District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

Since this facility has **only one permit unit**, SSPE2 is equal to the PE2.

SSPE2	
Pollutant	(lb/year)
NO <sub>x</sub>	114
SO <sub>x</sub>	1
PM <sub>10</sub>	11
CO	32
VOC	4,988

#### 5. Major Source Determination

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

- any ERCs associated with the stationary source
- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

This facility does not contain ERCs which have been banked at the source. Therefore, no adjustment to SSPE2 is necessary.

Major Source Determination					
Pollutant	SSPE1 (lb/yr)	SSPE2 (lb/yr)	Major Source Threshold (lb/yr)	Existing Major Source?	Becoming a Major Source?
NO <sub>x</sub>	114	114	20,000	No	No
SO <sub>x</sub>	1	1	140,000	No	No
PM <sub>10</sub>	11	11	140,000	No	No
CO	32	32	200,000	No	No
VOC	4,988	4,988	20,000	No	No

## 6. Baseline Emissions (BE)

Pursuant to Section 3.7.1.1 of Rule 2201, the BE = PE1 for any unit located at a non-Major Source.

## 7. SB 288 Major Modification

SB 288 Major Modification is defined Rule 2201. As discussed in Section VII.C.5 above, the facility is not a Major Source for any pollutant. Therefore, the project does not constitute a SB 288 Major Modification.

## 8. Federal Major Modification

Federal Major Modification is defined in Rule 2201. As discussed in Section VII.C.5 above, the facility is not a Major Source for any pollutant. Therefore, the project does not constitute a Federal Major Modification.

## 9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated to complete the District's PAS emissions profile screen. The QNEC is calculated by dividing the annual increase in permitted emissions (IPE) by 4 calendar quarters per year, as shown in the following table.

Enter the PE1 and the PE2 Below. Then highlight the entire IPE and QNEC Fields, and press F9. This will automatically calculate the IPE and the QNEC. Then enter the QNEC values in the PAS emission profile screen.

QNEC				
Pollutant	PE1 (lb/yr)	PE2 (lb/yr)	IPE (lb/yr)	QNEC (lb/qtr)
NO <sub>x</sub>	0	114	114	29
SO <sub>x</sub>	0	1	1	0
PM <sub>10</sub>	0	11	11	3
CO	0	32	32	8
VOC	0	4,988	4,988	1,247

## VIII. Compliance

### Rule 2201 New and Modified Stationary Source Review Rule

#### A. Best Available Control Technology (BACT)

##### 1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following\*:

- a. Any new emissions unit with a potential to emit exceeding two pounds per day,
- b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,



- c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding two pounds per day, and/or
- d. Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

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

Since the applicant is proposing to install ARB certified Phase I and Phase II vapor recovery systems which meet BACT for this type of operation, no BACT calculations are needed (see Appendix C).

**B. Offsets**

**1. Offset Applicability**

Pursuant to Section 4.5.3, offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals to or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The following table compares the post-project facility-wide annual emissions in order to determine if offsets will be required for this project.

Offset Applicability			
Pollutant	SSPE2 (lb/year)	Offset Threshold (lb/year)	Offsets Triggered?
NO <sub>x</sub>	114	20,000	No
SO <sub>x</sub>	1	54,750	No
PM <sub>10</sub>	11	29,200	No
CO	32	200,000	No
VOC	4,988	20,000	No

**2. Quantity of Offsets Required**

As seen above, the SSPE2 is not greater than the offset thresholds for all the pollutants; therefore offset calculations are not necessary and offsets will not be required for this project.

**C. Public Notification**

**1. Applicability**

Public noticing is required for:

- a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications
- b. New emissions units with a PE > 100 lb/day
- c. Modifications that increase the SSPE across the offset threshold for any pollutant
- d. New Stationary Sources with an SSPE2 exceeding any emissions offset threshold

e. Any Permitting Action resulting in a SSIPE > 20,000 lb/yr for any pollutant.

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

Section 5.4.1 requires public notification for New Major Sources, Federal Major Modifications, and SB 288 Major Modifications. New Major Sources are new facilities, which are also major sources. Since this is not a new major source, and this project constitutes neither a Federal Major Modification nor an SB 288 Major Modification, public noticing is not required for these purposes.

**b. New emissions unit with a PE > 100 lb/day**

Section 5.4.2 requires public notification for projects for any new emissions unit with emissions exceeding 100 lb/day. As shown above, this project includes no such units. Therefore, public noticing is not required for new emission units with a PE > 100 lb/day purposes.

**c. Modifications Exceeding any Offset Thresholds**

Section 5.4.3 requires public notification for projects that raise the SSPE above the offset threshold for any pollutant. As seen in the following table, the facility's SSPE2 is beneath the offset threshold, the offset threshold is not being surpassed with this project, and public noticing for surpassing any offset thresholds is not required.

Public Notice Offset Threshold Values				
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	Offset Threshold (lb/year)	Public Notice Required?
NO <sub>x</sub>	0	114	20,000	No
SO <sub>x</sub>	0	1	54,750	No
PM <sub>10</sub>	0	11	29,200	No
CO	0	32	200,000	No
VOC	0	4,988	20,000	No

**d. New Stationary Sources Exceeding any Offset Thresholds**

Section 5.4.4 requires public notification for any new stationary source with an SSPE2 exceeding any offset threshold.

*For an existing facility, use the following otherwise delete:*

Since this is not a new stationary source, public noticing for new stationary sources is not required.

*For a New facility, use the following otherwise delete:*

Since the PE2 does not exceed any offset thresholds, public noticing for a new stationary source exceeding the offset thresholds is not required.

**e. SSIPE > 20,000 lb/year**

Section 5.4.5 requires public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as SSPE2 – SSPE1 pursuant to Rule 2201. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

*Use the following table if SSIPE is a positive number, otherwise delete:*

SSIPE Public Notice Threshold					
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	SSIPE	SSIPE Threshold	Public Notice Required?
NO <sub>x</sub>	0	0	0 lb/year	20,000 lb/year	No
SO <sub>x</sub>	0	0	0 lb/year	20,000 lb/year	No
PM <sub>10</sub>	0	0	0 lb/year	20,000 lb/year	No
CO	0	0	0 lb/year	20,000 lb/year	No
VOC			0 lb/year	20,000 lb/year	No

*Use the following table if SSIPE is a negative number, otherwise delete:*

SSIPE Public Notice Threshold					
Pollutant	SSPE1 (lb/year)	SSPE2 (lb/year)	SSIPE	SSIPE Threshold	Public Notice Required?
NO <sub>x</sub>	0	0	0 lb/year	20,000 lb/year	No
SO <sub>x</sub>	0	0	0 lb/year	20,000 lb/year	No
PM <sub>10</sub>	0	0	0 lb/year	20,000 lb/year	No
CO	0	0	0 lb/year	20,000 lb/year	No
VOC			0* lb/year	20,000 lb/year	No

\*Per District policy, negative values of SSIPE are set equal to zero.

*Use the following for all facilities:*

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

**2. Public Notice Action**

As discussed above, this project will not result in emissions, for any pollutant, which would subject the project to any of the noticing requirements listed above. Therefore, public notice will not be required for this project.

**D. Daily Emission Limits (DELs)**

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained

in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

For the motor vehicle refueling operation the DEL is established by the number of fueling points and the emission factor as shown in Section VII of this document. In addition, the following permit conditions will be placed on the ATC to ensure compliance:

*For facilities WITH ISD, use the following, otherwise delete (enter the annual gasoline throughput limit as calculated in Section VII.C.2 above or as determined based on the HRA):*

- {4011} The gasoline throughput for this permit unit shall not exceed X,XXX,XXX gallons in any one calendar year. [District Rule 2201]

*For facilities WITHOUT ISD use the following condition, otherwise delete:*

- {3906} The gasoline throughput at this facility shall not exceed 600,000 gallons per year. [District Rule 4622]

## **E. Compliance Assurance**

### **1. Source Testing**

Source testing is required by District Rules 4621, *Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants*, and 4622, *Transfer of Gasoline into Vehicle Fuel Tanks*. Since this gasoline dispensing operation is subject to the source testing requirements of these rules, these requirements will be discussed in Section VIII of this evaluation.

### **2. Monitoring**

Monitoring is required by District Rules 4621, *Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants*, and 4622, *Transfer of Gasoline into Vehicle Fuel Tanks*. Since this gasoline dispensing operation is subject to the monitoring requirements of these rules, these requirements will be discussed in Section VIII of this evaluation.

### **3. Recordkeeping**

Recordkeeping is required by District Rules 4621, *Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants*, and 4622, *Transfer of Gasoline into Vehicle Fuel Tanks*. Since this gasoline dispensing operation is subject to the recordkeeping requirements of these rules, these requirements will be discussed in Section VIII of this evaluation.

### **4. Reporting**

No reporting is required to demonstrate compliance with Rule 2201.

**Rule 2520 Federally Mandated Operating Permits**

Since this facility’s potential emissions do not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

**Rule 4102 Nuisance**

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations, provided the equipment is well maintained. *Therefore, the following condition will be listed on the ATC to ensure compliance:*

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

**California Health & Safety Code 41700 (Health Risk Assessment)**  
*(All Projects resulting in an increase in emissions REQUIRE an RMR)*

*For projects NOT requiring RMR use the following, otherwise delete:*

Motor vehicle refueling facilities equipped with both Phase I and Phase II vapor recovery systems satisfy the District’s BACT requirement for air toxic control, and the District has determined the health risk impact from such sources are insignificant. Therefore, a health risk assessment will not be required. Compliance with this rule is expected.

*For projects requiring RMR use the following, otherwise delete all the way through the end of the section:*

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

Therefore pursuant to the policy, a Health Risk Assessment (HRA) has been performed for this project to analyze the impact of toxic emissions. For projects where the increase in cancer risk is greater than one per million, Toxic Best Available Control Technology (TBACT) is required.

The HRA results for this project are shown below (see the HRA Summary in [Appendix D](#)):

HRA Results				
Unit	Acute Hazard Index	Chronic Hazard Index	Cancer Risk	T-BACT Required?
X-XXXX-XX	N/A	N/A	X.X in a million	No

As demonstrated previously, T-BACT is required for this project because the HRA indicates that the risk is above the District’s thresholds for triggering T-BACT requirements. BACT for

volatile organic compounds or enhanced vapor recovery constitutes T-BACT for this process. Therefore, compliance with the District's Risk Management Policy is expected.

District policy APR 1905 also specifies that the increase in emissions associated with a proposed new source or modification not have acute or chronic indices, or a cancer risk greater than the District's significance levels (i.e. acute and/or chronic indices greater than 1 and a cancer risk greater than 20 in a million). As outlined by the HRA Summary in [Appendix D](#) of this report, the emissions increases for this project was determined to be less than significant.

## **Rule 4621 Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants**

This rule applies to storage containers located at bulk plants with capacities greater than 250 gallons and less than 19,800 gallons; to other stationary storage containers with capacities greater than 250 gallons; and to those storage containers that are not subject to the control requirements of Rule 4623 (Storage of Organic Liquids) Section 5.0. The rule also applies to gasoline delivery vessels.

Section 5.1 states "loading equipment and vapor collection equipment shall be installed, maintained, and operated such that it is leak-free, with no excess organic liquid drainage at disconnect."

Section 3.19.2 defines a leak as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration or total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with the test method in Section 6.4.2. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from a component or equipment into a container is not considered sampling of a leak provided such activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {3913} The Phase I and Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method specified in this permit. [District Rules 4621 and 4622]
- {3914} A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration or total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with EPA Test Method 21. [District Rules 4621 and 4622]

Section 5.2.1 states "no person shall transfer, or permit the transfer, of gasoline from any delivery vessel into any stationary storage container subject to the requirements of this rule unless such container is equipped with an ARB certified permanent submerged fill pipe and utilizes an ARB certified Phase I vapor recovery system that is maintained and operated according to manufacturer specifications and the applicable ARB Executive Order." [Since the](#)



facility is proposing to install ARB certified Phase I vapor recovery system, requirements of this section are satisfied and compliance is expected.

In addition, ARB has the additional certification requirements, including applicable rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {3977} The Phase I and Phase II vapor recovery systems shall be installed and maintained in accordance with the manufacturer specifications and the ARB Executive Orders specified in this permit, including applicable rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. [District Rules 4621 and 4622]

*For facilities with Phase I with “double fill” option, use the following condition, otherwise delete.*

- {3013} When gasoline is delivered to an underground tank using the double fill configuration, two vapor return hoses shall be connected to the double fill configuration with at least one connection to each cargo tank(s) used to simultaneously deliver gasoline through two product lines into the underground tank. [District Rule 4621]

Section 5.2.4 states “operators shall have all underground storage container installations and all underground piping configurations inspected by the APCO prior to backfilling. The operator shall notify the District by telephone or other District-approved method and obtain a confirmation number at least three business days prior to the backfilling.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {3909} The permittee shall have all underground storage container installations and all underground piping configurations inspected by the APCO prior to backfilling. The permittee shall notify the District by telephone or other District-approved method and obtain a confirmation number at least three business days prior to backfilling. [District Rules 4621 and 4622]

Section 5.3.3 states “for an underground storage container not located at a bulk plant and a container that does not contain aviation gasoline, the container shall be equipped with an ARB certified Phase I vapor recovery system that has a minimum volumetric control efficiency of 98 percent.” The facility has proposed the installation of a Phase I vapor recovery system that meets the requirements of this section. Therefore, no further discussion is required.

Section 5.3.5 states “operators of underground storage containers not located at bulk plants shall conduct and pass the applicable performance tests specified in Sections 6.4.4 through 6.4.7 to determine compliance at least once every 36 months, (no more than 30 days before or after the required performance test date) unless otherwise required under ARB Executive

Order or Rule 4622 (Gasoline Transfer into Motor Vehicle Fuel Tanks).” Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {3928} The permittee shall conduct all periodic vapor recovery system performance tests specified in this permit, no more than 30 days before or after the required compliance testing date, unless otherwise required under the applicable ARB Executive Order. [District Rules 4621 and 4622]
- {3929} The permittee shall perform and pass a Static Torque of Rotatable Phase I Adaptors test using ARB procedure TP-201.1B within 60 days after initial start-up and at least once every 36 months thereafter. [District Rule 4621]
- {3941} The permittee shall perform and pass a Static Leak Test for Underground Tanks using ARB TP-201.3 in accordance with the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days after initial start-up and at least once every 12 months thereafter. [District Rules 4621 and 4622]

*For Phase I Executive Orders VR-101, VR-102, VR-103, or VR-104 use the following condition, otherwise delete:*

- {3931} The permittee shall perform and pass a Pressure Integrity of Drop Tube Drain Valve Assembly Test using ARB TP-201.1C or a Pressure Integrity of Drop Tube Overfill Protection Devices Test using ARB TP-201.1D if an overfill protection device is installed, within 60 days after initial start-up and at least once every 36 months thereafter. [District Rule 4621]

*For Phase I Executive Orders VR-105 use the following condition, otherwise delete:*

- {3935} The permittee shall perform and pass a Pressure Integrity of Drop Tube Overfill Protection Devices Test using ARB TP-201.1D within 60 days after initial start-up and at least once every 36 months thereafter. [District Rule 4621]

Section 5.5 states “all Phase I vapor recovery systems shall be inspected according to the frequency specified in Table 1. The person conducting the inspections shall, at a minimum, verify that the fill caps and vapor caps are not missing, damaged, or loose, that the fill cap gasket and vapor cap gaskets are not missing or damaged, that the fill adapter and vapor adapter are securely attached to the risers, that, where applicable, the spring-loaded submerged fill tube seals properly against the coaxial tubing, and the dry break (poppet-valve) is not missing or damaged and that the submerged fill tube is not missing or damaged.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

*For all RETAIL facilities use the following, otherwise delete:*

- {3921} The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 25,000 gallons - one day per week; B) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O&M manual. [District Rules 4621 and 4622]

*For all NON-Retail facilities use the following, otherwise delete:*

- {3923} The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 2,500 gallons - one day per month; B) 2,500 to less than 25,000 gallons - one day per week; or C) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O & M Manual. [District Rules 4621 and 4622]

*For all facilities use the following:*

- {3924} Periodic maintenance inspections of the Phase I vapor recovery system shall include, at a minimum, verification that 1) the fill caps and vapor caps are not missing, damaged, or loose; 2) the fill cap gasket and vapor cap gaskets are not missing or damaged; 3) the fill adapter and vapor adapter are securely attached to the risers; 4) where applicable, the spring-loaded submerged fill tube seals properly against the coaxial tubing; 5) the dry break (poppet-valve) is not missing or damaged; and 6) the submerged fill tube is not missing or damaged. [District Rule 4621]
- {4428} If Franklin Fueling Systems (FFS) PV-Zero pressure/vacuum vent valve is installed, the permittee shall conduct the following maintenance for the pressure vacuum vent valve, at least once every 12 months: 1) visually inspect the housing, pipe fittings, and rain cap for obvious signs of damage, missing parts, or fluid leaks, 2) visually inspect the rain cap, from ground level, for signs of bird nests or insect activity, and 3) drain and inspect the fill fluid per the "Fluid Inspection Procedure" described in the Executive Order specified in this permit. [District Rule 4621]

Section 5.7.2 states "no person shall operate, or allow the operation of a delivery vessel unless valid State of California decals which attest to the vapor integrity of the container are displayed." Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {3915} No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo container, which attest to the vapor integrity of the container. [District Rule 4621]

Section 6.1.4 states "all records required to demonstrate compliance with the requirements of this rule shall be retained on the premises for a minimum of five years and made available on site during normal business hours to the APCO, ARB, or EPA, and submitted to the APCO, ARB, or EPA upon request." Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {4010} The permittee shall maintain monthly and annual gasoline throughput records. [District Rules 4621 and 4622]
- {3975} All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

Section 6.2.4 states "Operators shall notify the District at least seven days prior to any performance testing." Section 6.2.5 states "Operators shall submit all performance test results

to the District within 30 days of test completion.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {3968} The permittee shall notify the District at least 7 days prior to each performance test. The test results shall be submitted to the District no later than 30 days after the completion of each test. [District Rule 4621]

Section 6.3.1 states “Installation and maintenance contractors shall be certified by the ICC for Vapor Recovery System Installation and Repair (VI) and make available onsite proof of ICC certification for VI, and have and make available on site proof of any and all certifications required by the applicable ARB Executive Order and installation and operation manual in order to install or maintain specific systems, or work under the direct and personal supervision of an individual physically present at the work site who possesses and makes available onsite a current certificate from the ICC, indicating he or she has passed the VI exam and all certifications required by the applicable ARB Executive Order.” Section 6.3.2 states “All ICC certifications shall be renewed every 24 months by passing the appropriate exam specific to the certification being sought.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {4014} A person performing installation of, or maintenance on, a certified Phase I or Phase II vapor recovery system shall be certified by the ICC for Vapor Recovery System Installation and Repair, or work under the direct and personal supervision of an individual physically present at the work site who is certified. The ICC certification shall be renewed every 24 months. [District Rules 4621 and 4622]
- {4016} Proof of the ICC certification and all other certifications required by the Executive Order and installation and operation manual shall be made available onsite. [District Rules 4621 and 4622]

Section 6.3.3 states “Gasoline Dispensing Facility Testers wishing to conduct vapor recovery system testing and repair at facilities located within the District, shall be in full compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification).” Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {4005} A person conducting testing of, or repairs to, a certified vapor recovery system shall be in compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification). [District Rules 4621 and 4622]

#### **Rule 4622 Transfer of Gasoline into Vehicle Fuel Tanks**

This rule applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks, except as provided in Section 4.0.

*For all NON-RETAIL facilities use the following, otherwise delete:*

Section 3.29 defines a retail gasoline outlet as an establishment at which gasoline is sold or offered for sale to the general public for use in motor vehicles. Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {1993} This gasoline storage and dispensing equipment shall not be used in retail sales, where gasoline dispensed by the unit is subject to payment of California sales tax on gasoline sales. [District Rule 4622]

*For all facilities use the following:*

Section 5.1 states “a person shall not transfer or permit the transfer of gasoline from any stationary storage container, or from any mobile fueler with a capacity greater than 120 gallons, into a motor vehicle fuel tank with a capacity greater than 5 gallons, unless the gasoline dispensing unit used to transfer the gasoline is equipped with and has in operation an ARB certified Phase II vapor recovery system.”

Section 5.1.1 states “all ARB certified Phase II vapor recovery systems shall be maintained according to ARB certifications and the manufacturer specifications applicable to the system.” Since the facility is proposing to install ARB certified Phase II vapor recovery system, requirements of this section are satisfied and compliance is expected.

In addition, ARB has the additional certification requirements, including applicable rules and regulations of the Division of Measurement Standards, the Department of Food and Agriculture, the Office of the State Fire Marshal, the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health, the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {3977} The Phase I and Phase II vapor recovery systems shall be installed and maintained in accordance with the manufacturer specifications and the ARB Executive Orders specified in this permit, including applicable rules and regulations of the Division of Measurement Standards, the Department of Food and Agriculture, the Office of the State Fire Marshal, the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health, the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board that have been made conditions of the certification. [District Rules 4621 and 4622]

Section 5.1.2 states “all ARB certified Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method in Section 6.5.4.” Section 6.5.4 states “detection of leaks shall be in accordance with EPA Test Method 21.”

Section 3.20 defines leak as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration or total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with the test method in Section 6.5.4. Any liquid or gas coming from a component undergoing repair or replacement, or during sampling of process fluid from a component or equipment into a container is not considered sampling of a leak provided such



activities are accomplished as expeditiously as possible and with minimal spillage of material and VOC emissions to the atmosphere. Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {3913} The Phase I and Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method specified in this permit. [District Rules 4621 and 4622]
- {3914} A leak is defined as the dripping of VOC-containing liquid at a rate of more than three (3) drops per minute, or the detection of any gaseous or vapor emissions with a concentration or total organic compound greater than 10,000 ppmv, as methane, above background when measured in accordance with EPA Test Method 21. [District Rules 4621 and 4622]

*For all facilities use the following:*

Section 5.2.1 states “any gasoline dispensing system subject to this rule shall comply with the provisions of this rule at the time of installation.”

Section 5.2.2 states “operators shall have all underground storage container installations and all underground piping configurations inspected by the APCO prior to backfilling. The operator shall notify the District by telephone or other District-approved method and obtain a confirmation number at least three business days prior to the backfilling.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {3909} The permittee shall have all underground storage container installations and all underground piping configurations inspected by the APCO prior to backfilling. The permittee shall notify the District by telephone or other District-approved method and obtain a confirmation number at least three business days prior to the backfilling. [District Rules 4621 and 4622]

Section 5.2.3 states “installation and maintenance contractors shall, be certified by the ICC (International Code Council) for Vapor Recovery System Installation and Repair, renew the ICC certification for Vapor Recovery System Installation and Repair every 24 months, make available onsite proof of ICC certification, and have and make available on site proof of any and all certifications required by the Executive Order and installation and operation manual in order to install or maintain specific systems.”

Section 5.2.4 states “in lieu of complying with Sections 5.2.3.1 through 5.2.3.4, installation and maintenance contractors may work under the direct and personal supervision of an individual physically present at the work site who possesses and makes available on site current certifications from the ICC, indicating he or she has passed the ICC Vapor Recovery System Installation and Repair exam and all other certifications required by the applicable ARB Executive Order.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {4014} A person performing installation of, or maintenance on, a certified Phase I or Phase II vapor recovery system shall be certified by the ICC for Vapor Recovery System



Installation and Repair, or work under the direct and personal supervision of an individual physically present at the work site who is certified. The ICC certification shall be renewed every 24 months. [District Rules 4621 and 4622]

- {4016} Proof of the ICC certification and all other certifications required by the Executive Order and installation and operation manual shall be made available onsite. [District Rules 4621 and 4622]

Section 5.3.1 states “the owner or operator of an ARB certified Phase II vapor recovery system shall conduct periodic maintenance inspections to ensure that components of the vapor recovery system are in proper operating condition.”

Section 5.3.2 states “the frequency of inspections shall be based on the operation’s largest monthly gasoline throughput from the previous calendar year as indicated in Table 1.”

Section 5.3.3 states “the frequency of vapor path inspections shall be based on the amount of gasoline dispensed by the operation in a calendar month as indicated in Table 1.”

Section 5.3.4 states “the person conducting the inspections shall at a minimum, verify that the fueling instructions required by Section 5.5 are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs, that the following nozzle components are in place and in good condition as specified in ARB Executive Orders: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, hold open latch, that the hoses are not torn or crimped, that the vapor path of coaxial hoses associated with bellows equipped nozzles does not contain more than 100 ml of liquid, or as required by the applicable ARB Executive Order, and that the vapor processing unit is functioning properly, for operations that are required to have or possess such a unit.” Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

*For all RETAIL facilities use the following, otherwise delete:*

- {3921} The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 25,000 gallons - one day per week; B) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O&M manual. [District Rules 4621 and 4622]
- {4742} Periodic maintenance inspections of the Phase II vapor recovery system shall include, at a minimum, verification that 1) the fueling instructions required by this permit are clearly displayed with the appropriate toll-free complaint phone number and toxic warning signs; 2) the following nozzle components are in place and in good condition as specified in ARB Executive Order as applicable: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, and hold open latch (unless prohibited by law or the local fire control authority); 3) the hoses are not torn, flattened or crimped; 4) the vapor path of the coaxial hoses associated with bellows equipped nozzles does not contain more than 150 ml of liquid if applicable; and 5) the vapor processing unit is functioning

properly, for operations that are required to have or possess such a unit. [District Rule 4622]

*For all NON-RETAIL facilities use the following, otherwise delete:*

- {3923} The permittee shall conduct periodic maintenance inspections based on the greatest monthly throughput of gasoline dispensed by the facility in the previous year as follows: A) less than 2,500 gallons - one day per month; B) 2,500 to less than 25,000 gallons - one day per week; or C) 25,000 gallons or greater - five days per week. All inspections shall be documented within the O & M Manual. [District Rules 4621 and 4622]
- {4743} Periodic maintenance inspections of the Phase II vapor recovery system shall include, at a minimum, verification that 1) the following nozzle components are in place and in good condition as specified in ARB Executive Order as applicable: faceplate/facecone, bellows, latching device spring, vapor check valve, spout (proper diameter/vapor collection holes), insertion interlock mechanism, automatic shut-off mechanism, and hold open latch (unless prohibited by law or the local fire control authority); 2) the hoses are not torn, flattened or crimped; 3) the vapor path of the coaxial hoses associated with bellows equipped nozzles does not contain more than 150 ml of liquid if applicable; and 4) the vapor processing unit is functioning properly, for operations that are required to have or possess such a unit. [District Rule 4622]

*For all facilities use the following:*

Section 5.4.1 states “no person shall operate any ARB certified Phase II vapor recovery system or any portion thereof that has a major defect, until: The defect has been repaired, replaced, or adjusted as necessary to correct the defect; The District has been notified, and the District has reinspected the system or authorized the system for use. Such authorization shall not include the authority to operate the equipment prior to the correction of the defective components; and all major defects, after repair, are duly entered into the Operations and Maintenance (O&M) manual.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {3917} No person shall operate any ARB certified Phase II vapor recovery system or any portion thereof that has a major defect or an equipment defect that is identified in any applicable ARB Executive Order until the following conditions have been met: 1) the defect has been repaired, replaced, or adjusted as necessary to correct the defect; 2) the District has been notified, and the District has reinspected the system or authorized the system for use (such authorization shall not include the authority to operate the equipment prior to the correction of the defective components); and 3) all major defects, after repair, are duly entered into the Operations and Maintenance (O&M) manual. [District Rule 4622]

Section 5.4.2 states “upon identification of any major defects, the owner or operator shall tag “Out-of-Order” all dispensing equipment for which vapor recovery has been impaired.”

Section 5.4.2.1 states “tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the defective equipment has been repaired, replaced, or adjusted, as necessary.”

Section 5.4.2.2 states “in the case of defects identified by the District, tagged equipment shall be rendered inoperable, and the tag shall not be removed until the District has been notified of the repairs, and the District has either reinspected the system or authorized the tagged equipment for use.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {3918} Upon identification of any major defects, the permittee shall tag "Out-of-Order" all dispensing equipment for which vapor recovery has been impaired. Tagged equipment shall be rendered inoperable and the tag(s) shall not be removed until the defective equipment has been repaired, replaced, or adjusted, as necessary. In the case of defects identified by the District, tagged equipment shall be rendered inoperable, and the tag shall not be removed until the District has been notified of the repairs, and the District has either reinspected the system or authorized the tagged equipment for use. [District Rule 4622]

Section 5.4.4 states “in the event of a separation due to a drive off, the owner or operator shall complete one of the following, unless otherwise specified in the applicable ARB Executive Order, and document the activities in accordance with Section 6.2, before placing the affected equipment back in service:

- 1) Conduct a visual inspection of the affected equipment, perform qualified repairs on any damaged components, and conduct applicable re-verification tests pursuant to Sections 6.5.1.1 and 6.5.1.4, or
- 2) Conduct a visual inspection of the affected equipment and replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are ARB certified, before placing affected equipment back in service.”

Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {4137} In the event of a separation due to a drive off, the permittee shall, unless otherwise specified in the applicable ARB Executive Order, conduct a visual inspection of the affected equipment and replace the affected nozzles, coaxial hoses, breakaway couplings, and any other damaged components with new or certified rebuilt components that are ARB certified. The activities shall be documented in accordance with the requirements of this permit before placing the affected equipment back in service. [District Rule 4622]

*For all RETAIL facilities include section 5.5 and the following condition, otherwise delete:*

Section 5.5 states “no owner or operator of a retail gasoline outlet shall operate or allow the operation of an ARB certified Phase II vapor recovery system unless operating instructions for the system:

- 1) Are posted, noticeable, and readable from any place from which gasoline may be dispensed from the operation,
- 2) Describe clearly how to fuel vehicles correctly using the station's dispensing nozzles,
- 3) Include a warning that topping off may result in spillage or recirculation of gasoline and is prohibited, and

- 4) Display prominently the District's or the ARBs toll-free telephone number, or both, and the information that such number or numbers can be used to register complaints regarding the operation of the vapor recovery system.”

Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {3910} No operator of a retail gasoline outlet shall operate or allow the operation of an ARB certified Phase II vapor recovery system unless operating instructions for the system 1) are posted, noticeable, and readable from any place from which gasoline may be dispensed from the operation; 2) describe clearly how to fuel vehicles correctly using the station's dispensing nozzles; 3) include a warning that topping off may result in spillage or recirculation of gasoline and is prohibited; and 4) display prominently the District's or the ARB's toll-free telephone number, or both, and the information that such number or numbers can be used to register complaints regarding the operation of the vapor recovery system. [District Rule 4622]

*For facilities with VR-203 or VR-204, use the following condition, otherwise delete:*

Section 5.12 states “liquid condensate traps shall be used, if necessary, to keep the vapor return piping clear of any liquid blockage from the remote dispenser to the aboveground storage tank or when it is not possible to achieve the necessary slope from the dispenser to the underground storage tank.”

Section 5.12.1 states “Liquid condensate traps shall be used only when the minimum slope requirements of 1/8 inches per foot of run cannot be met due to the topography.”

Section 5.12.2 states “When liquid condensate traps are installed on gasoline dispensing systems equipped with an ARB certified Phase II enhanced vapor recovery system, they shall meet the following requirements:

- 5.12.2.1 Maintained vapor tight;
- 5.12.2.2 Accessible for inspection upon request;
- 5.12.2.3 Capable of automatic evacuation of liquid; and
- 5.12.2.4 Equipped with an alarm system in case of failure of the evacuation system.”

Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {4614} If a Liquid Condensate Trap is installed, the permittee shall perform and pass a Liquid Condensate Trap Compliance Test using the test procedure defined in the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days after initial startup and at least once every 12 months thereafter. [District Rule 4622]

- {4651} If a Liquid Condensate Trap is installed it shall be (1) maintained without leaks; (2) accessible for inspection upon request; (3) capable of automatic evacuation of liquid; and (4) equipped with an alarm system in case of failure of the evacuation system. [District Rule 4622]

*For facilities with VR-204 or VR-208 add the following conditions, otherwise delete:*

Section 5.13.1 states “The owner or operator shall not clear, or allow any other individual to clear, any ISD warning or failure alarms prior to taking appropriate action. The appropriate action shall be in accordance with the IOM manual for the Phase II vapor recovery system or an ARB Enforcement Advisory.”

Section 5.13.2 states “In the event of an ISD failure alarm and subsequent automatic shutdown of gasoline dispensing, the owner or operator shall not re-enable or allow the re-enabling of the affected fueling point(s) unless all troubleshooting, repairs and tests specified in the applicable ARB Executive Order and IOM for the Phase II vapor recovery system, have been successfully completed or are in the process of being completed and documented.”

Section 5.13.3 states “The owner or operator shall keep records of all alarms detected by the ISD system. The records shall include the following:

- 5.13.3.1 The alarm date;
- 5.13.3.2 The nature of the alarm;
- 5.13.3.3 Type of test and test date to verify the validity of ISD alarm;
- 5.13.3.4 Maintenance or repair date to correct the cause of the alarm;
- 5.13.3.5 Maintenance or repair performed to correct the cause of the alarm; and
- 5.13.3.6 Affiliation, telephone number, name and Certified Technician Identification Number of individual conducting maintenance or test.”

Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {4728} The permittee shall perform and pass ISD operability testing including, but not limited to, a pressure sensor verification test, a dispenser shutdown test, and a test of flow meter operability using the test procedure(s) defined in the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days of initial startup and at least once every 12 months thereafter. [District Rule 4622]
- {4730} Unless specifically allowed by special order of ARB, the permittee shall not clear, or allow any other individual to clear, any ISD warning or failure alarms prior to taking appropriate action. The appropriate action is listed in the IOM manual for the Phase II vapor recovery system specified in this permit. [District Rule 4622]

- {4731} In the event of an ISD failure alarm and subsequent automatic shutdown of gasoline dispensing, the permittee shall not re-enable or allow the re-enabling of the affected fueling point(s) unless all troubleshooting, repairs and tests specified in the Executive Order and IOM for the Phase II vapor recovery system specified in this permit, have been successfully completed or are in the process of being completed and documented. [District Rule 4622]
- {4732} The permittee shall keep records of all alarms detected by the ISD system. The records shall include the following: 1) the alarm date, 2) the nature of the alarm, 3) type of test and test date to verify the validity of ISD alarm, 4) maintenance or repair date to correct the cause of the alarm, 5) maintenance or repair performed to correct the cause of the alarm, and 6) affiliation, telephone number, name and Certified Technician Identification Number of individual conducting maintenance or test. [District Rule 4622]

*For all facilities use the following:*

Section 6.2.1 states “operators shall retain the test result verification that each ARB certified Phase II vapor recovery system meets or exceeds the requirements of the tests specified in Section 6.5. These verifications shall be maintained for at least five years. These test results shall be dated and shall contain the names, addresses, and telephone numbers of the companies responsible for system installation and testing.” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {3969} The permittee shall maintain a copy of all test results. The test results shall be dated and shall contain the name, address, and telephone number of the company responsible for system installation and testing. [District Rule 4622]

Section 6.2.2 states “a person who performs repairs on any ARB certified Phase I or Phase II vapor recovery system shall provide to the owner or operator a repair log, which the owner or operator shall maintain on the premises for at least five years and which shall include all of the following:

- 1) Date and time of each repair;
- 2) The name and applicable certification numbers of the person(s) who performed the repair, and, if applicable, the name, address and phone number of the person’s employer;
- 3) Description of service performed;
- 4) Each component that was repaired, serviced, or removed;
- 5) Each component that was installed as replacement, if applicable;
- 6) Receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs.”

Therefore, the following permit condition will be placed on the ATC to ensure compliance with these requirements:

- {3970} The permittee shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following: 1) date and time of each repair; 2) the name and applicable certification numbers of the person(s) who performed the repair, and if applicable, the name, address and phone



number of the person's employer; 3) description of service performed; 4) each component that was repaired, serviced, or removed; 5) each component that was installed as replacement, if applicable; and 6) receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. [District Rule 4622]

Section 6.2.3 states “each operator who is required to perform periodic maintenance inspections under Section 5.3 shall maintain monthly gasoline throughput records on the premises for a minimum of five years, make them available on site during normal business hours to the APCO, ARB, or EPA, and submit them to the APCO, ARB, or EPA upon request.” Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {4010} The permittee shall maintain monthly and annual gasoline throughput records. [District Rules 4621 and 4622]
- {3975} All records required by this permit shall be retained on-site for a period of at least five years and shall be made available for District inspection upon request. [District Rules 4621 and 4622]

Section 6.3.1 states “the owner or operator of a gasoline dispensing operation shall maintain an O&M Manual in accordance with Section 6.3.”

Section 6.3.2 states “the O&M manual shall be kept at the dispensing operation and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the operation as well as to District personnel upon request.”

Section 6.3.3 states “the O&M manual shall, at a minimum, include the following current information:

- 1) copies of all vapor recovery performance tests,
- 2) all applicable ARB Executive Orders, Approval Letters, and District Permits,
- 3) manufacturer’s specifications and instructions for installation, operation, repair, and maintenance required pursuant to applicable ARB Certification Procedures, and any additional instruction provided by the manufacturer,
- 4) system and/or component testing requirements, including test schedules and passing criteria for each of the standard tests listed in Section 6.0. The owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements, and
- 5) additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components.”

Section 6.3.4 states “owners or operators of gasoline dispensing operations shall document the periodic maintenance inspection program in the O&M manual.”

Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:



- {3919} The permittee shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system consistent with the requirements of this permit. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information: 1) copies of all vapor recovery performance tests; 2) all applicable ARB Executive Orders, Approval Letters, and District Permits; 3) the manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer; 4) system and/or component testing requirements, including test schedules and passing criteria for each of the standard tests required by this permit (the owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements), and 5) additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. [District Rule 4622]
- {3971} The O&M manual shall be kept at the dispensing operation and made available to any person who operates, inspects, maintains, repairs, or tests the equipment at the operation as well as to District personnel upon request. [District Rule 4622]

Section 6.4.1 states “operators shall comply with the ARB certified Phase II vapor recovery system performance tests specified in Sections 6.4.1.1 through 6.4.1.4 and shall conduct all applicable performance tests at start up and thereafter (no more than 30 days before or after the required compliance testing date) as required by the applicable ARB Executive Order and installation and operation manuals.”

Section 6.4.1.1 states “conduct and pass a Static Leak Test of the ARB certified Phase II vapor recovery system at least once every twelve months.”

Section 6.4.1.2 states “conduct and pass a Dynamic Back-Pressure Test of the ARB certified Phase II vapor recovery system at least once every five years except for those aboveground storage tanks that have integral dispensers (non-remote), unless otherwise required under the applicable ARB Executive Order.”

Section 6.4.1.3 states “for ARB certified Phase II vapor recovery systems with bellows-less nozzles, conduct and pass, as applicable, an Air-to-Liquid Volume Ratio Test or a Vapor-to-Liquid Ratio Test at least once every six months.”

Section 6.4.1.4 states “for ARB certified Phase II vapor recovery systems with a liquid removal device required by ARB Executive Orders, conduct and pass a Liquid Removal Test whenever the liquid in the vapor path exceeds 100 ml of liquid, or as required by the applicable ARB Executive Order. The amount of liquid in the vapor path shall be determined in accordance with the procedure specified in Section 5.3.4.4.”

Section 6.4.2 states “the person responsible for conducting the tests specified in Section 6.4 shall use calibrated equipment meeting the calibration range and calibration intervals specified by the manufacturer, ARB Executive Order, or ARB test procedure.”

Section 6.4.3 states “Persons responsible for conducting the tests specified in Section 6.5 shall be in full compliance with all provisions of Rule 1177 (Gasoline Dispensing Facility Tester Certification).” Therefore, the following permit condition will be placed on the ATC to ensure compliance with this requirement:

- {4005} A person conducting testing of, or repairs to, a certified vapor recovery system shall be in compliance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification). [District Rules 4621 and 4622]

Section 6.4.4 states “each gasoline dispensing operation shall notify the District at least seven days prior to any performance testing.”

Section 6.4.5 states “each ARB certified Phase II vapor recovery system shall be tested within 60 days of completion of installation or modification.”

Section 6.5.1 states “tests shall be conducted in accordance with the latest version of the following ARB and EPA approved test methods, or their equivalents as approved by the EPA, and the APCO.”

Section 6.5.1.1 states “Static Leak Test for Underground Tanks, ARB TP-201.3”

Section 6.5.1.2 states “Dynamic Back-Pressure Test, ARB TP-201.4”

Section 6.5.1.3 states “Air-to-Liquid Volume Ratio Test, ARB TP-201.5”

Section 6.5.1.4 states “Liquid Removal Test, ARB TP-201.6C”

Section 6.5.1.5 states “Static Leak Test for Aboveground Tanks, ARB TP-206.3 or TP-201.3B as applicable.”

Therefore, the following permit conditions will be placed on the ATC to ensure compliance with these requirements:

- {3928} The permittee shall conduct all periodic vapor recovery system performance tests specified in this permit, no more than 30 days before or after the required compliance testing date, unless otherwise required under the applicable ARB Executive Order. [District Rules 4621 and 4622]
- {3941} The permittee shall perform and pass a Static Leak Test for Underground Tanks using ARB TP-201.3 in accordance with the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days after initial start-up and at least once every 12 months thereafter. [District Rules 4621 and 4622]
- {1998} The permittee shall perform and pass a Dynamic Back Pressure Test using ARB TP-201.4 within 60 days after initial start-up and at least once every 12 months thereafter. [District Rule 4622]
- {3949} The permittee shall perform and pass a Liquid Removal Test using the test procedure defined in the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days after initial startup and at least once every 12 months thereafter. [District Rule 4622]

- {3951} The permittee shall perform and pass a Nozzle Bag Test using the test procedure defined in the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days after initial startup. [District Rule 4622]
- {4177} The permittee shall perform and pass a Hirt VCS Processor with Indicator Panel Operability Test using the test procedure defined in the Executive Order specified in this permit for the Phase II Vapor Recovery System within 60 days of initial startup and at least once every 12 months thereafter. [District Rule 4622]

**California Health & Safety Code 42301.6 (School Notice)**

*For a Non-School Notice project – > 1,000 feet:*

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

*For a Non-School Notice project – no increase in emissions:*

Pursuant to California Health and Safety Code 42301.6, since this project will not result in an increase in emissions, a school notice is not required.

*For a School Notice project:*

The District has verified that this site is located within 1,000 feet of the following school:

School Name: [Name]  
Address: [Address]

Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is required. Prior to the issuance of the ATC for this equipment, notices will be provided to the parents/guardians of all students of the affected school, and will be sent to all residents within 1,000 ft of the site.

*[If there is no school w/in ¼ mile of the emissions increase, include the following discussion, otherwise delete]:*

The District has verified that there are no additional schools within ¼ mile of the emission source.

*[If there is a school w/in ¼ mile of the emissions increase, include the following discussion, otherwise delete]:*

Since a school notice has been triggered (due to the above-listed school within 1,000 of the emission source), notices will also be provided to the parents/guardians of all students from all school sites within ¼ mile of the emission source. The following schools(s) are within ¼ mile of the emission source:

School Name: [Name]  
Address: [Address]  
*(add additional schools if necessary)*

*(Note: Refer to FYI - 71 for guidance on how to process a School Notice project.)*

## California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The San Joaquin Valley Unified Air Pollution Control District (District) adopted its *Environmental Review Guidelines* (ERG) in 2001.

The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities.
- Identify the ways that environmental damage can be avoided or significantly reduced.
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible.
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Consistent with California Environmental Quality Act (CEQA) and CEQA Guidelines requirements, the San Joaquin Valley Air Pollution Control District (District) has adopted procedures and guidelines for implementing CEQA. The District's Environmental Review Guidelines (ERG) establishes procedures for avoiding unnecessary delay during the District's permitting process while ensuring that significant environmental impacts are thoroughly and consistently addressed. The ERG includes policies and procedures to be followed when processing permits for projects that are exempt under CEQA.

The State Legislature granted a number of exemptions from CEQA, including projects that require only ministerial approval. Based upon analysis of its own laws and consideration of CEQA provisions, the District has identified a limited number of District permitting activities considered to be ministerial approvals. As set forth in §4.2.1 of the ERG, projects permitted consistent with the District's *Guidelines for Expedited Application Review* (GEAR) are standard application reviews in which little or no discretion is used in issuing Authority to Construct (ATC) documents.

For the proposed project, the District performed an Engineering Evaluation (this document) and determined that the project qualifies for processing under the procedures set forth in the District's Permit Services Procedures Manual in the Guidelines for Expedited Application Review (GEAR). Thus, as discussed above, this issuance of such ATC(s) is a ministerial approval for the District and is not subject to CEQA provisions.

## IX. Recommendation

*For a project where noticing school is NOT required.*

Compliance with all applicable rules and regulations is expected. Issue Authority to Construct X-XXXX-X-X subject to the permit conditions on the attached draft Authority to Construct in Appendix D.

*For a project where school noticing is triggered.*

Compliance with all applicable rules and regulations is expected. Pending a successful School Noticing period, issue Authority to Construct X-XXXX-X-X subject to the permit conditions on the attached draft Authority to Construct in [Appendix E](#).

## X. Billing Information

Annual Permit Fees		
Permit Number	Fee Schedule	Fee Description
X-XXXX-X-X	3020-11-A	\$XX per nozzle <i>(use \$ amount from PAS)</i>

## Appendices

- A: [Current Permit to Operate](#) *(Delete for new facility)*
- B: Supplemental Application
- C: BACT Guideline and Analysis
- D: [HRA Summary](#) *(Delete if no school notice triggered)*
- E: Draft ATC
- F: Emission Profile

## Appendix A

### Current Permit to Operate

## Appendix B

### Supplemental Application



## Appendix C

### BACT Guideline and Analysis

San Joaquin Valley  
Unified Air Pollution Control District

**Best Available Control Technology (BACT) Guideline 4.6.1\***

Last Update: 4/14/2010

**Motor Vehicle Gasoline Storage and Dispensing Operation**

<b>Pollutant</b>	<b>Achieved in Practice or contained in the SIP</b>	<b>Technologically Feasible</b>	<b>Alternate Basic Equipment</b>
VOC	CARB certified Phase I and Phase II vapor recovery systems  or  CARB certified Phase I vapor recovery system with a vehicle fleet where 100% of the vehicles are equipped with Onboard Refueling Vapor Recovery (ORVR) systems and the operator also owns the gasoline dispensing operation that serves the fleet.		

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

**\*This is a Summary Page for this Class of Source - Permit Specific BACT Determinations on Next Page(s)**

## **BACT Analysis for VOC Emissions:**

### Step 1 - Identify All Possible Control Technologies

Combined emission control system consisting of ARB certified Phase I and Phase II vapor recovery system.

### Step 2 - Eliminate Technologically Infeasible Options

All control technologies listed in the clearinghouse are feasible.

### Step 3 - Rank Remaining Control Technologies by Control Effectiveness

ARB certified Phase I and Phase II vapor recovery systems

### Step 4 - Cost Effectiveness Analysis

A cost effectiveness analysis is not required when the applicant proposes the most effective control method identified as technologically feasible. A combined Phase I and Phase II vapor recovery system is identified as technologically feasible and achieved in practice BACT. Therefore, further cost effectiveness analysis is not required.

### Step 5 - Select BACT

The applicant's proposed use of Phase I and Phase II vapor recovery for the control of VOC emissions satisfies District's BACT requirements.

Appendix D

Draft ATC

## Appendix E

### Emissions Profile