



**TECHNICAL SUPPORT DOCUMENT**

**Air Discharge Permit 24-3645  
Air Discharge Permit Application CL-3269**

**Issued: May 30, 2024**

**CAMAS FUEL**

**SWCAA ID – 2149**

Prepared By: Clint Lamoreaux  
Air Quality Engineer  
Southwest Clean Air Agency

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Appendix A – CARB Executive Order VR-102-G

## ABBREVIATIONS

### *List of Acronyms*

ADP .....	Air Discharge Permit	NESHAP .....	National Emission Standards for Hazardous Air Pollutants
AP-42 .....	Compilation of Emission Factors, AP-42, 5th Edition, Volume 1, Stationary Point and Area Sources – published by EPA	NSPS .....	New Source Performance Standard
BACT .....	Best available control technology	ORVR .....	Onboard Refueling Vapor Recovery
BART .....	Best Available Retrofit Technology	PSD .....	Prevention of Significant Deterioration
CARB .....	California Air Resources Board	RACT .....	Reasonably Available Control Technology
CFR .....	Code of Federal Regulations	RCW .....	Revised Code of Washington
EPA .....	U.S. Environmental Protection Agency	SEPA .....	State Environmental Policy Act Standard .....
EU .....	Emission Unit		Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
EVR .....	Enhanced Vapor Recovery	SWCAA .....	Southwest Clean Air Agency
LAER .....	Lowest achievable emission rate	T-BACT .....	Best Available Control Technology for toxic air pollutants
MACT .....	Maximum Achievable Control Technologies	WAC .....	Washington Administrative Code

### *List of Units and Measures*

tpy ..... Tons per year

*List of Chemical Symbols, Formulas, and Pollutants*

CO.....	Carbon monoxide	PM <sub>10</sub> .....	PM with an aerodynamic diameter 10 µm or less
CO <sub>2</sub> .....	Carbon dioxide	PM <sub>2.5</sub> .....	PM with an aerodynamic diameter 2.5 µm or less
CO <sub>2e</sub> .....	Carbon dioxide equivalent	SO <sub>2</sub> .....	Sulfur dioxide
HAP .....	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act	SO <sub>x</sub> .....	Sulfur oxides
NO <sub>x</sub> .....	Nitrogen oxides	TAP.....	Toxic air pollutant pursuant to Chapter 173-460 WAC
O <sub>2</sub> .....	Oxygen	VOC.....	Volatile organic compound
PM.....	Particulate Matter with an aerodynamic diameter 100 µm or less		

Terms not otherwise defined have the meaning assigned to them in the referenced regulations or the dictionary definition, as appropriate.



**1. FACILITY IDENTIFICATION**

Applicant Name: Camas Fuel, Inc.  
 Applicant Address: 1605 NW 6<sup>th</sup> Ave., Unit E  
 Camas, WA 98607-2651  
 Facility Name: Camas Fuel  
 Facility Address: 1605 NW 6<sup>th</sup> Ave., Unit E  
 Camas, WA 98607-2651  
 ~ 45°34'53.13"N, 122°25' 39.80"W  
 SWCAA Identification: 2149  
 Contact Person: Sukhvir Josan  
 Primary Process: Gasoline dispensing  
 SIC/NAICS Code: 5541: Gasoline service stations  
 44711: Gas stations with convenience stores  
 Facility Classification: Natural Minor

**2. FACILITY DESCRIPTION**

This facility is a retail gasoline dispensing facility associated with a convenience store.

**3. CURRENT PERMITTING ACTION**

This permitting action is in response to Air Discharge Permit (ADP) application number CL-3269 received April 5, 2024, requesting removal of the Stage II vapor recovery system.

Air Discharge Permit 07-2724 will be superseded in this permitting action.

**4. PROCESS DESCRIPTION**

This facility receives unleaded gasoline from tanker trucks for storage in two underground storage tanks, both of which are split into two storage compartments. The gasoline storage tanks are equipped with two-point vapor balance systems that return gasoline vapors vented from the underground storage tanks to the tanker truck during filling (Stage I vapor recovery). Gasoline is dispensed from 16 multi-product pumps. Vapors displaced from individual motor vehicle gasoline tanks during filling will not be returned to the gasoline storage tanks (no Stage II vapor recovery).

<u>Products at Pump</u>	<u>Number of Pumps</u>
Blended gasoline through as single hose, diesel through a single hose	8
Blended gasoline through as single hose	8

**5. EQUIPMENT/ACTIVITY IDENTIFICATION**

5.a. Storage Tanks. The following storage tanks are utilized at the facility:

<b>Tank</b>	<b>Product</b>	<b>Capacity</b>
1 – 1	Regular Unleaded	20,000 gallons
1 – 2	Regular Unleaded	10,000 gallons
2 – 1	Regular Unleaded	10,000 gallons
2 – 2	Super Unleaded	10,000 gallons
2 - 3	Diesel	10,000 gallons

The gasoline storage tanks are fitted with equipment approved by CARB Executive Order VR-102-G as components of the OPW Stage I enhanced vapor recovery system. The following components of the Stage I system have been installed:

<b>Component</b>	<b>Make / Model</b>
Drop Tubes / Overfill Protection	OPW / 61T
Face Seal Adapter	OPW / FSA-400
Jack Screw Kit	OPW / 61JSK-4410
Fill Adapters <sup>1</sup>	OPW / 61SALP-1020-EVR
Fill Caps	OPW / 634TT-7085-EVR
Vapor Adapters <sup>1</sup>	OPW / 61VSA-1020-EVR
Vapor Caps	OPW / 1711T-7085-EVR
Extractor Assembly	OPW / 233-4422
Float Vent Valve	OPW / 53VML-0120
Spill Bucket	OPW / 1-2100C-DEVK with drain
Pressure / Vacuum Valve	Husky / 4885 <sup>2</sup>

<sup>1</sup> This is a two point system.

<sup>2</sup> The Husky model 4885 is no longer certified for use with VR-102. If a valve is replaced, the replacement must be certified for use with VR-102.

This facility will not utilize Stage II vapor recovery equipment. The following low permeation hoses and enhanced conventional nozzles will be installed:

<b>Component</b>	<b>Make / Model</b>
Nozzles	VST / NV-NDBK
Hoses and Whip Hoses	VST / V34EC Low Perm

#### 5.b. Equipment/Activity Summary.

<b>ID No.</b>	<b>Equipment/Activity</b>	<b>Control Equipment/Measure</b>
1	Retail Gasoline Dispensing Facility	Stage I Vapor Recovery Systems

## 6. EMISSIONS DETERMINATION

Unless otherwise specified by SWCAA, actual emissions must be determined using the specified input parameter listed for each emission unit and the following hierarchy of methodologies:

- Continuous emissions monitoring system (CEMS) data;

- (b) Source emissions test data (EPA reference method). When source emissions test data conflicts with CEMS data for the time period of a source test, source test data must be used;
- (c) Source emissions test data (other test method); and
- (d) Emission factors or methodology provided in this TSD.

Nothing precludes the use, including the exclusive use of any credible evidence or information relevant to identifying or quantifying emissions if such credible evidence provides more accurate identification or quantification of actual emissions than other available information.

- 6.a. Gasoline Vapors. Total potential VOC emissions from the facility were estimated using the following emission factors from the California Air Resources Board December 23, 2013, document "Revised Emission Factors for Gasoline Marketing Operations at California Gasoline Dispensing Facilities":

<b>Emission Source</b>	<b>VOC Emission Factor (lb/1,000 gallons of fuel)</b>
Loading – Stage I Controlled (EVR)	0.150
Breathing – Controlled with P/V Valve	0.092
Uncontrolled Refueling – Stage II uncontrolled (non ORVR Vehicles, no Stage II)	0.84 <sup>1</sup>
Controlled Refueling (ORVR vehicles, no Stage II)	0.151 <sup>2</sup>
Spillage (ECO nozzles)	0.240
Hose Permeation (low permeation)	0.009
<b>Total</b>	<b>1.482</b>

<sup>1</sup> Based on 90% of the gasoline being dispensed to vehicles equipped with carbon canisters (ORVR). The base emission factor, assuming no ORVR vehicles, is 8.400 lb/1,000 gallons. 10% of the vehicles are not equipped with ORVR: 8.4 lb/1,000 gallons \* (1-0.90) = 0.84 lb/1,000 gallons.

<sup>2</sup> This is the amount of vapor released during refueling that is attributable to those vehicles equipped with carbon canisters (ORVR) assuming carbon canisters provide for 98% control. 8.400 lb/1,000 gallons \* 90% of gas dispensed to vehicles with ORVR \* (2% of vapors not captured by the canister) = 0.151 lb/1,000 gallons.

The above calculations assume that 90% of the fuel is dispensed to vehicles equipped with onboard refueling vapor recovery (ORVR). SWCAA expects this level was met in Clark County in 2020 and will be met a few years later in Cowlitz, Lewis, Skamania, and Wahkiakum counties.

At a throughput of 5,000,000 gallons of gasoline per year, the facility would emit 3.71 tons of volatile organic compounds. Based on EPA Speciate 3.2 profile number 2455, approximately 50.0% of the total VOC emissions are toxic air pollutants (TAPs) as defined by WAC 173-460 (as in effect August 21, 1998), and approximately 12.9% of the total VOC emissions are federally listed hazardous air pollutants (HAPs). For a throughput of

5,000,000 gallons per year, TAP and HAP emission rates are estimated at 1.85 tons per year, and 0.48 tons per year respectively.

6.b. Emissions Summary

<b>Air Pollutant</b>	<b>Potential to Emit (tpy)</b>	<b>Project Impact (tpy)</b>
NO <sub>x</sub>	0	0
CO	0	0
VOC	3.71	0.95
SO <sub>2</sub>	0	0
PM	0	0
PM <sub>10</sub>	0	0
PM <sub>2.5</sub>	0	0
CO <sub>2</sub> /CO <sub>2e</sub>	0	0
Toxic Air Pollutants	1.85	0.48
Hazardous Air Pollutants	0.48	0.12

<sup>1</sup> Based on 90% of fuel dispensed to ORVR-equipped vehicles, removal of Stage II vapor recovery at this facility, in combination with adding ECO nozzles and low permeation hoses. The magnitude of the project impact presented here assumes a gasoline throughput of 5,000,000 gallons per year.

## 7. REGULATIONS AND EMISSION STANDARDS

Regulations have been established for the control of emissions of air pollutants to the ambient air. Regulations applicable to the proposed facility that have been used to evaluate the acceptability of the proposed facility and establish emission limits and control requirements include, but are not limited to, the following regulations, codes, or requirements. These items establish maximum emissions limits that could be allowed and are not to be exceeded for new or existing facilities. More stringent limits are established in this ADP consistent with implementation of Best Available Control Technology (BACT):

- 7.a. Title 40 Code of Federal Regulations (CFR) Part 63.11110 et seq. Subpart CCCCCC "National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities" establishes emission control, testing, recordkeeping and reporting requirements for new and existing gasoline dispensing facilities. Which requirements apply to a specific facility depend upon when the facility began operation and the monthly throughput. This facility began operation prior to January 10, 2008 and has a potential throughput of 100,000 gallons per month or more. Facilities with a throughput of 100,000 gallons per month or more that began operation prior to January 10, 2008 must be in compliance with a state rule or federally enforceable permit that contains requirements to achieve emission reductions of at least 90% by January 10, 2008 or comply with requirements found in Table 1 of Subpart CCCCCC including:

- (1) All vapor connections and lines on the storage tank shall be equipped with closures that seal upon disconnection;
- (2) The vapor line from the gasoline storage tank to the gasoline cargo tank shall be vapor tight;
- (3) The vapor balance system shall be designed such that the pressure in the tank truck does not exceed 18" w.c. pressure or 5.9" w.c. vacuum during product transfer;
- (4) The vapor recovery and product adaptors, and the method of connection with the delivery elbow, shall be designed so as to prevent the over-tightening or loosening of fittings during normal delivery operations;
- (5) Liquid fill connections for all systems shall be equipped with vapor-tight caps;
- (6) Pressure/vacuum vent valves shall be installed on the storage tank vent pipes. The positive pressure setting shall be 2.5" w.c. to 6" w.c. and the negative pressure setting shall be 6" w.c. to 10" w.c. The total leak rate for all pressure/vacuum valves at an affected facility, including connections, shall not exceed 0.17 cubic foot per hour at a pressure of 2.0" w.c. and 0.63 cubic foot per hour at a vacuum of 4" w.c.;
- (7) The vapor balance system shall be capable of meeting the static pressure performance requirement found in Table 1 of Subpart CCCCCC; and
- (8) Each new or existing gasoline storage tank shall be equipped with a dual-point vapor balance system.

As of January 10, 2008, this facility was complying with the requirements of SWCAA 491 which required Stage I vapor recovery equipment as approved by CARB or SWCAA. The Stage I vapor recovery equipment provided at least 90% control of gasoline vapors; therefore, this facility is not subject to the requirements of Table 1 or any other requirement of this rule including initial notification. Note that although the rule adds no requirements for this facility, this facility is an affected source for the purposes of this rule.

- 7.b. Title 40 CFR Part 1090 "Regulation of Fuels, Fuel Additives, and Regulated Blendstocks" in section 1090.1550(b) requires that the flow through any nozzle dispensing gasoline into motor vehicles be limited so as not to exceed a maximum value of 10 gallons per minute.
- 7.c. Revised Code of Washington (RCW) 70A.15.2040 empowers any activated air pollution control authority to prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution within its jurisdiction. An air pollution control authority may issue such orders as may be necessary to effectuate the purposes of the Washington Clean Air Act (RCW 70A.15) and enforce the same by all appropriate administrative and judicial proceedings subject to the rights of appeal as provided in Chapter 62, Laws of 1970 ex. sess.
- 7.d. RCW 70A.15.2210 provides for the inclusion of conditions of operation as are reasonably necessary to assure the maintenance of compliance with the applicable ordinances, resolutions, rules and regulations when issuing an ADP for installation and establishment of an air contaminant source.
- 7.e. Washington Administrative Code (WAC) 173-460 "Controls for New Sources of Toxic Air Pollutants" requires Best Available Control Technology for toxic air pollutants (T-BACT),

- identification and quantification of emissions of toxic air pollutants and demonstration of protection of human health and safety from new sources not provided an exemption under WAC 173-460-030. Gasoline dispensing facilities are exempt from the provisions of WAC 173-460.
- 7.f. WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM<sub>10</sub>, PM<sub>2.5</sub>, lead, SO<sub>2</sub>, NO<sub>x</sub>, ozone, and CO in the ambient air, which must not be exceeded.
- 7.g. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new and existing sources and emission units to meet certain performance standards with respect to Reasonably Available Control Technology (RACT), visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons or property, SO<sub>2</sub>, concealment and masking, and fugitive dust.
- 7.h. SWCAA 400-040(3) "Fugitive Emissions" requires that reasonable precautions be taken to prevent the fugitive release of air contaminants to the atmosphere.
- 7.i. SWCAA 400-040(4) "Odors" requires any source which generates odors that may unreasonably interfere with any other property owner's use and enjoyment of their property to use recognized good practice and procedures to reduce these odors to a reasonable minimum.
- 7.j. SWCAA 400-109 "Air Discharge Permit Applications" requires that an ADP application be submitted for all new installations, modifications, changes, or alterations to process and emission control equipment consistent with the definition of "new source." Sources wishing to modify existing permit terms may submit an ADP application to request such changes. An ADP must be issued, or written confirmation of exempt status must be received, before beginning any actual construction, or implementing any other modification, change, or alteration of existing equipment, processes, or permits.
- 7.k. SWCAA 400-110 "New Source Review" requires that SWCAA issue an ADP in response to an ADP application prior to establishment of the new source, emission unit, or modification.
- 7.l. SWCAA 400-111 "Requirements for Sources in a Maintenance Plan Area" requires that no approval to construct or alter an air contaminant source will be granted unless it is evidenced that:
- (1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
  - (2) Emissions will be minimized to the extent that the new source will not exceed emission levels or other requirements provided in the maintenance plan;
  - (3) BACT will be employed for all air contaminants to be emitted by the proposed equipment;
  - (4) The proposed equipment will not cause any ambient air quality standard to be exceeded; and

- (5) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

The facility is located in a maintenance plan area; therefore, this regulation applies to the facility.

- 7.m. SWCAA 491-040(4) "Gasoline Vapor Control Requirements – Gasoline Dispensing Facilities" establishes the following requirements:

- (1) All gasoline dispensing facilities with an annual gasoline throughput greater than two hundred thousand (200,000) gallons in Clark County and three hundred sixty thousand (360,000) gallons in Cowlitz, Lewis, Skamania and Wahkiakum Counties shall be subject to gasoline Stage I vapor control requirements;
- (2) All gasoline dispensing stations subject to this section shall be equipped with submerged or bottom fill lines and fittings to balance gasoline vapors with the delivery transport tank;
- (3) The owner or operator of a gasoline dispensing facility subject to this section shall not permit the loading of gasoline into a storage tank equipped with vapor recovery equipment from a transport tank equipped with vapor recovery fittings unless Stage I vapor recovery equipment is attached to the transport tank and operated satisfactorily;
- (4) Every retailer and wholesale purchaser-consumer shall equip each pump from which gasoline is dispensed into motor vehicles with a nozzle that dispense fuel at a flow rate not to exceed 10 gallons per minute;
- (5) Stage II vapor recovery equipment compatible with ORVR may be removed from service beginning January 1, 2023 after an Air Discharge Permit has been issued for the modification; and
- (6) New gasoline dispensing facilities (built after February 7, 2020), or existing gasoline dispensing facilities without Stage II vapor recovery, are not required to install Stage II vapor recovery equipment.

## **8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS**

The proposed equipment and control systems incorporate BACT for the types and amounts of air contaminants emitted by the processes as described below:

- 8.a. Retail Gasoline Dispensing Facility. SWCAA has determined that Best Available Control Technology for the control of gasoline vapors emitted from new gasoline dispensing facilities with a throughput of more than 200,000 gallons per year in Clark County consists of EVR Stage I vapor recovery equipment as tested and approved by CARB, enhanced conventional nozzles (where Stage II is not in place), and low permeation hoses if liquid gasoline is carried against the outermost hose wall.

The applicant will utilize Stage I enhanced vapor recovery equipment, low permeation hoses, and enhanced conventional nozzles. This configuration meets the requirements of BACT.

- 8.b. PSD Applicability. Maximum potential emissions from this facility are well below PSD thresholds; therefore, PSD permitting is not required.
- 8.c. Compliance Assurance Monitoring (CAM) Applicability Determination. CAM is not applicable to any emission unit at this source because it is not a major source and is not required to obtain a Part 70 permit.

## 9. AMBIENT IMPACT ANALYSIS

- 9.a. The retail gasoline dispensing facility equipped with Stage I enhanced vapor recovery systems, ECO nozzles, and low permeation hoses will not cause the ambient air quality standards established by Title 40 Code of Federal Regulations Part 50 (40 CFR 50), "National Primary and Secondary Ambient Air Quality Standards" to be violated.
- 9.b. The retail gasoline dispensing facility equipped with Stage I enhanced vapor recovery systems, ECO nozzles, and low permeation hoses, if properly installed and maintained, can be operated without causing a violation of the applicable emission standards which include the limits established under SWCAA 400-040 "General Standards for Maximum Emissions."
- 9.c. The retail gasoline dispensing facility equipped with Stage I enhanced vapor recovery systems, ECO nozzles, and low permeation hoses will not cause the requirements of WAC 173-476 "Ambient Air Quality Standards" to be violated.

## 10. DISCUSSION OF APPROVAL CONDITIONS

SWCAA has made a determination to issue ADP 24-3645 in response to ADP application CL-3269. ADP 24-3645 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards, as discussed below.

- 10.a. Supersession of Previous Permits. ADP 07-2724 will be superseded in its entirety.
- 10.b. Emission Limits. An annual VOC emission limit of 3.71 tons per year was established. This limit is based upon the facility utilizing properly operated Stage I enhanced vapor recovery systems, enhanced conventional nozzles, low permeation hoses, dispensing 90% of the fuel to ORVR-equipped vehicles, and a gasoline throughput of 5,000,000 gallons per year.
- 10.c. Operational Limits and Requirements. Consistent with SWCAA 400-040(4), the permittee is required to use recognized good practice and procedures to minimize odors that impact other property owners.



The gasoline throughput was limited to 5,000,000 gallons per year. At higher throughputs the facility would be required to increase the frequency of vapor recovery testing.

The remaining requirements are related to proper operation of the Stage I vapor recovery systems, the use of low permeation hoses and enhanced conventional nozzles.

- 10.d. Monitoring and Recordkeeping Requirements. The permittee is required to record each occurrence of maintenance and repairs to vapor recovery equipment so that SWCAA and the permittee can assure that maintenance and repairs are consistent with approved vapor recovery requirements.
- 10.e. Reporting Requirements. Total gasoline throughput and the annual emissions inventory are required to be submitted to SWCAA by January 31<sup>st</sup> of each year (unless otherwise directed by SWCAA) to demonstrate compliance with the throughput limitation in the permit and allow for the development of a comprehensive emissions inventory. Test results must be reported to SWCAA within 14 days of test completion consistent with CARB and SWCAA reporting requirements.

## **11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION**

- 11.a. Start-up and Shutdown Provisions. Pursuant to SWCAA 400-081 "Start-up and Shutdown," technology-based emission standards and control technology determinations shall take into consideration the physical and operational ability of a source to comply with the applicable standards during start-up or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during start-up or shutdown, SWCAA shall include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

This source is capable of achieving continuous compliance with all applicable requirements; therefore, no start-up or shutdown provisions were included in the ADP.

- 11.b. Alternate Operating Scenarios. SWCAA conducted a review of alternate operating scenarios applicable to equipment affected by this permitting action. The permittee did not propose or identify any applicable alternate operating scenarios. Therefore, none were accommodated by the approval conditions.
- 11.c. Pollution Prevention Measures. SWCAA conducted a review for possible pollution prevention measures outside of the use of Stage I vapor recovery equipment, low permeation hoses, and enhanced conventional nozzles. As indicated in Section 8, Stage II vapor recovery equipment was not necessary to meet the requirements of BACT. No other pollution prevention measures were identified by either the permittee or SWCAA. Therefore, none were accommodated in the approval conditions.

## 12. EMISSION MONITORING AND TESTING

In accordance with the requirements of SWCAA 491-040(4)(n) that became effective February 7, 2020, testing of each pressure-vacuum vent valve is required every 36 months and Stage I vapor recovery testing is required annually. The pressure-vacuum vent valve testing frequency is consistent with the testing required by 40 CFR 63 Subpart CCCCCC. New pressure/vacuum vent valves are typically tested at the factory, therefore initial testing does not apply to new valves with a factory test. In accordance with SWCAA 491, initial vapor recovery testing is required prior to placing the equipment back into service rather than within 60 days after startup as specified in the applicable CARB Executive Order.

For the static pressure decay test, TP-201.3 does not provide an allowable final pressure for stations without Stage II vapor recovery. Therefore, the allowable final pressure equation from 40 CFR 63 Subpart CCCCCC was included in the permit.

## 13. FACILITY HISTORY

- 13.a. Previous Permitting Actions. The following approvals, Permits, and Orders have been issued for this facility:

<b>Permit / Order #</b>	<b>Application #</b>	<b>Date Issued</b>	<b>Description</b>
<b>07-2724</b>	CL-1775	4/24/2007	Approval to install a new gas station utilizing EVR Stage I and ORVR Stage II vapor recovery systems.
<b>02-2424</b>	CL-1562	7/29/2002	Approval for a new gas station utilizing non-EVR Stage I and non-ORVR Stage II vapor recovery systems. This permit expired when construction did not commence within 18 months of permit issuance.

Bold font indicates that the Air Discharge Permit was superseded or no longer in effect upon issuance of Air Discharge Permit 24-3645.

- 13.b. Compliance History. The following compliance issues have been identified for this facility within the past five years:

<b>NOV</b>	<b>Date</b>	<b>Violation</b>
10765	1/25/2023	Failure to properly maintain vapor recovery equipment.

## 14. PUBLIC INVOLVEMENT OPPORTUNITY

- 14.a. Public Notice for ADP Application CL-3269. Public notice for ADP application CL-3269 was published on the SWCAA website for a minimum of 15 days, beginning on April 12, 2024.

- 14.b. Public/Applicant Comment for ADP Application CL-3269. SWCAA did not receive specific comments, a comment period request, or any other inquiry from the public or the applicant regarding ADP application CL-3269. Therefore, no public comment period was provided for this permitting action.
- 14.c. State Environmental Policy Act. This project is exempt from SEPA requirements pursuant to WAC 197-11-800(3) since it only involves repair, remodeling, maintenance, or minor alteration of existing structures, equipment or facilities, and does not involve material expansions or changes in use. SWCAA issued a determination that the project is exempt from SEPA review on May 30, 2024 (Determination of SEPA Exempt - SWCAA 24-020).

**Appendix A**

**CARB Executive Order VR-102-G**

**OPW Phase I Vapor Recovery System**

State of California  
AIR RESOURCES BOARD

Executive Order VR-102-G  
OPW Phase I Vapor Recovery System

WHEREAS, the California Air Resources Board (ARB) has established, pursuant to California Health and Safety Code sections 25290.1.2, 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during the filling of underground gasoline storage tanks, in its **CP-201, Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities** (Certification Procedure), as last amended February 9, 2005, incorporated by reference in Title 17, California Code of Regulations, section 94011;

WHEREAS, ARB has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, test procedures for determining the compliance of Phase I vapor recovery systems with emission standards;

WHEREAS, OPW Fueling Components, Inc. (OPW) requested and was granted certification of the OPW Phase I Vapor Recovery System (OPW system) pursuant to the Certification Procedure by Executive Order VR-102-A, first issued on October 10, 2002, and last modified on May 17, 2006 by Executive Order VR-102-F;

WHEREAS, the Certification Procedure provides that the ARB Executive Officer shall issue an Executive Order if he or she determines that the vapor recovery system, including modifications, conforms to all of the applicable requirements set forth in the Certification Procedure;

WHEREAS, G-01-032 delegates to the Chief of the Monitoring and Laboratory Division the authority to certify or approve modifications to certified Phase I and Phase II vapor recovery systems for gasoline dispensing facilities (GDF); and

WHEREAS, I, William V. Loscutoff, Chief of the Monitoring and Laboratory Division, find that the OPW Phase I Vapor Recovery System, including modifications, conforms with all of the requirements set forth in the Certification Procedure, and results in a vapor recovery system which is at least 98.0 percent efficient as tested in accordance with test procedure **TP-201.1, Volumetric Efficiency for Phase I Systems**;

NOW THEREFORE, IT IS HEREBY ORDERED that the OPW system is certified to be at least 98.0 percent efficient when installed and maintained as specified herein and in the following exhibits. Exhibit 1 contains a list of the certified components. Exhibit 2 contains the performance standards and specifications, typical installation drawings, and maintenance intervals for the OPW system as installed in a gasoline dispensing facility (GDF). Exhibit 3 contains the manufacturing specifications.

IT IS FURTHER ORDERED that compliance with the applicable certification requirements, 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 are made conditions of this certification.

IT IS FURTHER ORDERED that OPW shall provide a warranty for the vapor recovery system and components to the initial purchaser and each subsequent purchaser within the warranty period. The manufacturer of components not manufactured by OPW shall provide a warranty for each of their components certified herein. This warranty shall include the ongoing compliance with all applicable performance standards and specifications, and shall comply with all warranty requirements in Section 9.2 of the Certification Procedure. OPW may specify that the warranty is contingent upon the use of trained installers. Copies of the warranty for the system and components shall be made available to the GDF owner or operator.

IT IS FURTHER ORDERED that the certified OPW system shall be installed, operated, and maintained in accordance with the **ARB-Approved Installation, Operation and Maintenance Manual for the OPW Phase I Vapor Recovery System**. A copy of this Executive Order and manual shall be maintained at each GDF where a certified OPW system is installed.

IT IS FURTHER ORDERED that equipment listed in Exhibit 1, unless exempted, shall be clearly identified by a permanent identification showing the manufacturer's name and model number. Within 60 days after the issuance of this Executive Order, OPW shall provide a picture to ARB, in the format designated by the Executive Officer or Executive Officer Delegate, showing permanent identification of each component listed in Exhibit 1.

IT IS FURTHER ORDERED that any alteration in the equipment, parts, design, installation, or operation of the system certified hereby is prohibited and deemed inconsistent with this certification unless the alteration has been submitted in writing and approved in writing by the Executive Officer or Executive Officer's delegate.

IT IS FURTHER ORDERED that the following requirements be made a condition of certification. The owner or operator of the OPW system shall conduct and pass the following tests no later than 60 days after startup and at least once every three (3) years after startup testing, using the latest adopted version of the following test procedures: **TP-201.3, Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities, TP-201.1B, Static Torque of Rotatable Phase I Adaptors** and depending on the system configuration, either **TP-201-1D, Leak Rate of Drop Tube Overflow Prevention Devices and Spill Container Drain Valves;** or **TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly**. Shorter time periods may be specified in accordance with local district requirements. Notification of testing and submittal of test results shall be done in accordance with local district requirements and pursuant to the policies established by that district. Alternative test procedures may be used if determined in writing by the Executive Officer to yield comparable results. Testing the Pressure/Vacuum (P/V) Vent valve will be at the option of the local districts. If P/V valve testing is required by the district, the test shall be conducted in accordance


with TP-201.1E, *Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves*.

IT IS FURTHER ORDERED that the OPW system shall be compatible with gasoline in common use in California at the time of certification. Any modifications to comply with future California gasoline requirements shall be approved in writing by the Executive Officer or Executive Officer's delegate.

IT IS FURTHER ORDERED that the certification of the OPW Phase I vapor recovery system is valid through September 30, 2007 to provide more time for the Executive Officer or Executive Officer delegate to gather and evaluate information.

IT IS FURTHER ORDERED that Executive Order VR-102-F, issued on May 17, 2006 is hereby superseded by this Executive Order. OPW Phase I Vapor Recovery Systems certified under Executive Orders VR-102-A to F may remain in use at existing installations. This Executive Order shall apply to new installations or major modification of existing gasoline dispensing facilities.

Executed at Sacramento, California, this <sup>th</sup>29 day of September 2006.

  
William V. Loscutt, Chief  
Monitoring and Laboratory Division

Attachments:

- Exhibit 1 OPW Phase I Vapor Recovery System Equipment List
- Exhibit 2 Installation, Maintenance and Compliance Specifications
- Exhibit 3 Manufacturing Performance Standards and Specifications



## Executive Order VR-102-G OPW Phase I Vapor Recovery System

### Exhibit 1 OPW Phase I Vapor Recovery System Equipment List

<u>Equipment</u>	<u>Manufacturer/Model Number</u>
<b>Pressure/Vacuum Vent Valve</b>	Husky Model 4885, 2-Inch Threaded OPW 623V, 2 and 3-inch Threaded
<b>Spill Containers</b>	Spill Container OPW 1-Series  OPW / Pomeco Container Bellows Capacity – 5, 7.5, or 15 gallons Type of Base – Composite or Cast Iron
<b>Replacement Drain Valve Kit</b>	OPW 1DK-2100
<b>Dust Caps</b>	OPW 634TT-EVR (product) OPW 1711T-EVR (vapor) OPW 634LPC (product) OPW 1711LPC (vapor)
<b>Product Adaptor</b>	OPW 61SALP
<b>Vapor Adaptor</b>	OPW 61VSA
<b>Extractor Assembly</b> <sup>1</sup>	OPW 233
<b>Ball Float Vent Valve</b> <sup>1, 2</sup>	OPW 53VML OPW 30MV
<b>Jack Screw Kit</b>	OPW 61JSK-4400-EVR OPW 61JSK-4410 OPW 61JSK-44CB
<b>Face Seal Adaptor</b>	OPW FSA-400 OPW FSA-400-S
<b>Drop Tube</b>	OPW 61T (various lengths)
<b>Drop Tube Overfill Prevention Device</b> <sup>1</sup>	OPW 61SO-XXXX-EVR

<sup>1</sup> If these components are installed or required by regulations of other agencies, only those components and model numbers specified above shall be installed or used.

<sup>2</sup> The 53VML and 30MV includes both the 2" and 3" models



Where XXX = 400, 410, 412, 420 or 440

- Double Fill** OPW (Configuration Only)
- Tank Bottom Protector**<sup>1</sup> OPW/Pomeco 6111-1400-EVR
- Tank Gauge Port Components**<sup>1</sup>
  - Morrison Brothers 305XPA1100AKEVR (cap & adaptor kit)
  - Morrison Brothers 305-0200AAEVR (replacement adaptor)
  - Morrison Brothers 305XP-110ACEVR (replacement cap)
  - Ever-Tite 4097AGBR Adaptor
  - Ever-Tite 4097AGMBRNL Adaptor
  - Ever-Tite 4097MBR Cap
  - Veeder-Root 312020-952 (cap & adaptor)

**Table 1  
Components Exempt from Identification Requirements**

<b>Component Name</b>	<b>Manufacturer</b>	<b>Model Number</b>
<b>Replacement Drain Valve</b>	OPW	1DK-2100
<b>Jack Screw Kit</b>	OPW	61JSK-4400-EVR Generation 1 – No Identification Stamp Generation 2 – Stamped <b>OPW 61JSK MFG date</b>  61JSK-4410 – Stamped <b>OPW 61JSK MFG date</b>  61JSK-44CB – Stamped <b>OPW 61JSK MFG date</b>
<b>Tank Gauge Port Component (Cap and Adaptor)</b>	Morrison Brothers	305XPA1100AKEVR (cap & adaptor kit)  305-0200AAEVR (replacement adaptor)  305XP-110ACEVR (replacement cap).
<b>Drop Tube</b>	OPW	61-T, 61SO
<b>Face Seal Adaptor</b>	OPW	OPW FSA-400 OPWFSA-400-S
<b>Sump / Sump Lids / Spill Container Covers</b>	Varies	Varies

<sup>1</sup> If these components are installed or required by regulations of other agencies, only those components and model numbers specified above shall be installed or used.

## Executive Order VR-102-G OPW Phase I Vapor Recovery System

### Exhibit 2 Installation, Maintenance and Compliance Standards and Specifications

This exhibit contains the installation, maintenance and compliance standards, and specifications applicable to an OPW system installed in a gasoline dispensing facility (GDF).

#### General Specifications

1. Typical installations of the OPW system are shown in Figures 2A and 2B.
2. The OPW system shall be installed, operated, and maintained in accordance with the latest amended version of the **ARB-Approved Installation, Operation and Maintenance Manual for the OPW Phase I Vapor Recovery System**.
3. Any repair or replacement of system components shall be done in accordance with the latest amended version of the **ARB-Approved Installation, Operation and Maintenance Manual for the OPW Phase I Vapor Recovery System**.
4. The OPW system shall comply with the applicable performance standards and performance specifications in CP-201. Compliance of the system and all components shall be demonstrated in accordance with the latest adopted version of **TP-201.3, Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities**.
5. Installation, maintenance and repair of system components, including removal and installation of such components in the course of any required tests, shall be performed by OPW Certified Technicians.

#### Pressure/Vacuum Vent Valves For Storage Tank Vent Pipes<sup>1</sup>

1. No more than three certified pressure/vacuum vent valves (P/V valves) listed in Exhibit 1 shall be installed on any GDF underground storage tank system.
2. Compliance determination of the following P/V valve performance specifications shall be at the option of the districts:
  - a. The leak rate of each P/V valve shall not exceed 0.05 cubic feet per hour (CFH) at 2.00 inches of H<sub>2</sub>O positive pressure and 0.21 CFH at 4.00 inches negative pressure as determined by **TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves**. NOTE: If the positive pressure leak rate is exceeded, a second positive pressure leak test shall be conducted per TP-201.1E to determine compliance with the leak rate

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<sup>1</sup> The requirement that the vent pipe manifold be installed at a height not less than 12 feet above the grade stated in Executive Orders VR-102-A through VR-102-E is rescinded.

specification. This second positive leak rate test shall be run only after completing the sequence of tests specified by sections 7.2 through 7.5 of TP-201.1E.

- b. The positive pressure setting is  $3.0 \pm 0.5$  inches of H<sub>2</sub>O and the negative pressure setting is  $-8.0 \pm 2.0$  inches of H<sub>2</sub>O as determined by **TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves**.
3. A manifold may be installed on the vent pipes to reduce the number of potential leak sources and P/V valves installed. Vent pipe manifolds shall be constructed of steel pipe or an equivalent material that has been listed for use with gasoline. If a material other than steel is used, the GDF operator shall make available, information demonstrating that the material is compatible for use with gasoline. One example of a typical vent pipe manifold is shown in Figure 2D. This shows only one typical configuration; other manifold configurations may be used. For example, a tee may be located in a different position, or fewer pipes may be connected, or more than one P/V valve may be installed on the manifold.
4. Each P/V valve shall have permanently affixed to it a yellow or gold-colored label with black lettering stating the following specifications:

Positive pressure setting:  $3.0 \pm 0.5$  inches H<sub>2</sub>O  
Negative pressure setting:  $-8.0 \pm 2.0$  inches H<sub>2</sub>O  
Positive Leakrate: 0.05 CFH at 2.0 inches H<sub>2</sub>O  
Negative Leakrate: 0.21 CFH at -4.0 inches H<sub>2</sub>O

#### **Rotatable Product and Vapor Recovery Adaptors**

1. Rotatable product and vapor recovery adaptors shall be capable of at least 360-degree rotation and have an average static torque not to exceed 108 pound-inch (9 pound-foot). Compliance with this requirement shall be demonstrated in accordance with the latest adopted version of **TP-201.1B, Static Torque of Rotatable Phase I Adaptors**.
2. The vapor adaptor poppet shall not leak when closed. Compliance with this requirement may be verified by the use of commercial liquid leak detection solution or by bagging, when the vapor containment space of the underground storage tank is subjected to a non-zero gauge pressure. (Note: leak detection solution will detect leaks only when positive gauge pressure exists.)

#### **Vapor Recovery and Product Adaptor Dust Caps**

Dust caps with intact gaskets shall be installed on all Phase I tank adaptors.

### **Spill Container Drain Valve**

The spill container drain valve shall be configured to drain liquid directly into the drop tube and shall be isolated from the underground storage tank ullage space. The leak rate of the drain valve shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O. Depending on the presence of the drop tube overfill prevention device, compliance with this requirement shall be demonstrated in accordance with the latest adopted version of either **TP-201.1D, *Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves***; or **TP-201.1C, *Leak Rate of Drop Tube/Drain Valve Assembly***.

### **Drop Tube Overfill Prevention Device**

1. The Drop Tube Overfill Prevention Device (overfill device) is designed to restrict the flow of gasoline delivered to the underground storage when liquid levels exceeds a specified capacity. The overfill device is not a required component of the vapor recovery system, but may be installed as an optional component. Other regulatory requirements may apply.
2. The leak rate of the overfill device shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O when tested in accordance with the latest adopted version of **TP-201.1D, *Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves***.

### **Face Seal Adaptor**

The Face Seal Adaptor shall provide a machined surface on which a gasket can seal and ensures that the seal is not compromised by an improperly cut or improperly finished riser. A Face Seal Adaptor shall be installed on the following required connections. As an option, the adaptor may be installed on other connections.

- a. Product Spill Container (required)
- b. Tank Gauging Components (required)
- c. Vapor Recovery Spill Container (optional)
- d. Rotatable Adaptors (optional)

### **Ball Float Vent Valve**

A Ball Float Vent Valve (ball float) is designed to restrict the flow of a gasoline delivery by using back pressure when the storage tank levels exceed a specified level. If installed for overfill prevention, a ball float must be installed at each vapor and vent connection to the tank. Ball floats are not required components of the vapor recovery system, but may be installed as optional components for vapor recovery. Other requirements may apply.



### **Double Fill Configuration**

1. OPW Double Fill Configuration shall be allowed for installation provided that no more than two fill and two vapor return points are installed on any single underground storage tank and that no offset of the vapor recovery riser pipe is installed. An example of an OPW Dual Fill configuration is shown in Figure 2C.

### **Vapor Recovery Riser Offset**

1. The vapor recovery tank riser may be offset from the tank connection to the vapor recovery Spill Container provided that the maximum horizontal distance (offset distance) does not exceed 20 inches. One example of an offset is shown in Figure 2E.
2. The vapor recovery riser shall be offset up to 20 inches horizontal distance with use of commercially available, 4 inch diameter steel pipe fittings.

### **Tank Gauge Port Components**

The tank gauge adaptor and cap are paired. Therefore, an adaptor manufactured by one company shall be used only with a cap manufactured by the same company.

### **Connections and Fittings**

All connections and fittings not specifically certified with an allowable leak rate shall not leak. The absence of vapor leaks may be verified with the use of commercial liquid leak detection solution (LDS) or by bagging, when the vapor containment space of the underground storage tank is subjected to a non-zero gauge pressure. (Note: leak detection solution will detect leaks only when positive gauge pressure exists).

### **Maintenance Records**

Each GDF operator/owner shall keep records of maintenance performed at the facility. Such record shall be maintained on site or in accordance with district requirements or policies. The records shall include the maintenance or test date, repair date to correct test failure, maintenance or test performed, affiliation, telephone number, name and Certified Technician Identification Number of individual conducting maintenance or test. An example of a Phase I Maintenance Record is shown in Figure 2F.

**Table 2-1  
Gasoline Dispensing Facility Compliance Standards and Specifications**

<b>Component</b>	<b>Test Method</b>	<b>Standard or Specification</b>
Rotatable Phase I Adaptors	TP-201.1B	Minimum, 360-degree rotation Maximum, 108 pound-inch average static torque
Overfill Prevention Device	TP-201.1D	≤0.17 CFH at 2.00 in H <sub>2</sub> O
Spill Container Drain Valve	TP-201.1C or TP-201.1D	≤0.17 CFH at 2.00 in H <sub>2</sub> O
P/V Valve <sup>1</sup>	TP-201.1E	Positive pressure setting: 3.0 ± 0.5 in H <sub>2</sub> O Negative pressure setting: -8.0 ± 2.0 in H <sub>2</sub> O Positive Leakrate: 0.05 CFH at 2.0 in H <sub>2</sub> O Negative Leakrate: 0.21 CFH at -4.0 in H <sub>2</sub> O
Gasoline Dispensing Facility	TP-201.3	As specified in TP-201.3 and/or CP-201
Connections and fittings certified without an allowable leak rate	Leak Detection Solution or Bagging	No leaks

**Table 2-2  
Maintenance Intervals for System Components**

<b>Manufacturer</b>	<b>Component</b>	<b>Maintenance Interval</b>
Husky	Pressure/Vacuum Vent Valve	Annual
Morrison Brothers	Tank Gauge Components	Annual
OPW	Pressure/Vacuum Vent Valve	Annual
OPW	Dust Caps (all models)	Annual
OPW	61-T Straight Drop Tube	Annual
OPW	Ball Float (all models)	Every 3 years
OPW	Rotatable Phase I Adaptors	Annual
OPW	Drop Tube Overfill Prevention Valve	Annual
OPW \ Pomeco	Spill Containers (all models)	Annual

<sup>1</sup> Compliance determination is at the option of the district.

Figure 2A

Typical Product Installation Using OPW System

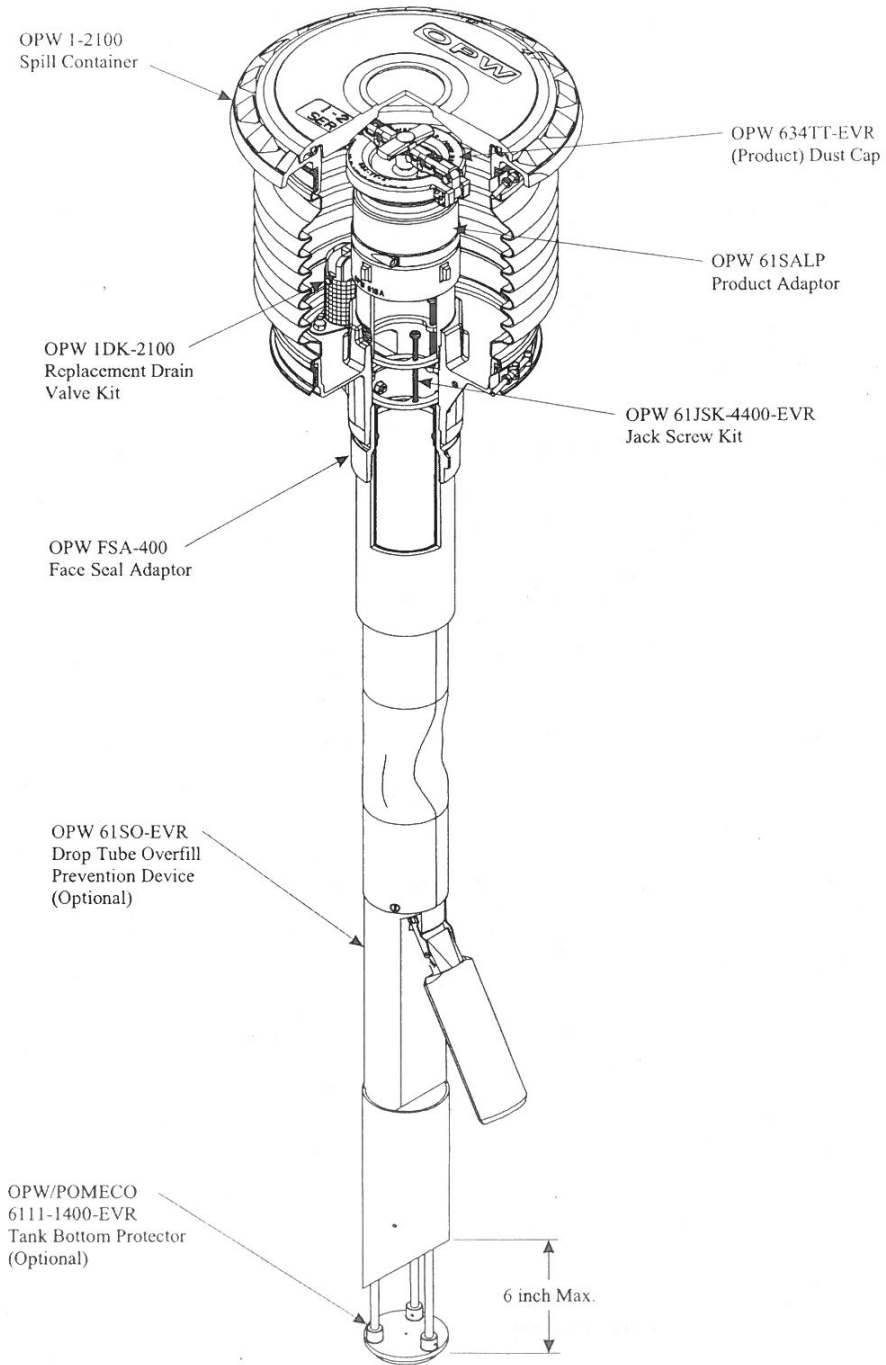


Figure 2B

Typical Vapor Installation Using OPW System

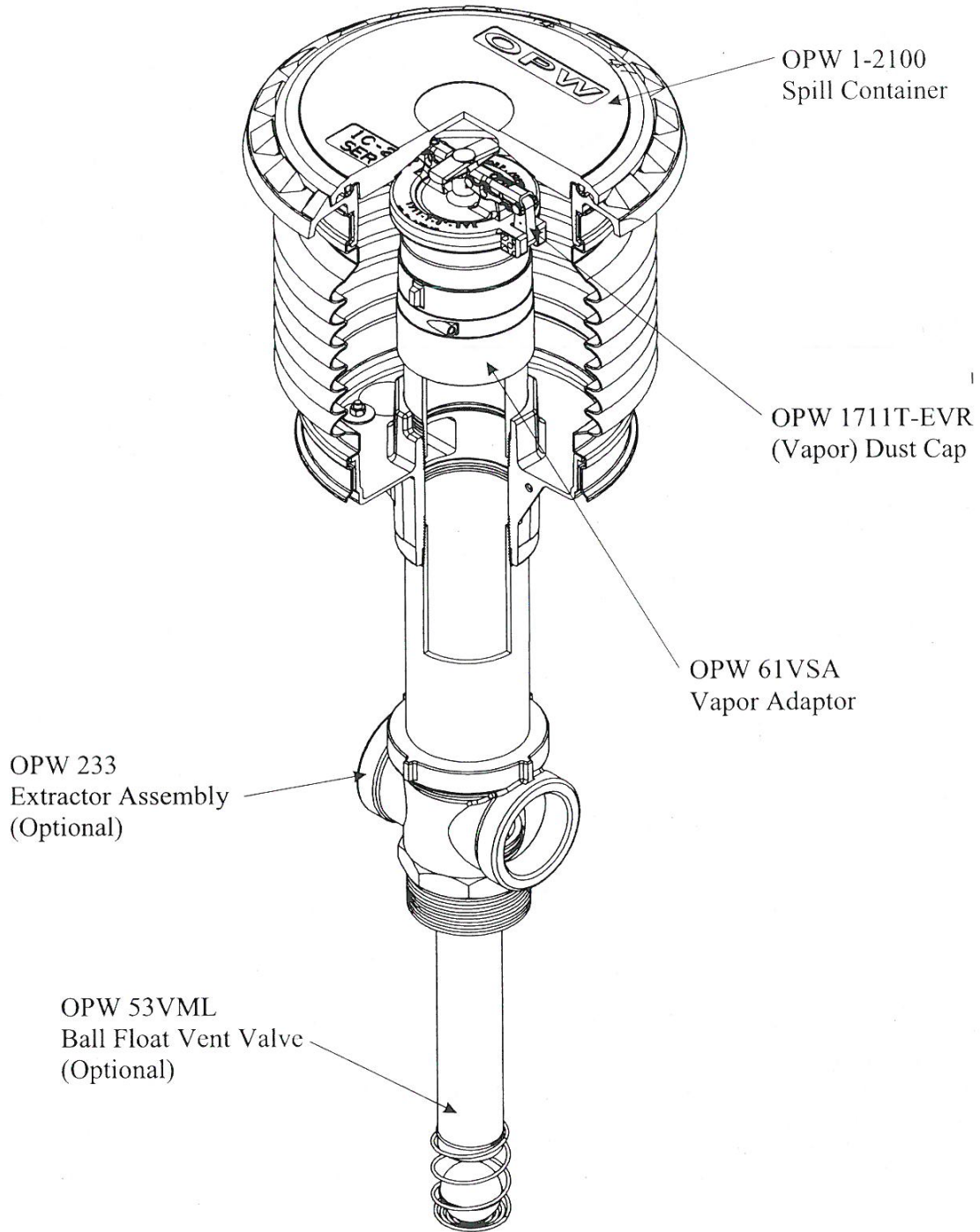




Figure 2C

Typical OPW/POMEKO Double Fill Configuration

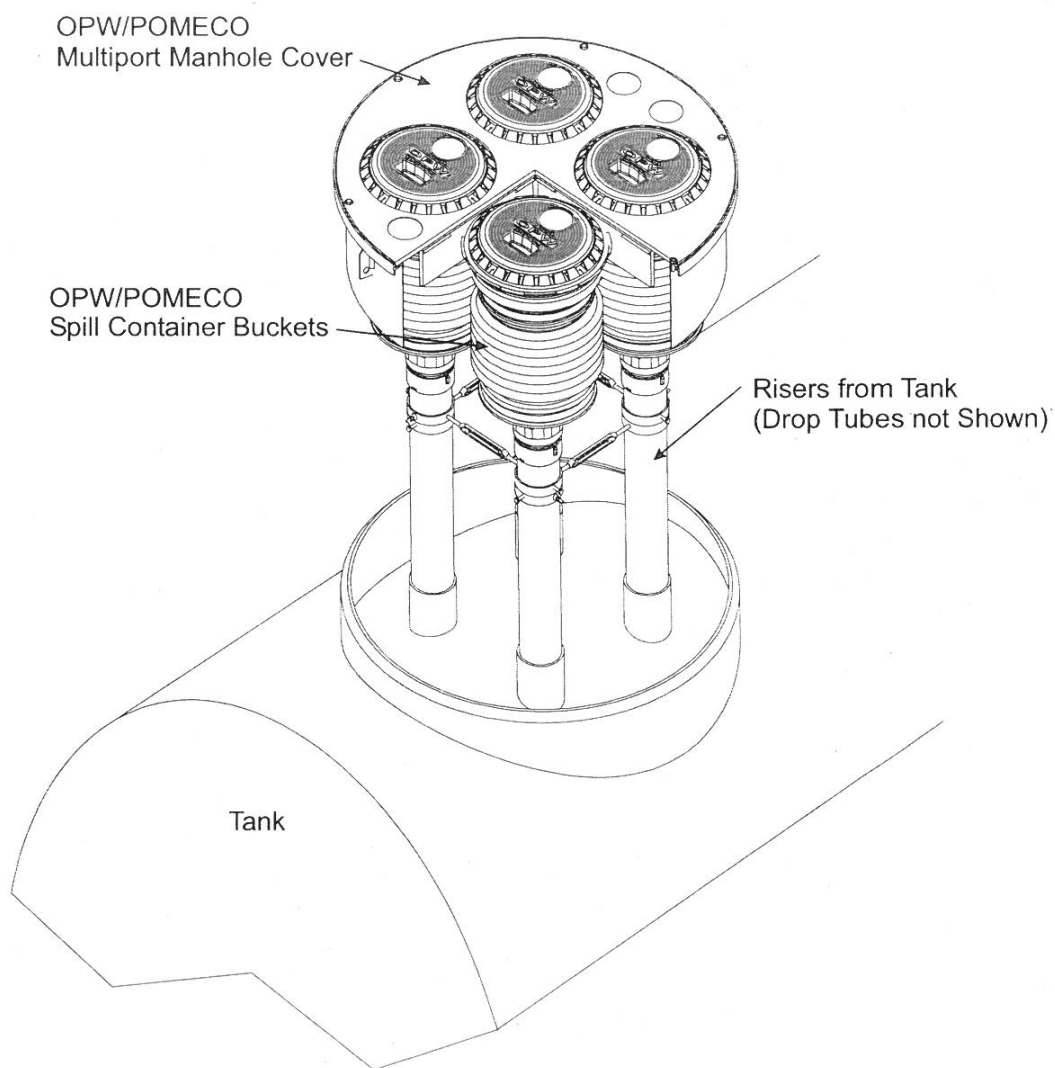
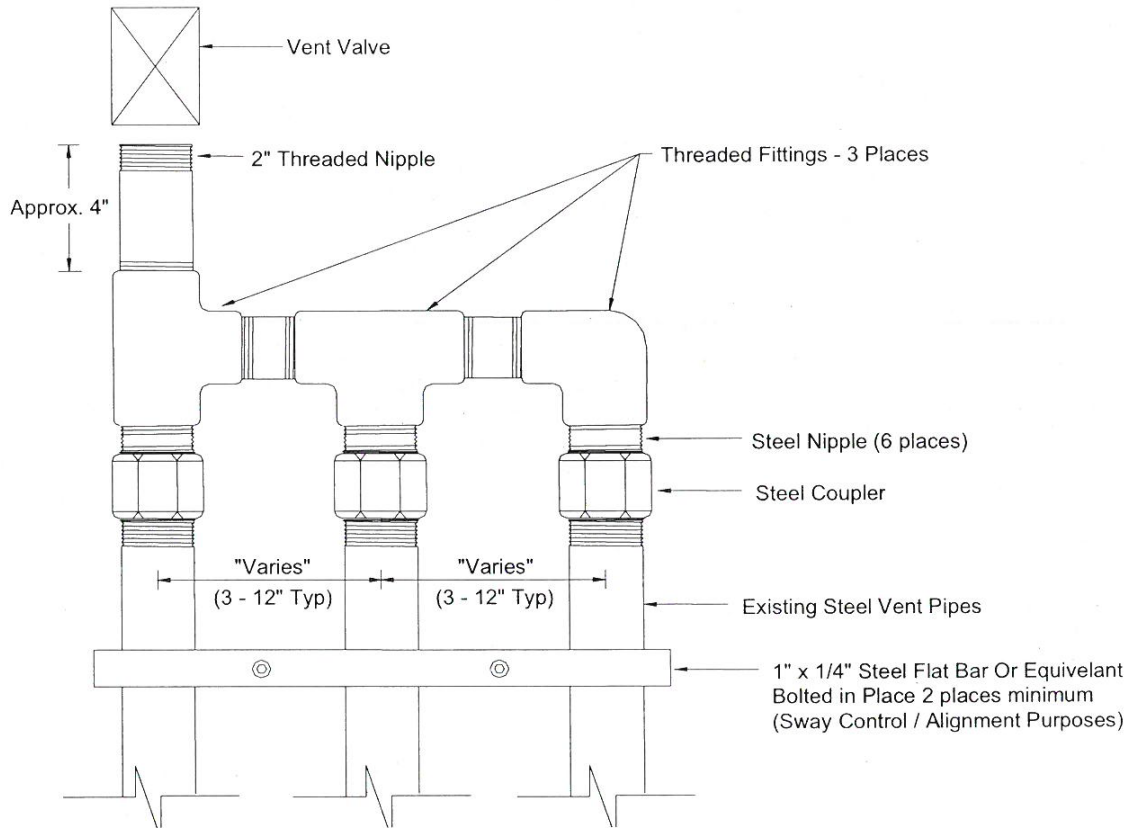


Figure 2D

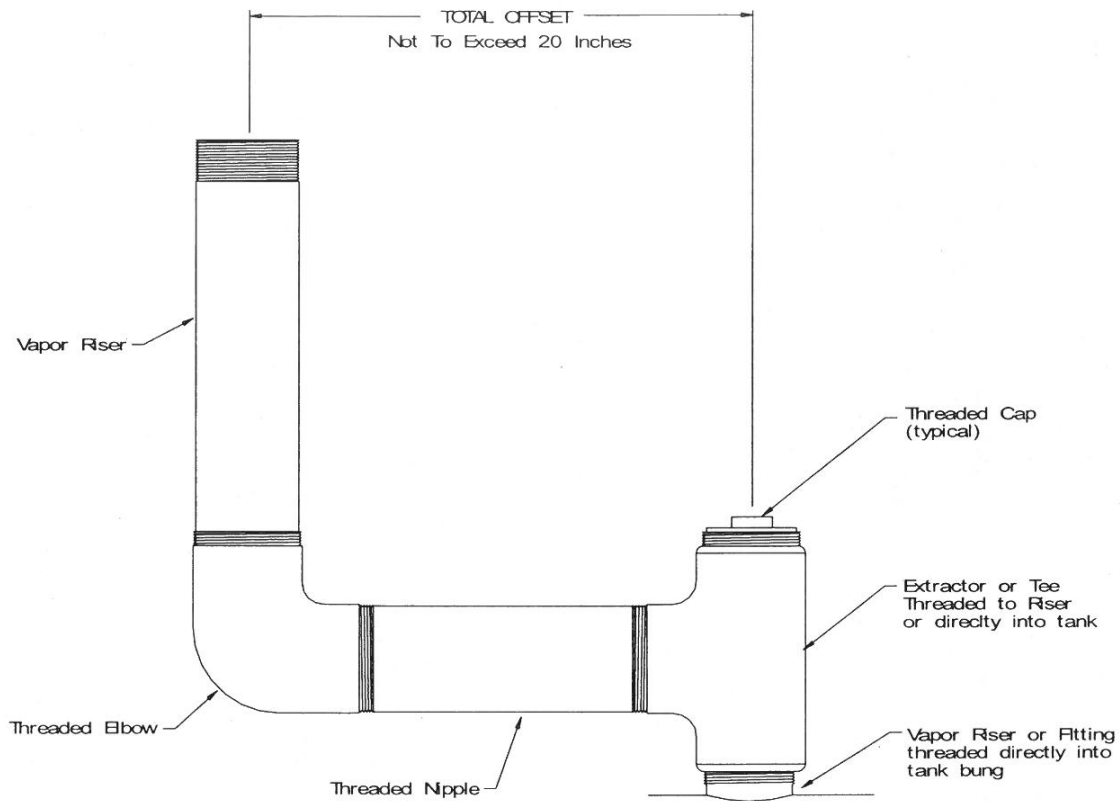
Typical Vent Pipe Manifold



**Note:** This shows only one typical configuration; other manifold configurations may be used. For example, a tee may be located in a different position, or fewer pipes may be connected, or more than one P/V valve may be installed on the manifold.

Figure 2E

Typical Vapor Recovery Riser Offset



**Note:** This figure represents one instance where a vapor recovery riser has been offset in order to construct a two-point Phase I vapor recovery system. The above figure illustrates an offset using a 90-degree elbow. However, in some instances, elbows less than 90 degrees may be used. All fittings and pipe nipples shall be 4-inch diameter similar to those of the spill container and rotatable Phase I adaptors in order to reduce back pressure during a gasoline delivery.

Figure 2F

Example of a GDF Phase I Maintenance Record

Date of Maintenance/ Test/Inspection /Failure	Repair Date To Correct Test Failure	Maintenance/Test/Inspection Performed and Outcome	Affiliation	Name and Certified Technician Identification Number of Individual Conducting Maintenance or Test	Telephone Number

## Executive Order VR-102-G OPW Phase I Vapor Recovery System

### Exhibit 3 Manufacturing Performance Standards and Specifications

The OPW system and all components shall be manufactured in compliance with the performance standards and specifications in CP-201, as well as the requirements specified in this Executive Order. All components shall be manufactured as certified; no change to the equipment, parts, design, materials, or manufacturing process shall be made unless approved in writing by the Executive Officer. Unless specified in Exhibit 2 or in the **ARB-Approved Installation, Operation and Maintenance Manual for the OPW Phase I Vapor Recovery System**, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a GDF.

#### Pressure/Vacuum Vent Valves for Storage Tank Vent Pipes

1. Each pressure/vacuum vent valve (P/V valve) shall be performance tested at the factory for cracking pressure and leak rate at each specified pressure setting and shall be done in accordance with the latest adopted version of **TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves**. Each P/V valve shall be shipped with a card or label stating the performance specifications listed below and a statement that the valve was tested to and met these specifications.
  - a. The pressure settings for the P/V valve
    - Positive pressure setting of  $3.0 \pm 0.5$  inches H<sub>2</sub>O.
    - Negative pressure setting of  $-8.0 \pm 2.0$  inches H<sub>2</sub>O.
  - b. The leak rate for each P/V valve, including connections, shall not exceed:
    - 0.05 CFH at 2.0 inches H<sub>2</sub>O.
    - 0.21 CFH at -4.0 inches H<sub>2</sub>O.
2. Each P/V valve shall have permanently affixed to it a yellow or gold label with black lettering listing the positive and negative pressure settings specified above. The lettering of the label shall have a minimum font size of 20.

#### Rotatable Product and Vapor Recovery Adaptors

1. The rotatable product and vapor recovery adaptors shall not leak.
2. The product adaptor cam and groove shall be manufactured in accordance with the cam and groove specifications shown in Figure 3A of CP-201.
3. The vapor recovery adaptor cam and groove shall be manufactured in accordance with the cam and groove specifications shown in Figure 3B of CP-201.

4. Each product and vapor recovery adaptor shall be performance tested at the factory. Each adaptor shall have affixed to it a card or label stating the performance specification listed below and a statement that the adaptor was tested to and met the following specifications.
  - a. The average static torque for the rotatable adaptor shall not exceed 108 pound-inch average static torque when tested in accordance with the latest adopted version of **TP-201.1B, Static Torque of Rotatable Phase I Adaptors.**
  - b. The rotatable adaptor shall be capable of rotating at least 360 degrees when tested in accordance with the latest adopted version of **TP-201.1B, Static Torque of Rotatable Phase I Adaptors.**

#### **Spill Container and Drain Valves**

Each Spill Container Drain Valve shall be performance tested at the factory. Each Spill Container Drain Valve shall have affixed to it a card or label stating the performance specifications listed below and a statement that the valve was tested to and met the following performance specification.

- a. The maximum leakrate shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O when tested in accordance with the latest adopted version of either **TP-201.1C, Leak Rate of Drop Tube/Drain Valve** or **TP-201.1D, Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves.**

#### **Drop Tube Overfill Prevention Device**

Each Drop Tube Overfill Prevention Device shall be performance tested at the factory to verify that it does not exceed the maximum allowable leak rate. Each Drop Tube Overfill Prevention Device shall have affixed to it a card or label stating the performance specifications listed below and a statement that the device was tested to and met the following performance specification.

- a. The maximum leak rate shall not exceed 0.17 CFH at 2.00 inches H<sub>2</sub>O when tested in accordance with the latest adopted version of **TP-201.1D, Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves.**

**Table 3-1  
Manufacturing Component Standards and Specifications**

<b>Component</b>	<b>Test Method</b>	<b>Standard or Specification</b>
Rotatable Phase I Adaptors	TP-201.1B	Minimum, 360-degree rotation Maximum, 108 pound-inch average static torque
Rotatable Phase I Adaptors	Micrometer	Cam and Groove Specifications (CP-201)
Overfill Prevention Device	TP-201.1D	≤0.17 CFH at 2.00 inches H <sub>2</sub> O
Spill Container Drain Valve	TP-201.1C or TP-201.1D	≤0.17 CFH at 2.00 inches H <sub>2</sub> O
Pressure/Vacuum Vent Valve	TP-201.1E	Positive Pressure: 3.0 ±0.5 inches H <sub>2</sub> O Negative Pressure: -8.0 ±2.0 inches H <sub>2</sub> O Leak rate: ≤ 0.05 CFH at +2.0 inches H <sub>2</sub> O Leak rate: ≤ 0.21 CFH at -4.0 inches H <sub>2</sub> O