

# **TECHNICAL SUPPORT DOCUMENT**

# WINLOCK SHELL MINIMART

# 642 State Highway 505, Winlock, WA 98596 SWCAA ID: 1963

# Air Discharge Permit SWCAA 21-3467

# Air Discharge Permit Application L-719

Issued: June 15, 2021

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Appendix A - CARB Executive Order G-70-97-A

# **Abbreviations**

ADP	Air Discharge Permit (a.k.a. Order of Approval)
AP-42	Compilation of Emission Factors, AP-42, Fifth Edition, Volume 1, Stationary Point and Area Sources -
	published by the US Environmental Protection Agency
BACT	Best Available Control Technology
BART	Best Available Retrofit Technology
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO <sub>2</sub> e	Carbon dioxide equivalent
EPA	U.S. Environmental Protection Agency
EVR	Enhanced Vapor Recovery
HAP	Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act
LAER	Lowest Achievable Emission Rate
lb	Pounds
NO <sub>X</sub>	Nitrogen oxides
PM	Particulate matter with an aerodynamic diameter less than or equal to 100 micrometers (includes both
	filterable particulate matter measured by EPA Method 5 that is less than 100 micrometers and
	condensable particulate matter measured by EPA Method 202)
$PM_{10}$	Particulate matter with an aerodynamic diameter less than or equal to 10 micrometers (includes both
	filterable particulate matter measured by EPA Method 201 or 201A and condensable particulate matter
	measured by EPA Method 202)
PM <sub>2.5</sub>	Particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (includes both
	filterable particulate matter measured by EPA Method 201 or 201A and condensable particulate matter
	measured by EPA Method 202)
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SO <sub>2</sub>	Sulfur dioxide
SWCAA	Southwest Clean Air Agency
TAP	Toxic air pollutant pursuant to Chapter 173-460 WAC
T-BACT	Best Available Control Technology for toxic air pollutants
tpy	Tons per year
VOC	Volatile organic compound
WAC	Washington Administrative Code
"w.c.	Pressure measured in inches of water column

Technical Support Document Winlock Shell MiniMart

#### **1. FACILITY IDENTIFICATION**

11	NB Ventures, Inc. 642 State Route 505, Winlock, WA 98596				
Facility Name: Facility Address:	Winlock Shell MiniMart 642 State Route 505, Winlock, WA 98596				
SWCAA Identification:					
Contact Person:	Basheer Alomari				

Contact Person:Basheer AtomatiPrimary Process:Gasoline dispensing associated with a convenience storeSIC / NAICS:447110 / 5541Facility Classification:BACT / 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 L-719 received April 1, 2021. ADP Application L-719 was submitted for belated approval to install an above-ground gasoline storage tank equipped with a Stage I Vapor Recovery system.

#### 4. PROCESS DESCRIPTION

This facility receives unleaded gasoline from tanker trucks for storage in two underground storage tanks and one aboveground storage tank. The storage tanks are each equipped with a two-point vapor balance system that returns gasoline vapors vented from the underground storage tanks to the tanker truck during filling (Stage I vapor recovery). Gasoline from the underground storage tanks is dispensed from eight pumps.

Products at Pump	Number of Pumps
Blended gasoline and diesel through separate hoses	2
Blended gasoline only	4
Blended gasoline and premium clear unleaded through separate hoses	2

Each pump dispensing blended gasoline does so through a single hose (unihose design). Vapors displaced from individual motor vehicle gasoline tanks during filling that are not captured by an onboard vapor recovery system (ORVR) will not be returned to the underground storage tanks (no Stage II vapor recovery).

#### 5. EQUIPMENT/ACTIVITY IDENTIFICATION

5.a <u>Storage Tanks</u>: The following storage tanks will be utilized at the facility:

Tank	Product	Capacity
1	Regular Unleaded	15,000 gallons
2	Super Unleaded	12,000 gallons
3	Diesel	8,000 gallons
4	Super Unleaded "Clear" (ethanol free)	6,000 gallons

Tanks 2 and 3 are separate sections of a split 20,000 gallon storage tank. Tank 4 an above-ground tank.

The underground gasoline storage tanks are equipped with equipment approved by CARB Executive Order G-70-97-A as components of the Stage I vapor recovery system. The following components of the Stage I system have been installed:

Component	Make/Model
Drop Tubes	EMCO-Wheaton / A20-001
Fill Adapters <sup>1</sup>	EMCO-Wheaton / A30-014
Fill Caps	EMCO-Wheaton / A97-005
Vapor Adapters <sup>1</sup>	EMCO-Wheaton / A76-005
Vapor Caps	EMCO-Wheaton / A99-002
Extractor Assembly	N/A
Float Vent Valve	EMCO-Wheaton / A79
Pressure / Vacuum Valve	Morrison / 749CRB
1 months to the second	

<sup>1</sup> This is a two point system. The fill and vapor adaptors are not swivel type.

The aboveground storage tank is equipped with equipment approved by CARB Executive Order G-70-162-A as components of the Stage I vapor recovery system.

#### 5.b <u>Summary.</u>

ID No.	Generating Equipment/Activity	# of Units	Control Measure/Equipment	# of Units
1	Retail Gasoline Dispensing Facility	1	Stage I Vapor Recovery Systems	1

#### 6. EMISSIONS DETERMINATION

6.a <u>Gasoline Vapors.</u> Total potential VOC emissions from the underground storage tanks fuel delivery, and fuel dispensing 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":

	VOC Emission Factor (lb/1,000
Emission Source	gallons of fuel)
Loading – Stage I Controlled (non-EVR)	0.380
Breathing – Controlled with P/V Valve	0.092
Uncontrolled Refueling – Stage II uncontrolled (non ORVR Vehicles, no Stage II)	0.841
Controlled Refueling (ORVR vehicles, no Stage II)	$0.151^{2}$
Spillage (conventional nozzles)	0.610
Hose Permeation (regular hoses)	0.062
Total	2.135

<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.

In addition to the above emissions, the aboveground storage tank will have standing loss emissions due to temperature fluctuations that are small enough to be neglected for the underground storage tanks. Standing loss emissions were assumed to be equal to 0.57 lb/1,000 gallons of ullage per day, which is the emission certification level for CARB Executive Order VR-302-B "Standing Loss Control Vapor Recovery System for New Installations of Aboveground Storage Tanks." SWCAA assumed that, on average, the tank was half full (3,000 gallons of ullage); therefore annual emissions would be 624 pounds per year. Assuming a facilitywide gasoline throughput of 5,000,000 gallons per year, the overall VOC emissions from the facility would be 11,300 pounds per year (2.260 lbs/1,000 gallons dispensed).

At a throughput of 5,000,000 gallons of gasoline per year, the facility would emit 5.65 tons of volatile organic compounds. Note that beginning in 2023, enhanced conventional nozzles must be used, and if the gasoline throughput exceeds 1,400,000 gallons per year then low permeation hoses must be used. Use of one or both of these upgraded components will reduce emissions from the facility. At a throughput of 5,000,000 gallons per year, potential annual emissions after January 1, 2023 would be 4.59 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 2.83 tons per year, and 0.73 tons per year respectively before 2023 and 2.30 and 0.59 tons per year respectively after January 1, 2023.

Pollutant	Potential Annual Emissions Until 2023 (tpy)	Potential Annual Emissions Beginning 2023 (tpy)
Carbon monoxide	0.00	0.00
Nitrogen oxides	0.00	0.00
Volatile organic compounds	5.65	4.59
Sulfur oxides as sulfur dioxide	0.00	0.00
Particulate matter	0.00	0.00
PM <sub>10</sub>	0.00	0.00
PM <sub>2.5</sub>	0.00	0.00
CO <sub>2</sub> e	0.00	0.00
Toxic Air Pollutants	2.83	2.30
Hazardous Air Pollutants	0.73	0.59

6.b Facility-wide Potential Emissions Summary.

#### 7. REGULATIONS AND EMISSION STANDARDS

Regulations 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 regulations, codes, or requirements listed below.

7.a <u>Title 40 Code of Federal Regulations (CFR) Part 63.11110 et seq. Subpart CCCCCC "National Emission</u> <u>Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities"</u> 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. The addition of the aboveground storage tank was not "reconstruction" of the facility for the purposes of this rule.

- 7.b <u>Title 40 CFR Part 80 "Regulation of Fuels and Fuel Additives"</u> in section 80.22(j) requires that after January 1, 1998, every retailer and wholesale purchaser-consumer of gasoline and methanol shall limit each nozzle from which gasoline or methanol is introduced into motor vehicles to a maximum fuel flow rate not to exceed 10 gallons per minute.
- 7.c <u>Revised Code of Washington (RCW) 70A.15.2040</u> 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.15A] 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 <u>RCW 70A.15.2210</u> 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 Order of Approval (Air Discharge Permit) for installation and establishment of an air contaminant source.
- 7.e <u>Washington Administrative Code (WAC) 173-460 "Controls for New Sources of Toxic Air Pollutants"</u> (as in effect August 21, 1998) 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. WAC 173-460-030(1)(b)(ii) exempts gasoline dispensing facilities from the provisions of WAC 173-460.
- 7.f <u>WAC 173-476 "Ambient Air Quality Standards"</u> establishes ambient air quality standards for PM<sub>10</sub>, PM<sub>2.5</sub>, lead, sulfur dioxide, nitrogen dioxide, ozone, and carbon monoxide in the ambient air, which shall not be exceeded.

- 7.g <u>SWCAA 400-040 "General Standards for Maximum Emissions"</u> 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, sulfur dioxide, concealment and masking, and fugitive dust.
- 7.h <u>SWCAA 400-040(3) "Fugitive Emissions"</u> requires that reasonable precautions be taken to prevent the fugitive release of air contaminants to the atmosphere.
- 7.i <u>SWCAA 400-040(4) "Odors"</u> requires that good practice and procedures be used to reduce odors to a reasonable minimum, and does not allow any person to cause or allow the generation of any odor from any source or activity which may unreasonably interfere with any other property owner's use and enjoyment of their property.
- 7.j <u>SWCAA 400-070(6) "Gasoline Dispensing Facilities"</u> requires all gasoline dispensing facilities to meet all the provisions of SWCAA 491 "Emission Standards and Controls for Sources Emitting Gasoline Vapors."
- 7.k <u>SWCAA 400-109 "Air Discharge Permit Applications"</u> requires that an air discharge permit 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 Air Discharge Permit application to request such changes. An air discharge permit 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.
- 7.1 <u>SWCAA 400-110 "New Source Review"</u> requires that an Air Discharge Permit be issued by SWCAA prior to establishment of the new source, emission unit, or modification in response to an Air Discharge Permit application.
- 7.m <u>SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas"</u> requires that no approval to construct or alter an air contaminant source shall 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) Best Available Control Technology will be employed for all air contaminants to be emitted by the proposed equipment;
  - (3) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
  - (4) 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.
- 7.n <u>SWCAA 491-040(4)</u> "Gasoline Vapor Control Requirements Gasoline Dispensing Facilities" establishes the following requirements:
  - 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; and
  - (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.

(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 Best Available Control Technology (BACT) for the types and amounts of air contaminants emitted by the processes as described below:

8.a <u>Retail Gasoline Dispensing Facility.</u> 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 360,000 gallons per year in Cowlitz County consists of EVR Stage I vapor recovery equipment as tested and approved by CARB, maintenance of existing ORVR-compatible Stage II vapor recovery until 2023, enhanced conventional nozzles (where Stage II is not in place), and low-permeation hoses when throughput exceeds 1,400,000 gallons per year.

The underground storage tanks as this facility are not new. The existing Stage I vapor recovery system in use by this facility for the underground storage tanks was approved by CARB Executive Order G-70-97-A dated December 9, 1985 and is not EVR certified. Because the Stage I system is not new, it is not being reviewed against current BACT requirements. The facility does not have ORVR-compatible Stage II vapor recovery and will utilize enhanced conventional nozzles by 2023 and low-permeation hoses after 2023 if throughput exceeds 1,400,000 gallons per year.

The new aboveground storage tank will meet the standards for standing loss control in CARB Executive Order VR-302-B dated November 30, 2009, and the Stage I vapor recovery system approved by CARB Executive Order G-70-162-A dated March 2, 1998. CARB Executive Orders for standing loss control only allow the use of a single P/V valve (Husky 5885). Because there is only a single approved vendor/component SWCAA believes that requiring use of the component would exceed BACT, and therefore allowed the use of any EVR-certified P/V valve. In this case the OPW model 723V was installed. Based on the potential impact of this relatively small tank, this configuration will meet the requirements of BACT.

- 8.b <u>PSD Applicability.</u> Maximum potential emissions from this facility are well below PSD thresholds; therefore, PSD permitting is not required.
- 8.c <u>Compliance Assurance Monitoring (CAM) Applicability Determination</u>. 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 vapor recovery systems, ECO nozzles by 2023 and low permeation hoses after 2023 if throughput exceeds 1,400,000 gallons per year 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 vapor recovery systems, ECO nozzles by 2023 and low permeation hoses after 2023 if throughput exceeds 1,400,000 gallons per year, 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 vapor recovery systems, ECO nozzles by 2023 and low permeation hoses after 2023 if throughput exceeds 1,400,000 gallons per year will not cause the requirements

of WAC 173-460 "Controls for New Sources of Toxic Air Pollutants," (in effect August 21, 1998) or WAC 173-476 "Ambient Air Quality Standards" to be violated.

### **10. DISCUSSION OF APPROVAL CONDITIONS**

SWCAA has made a determination to issue Air Discharge Permit SWCAA 21-3467 in response to Air Discharge Permit Application L-719. Air Discharge Permit SWCAA 21-3467 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

- 10.a <u>General Basis</u>. Approval conditions for equipment affected by this permitting action incorporate the operating schemes proposed by the permittee in the Air Discharge Permit application.
- 10.b <u>Emission Limits.</u> An annual VOC emission limit of 5.65 tons per year was established until 2023, and 4.59 tons per year thereafter. The limit changes in 2023 consistent with the required use of enhanced conventional nozzles by all Stage I facilities, and low permeation hoses when throughput exceeds 1,400,000 gallons per year. Both limits assume the facility is properly operated with Stage I vapor recovery systems, 90% of fuel is dispensed to ORVR-equipped vehicles, and a gasoline throughput of 5,000,000 gallons per year.
- 10.c <u>Operating Limits and Requirements.</u> 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 an increased frequency of testing or monitoring is warranted. 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.

The pressure/vacuum valve leak rate requirements for individual valves were taken from CARB Stage I Executive Orders. The combined leak rate requirements for all pressure/vacuum valves in the system comes from 40 CFR 63 Subpart CCCCCC.

- 10.d <u>Monitoring and Recordkeeping</u>. 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 <u>Emission Monitoring and Testing Requirements.</u> See Section 12.
- 10.f <u>Reporting</u>. 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 <u>Startup and Shutdown Provisions</u>. 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 startup or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during startup or shutdown, SWCAA shall include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during startup or shutdown.

This source is capable of achieving continuous compliance with all applicable requirements; therefore, no startup or shutdown provisions were included in the Air Discharge Permit.

- 11.b <u>Alternate Operating Scenarios.</u> 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 <u>Pollution Prevention Measures.</u> 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**

The periodic testing required by SWCAA 491 and 40 CFR 63 Subpart CCCCCC were incorporated into the permit. 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. This 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 testing static pressure decay testing is required prior to placing the equipment 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 and TP-201.3B do not provide an allowable final pressure for stations without Stage II vapor recovery. Therefore, the allowable final pressure from 40 CFR 63 Subpart CCCCCC was included in the permit.

#### **13. FACILITY HISTORY**

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

Permit /		Date	
Order #	Application #	Issued	Description
07-2762	L-609	12/5/2007	Approval to remove Stage II vapor recovery equipment.
96-1961	L-375	10/31/1996	Installation of new gasoline dispensing facility equipped with 2-point Stage I and vacuum assist Stage II vapor recovery
			equipment.

Bold font indicates that the Air Discharge Permit was superseded or no longer in effect upon issuance of Air Discharge Permit 21-3467.

13.a. <u>Compliance History</u>. A search of source records on file at SWCAA did not identify any outstanding compliance issues.

#### 14. PUBLIC INVOLVEMENT

14.a <u>Public Notice for Air Discharge Permit Application L-719</u>. Public notice for Air Discharge Permit Application L-719 was published on the SWCAA internet website for a minimum of 15 days beginning on April 7, 2021.

- 14.b <u>Public/Applicant Comment for Air Discharge Permit Application L-719.</u> SWCAA did not receive formal comments, a comment period request, or any other inquiry from the public or the applicant regarding this Air Discharge Permit application. Therefore, no public comment period was provided for this permitting action.
- 14.c <u>State Environmental Policy Act.</u> 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 June 15, 2021 (Determination of SEPA Exempt -SWCAA 21-017).

# Appendix A

# CARB Executive Order G-70-97-A

Stage I Vapor Recovery Systems for Underground Gasoline Storage Tanks at Service Stations

#### State of California AIR RESOURCES BOARD

Executive Order G-70-97-A

#### Stage I Vapor Recovery Systems for Underground Gasoline Storage Tanks at Service Stations

WHEREAS, the Air Resources Board (the "Board") has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, certification procedures for systems designed for the control of gasoline vapor emissions during filling of underground gasoline storage tanks ("Stage I vapor recovery systems") in its "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations" as last amended December 4, 1981 (the "Certification Procedures"), incorporated by reference in Section 94001 of Title 17, California Administrative Code;

WHEREAS, the Board has established, pursuant to Sections 39600, 39601, and 41954 of the Health and Safety Code, test procedures for determining compliance of Stage I vapor recovery systems with emission standards in its "Test Procedures for Determining the Efficiency of Gasoline Vapor Recovery Systems at Services Stations" as last amended September 1, 1982 (the "Test Procedures"), incorporated by reference in Section 94000 of Title 17, California Administrative Code;

WHEREAS, the Board finds it beneficial to consolidate Executive Orders G-70-47-B, G-70-4-A, and G-70-2-G, certifying Stage I vapor recovery systems in order to have a complete listing by manufacturer of all Stage I vapor control equipment which has been certified and is available for use in the coaxial and/or two point Stage I vapor recovery systems;

WHEREAS, the Board finds it necessary to revise Executive Order G-70-97 to clarify the requirement for pressure/vacuum relief valves on the vents of underground storage tanks and to clarify the interchangeability of certain Stage I vapor recovery system componets.

NOW THEREFORE, IT IS HEREBY ORDERED that Executive Order G-70-97 issued on May 13, 1985 for Stage I vapor recovery systems for underground gasoline storage tanks be modified by this Executive Order G-70-97-A.

IT IS FURTHER ORDERED that Stage I Systems will conform to one of the four options shown in Figures 1 thru 4 of this Executive Order and only certified vapor recovery components (or fittings) may be used in the systems. Exhibits 1 thru 3 (Attached) list by manufacturer all of the certified fittings approved for use with Stage I vapor recovery systems. The systems shall otherwise comply with all the certification requirements in the latest "Certification Procedures for Gasoline Vapor Recovery Systems at Service Stations" applicable to Stage I systems. IT IS FURTHER ORDERED that any underground storage tank equipped with a Stage I vapor recovery system and filled from a gasoline delivery tank equipped with pressure-differential activated vapor-return vent valves must have a pressure-vacuum relief valve on the vent of the underground storage tank.

IT IS HEREBY ORDERED that compliance with the applicable certification requirements and rules and regulations of the Division of Measurement Standards, the Office of the State Fire Marshal, and the Division of Occupational Safety and Health of the Department of Industrial Relations is made a condition of this certification.

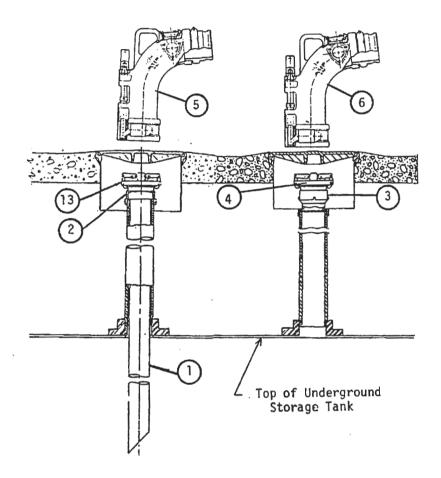
IT IS FURTHER ORDERED that the components and alternative configurations certified hereby shall perform in actual use with the same effectiveness as the certification test system.

IT IS FURTHER ORDERED that any alteration of the equipment, parts, design, or operation of the configurations certified hereby, is prohibited, and deemed inconsistent with this certification, unless such alteration has been approved by the undersigned or the Executive Officer's designee.

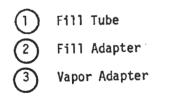
Executed at Sacramento, California this 974 day of Loca 421985.

James D. Boyd Executive Officer

# Two Point Stage 1 Vapor Recovery System Without Overfill Protection



LEGEND



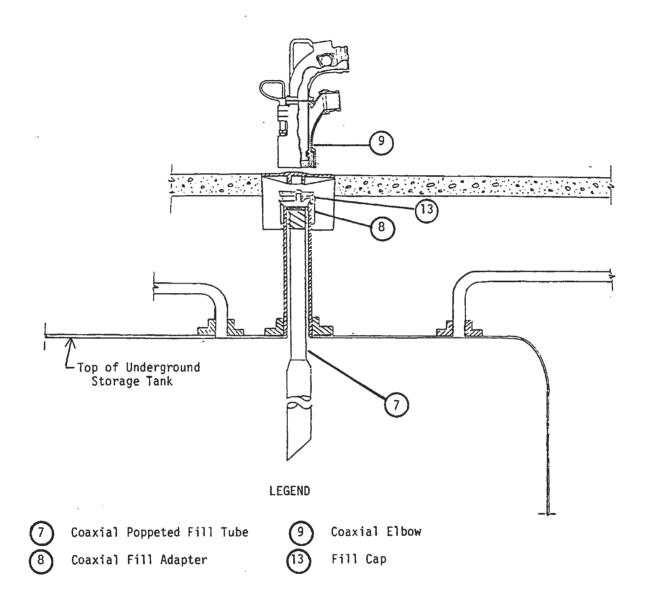
Vapor Cap 5 6 13

Product Elbow

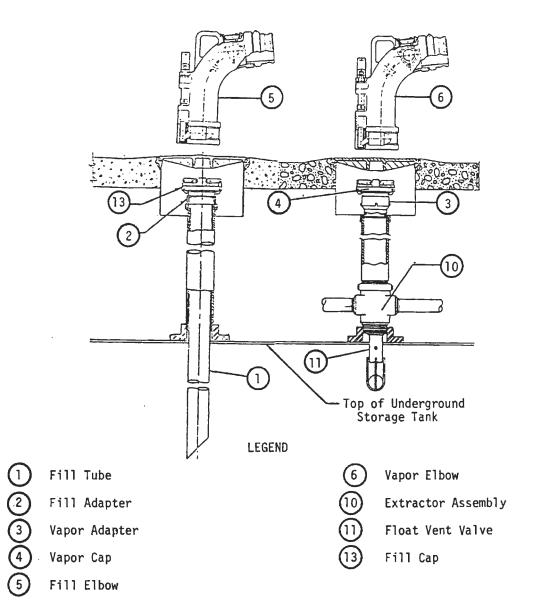
Vapor Elbow

Fill Cap

#### Coaxial Stage 1 Vapor Recovery System Without Overfill Protection



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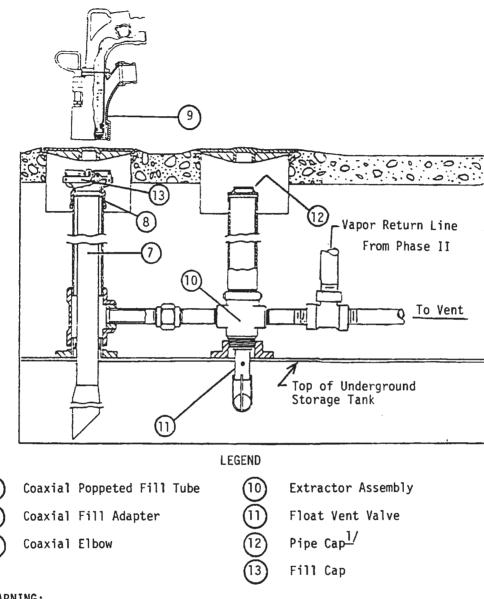


#### Two Point Stage I Vapor Recovery System With Overfill Protection

#### WARNING:

- 1. This system is not approved for use at service stations equipped with Red Jacket or Healy Phase II vapor recovery systems.
- 2. Float valve overfill protection systems should only be used on submerged pumping systems not with suction pump systems.
- 3. Overfill protection systems should only be used on gravity drop systems. Do not use where pump off unloading is used.

#### Coaxial Stage 1 Vapor Recovery System With Overfill Protection



#### WARNING:

- 1. This system is not approved for use at service stations equipped with Red Jacket or Healy Phase II vapor recovery systems.
- 2. Float valve overfill protection systems should only be used as submerged pumping systems, <u>not</u> with suction pump systems.
- 3. Overfill protection systems should only be used on gravity drop systems. Do not use where pump off unloading is used.
- 1/ Required when a two point system is modified to a coaxial system.

#### EXHIBIT 1

#### Fittings Approved For Use On The Two Point Stage I Vapor Recovery Systems

	Sta	tings Require ge I Vapor Re <u>Locations se</u>	covery Syste	o Point ms			Additional Fittings Req Vapor Recovery Systems Protection. For Locati	With Stage I O	verfill
Legend No.		2	3	4	5	6	10 + (1)	10	1
Manufacturer	Fill Tube	Fill Adapter	Vapor Adapter	Vapor Cap	Elbo Fill	vws Vapor	Extractor Assembly With Float Vent Valve	Extractor	Float Vent Valve
OP¥	61 T	61 AS 633 T	1611 AV	1711 T 1711 TK	60 AS 60 T 60 TT	1711VT 1711VP	233 - MSD 233 - VTS 233 - SD	233 - VM 233 - V 233 - V 233 - V	53 - VM 53 - VTS 53 - VM
Universal	723	724 727	0611 V	0612 VC 0613 VC 0614 VC		0711 V	V 420		37
EBW	782	776 778	300	304					
McDona 1 d	245	268 A 267 A							
CNI		613 615	611 DB	611 VR			119		
Emco-Wheaton	A 20	A 30	A 76	A 99	F523	F 77	A79 Series	562291 562016 or	A-75
Andrews 1/	TF	54 AG		400 DC-L	56 TFR				
Evertite		97 A			99 C				
York-Serv, Inc.		101 102							
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1/ Now owned by Dixon Valve & Coupling Company.

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Fittings Approved For Use On The Coaxial Stage I Vapor Recovery System

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	Fillings Required For All Coaxial Stage I Vapor Recovery Systems				Additional Fittings Required For Coaxial Stage I Vapor Recovery Systems with Overfill Protection		
ι	egend No.	7	8	9	(10) + (11)	(10)	(1)
	lanufacturer	Coaxial Poppeted Fill Tube Assembly with Adapter		Coaxial Elbow	Extractor Assembly With Float Vent Valve	Extractor Assembly	Float Vent Valve
	ОРМ	68-TCP		60 TC 60 TTC	233-MSD 233-VTS	233-VM	53-VM 53-VTS
-	Emco Wheaton	4" Tube A88-001	3" Tube A88-003	F 298	Λ79-002 Λ79-003 Λ79-004	562290 562016 or	Λ 75
	EBW	783-215					
	Universal Valve Co.				V-420		37
	CNI				119		

#### EXHIBIT 3

# Fittings Approved For All Stage I Vapor Recovery Systems

Legend No.	(12)	(			
Manufacturer	Pipe <sup>1/</sup> Cap	Fill Caps Top Seal Side Seal		Pressure Vacuum Relief Valve	
OPW	116	634 TT	62 62 TT	95 UTE	
Universal		731 733	727 732 734		
EBW		777	775		
McDonald		268 C	267 C		
CNI		64	32 33		
Emco Wheaton	A584	A 39 A <sup>:</sup> 97			
Andrews 2/		400 FPC 54 LC			
Varec				2010-811	
Hazlett				H-PVB-1	

<u>1</u>/ Required when a Two Point System is converted to a Coaxial System with overfill protection.

2/ Now owned by Dixon Valve & Coupling Company.