



**TECHNICAL SUPPORT DOCUMENT**

**Air Discharge Permit 25-3701  
Air Discharge Permit Application CL-3294**

**Issued: April 10, 2025**

**SAFEWAY STORE No. 1287**

**SWCAA ID – 2144**

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Appendix A – CARB Executive Order VR-101-A

## 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
EU .....	Emission Unit	Standard .....	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: Safeway, Inc.  
 Applicant Address: 1600 Evelyn Street  
 Clackamas, OR 97015  
 Facility Name: Safeway Fueling Facility No. 1287  
 Facility Address: 800 NE 3<sup>rd</sup> Avenue  
 Camas, WA 98607

SWCAA Identification: 2144

Contact Person: Ms. Shawn Carter-Elton

Primary Process: Gasoline dispensing  
 SIC/NAICS Code: 5541: Gasoline service stations  
 447110 (2012/2017 NAICS): Gas stations with convenience stores  
 457110 (2022 NAICS): Gas stations with convenience stores

Facility Latitude and Longitude: 45° 35'10.25"N  
 122°24'03.53"W

Facility Classification: Natural Minor

**2. FACILITY DESCRIPTION**

This facility is a retail gasoline dispensing facility associated with a Safeway grocery store.

**3. CURRENT PERMITTING ACTION**

This permitting action is in response to Air Discharge Permit (ADP) application number CL-3294 received March 7, 2025, for removal of balance-style Stage II vapor recovery and installation of low permeation hoses and enhanced conventional (ECO) nozzles.

**4. PROCESS DESCRIPTION**

This facility receives unleaded gasoline from tanker trucks for storage in two underground storage tanks or tank compartments. The gasoline storage tanks are equipped with two-point enhanced vapor balance systems that return gasoline vapors vented from the underground storage tanks to the tanker truck during filling (Stage I enhanced vapor recovery). Gasoline is dispensed from 8 multi-product blending pumps. Two of these pumps also dispense diesel through a separate hose. Vapors displaced from individual motor vehicle gasoline tanks during filling will not be returned to the gasoline storage tanks (Stage II vapor recovery).

<u>Products at Pump</u>	<u>Number of Pumps</u>
Blended gasoline through a single hose	6
Blended gasoline through as single hose, diesel through a separate hose	2

## 5. EQUIPMENT/ACTIVITY IDENTIFICATION

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

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

The applicant does not propose to modify the existing Stage I vapor recovery systems that substantially conform to the equipment approved as components of CARB Executive Order VR-101-A "Phil-Tite Phase I Vapor Recovery System for Gasoline Dispensing Facilities." The following equipment was originally approved:

<b>Component</b>	<b>Make / Model</b>
Drop Tube / Overfill Protection	OPW / 61SO-4000
Fill Adapters <sup>1</sup>	Phil-Tite / SWF-100-B
Fill Caps	Universal / 733-40
Vapor Adapters <sup>1</sup>	Phil-Tite / SWF-101-B
Vapor Caps	Universal / 0614VC-30
Extractor Assembly	Universal / V421-3020
Float Vent Valve	Universal / model 37
Spill Bucket	OPW / 1-2100 <sup>2</sup>
Pressure / Vacuum Valve	Husky / 4885 <sup>3</sup>

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

<sup>2</sup> This spill bucket is an exception to the VR-101-A equipment list. This spill bucket is an approved component in the VR-102 series CARB Executive Orders.

<sup>3</sup> If the pressure / vacuum valves are replaced, the only replacements currently approved by CARB are the Husky model 5885, FFS model PV-Zero, or the OPW model 723V.

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	OPW / 14E
Hoses	Contitech / Futura 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:

- (a) 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	1.10
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>2</sub> e	0	0
Toxic Air Pollutants	1.85	0.55
Hazardous Air Pollutants	0.48	0.14

<sup>1</sup> Based on 90% of fuel dispensed to ORVR-equipped vehicles. 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 CCCCC; 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 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas" 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) BACT 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.

The facility is located in an area that is in attainment for all criteria pollutants; 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:

### New BACT Determination(s)

- 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 proposes retaining Stage I enhanced vapor recovery equipment and installing enhanced conventional nozzles, and low permeation hoses. This configuration meets the requirements of BACT.

Previous BACT Determination(s)

- 8.b. Retail Gasoline Dispensing Facility (ADP 22-3542). 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 throughput could exceed 1,400,000 gallons per year and liquid gasoline is carried against the outermost hose wall.

This facility is equipped with EVR Stage I vapor recovery equipment. The use of low-permeation hoses does not apply to this facility because balance-style hoses do not carry liquid against the outermost hose wall. The proposed balance-style vapor recovery system is ORVR-compatible and satisfies the requirement to utilize BACT. No additional measures are currently necessary for this facility to meet the requirements of BACT.

Other Determinations

- 8.c. PSD Applicability. Maximum potential emissions from this facility are well below PSD thresholds; therefore, PSD permitting is not required.
- 8.d. 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 25-3701 in response to ADP application CL-3294. ADP 25-3701 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards, as discussed below.

- 10.a. Supersession of Previous Permits. Air Discharge Permit 22-3542 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 additional actions may be necessary to meet the requirements of BACT.

The remaining requirements are related to proper operation of the Stage I vapor recovery systems.

- 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 and II vapor recovery equipment. 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 SWCAA 491-040(4)(n) that became effective February 7, 2020, testing of each pressure-vacuum vent valve is required every 36 months. 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 past permitting actions have been taken by SWCAA for this facility:

Permit	Application	Date Issued	Description
22-3542	CL-3205	September 15, 2022	Approval to replace vacuum-assist style Stage II vapor recovery systems with balance-style Stage II vapor recovery systems.
02-2408	CL-1549	2/28/2002	Installation of new gas station with two gasoline storage tanks, EVR Stage I vapor recovery equipment, and vacuum-assist style Stage II vapor recovery equipment

Approvals in bold have been superseded or are no longer active with issuance of ADP 25-3701.

- 13.b. Compliance History. A search of source records on file at SWCAA did not identify any outstanding compliance issues at this facility. NOV 11394 was issued February 20, 2025, for replacing Stage II vapor recovery equipment with low permeation hoses and ECO nozzles without approval. This violation is addressed by this permitting action and is no longer outstanding.

#### **14. PUBLIC INVOLVEMENT OPPORTUNITY**

- 14.a. Public Notice for ADP Application CL-3294. Public notice for ADP application CL-3294 was published on the SWCAA website for a minimum of 15 days, beginning on March 7, 2025.
- 14.b. Public/Applicant Comment for ADP Application CL-3294. SWCAA did not receive specific comments, a comment period request, or any other inquiry from the public or the applicant regarding ADP application CL-3294. 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 April 10, 2025 (Determination of SEPA Exempt - SWCAA 25-018).

## **Appendix A**

### **CARB Executive Order VR-101-A**

#### **Phil-Tite Phase I Vapor Recovery System For Gasoline Dispensing Facilities**

State of California  
AIR RESOURCES BOARD

Executive Order VR-101-A  
Phil-Tite Phase I Vapor Recovery System  
For Gasoline Dispensing Facilities

WHEREAS, the California Air Resources Board (CARB) has established, pursuant to California Health and Safety Code sections 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 June 1, 2001 incorporated by reference in Title 17, California Code of Regulations, Section 94011;

WHEREAS, CARB 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, the Certification Procedure provides that the CARB Executive Officer shall issue an order of certification if he or she determines that the vapor recovery system conforms to all of the applicable requirements set forth in the Certification Procedure; and

WHEREAS, I, Michael P. Kenny, California Air Resources Board Executive Officer, find that the Phil-Tite Phase I Vapor Recovery System (Phil-Tite System) 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 pursuant to the test procedure for **TP-201.1 Volumetric Efficiency of Phase I Systems**, and shall not exceed 0.15 pounds of hydrocarbon emissions per 1,000 gallons of gasoline transferred when tested pursuant to the test procedure **TP-201.1A Emission Factor for Phase I Systems at Dispensing Facilities**;

NOW THEREFORE, IT IS HEREBY ORDERED that the Phil-Tite System is certified to be at least 98.0 percent efficient and does not exceed 0.15 pounds of hydrocarbons per 1,000 gallons of gasoline transferred. Exhibit 1 contains a list of the certified components by manufacturer and model number. Exhibit 2 contains the performance standards and specifications and maintenance instructions for verifying the compliance of the gasoline dispensing facilities (GDF) at which the Phil-Tite System is installed. Exhibit 3 contains the manufacturing specifications of the Phil-Tite System. Exhibit 4 outlines the test procedure **Pressure Integrity of Drop Tube/Drain Valve Assembly**. Exhibit 5 outlines the test procedure **Static Torque of Rotatable Phase I Adaptors**.

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 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 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 approved by the undersigned.

IT IS FURTHER ORDERED that each Phil-Tite System component listed in Exhibit 1, Figure 1A, shall be clearly identified by a permanent identification showing the manufacturer's name and model number.

IT IS FURTHER ORDERED that the certified Phil-Tite system shall be installed and maintained in accordance with the manufacturers recommended installation and maintenance instructions contained in this Executive Order. A copy of this Executive Order shall be maintained at each GDF where a certified Phil-Tite system is installed.

IT IS FURTHER ORDERED that the certified Phil-Tite system and/or components contained herein shall be warranted, in writing, for at least one year from the date of installation, to the ultimate purchaser and each subsequent purchaser within the warranty period. The warranty shall specify that the vapor recovery system is designed, built and equipped so as to conform at the time of original sale and installation with the applicable performance standards and performance specifications and is free from defects in materials and workmanship which could cause the vapor recovery system to fail. Copies of the manufacturer's warranty for the system and/or components shall be made available to the GDF owner/operator and a warranty tag shall be affixed as required in the Certification Procedure.

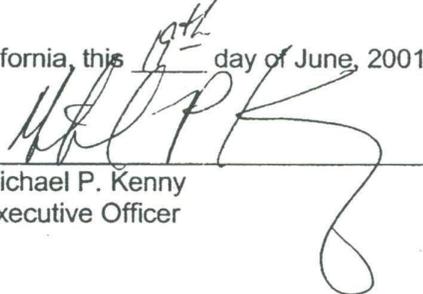
IT IS FURTHER ORDERED that the system, as installed, shall comply with the procedures and performance standards which the test installation was required to meet during certification testing. If, in the judgment of the Executive Officer, a significant fraction of installations fail to meet the specifications of this certification, the certification may be subject to modification or revocation.

IT IS FURTHER ORDERED that each Pressure/Vacuum Vent Valve (P/V Vent Valve), Spill Containment Bucket Drain Valve and Rotatable Adaptor shall be 100 percent performance tested at the factory, and shall comply with the requirements specified in Exhibit 3.

IT IS FURTHER ORDERED that the owner/operator of an installed Phil-Tite System shall successfully performance test each installation within 60-days of installation in accordance with **TP-201.3 Determination of 2 Inch H<sub>2</sub>O Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities**, Exhibit 4 **Pressure Integrity of Drop Tube/Drain Valve Assembly**, and Exhibit 5 **Static Torque of Rotatable Phase I Adaptors**. Performance testing shall be successfully conducted at least once every 3 years following installation. Shorter time periods may be specified in accordance with local district rules and regulations. Notification of testing, and submittal of test results, shall be done in accordance with local district rules and pursuant to the policies established by that district.

IT IS FURTHER ORDERED that the certification of the Phil-Tite Phase I vapor recovery system is valid through June 30, 2005.

Executed at Sacramento, California, this 19<sup>th</sup> day of June, 2001.

  
\_\_\_\_\_  
Michael P. Kenny  
Executive Officer

Attachments:

- Exhibit 1 Phil-Tite Phase I Vapor Recovery System Equipment List
- Exhibit 2 Installation, Maintenance and Compliance Specifications
- Exhibit 3 Manufacturers Performance Standards and Specifications
- Exhibit 4 Pressure Integrity of Drop Tube/Drain Valve Assembly
- Exhibit 5 Static Torque of Rotatable Phase I Adaptors

Executive Order VR-101-A

Exhibit 1

Phil-Tite Phase I Vapor Recovery System Equipment List

Component Name	Manufacturer	Model Number
<b>Spill Containment Bucket</b>	Phil-Tite	85000 (Product)
	Phil-Tite	85000-MS (Product)
	Phil-Tite	85001-NV (Vapor)
<b>Debris Bucket</b>	Phil-Tite	PP 1005 TB (Product)
	Phil-Tite	PP 1005 TBP (Vapor)
<b>Rotatable Adaptors</b>	Phil-Tite	SWF-100-B (Product)
	Phil-Tite	SWV-101-B (Vapor)
<b>Drop Tube</b>	OPW	61-T (various lengths)
	EBW	782-204 (various lengths)
	Emco Wheaton	A0020 (various lengths)
<b>Dust Caps</b>	Morrison Brothers	305C (Product)
	Morrison Brothers	323C (Vapor)
<b>Pressure/Vacuum Vent Valve</b>	Husky	4885 2-Inch Threaded
<b>Extractor Fitting</b>	Universal	V421 Series
	OPW	233 Series
	EBW	3XX Series
	Emco Wheaton	A0079 Series
<b>Ball Float Vent Valve</b>	Universal	Model 37 (various lengths)
	OPW	53 VML (various lengths)
<b>Installation and Removal Tool Kit for Rotatable Adaptors and Spill Containment Buckets</b>	Phil-Tite	T-7043

## Executive Order VR-101-A

### Exhibit 2

#### Installation, Maintenance and Compliance Specifications

This exhibit contains the specifications for the proper installation and maintenance of the system by which compliance of the Gasoline Dispensing Facility is to be determined.

#### General Specifications

1. The Phil-Tite System shall be installed and maintained according to the manufacturer's specifications and demonstrate compliance with the Certification and Test Procedures **Determination of 2 Inch H<sub>2</sub>O Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (TP-201.3)**, **Pressure Integrity of Drop Tube/Drain Valve Assembly (Exhibit 4)** and **Static Torque of Rotatable Phase I Adaptors (Exhibit 5)**. Testing shall be successfully conducted within 60 days of installation and at least once every three years thereafter unless otherwise specified by the local district.
2. During all Phase I deliveries there shall be at least one vapor recovery connection between the cargo tank vapor recovery connection and the underground storage tank associated with each delivery.

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

1. Vent pipes may be manifolded to produce a single vent outlet on which a single Pressure/Vacuum (P/V) Vent Valve is installed.
2. A maximum of 3 Pressure/Vacuum Vent Valves shall be used on any single GDF.
3. Vent pipe manifolds shall be constructed of galvanized-steel or an equivalent material that has been listed for use with gasoline. If a material other than galvanized steel is used the GDF operator shall provide a manufacturers listing demonstrating that the material is compatible for use with gasoline. An example of a vent pipe manifold, constructed of galvanized steel, is shown in Figure 3C. This example reflects only one allowable configuration (i.e., tee may be located at either left, center or right side, and more or fewer vent pipes may be manifolded together.)
4. The vent pipe manifold shall be installed at a height not less than 12 feet above the grade used for gasoline cargo tank delivery operations and shall conform to all applicable fire regulations.
5. Each P/V Vent Valve shall have permanently affixed to it a yellow or gold label with black lettering stating the positive and negative pressure settings specified below:

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

**Rotatable Product and Vapor Recovery Adaptors**

1. Rotatable product and vapor recovery adaptors, designed to prevent loosening or over-tightening of the adaptor on the riser pipe shall be installed in accordance with the manufacturer's recommended installation.
2. Rotatable product and vapor recovery adaptors shall maintain a minimum 360-degree rotation and average static torque not to exceed 108 pound-inch (9 pound-foot) when tested as specified in Exhibit 5.
3. The vapor adaptor poppet shall not leak when closed. The absence of vapor leaks may be verified with 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**

1. Dust caps shall be installed on all Phase I tank adaptors.

**Drop Tube and Drain Valve**

1. The Drop Tube and Drain Valve (Drop Tube/Drain Valve Assembly) is designed to drain liquid directly into the drop tube and is therefore isolated from the underground storage tank ullage. The leak rate of the Drop Tube/Drain Valve Assembly shall be determined by using the test method specified in Exhibit 4.

**Figure 2A**

**Facility Compliance Specifications**

<b>Component</b>	<b>Test Method</b>	<b>Standard or Specification</b>
Drop Tube/Drain Valve Assembly	Exhibit 4	2.00 inches H <sub>2</sub> O at 0.17 CFH
Rotatable Phase I Adaptors	Exhibit 5	Minimum, 360-degree rotation Maximum, 108 pound-inch average static torque
UST, P/V Vent Valve, Fittings, Adaptors, and Connections	TP-201.3	2.00 inches H <sub>2</sub> O - 5 minutes
Pressure/Vacuum Vent Valve	TP-201.2B Appendix 1	Positive Pressure: 3.0 ±0.5 inches H <sub>2</sub> O Negative Pressure: 8.0 ±2.0 inches H <sub>2</sub> O Leakrate: ≤ 0.05 CFH at +2.0 inches H <sub>2</sub> O ≤ 0.21 CFH at -4.0 inches H <sub>2</sub> O

**Figure 2B**

**Maintenance Instructions For Phil-Tite System Components**

Component	Maintenance
Product Spill Containment Bucket	Semi-Annually: Clean entire bucket and remove drain valve. Inspect all seals and replace components as needed. Upon completion, make sure bucket, valve, handle, and filter are properly aligned and adjusted.
Vapor Spill Containment Bucket	Routinely clean and inspect bucket quarterly.
Rotatable Vapor and Product Adaptors	Not Field Serviceable
Pressure/Vacuum Vent Valve	<p>Annually inspect the P/V Vent for foreign objects without removing the P/V Vent from the vent pipe by using the following procedure:</p> <ol style="list-style-type: none"> <li>1. Remove the screws that hold the top cover on.</li> <li>2. Remove any debris that might be sitting inside the lower cover.</li> <li>3. Check the drain holes in the lower cover for blockage.</li> <li>4. The two (2) screens should not be removed.</li> <li>5. Reinstall the top cover and retaining screws.</li> <li>6. Tighten the screws firmly.</li> </ol>

Each gasoline dispensing facility operator/owner shall keep a maintenance log on-site.

## Executive Order VR-101-A

### Exhibit 3

#### **Manufacturers Performance Standards and Specifications**

The performance standards and specifications contained in this Exhibit shall establish the minimum requirements by which vapor recovery components shall be manufactured, warranted, and offered for sale. These specifications shall verify the minimum parameters by which CARB shall determine compliance with certification.

#### **Pressure/Vacuum Vent Valves For Storage Tank Vent Pipes**

1. Each Pressure/Vacuum Vent Valve (P/V Vent Valve) shall be 100 percent performance tested at the factory. Each P/V vent 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 Vent  
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 Vent Valve, including connections, does 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 Vent Valve shall have permanently affixed to it a yellow or gold label with black lettering listing the positive and negative pressure settings specified above.

#### **Spill Containment Bucket and Drain Valves**

1. Spill containment buckets and all internal components contained within a spill containment bucket shall be compatible with any and all fuel blends in common use in California, including seasonal changes, and approved for use as specified in Title 13, CCR, section 2260, et seq.
2. Each Spill Containment Bucket Drain Valve shall be 100 percent performance tested at the factory. Each Spill Containment Bucket 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 specification.
  - a. The leak rate for the Spill Containment Bucket Drain Valve meets or exceeds the following specification: 2.00 inches H<sub>2</sub>O at 0.17 CFH

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

1. The rotatable product and vapor recovery adaptors shall not leak.

2. Rotatable product and vapor recovery adaptors shall be capable of rotating at least 360 degrees when used in conjunction with any product or vapor recovery elbow used to connect to cargo tanks.
3. The vapor recovery adaptor cam and groove shall be manufactured in accordance with the standard described in Commercial Item Description, CID A-A-59326.
4. The rotatable product adaptor cam and groove shall be manufactured in accordance with the cam and groove standard specified by CARB as shown in Figure 3P.
5. Each rotatable product and vapor recovery adaptor shall be 100 percent 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 specification.
  - a. The average static torque for the rotatable adaptor meets or exceeds the following specification: maximum 108 pound-inch average static torque

**Product and Vapor Recovery Adaptor Dust Caps**

1. Dust caps shall not leak when installed on vapor recovery or product adaptors. Dust caps shall be manufactured to ensure maximum compatibility with the cam and groove standards for rotatable adaptors shown in Figure 3A.

**Figure 3A**

**Manufacturers Component Standards or Specifications**

<b>Component</b>	<b>Test Method</b>	<b>Standard or Specification</b>
Drop Tube/Drain Valve Assembly	Exhibit 4	2.00 inches H <sub>2</sub> O at 0.17 CFH
Drain Valve Assembly Only	Exhibit 4 or equivalent	2.00 inches H <sub>2</sub> O at 0.17 CFH
Rotatable Phase I Adaptors	Exhibit 5	Minimum, 360-degree rotation Maximum, 108 pound-inch average static torque
Rotatable Vapor Recovery Adaptor	Micrometer	Cam and Groove Standard CID A-A-59326
Rotatable Product Adaptor	Micrometer	Cam and Groove Standard CARB Standard (Figure 3P)
UST, Fittings and Connections	TP-201.3	2.00 inches H <sub>2</sub> O - 5 minutes
Pressure/Vacuum Vent Valve	TP-201.2B Appendix 1	Positive Pressure: 3.0 ±0.5 inches H <sub>2</sub> O Negative Pressure: 8.0 ±2.0 inches H <sub>2</sub> O Leakrate: ≤ 0.05 CFH at +2.0 inches H <sub>2</sub> O ≤ 0.21 CFH at -4.0 inches H <sub>2</sub> O

Figure 3A

Typical Drop Tube Placement Using Phil-Tite Spill Containment Bucket

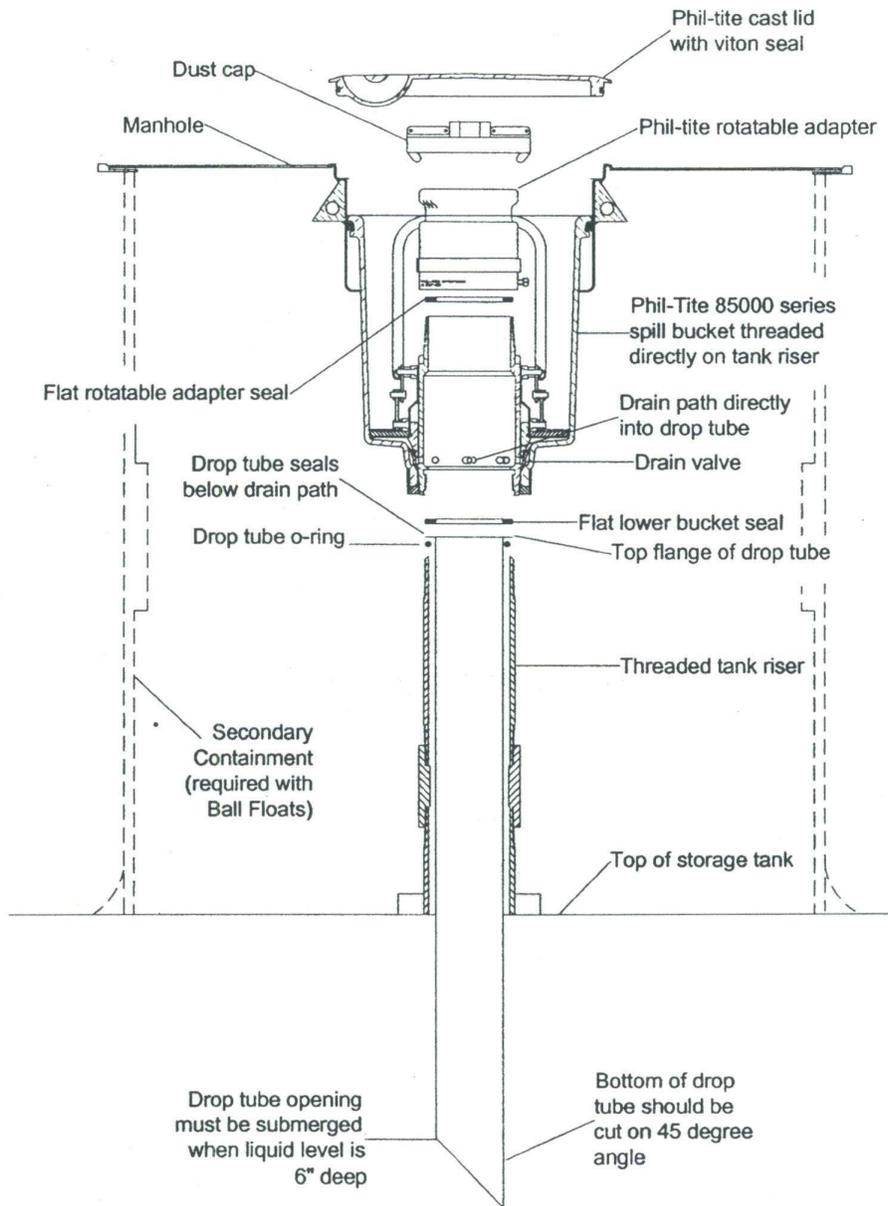


Figure 3B

Typical Vapor Installation Using Phil-Tite Spill Containment Bucket

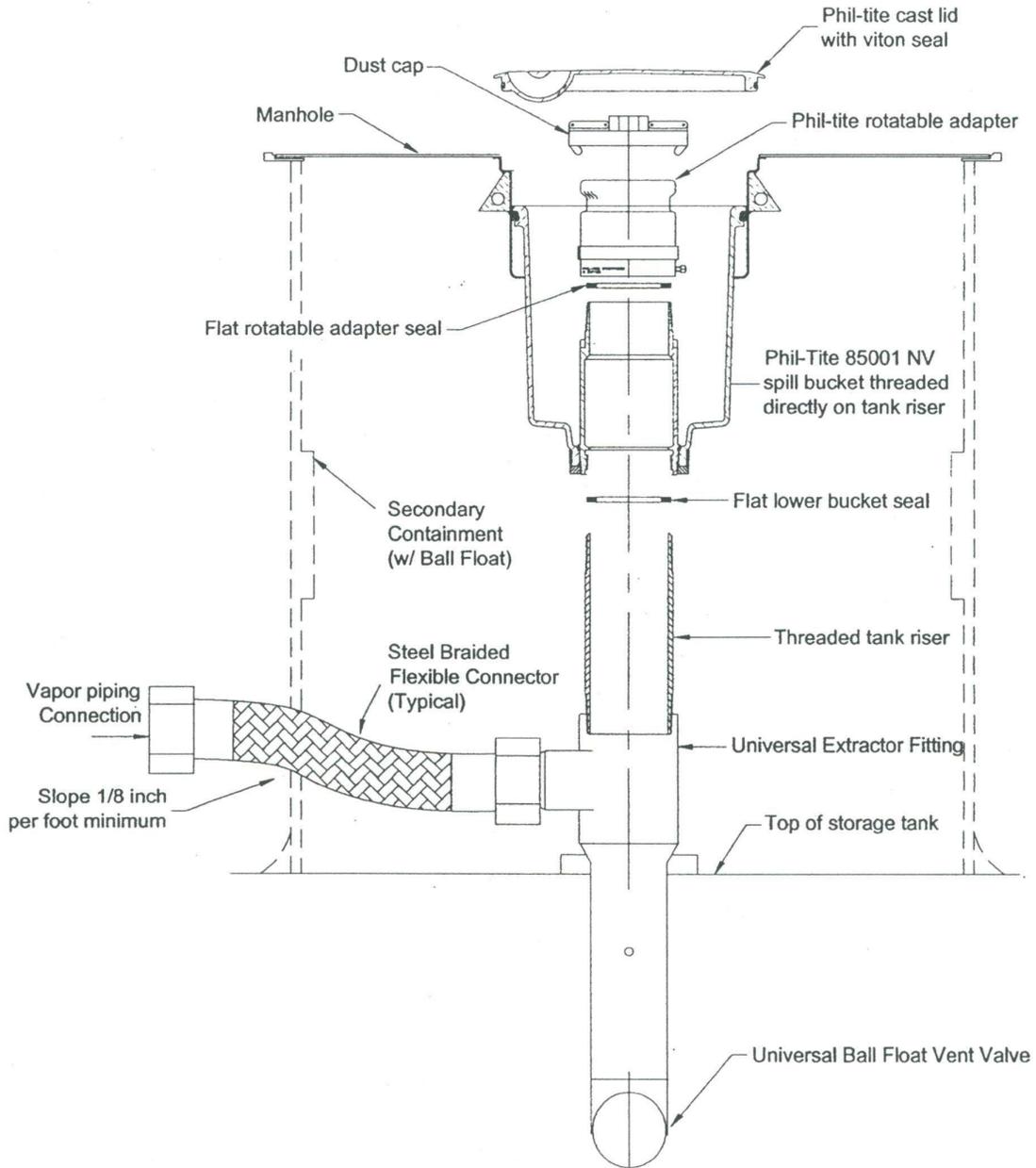
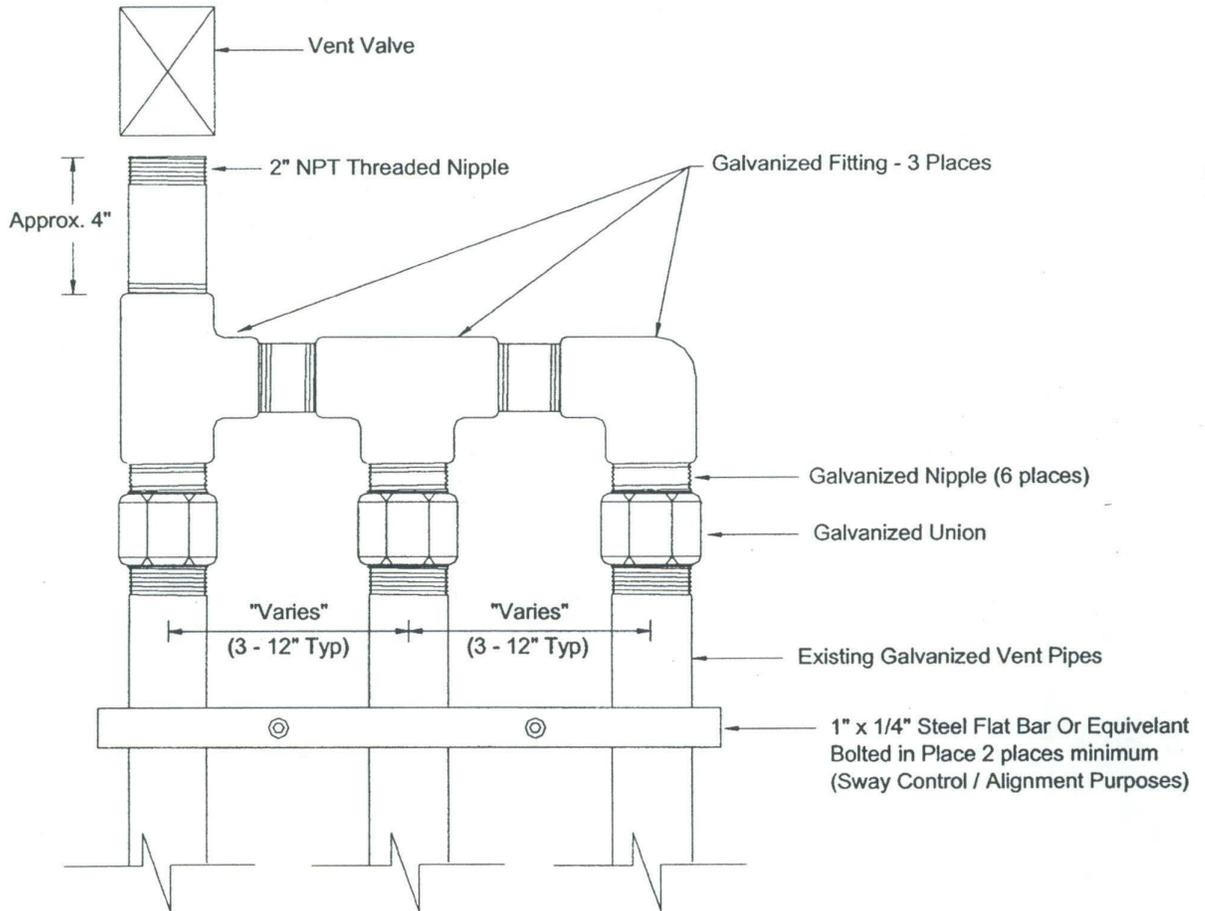


Figure 3C

Typical Vent Pipe Manifold



Note: This figure represents one instance where three vent pipes have been manifolded into one single outlet. However, a maximum of three Husky Model 4885 Threaded Pressure/Vacuum Vent Valves may be used on a single Gasoline Dispensing Facility.

Figure 3D

**Phil-Tite Removal and Installation Kit For Rotatable Adaptors and Spill Containment Buckets**

REMOVAL/INSTALLATION TOOL KIT  
T-7043

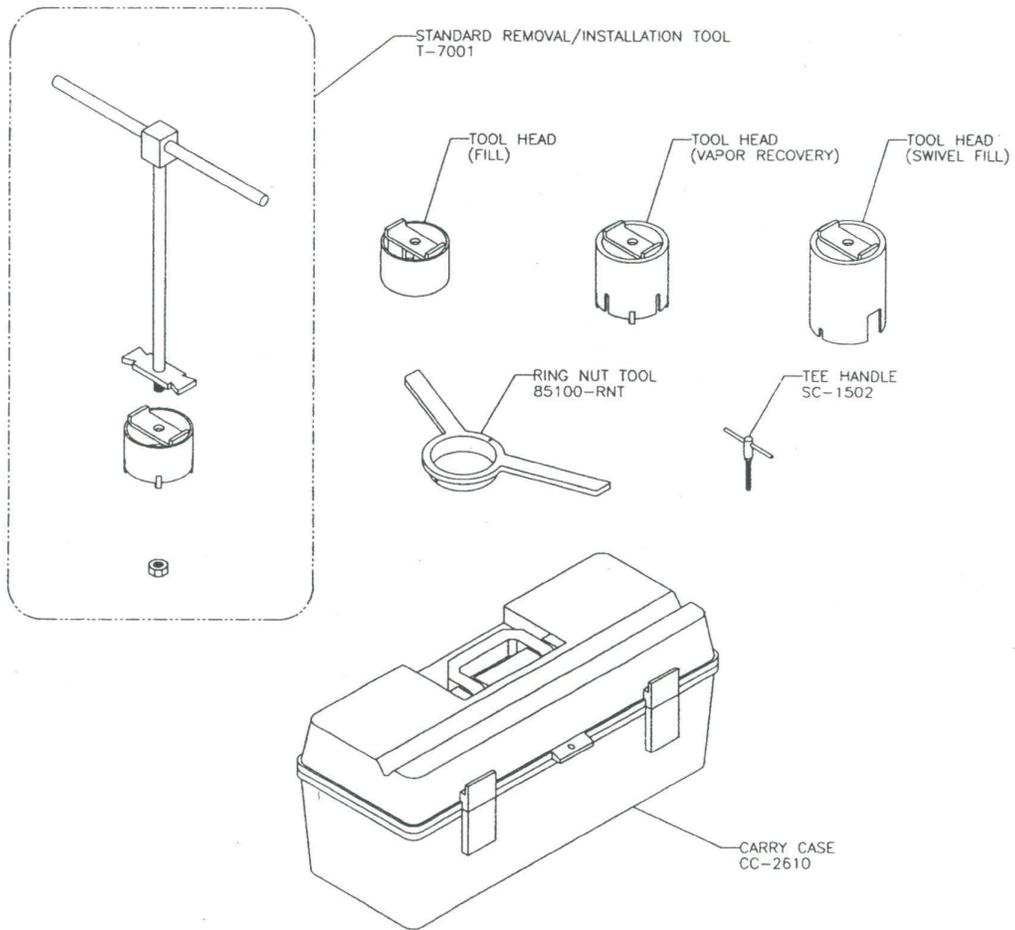
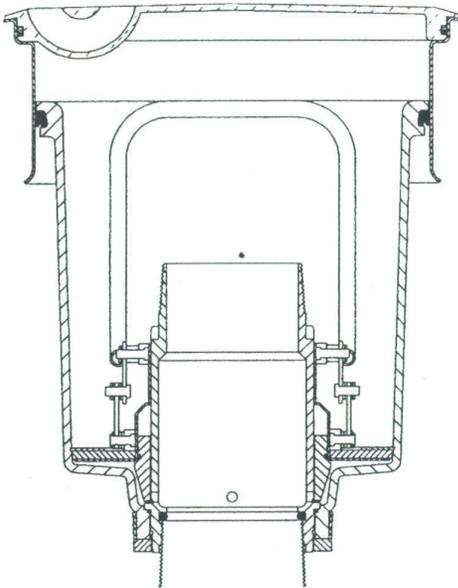


Figure 3E

**Phil-Tite 85000 and 85000-MS Product Spill Container and Drain Valve Assembly**



**INSTALLATION INSTRUCTIONS:**

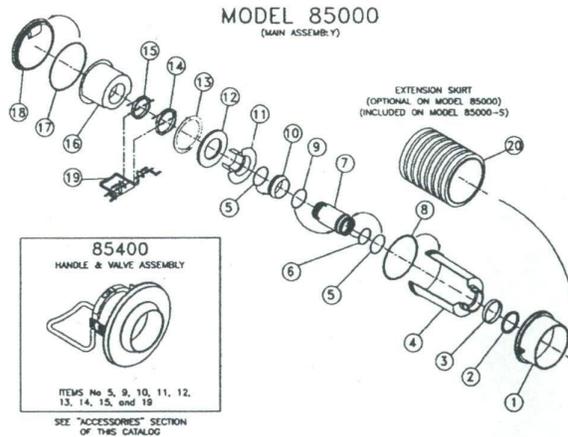
Cut and fit tank riser to terminate approximately 20" below finish grade. Use coupler and factory nipple to finish riser height to terminate 13-3/4" below finish grade. Next, measure and cut drop tube on a bias (minimum 2" from tank bottom - maximum 6" from bottom) and install tank bottom protector if needed. Install drop tube with proper seals. Install Product bucket and torque to approximately 50 ft. lbs. (using Phil-Tite Enterprises' tool kit - part #T-7043).

Next install swivel adaptor using Phil-Tite Enterprises' tool kit - part #T-7043 (available in our catalog) and torque to approximately 30 ft. lbs. Tighten setscrews to secure swivel.

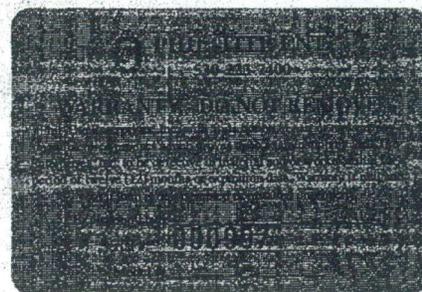
**The use of any unapproved tools, or over tightening bucket or swivel, will void any and all applied warranties.**

**MAINTENANCE INSTRUCTIONS:**

Semi-Annually: Clean entire bucket and remove Drain Valve Assembly. Inspect all seals and replace components as needed. Upon completion, make sure bucket, valve, handle, and filter are properly aligned and adjusted.



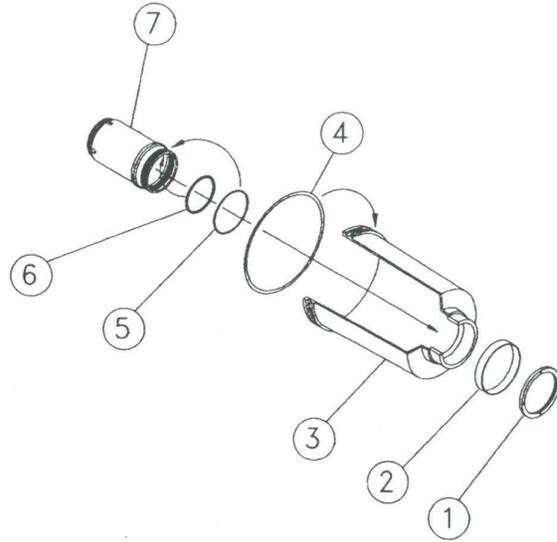
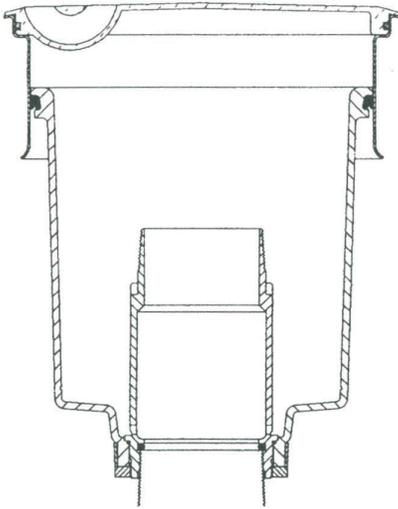
ITEM	PART No	DESCRIPTION	REQ'D
1	85010	SLEEVE	1
2	85019	FLANGE NUT	1
3	85018	COMPRESSION RING	1
4	85065	BUCKET	1
5	85035	RISER TUBE O-RING (OUTER) & SHUT OFF COLLAR O-RING (UPPER)	2
6	85039	RISER TUBE O-RING (INNER)	1
7	85020	RISER TUBE	1
8	85036-N	BUCKET O-RING	1
9	85038-1	SHUT OFF COLLAR O-RING (LOWER)	1
10	85021	SHUT OFF COLLAR	1
11	85032	BELLOW & SCREEN	1
12	UF8005	FOAM FILTER	1
13	85031	BELLOW & SCREEN RETAINING RING	1
14	85050	CLAMP (LOWER)	1
15	85040	CLAMP (UPPER)	1
16	PP-1005-TB	BUCKET INSERT	1
17	SC-1513V-N	LID O-RING	1
18	85011	CAST LID	1
19	85023	BAIL HANDLE	1
20	85029	EXTENSION SKIRT (OPTIONAL)	1



*Component Warranty Tag. Placed on outside of spill container, near top, just below upper lip.*

Figure 3F

**Phil-Tite 85001-NV Vapor Recovery Spill Container and Inner Assembly**



*Component Warranty Tag. Placed on outside of spill container, near top, just below upper lip.*

**INSTALLATION INSTRUCTIONS:**

Cut and fit tank riser to terminate approximately 20" below finish grade. Use coupler and factory nipple to finish riser height to terminate 13-3/4" below finish grade. Next, measure and cut drop tube on a bias (minimum 2" from tank bottom - maximum 6" from bottom) and install tank bottom protector if needed. Install drop tube with proper seals. Install Product bucket and torque to approximately 50 ft. lbs. (using Phil-Tite Enterprises' tool kit - part #T-7043).

Next install swivel adaptor using Phil-Tite Enterprises' tool kit - part #T-7043 (available in our catalog) and torque to approximately 30 ft. lbs. Tighten setscrews to secure swivel.

**The use of any unapproved tools, or over tightening bucket or swivel, will void any and all applied warranties.**

**MAINTENANCE INSTRUCTIONS:**

Routinely clean and inspect bucket quarterly.

ITEM	PART No	DESCRIPTION	REQ'D
1	85019	FLANGE NUT	1
2	85018	COMPRESSION RING	1
3	85065	INNER COLLECTOR BUCKET	1
4	85036-N	BUCKET O-RING	1
5	85035	RISER TUBE O-RING (OUTER)	1
6	85039	RISER TUBE FLAT SEAL (INNER)	1
7	85020-V	RISER TUBE (VAPOR REC)	1

Figure 3G

Phil-Tite 14" Cast Iron Lid With Viton Seal

14" CAST LID (ONE OPENING)

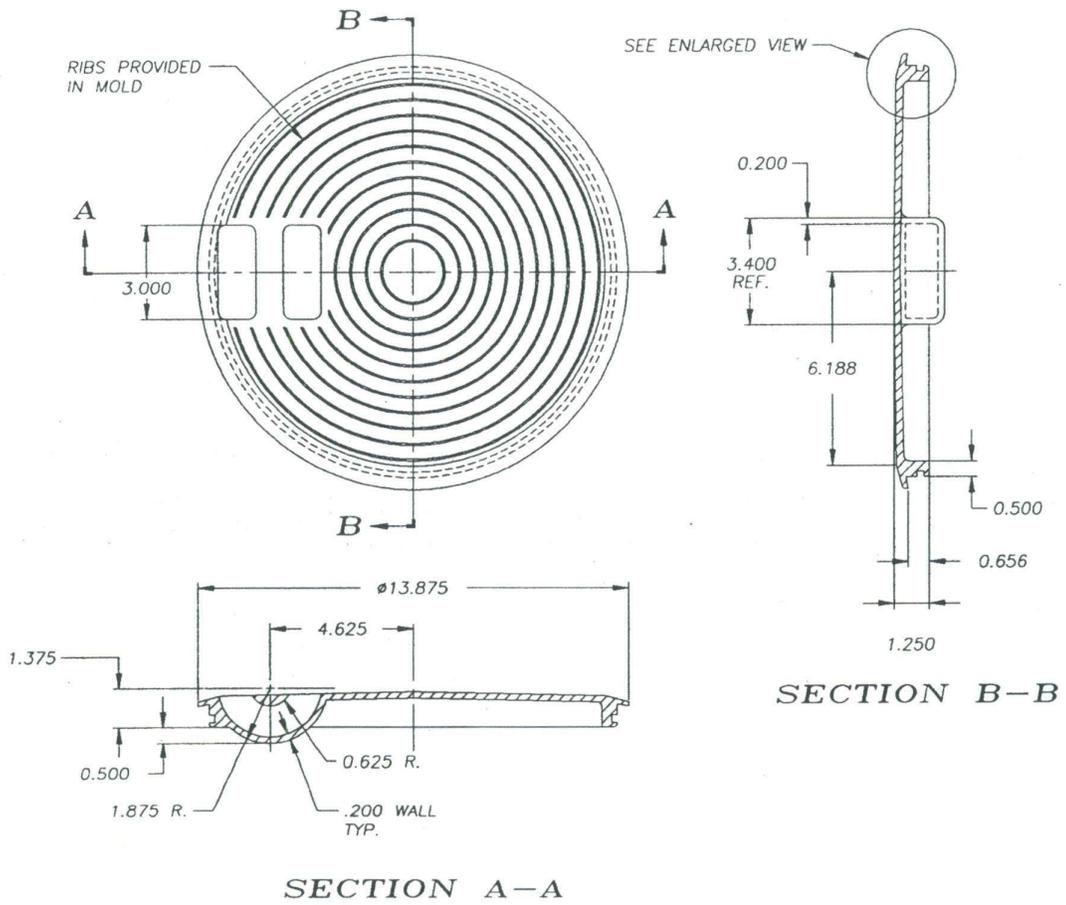
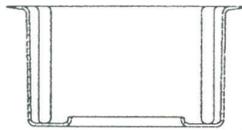
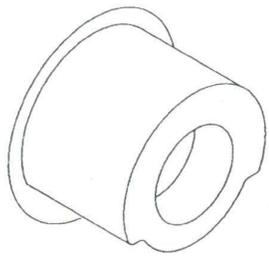


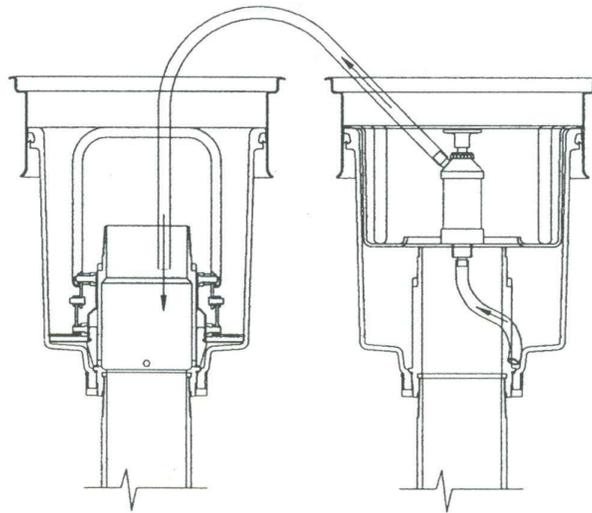
Figure 3H

**Phil-Tite Debris Bucket**  
**Part Number PP 1005 TB (Product)**  
**Part Number PP 1005 TBP (Vapor)**



Debris Bucket

Hand Pump  
(installd in vapor  
debris bucket only)



PRODUCT

VAPOR REC

Hand Pump Operation

Figure 31

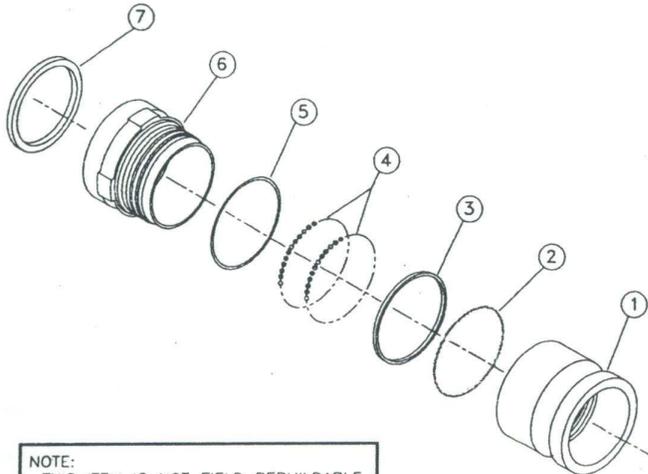
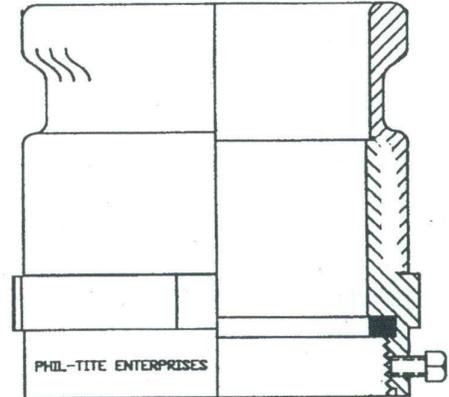
**Phil-Tite SWF-100-B Product Swivel Adaptor**

**INSTALLATION INSTRUCTIONS:**

Cut and fit tank riser to terminate approximately 20" below finish grade. Use coupler and factory nipple to finish riser height to terminate 13-3/4" below finish grade. Next, measure and cut drop tube on a bias (minimum 2" from tank bottom - maximum 6" from bottom) and install tank bottom protector if needed. Install drop tube with proper seals. Install Product bucket and torque to approximately 50 ft. lbs. (using Phil-Tite Enterprises' tool kit - part #T-7043).

Next install swivel adaptor using Phil-Tite Enterprises' tool kit - part #T-7043 (available in our catalog) and torque to approximately 30 ft. lbs. Tighten setscrews to secure swivel.

**The use of any unapproved tools, or over tightening bucket or swivel, will void any and all applied warranties.**



NOTE:  
THIS ITEM IS NOT FIELD REBUILDABLE

ITEM	DESCRIPTION	REQ'D
1	SWIVEL TOP (FILL)	1
2	TEFLON TENSION RING	1
3	URETHANE WIPER SEAL	1
4	BALL BEARINGS (72 EACH RACE)	2
5	VITON O-RING	1
6	SWIVEL BASE (FILL)	1
7	BUNA GASKET	1

Phil-Tite Enterprises, Inc.  
3732 Electro Way  
Redding, CA 96002  
Phone - 530-223-7400  
Fax - 530-223-7418

**WARRANTY CARD**

This product is warranted by Phil-Tite Enterprises, Inc. against defective material and workmanship for 1 (one) year from installation date. We will repair/replace, as we deem necessary, product that has been verified defective by a representative of our company. Any damage caused by either freight or wrongful installation are not covered under this warranty. This warranty does not cover normal wear, or force majeure - caused by fire, flood, earthquake, explosion, war, or acts of God. Seals and O-rings are not a warranty item. Warranty is null and void if a) item is disassembled, b) item is installed improperly, or c) warranty label has been tampered with or is removed from product.

Expiration Date:

Serial Number:

Model Number: Mfg. Number:

This card must be returned to manufacturer for warranty to be honored

Figure 3J

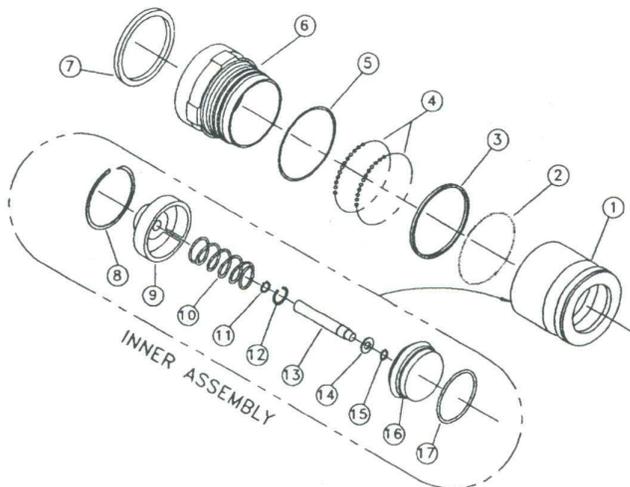
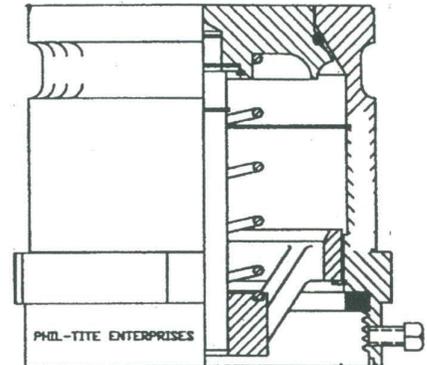
Phil-Tite SWV-101B Vapor Recovery Swivel Adaptor

INSTALLATION INSTRUCTIONS:

Cut and fit tank riser to terminate approximately 20" below finish grade. Use coupler and factory nipple to finish riser height to terminate 13-3/4" below finish grade. Next, measure and cut drop tube on a bias (minimum 2" from tank bottom - maximum 6" from bottom) and install tank bottom protector if needed. Install drop tube with proper seals. Install Product bucket and torque to approximately 50 ft. lbs. (using Phil-Tite Enterprises' tool kit - part #T-7043).

Next install swivel adaptor using Phil-Tite Enterprises' tool kit - part #T-7043 (available in our catalog) and torque to approximately 30 ft. lbs. Tighten setscrews to secure swivel.

The use of any unapproved tools, or over tightening bucket or swivel, will void any and all applied warranties.



ITEM	DESCRIPTION	REQ'D
1	SWIVEL TOP (VAPOR REC.)	1
2	TEFLON TENSION RING	1
3	URETHANE WIPER SEAL	1
4	BALL BEARINGS (72 EACH RACE)	2
5	VITON O-RING	1
6	SWIVEL BASE (VAPOR REC.)	1
7	BUNA GASKET	1
8	SNAP RING (INT.)	1
9	SPIDER	1
10	SPRING	1
11	SAFETY SNAP RING (EXT.)	1
12	SNAP RING (INT.)	1
13	SHAFT	1
14	FLATWASHER	1
15	SNAP RING (EXT.)	1
16	POPPIT	1
17	VITON O-RING	1

NOTE:  
THIS ITEM IS NOT FIELD REBUILDABLE

Phil-Tite Enterprises, Inc.  
3732 Electro Way  
Redding, CA 96002  
Phone - 530-223-7400  
Fax - 530-223-7418

WARRANTY CARD

This product is warranted by Phil-Tite Enterprises, Inc. against defective material and workmanship for 1 (one) year from installation date. We will repair/replace, as we deem necessary, product that has been verified defective by a representative of our company. Any damage caused by either freight or wrongful installation are not covered under this warranty. This warranty does not cover normal wear, or force majeure - caused by fire, flood, earthquake, explosion, war, or acts of God. Seals and O-rings are not a warranty item. Warranty is null and void if a) item is disassembled, b) item is installed improperly, or c) warranty label has been tampered with or is removed from product.

Expiration Date:

Serial Number:

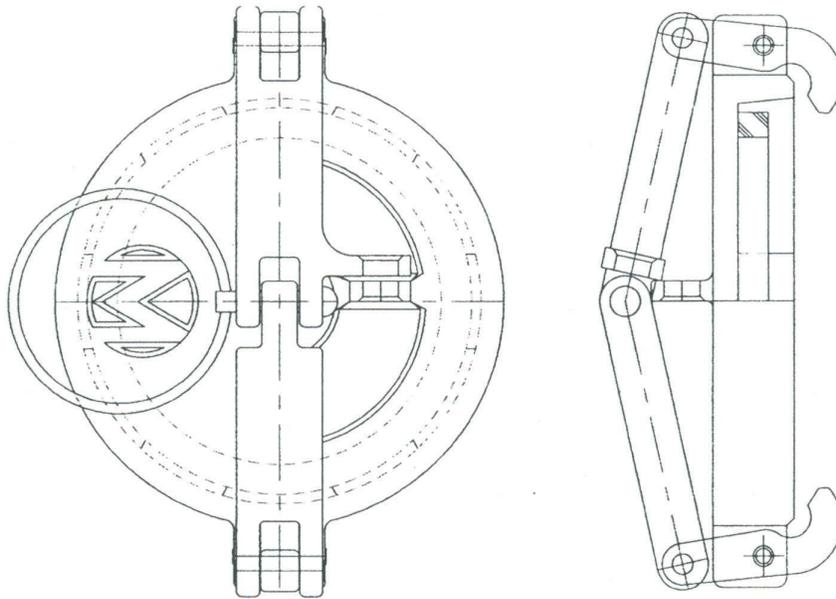
Model Number:

Mfg. Number:

This card must be returned to manufacturer for warranty to be honored

Figure 3K

**Morrison Brothers 323C Vapor Recovery Adaptor Cap**



**WARRANTY**—All Morrison products are thoroughly tested before shipment and only material found to be defective in manufacture will be replaced. Claims must be made within one year from the date of invoice. Morrison Bros. Co. will not allow claims for labor or consequential damage resulting from purchase, installation, or misapplication of the product.

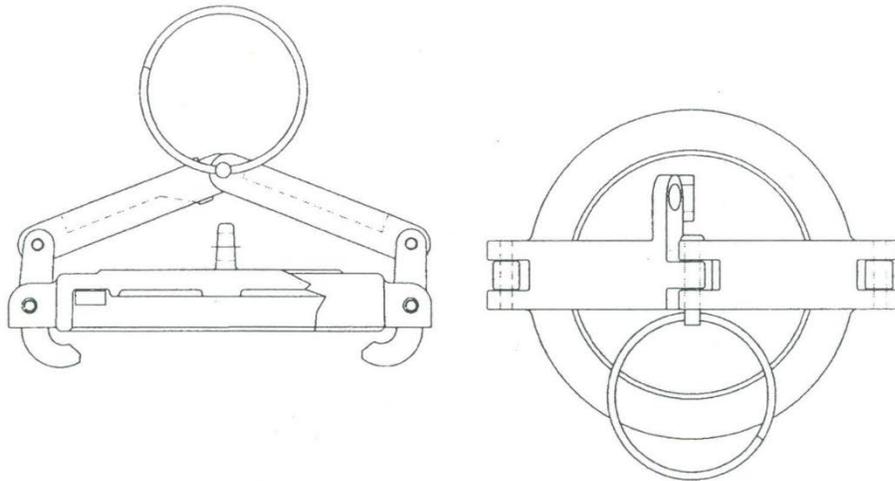


**MORRISON BROS. CO.**

24<sup>th</sup> and Elm Street  
P.O. Box 238  
Dubuque, IA 52001

Figure 3L

**Morrison Brothers 305C Product Adaptor Cap**



WARRANTY—All Morrison products are thoroughly tested before shipment and only material found to be defective in manufacture will be replaced. Claims must be made within one year from the date of invoice. Morrison Bros. Co. will not allow claims for labor or consequential damage resulting from purchase, installation, or misapplication of the product.

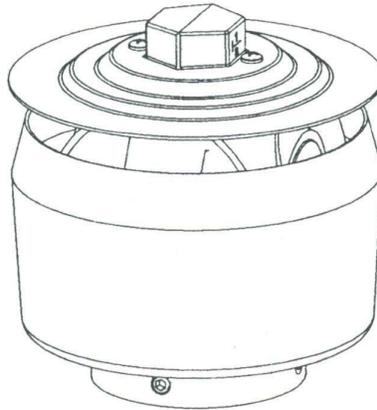


**MORRISON BROS. CO.**

24<sup>th</sup> and Elm Street  
P.O. Box 238  
Dubuque, IA 52001

Figure 3M

Husky Model 4885 2-Inch Threaded Pressure/Vacuum Vent Valve



Newer model 4885 has top hex used for installation. Earlier model 4885, without top hex is permissible.

**PRESSURE/VACUUM VENT MODEL 4885  
INSTALLATION AND MAINTENANCE INSTRUCTIONS**

**INSTALLATION**

The P/V Vent is designed to fit on top of a 2" vent pipe. Remove the P/V Vent from the carton and visually inspect for any shipping damage.

**MAINTENANCE**

Annually inspect the P/V Vent valve for foreign objects without removing the P/V Vent valve from the vent pipe by using the following procedure:

1. Remove the screws that holds the top cover on.
2. Remove any debris that might be sitting inside the lower cover.
3. Check the drain holes in the lower cover for blockage.
4. The two (2) screens should not be removed.
5. Reinstall the top cover and retaining screws.
6. Tighten the screws firmly.

**NOTE: DO NOT ALTER OR COVER THE P/V VENT**



HUSKY CORPORATION • 2325 HUSKY WAY • PACIFIC, MO 63069  
www.husky.com PHONE: 800-325-3558

009841-3 06/11/01

**Warranty**

Husky Corporation will, at its option, repair, replace, or credit the purchase price of any Husky manufactured product which proves upon examination by Husky, to be defective in material and/or workmanship within FIFTEEN (15) MONTHS from the date of shipment by Husky if the original purchaser properly returns a warranty registration card, otherwise, within FIFTEEN (15) MONTHS from the date of shipment for any Husky Inverted Swivel, within EIGHTEEN (18) MONTHS from the date of shipment for any Husky Pressure Vacuum Vent or Model 4860 Hi-Flo Swivel and within ONE (1) YEAR from the date of shipment by Husky for any other Husky manufactured product, except as otherwise provided herein.

The warranty period on repaired or replacement vapor recovery nozzles is only for the remainder of the warranty period of the defective nozzle. Buyer must return the products to Husky, transportation charges prepaid. This Warranty excludes the replaceable bellows, bellows spring assembly, spout assembly and scuff guard, unless (i) damage is obvious when the product is removed from shipping carton and (ii) the defective product is returned to Husky prior to use. This Warranty does not apply to equipment or parts which have been installed improperly, damaged by misuse, improper operation or maintenance, or which are altered or repaired in any way other than by Husky.

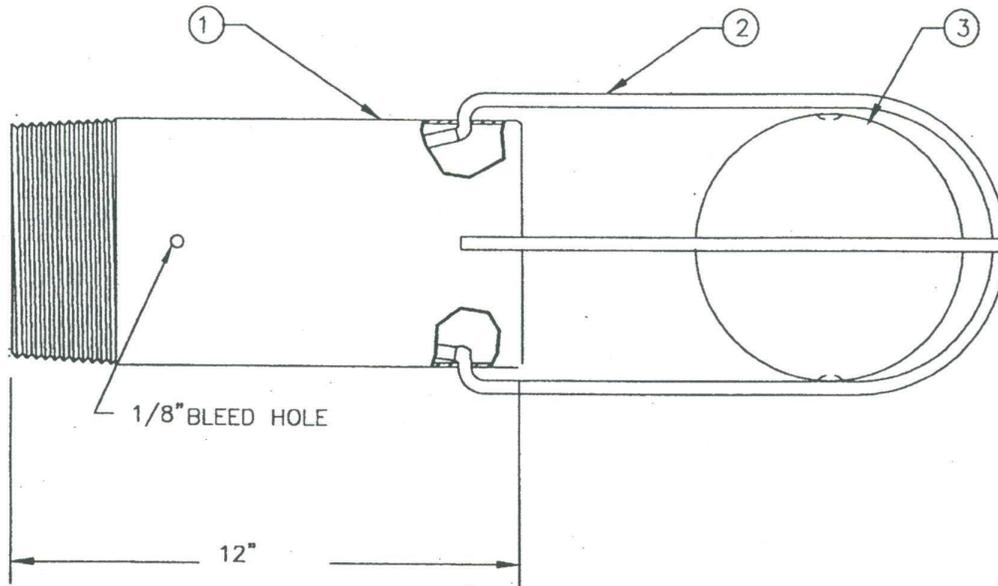
The Warranty provisions contained herein apply ONLY to original purchasers who use the equipment for commercial or industrial purposes. There are no other warranties of MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE, and any other such warranties are hereby specifically disclaimed.

Husky assumes NO LIABILITY for labor charges or other costs incurred by Buyer incidental to the service, adjustment, repair, return, removal or replacement of products. HUSKY ASSUMES NO LIABILITY FOR ANY INCIDENTAL, CONSEQUENTIAL, OR OTHER DAMAGES UNDER ANY WARRANTY, EXPRESS OR IMPLIED, AND ALL SUCH LIABILITY IS HEREBY EXPRESSLY EXCLUDED.

Husky reserves the right to change or improve the design of any Husky fuel dispensing equipment without assuming any obligations to modify any fuel dispensing equipment previously manufactured.

Figure 3N

Universal Ball Float Vent Valve Model Number 37



**WARRANTY**

All **UNIVERSAL** products are guaranteed to be free from defects in materials and workmanship. All products are thoroughly tested before shipment and guaranteed to the extent of replacing only products found to be defective in manufacture. We cannot, however, allow claims for labor or consequential damage resulting from purchase, installation or misapplication of our products.

Our responsibility ceases when products are accepted by transportation carriers. All goods are at the risk of the purchaser after they have been delivered by us to the carrier and receipt obtained from same (in good order).

The right is reserved to make changes in pattern, design or materials when deemed necessary, without prior notice. Products which have become obsolete

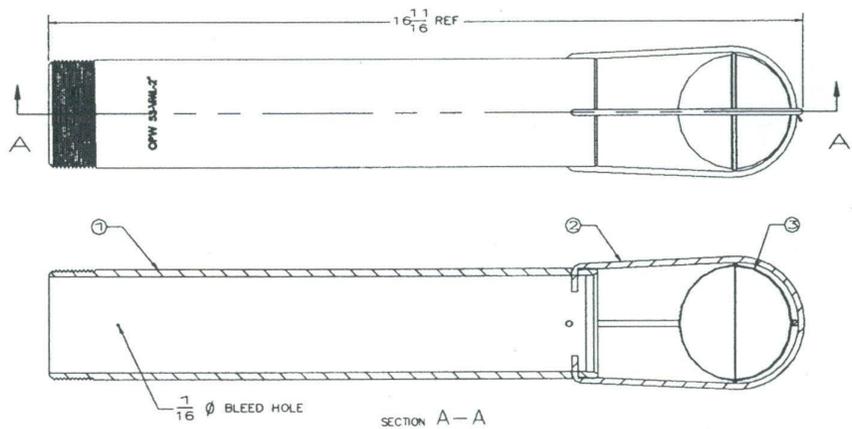
by reason of design change or discontinued as a manufactured item may not be returned for credit.

**THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

**UNIVERSAL** products should be used in compliance with applicable federal, state and local laws and regulations. Product choice should be based on physical specifications and limitations and compatibility with the environment and material to be handled. **UNIVERSAL MAKES NO WARRANTY OF FITNESS FOR A PARTICULAR USE.**

Figure 30

OPW Model 53 VML-0120 Ball Float Vent Valve



**OPW Product Warranty**

OPW warrants that products sold by it are free from defects in materials and workmanship for a period of one year from the date of shipment by OPW. As the exclusive remedy under this limited warranty, OPW will at its sole discretion, repair, replace, or issue credit for future orders for any product that may prove defective within the one year period. This warranty shall not apply to any product that has been altered in any way, which has been repaired by any party other than a service representative authorized by OPW, or when failure is due to misuse, conditions of use, or improper installation or maintenance. OPW shall in no instance have any liability whatsoever for special, incidental or consequential damages to any party and shall have no liability for the cost of labor, freight, excavation, clean up, downtime, removal, reinstallation, loss of profit, or any other cost or charges in excess of the amount of the original invoice for the products.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.



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IN ACCORDANCE WITH CARB CP201 SECTION 9.2.3:

**WARRANTY TAGS SHALL BE REMOVED ONLY BY THE OWNER/OPERATOR OF THE VAPOR RECOVERY EQUIPMENT**

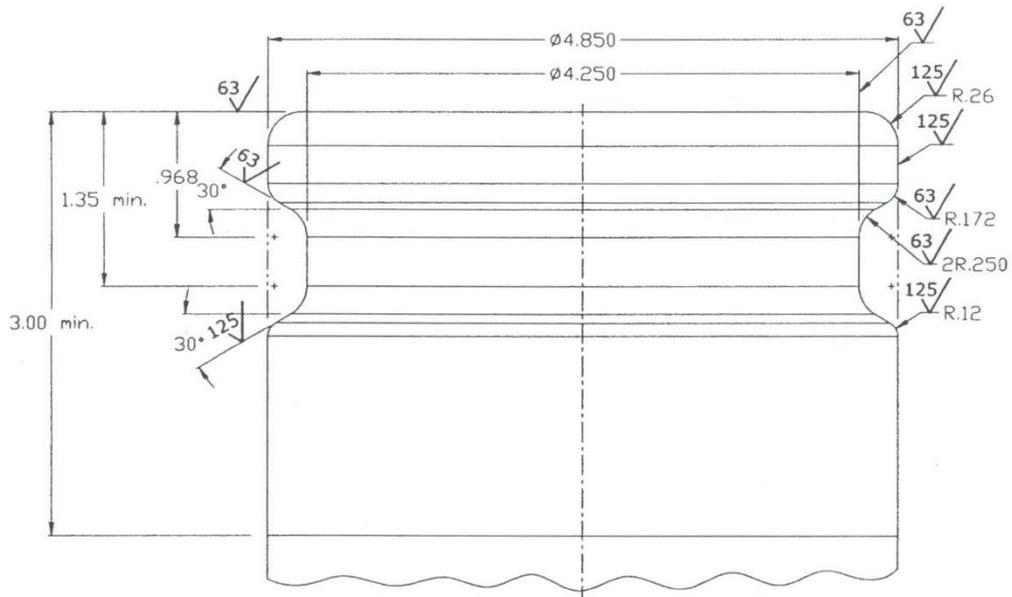
- ♦ OPW guarantees that all products are free from defects in materials and workmanship for a period of one (1) year from date of manufacture
- ♦ The manufacture date is stamped on the product. A month and year denote the start date for warranty.  
Example: 02 00, warranty is for one year from February 2000
- ♦ All OPW products are inspected and tested at the OPW manufacturing facility before shipping.
- ♦ This product is tested and certified to meet the appropriate performance standard found in CARB procedure CP201 and all applicable CARB test procedures.

For all other questions or inquiries please contact your local OPW distributor. Distributors are located on the OPW web site at: [www.opw-fc.com](http://www.opw-fc.com)

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Figure 3P

CARB Product Adaptor Cam and Groove Standard



UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ON DECIMALS
.XXX ± .005
.XX ± .01
ANGLES ± 0.5°