

**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
System Specifications**

This exhibit contains the installation, maintenance and compliance standards and specifications that apply to the Healy Phase II EVR System Including Veeder-Root ISD installed in a gasoline dispensing facility. All components must be installed in accordance with the specifications in the **ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System**.

**Nozzle**

1. A vapor collection boot shall be installed on the nozzle at the base of the spout, as shown in **Figure 2B-1**.
2. The Healy Model 900 nozzle has an integral vapor valve which prevents the loss of vapor from the underground storage tanks, ensures proper operation of the system and prevents the ingestion of air into the system. Any dispenser that has a nozzle installed that is determined to have a defective vapor valve, as described in items 3 or 4 below, shall be immediately removed from service (including nozzle(s) on both sides of dispenser) and a call for repair made immediately.
3. The maximum allowable leak rate for the nozzle vapor path, as determined by TP-201.2B, shall not exceed the following:
  - 0.038 cubic feet per minute (CFH) at a pressure of two inches water column (2.00" wc), and
  - 0.10 CFH at a vacuum of one hundred inches water column (-100.00" wc)
4. Verification of the integrity of the vapor valve can be performed on installed nozzles using the nozzle bag test procedure in Exhibit 7.

**Vapor Collection**

1. The V/L ratio of the system shall be **1.05 plus or minus 0.10 (0.95 to 1.15)**, measured at a flow rate between six and ten gallons per minute (6.0 – 10.0 gpm). *Any fueling point whose V/L ratio is determined to be at or below 0.80 shall be deemed defective and removed from service.* The V/L ratio shall be determined by using the test procedure in Exhibit 5 with the shut-off port excluded.

2. Inoperative vapor pumps, as determined by the ***ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System***, constitute a defect.

### **Inverted Coaxial Hoses**

1. The maximum length of the hose assembly, including hose adapter, whip hose, breakaway, flow limiter (optional) and inverted coaxial hose, measured at the base of the nozzle, shall be no more than twenty (20) feet.
2. Only standard (**Figure 2B-2**), Lazy-J (**Figure 2B-3**) and Curly-Q (**Figure 2B-4**) hose configurations are permitted.

### **Hose Adaptors**

1. Component necessary to install hanging hardware on some dispenser types.

### **Breakaway Couplings**

1. Only the Healy Model 8701VV breakaway (which closes the vapor path) shall be used.
2. Testing is required after reconnecting the breakaway to ensure proper operation and no observed leaks. The procedure for reconnecting breakaway and fueling point testing after a drive-off, referenced in Section 1.4 of Healy Systems Scheduled Maintenance, shall be conducted to verify that breakaway, hose and nozzle are operating properly after a drive-off.

### **Flow Limiters**

1. Component is optional for vapor recovery.
2. Flow limiter is mandatory when the flow rate is greater than 10 gallons per minute to comply with U.S. EPA requirement.

### **Clean Air Separator**

1. The Clean Air Separator is a passive tank pressure management system, with no electrical requirements. The Clean Air Separator vapor integrity shall be evaluated using the test procedure outlined in Exhibit 4 of this Executive Order.
  - a. A Clean Air Separator that fails the leak decay test outlined in Exhibit 4 shall be considered a defect.
  - b. Unless there is maintenance or testing being conducted on the Clean Air Separator, the four ball valves shall be locked in the

positions shown in **Figure 2B-5** for normal Clean Air Separator operation. A Clean Air Separator that is not in the proper operating configuration shall be considered a defect.

2. The Clean Air Separator can be installed up to 100 feet from the vent line(s), provided that this piping is sloped 1/8" per foot minimum toward the vent line(s).
3. The Air Breather Assembly for the Clean Air Separator shall be installed at least twelve feet (12') above grade.

### **Pressure/Vacuum Vent Valves for Storage Tank Vents**

1. The P/V vent valve shall be an ARB-certified valve as specified in Exhibit 1.
2. At least one pressure/vacuum (P/V) vent valve shall be installed on each tank vent. The maximum number of P/V vent valves allowed and P/V vent valve performance specifications are listed in the applicable Phase I EVR Executive Order. Vent lines may be manifold to minimize the number of P/V vent valves and potential leak sources, provided the manifold conforms to all applicable fire regulations. At least one P/V vent valve shall be installed on vents if a manifold is incorporated. **Figure 2B-6** shows a typical manifold configuration for a single P/V vent valve with the Clean Air Separator. If two or more P/V vent valves are desired, they shall be installed in parallel, so that each can serve as a backup to the other if one should fail to open properly. **Figure 2B-7** shows a typical manifold configuration for two P/V vent valves installed in parallel with the Clean Air Separator. **Figure 2B-8** shows a typical manifold configuration for three P/V vent valves installed in parallel with the Clean Air Separator. **Figure 2B-9** shows a typical configuration for a P/V vent valve mounted on a single 3" vent line with the Clean Air Separator.

### **Vapor Recovery Piping Configurations**

**NOTE: New facilities and facilities undergoing Phase II major modifications must also meet the piping requirements specified in section 4.12 of CP-201.**

1. Vapor Return and Vent Lines
  - a. For new installations and existing installations undergoing Phase II major modifications, all vapor return and vent lines shall be a minimum nominal internal diameter of 2 inches from the dispensers or the vent stacks to the first manifold. All lines after the first manifold and back to the underground storage tank shall have a minimum nominal internal diameter of 3 inches. Prior to and after backfilling the vapor return and vent lines, the maximum pressure drop shall not exceed 0.5 inches WC at 60 standard cubic feet per hour as determined by TP-201.4, Dynamic Backpressure. The pressure drop shall be measured from the dispenser riser to the UST with

pressure/vacuum vent valves installed and with the poppeted Phase I vapor connection open.

- b. For existing installations, the maximum pressure drop through the system shall not exceed 0.5 inches WC at 60 standard cubic feet per hour as determined by TP-201.4, Dynamic Backpressure. The pressure drop shall be measured from the dispenser riser to the UST with the pressure/vacuum vent valves installed and with the poppeted Phase I vapor connection open.

Note: The V/L test from Exhibit 5 may be used to verify proper operation of the system, in lieu of measuring the pressure drop through the lines, provided that at least two gallons of product are introduced into the system through each dispenser riser, prior to the test.

2. All vapor return lines shall have a minimum slope of 1/8 inch per foot from the dispenser riser to the riser of the UST. A slope of 1/4 inch or more per foot is recommended wherever feasible. The vapor return path from any fueling point to the underground storage tank shall be free of liquid blockage.
3. The dispenser shall be connected to the riser with either flexible or rigid material that is listed for use with gasoline. The dispenser-to-riser connection shall be installed so that any liquid in the lines will drain toward the storage tank. The internal diameter of the connector, including all fittings, shall not be less than one-half inch (1/2").
4. There is no length restriction for the vapor return piping of the system as long as the system complies with the maximum pressure drop requirement of Item 1 (or the V/L option).
5. No product shall be dispensed from any fueling point at a GDF installed with the Healy Phase II EVR System Including Veeder-Root ISD if there is a vapor line that is disconnected and open to the atmosphere.
6. No liquid condensate traps are allowed with this system.

### **Dispenser Vapor Piping**

1. Any dispenser with a dispenser piping test valve in the closed position shall be considered a defect.

### **In-Station Diagnostics**

1. The gasoline dispensing facility operator/owner is advised to follow Districts requirements, if any, following a warning by the Veeder-Root In-Station

Diagnostics (ISD) system and a shut down of the submersible pumps to all gasoline tanks by the ISD systems.

### **Phase I System**

1. The Phase I system shall be an ARB-certified system that demonstrates compliance with the static pressure decay test criteria contained in the latest version of TP-201.3.

### **Maintenance Records**

1. Each GDF operator/owner shall keep records of maintenance performed at the facility. Such records shall be maintained on site in accordance with district requirements or policies. The records shall include the test or maintenance date, repair date to correct test failure, maintenance or test performed, and if applicable, affiliation, telephone number and name of the individual conducting maintenance or test. An example of a GDF Maintenance Record is shown in **Figure 2B-18**.
2. Maintenance shall be conducted in accordance with Healy Systems Scheduled Maintenance document in **Figure 2B-19**.
3. Reconnection of breakaways shall be included in the maintenance records.

## Veeder-Root ISD System Specifications

### TLS Console & ISD Software Version Number

The presence of ISD and the ISD software version number can be verified on the TLS Console LCD screen by using the <STEP> key or by using the TLS Console <PRINT> key to print and review the latest ISD Daily Report. **See Figure 2B-10 and 2B-11** for TLS and ISD verification instructions.

The TLS Console must have a printer as well as an RS232 interface port.

### Operability Test Procedure

The Veeder-Root ISD operability test procedure provided in Exhibit 9, and in section 4 of the ***ARB Approved Installation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System***, shall be used at GDF sites to determine the operability of the Veeder-Root ISD system to comply with applicable performance standards and performance specification in CP-201. Testing the ISD equipment in accordance with this procedure will verify the proper selection, setup and operation of the TLS Console sensors and interface modules.

### The Vapor Flow Meter

The Veeder-Root ISD system requires one Vapor Flow Meter per dispenser installed via the ***ARB Approved ISD Vapor Flow Meter Manual 577013-796, Rev. E for the Veeder-Root ISD System***. The Vapor Flow Meter shall be installed into dispensers listed in Exhibit 1 of this Executive Order in accordance with the ***ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System***. The Vapor Flow Meter is an intrinsically safe sensor that is wired to the TLS Console Smart Sensor Module via a conduit dedicated to TLS Console low-voltage sensors. **Figure 2B-12** shows the ISD Vapor Flow Meter. **Figures 2B-16 and 2B-17** show the installation configuration.

### The Vapor Pressure Sensor

The Veeder-Root ISD system requires one Vapor Pressure Sensor per GDF installed into one of the dispensers located closest to the tanks (If a row of dispensers are equal distance from the tank pad and within 10' of each other, any dispenser can be used) in accordance with the ***ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System***. The Vapor Pressure sensor shall be installed into dispensers listed in Exhibit 1 of this Executive Order. The Vapor Pressure Sensor is an intrinsically safe sensor that is wired to the TLS Console Smart Sensor Module via a conduit dedicated to TLS Console low-voltage sensors. **Figure 2B-13** shows an ISD Vapor Pressure Sensor illustration. **Figures 2B-16 and 2B-17** show the installation configuration.

## **Dispenser Interface Module (DIM)**

Existing Dispenser Interface Modules or DIM communication cards are used to interface to the dispenser Point Of Sale (POS) or controller system to gather fuel transaction data. The ISD Operability Test Procedure provided in Exhibit 9 and in Section 4 of the Veeder-Root ISD Install, Setup and Operation Manual can be used to verify the proper selection and setup of the Dispenser Interface Module. See **Figure 2B-14** for a typical Dispenser Illustration.

## **Tank Inventory Probe Sensor**

Existing Tank Inventory Probe sensors (one per tank) are used to measure the amount of vapor space in the Underground Storage Tanks (USTs). The ISD Operability Test Procedure can be used to verify the proper selection and setup of the Tank Inventory Probes. See **Figure 2B-15** for a typical Tank Inventory Probe Sensor.

## **Shutdown Control**

The TLS Console must be wired per the ***Veeder-Root ISD Install, Setup and Operation Manual 557013-800, Rev. E*** of the ***ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including the Veeder-Root ISD System*** such that it shall automatically prohibit the dispensing of fuel through shutdown of all the gasoline turbine pumps during a CP-201 ISD failure alarm or TLS Console ISD system power loss.

## **TLS Console Modules**

The ISD Operability Test Procedure in Exhibit 9 and in section 4 of the Veeder-Root ISD Install, Setup, and Operation Manual of the ***ARB Approved Installation, Operation, and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System*** shall be used to verify the proper selection and setup of the TLS Console Modules.

## **Training Program**

All Veeder-Root contractors must successfully complete a Veeder-Root training program before they can startup and service TLS Console equipment. Contractors must have taken and passed the Veeder-Root ISD course and must have an up-to-date Level 1 certification to install the TLS Console ISD system. Contractors must have taken and passed the Veeder-Root ISD course and must have an up-to-date Level 2, 3 or 4 certification to startup the ISD system. The schedule, fee and registration information for the ASC training program can be found at <http://www.veeder.com>.

To confirm TLS or ISD training a regulator should call 800-997-7725 and press "\*" to get to the Veeder-Root menu and "\*" again to speak to a representative.

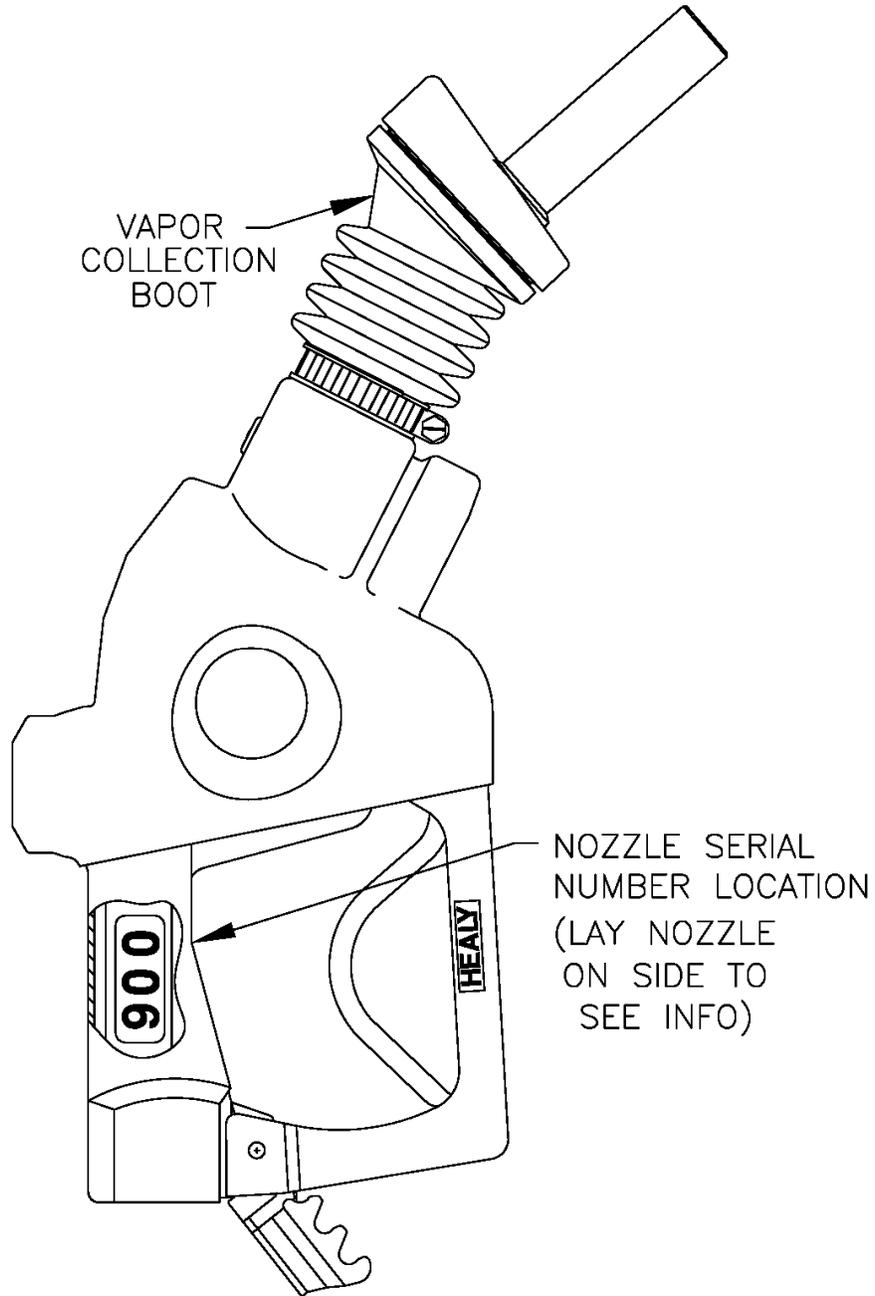
## **Maintenance**

The TLS console, including interface modules, do not require scheduled maintenance. ISD System Self-Test Monitoring algorithms are designed to verify proper selection, setup and operation of the TLS console and sensors.

There is no recommended maintenance, inspection nor calibration for the Vapor Flow Meter or the Vapor Pressure Sensor. Servicing should be performed in accordance with the In-Station Diagnostic System Troubleshooting Guide, Manual 577013-819 in response to warning or alarm conditions.

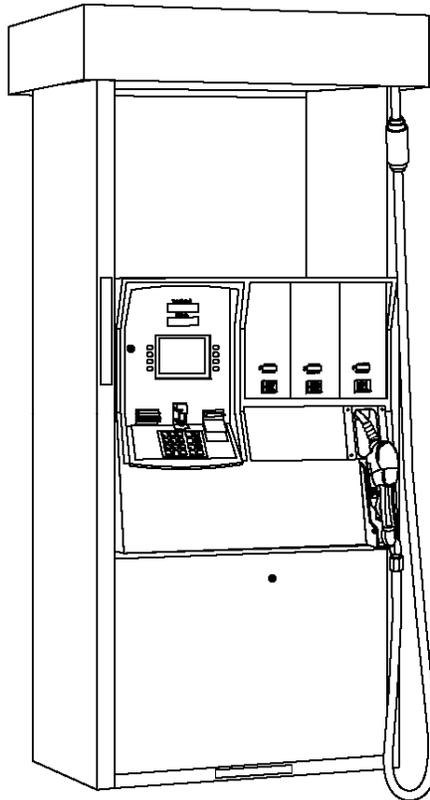
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-1  
Vapor Boot for Healy 900 Nozzle**



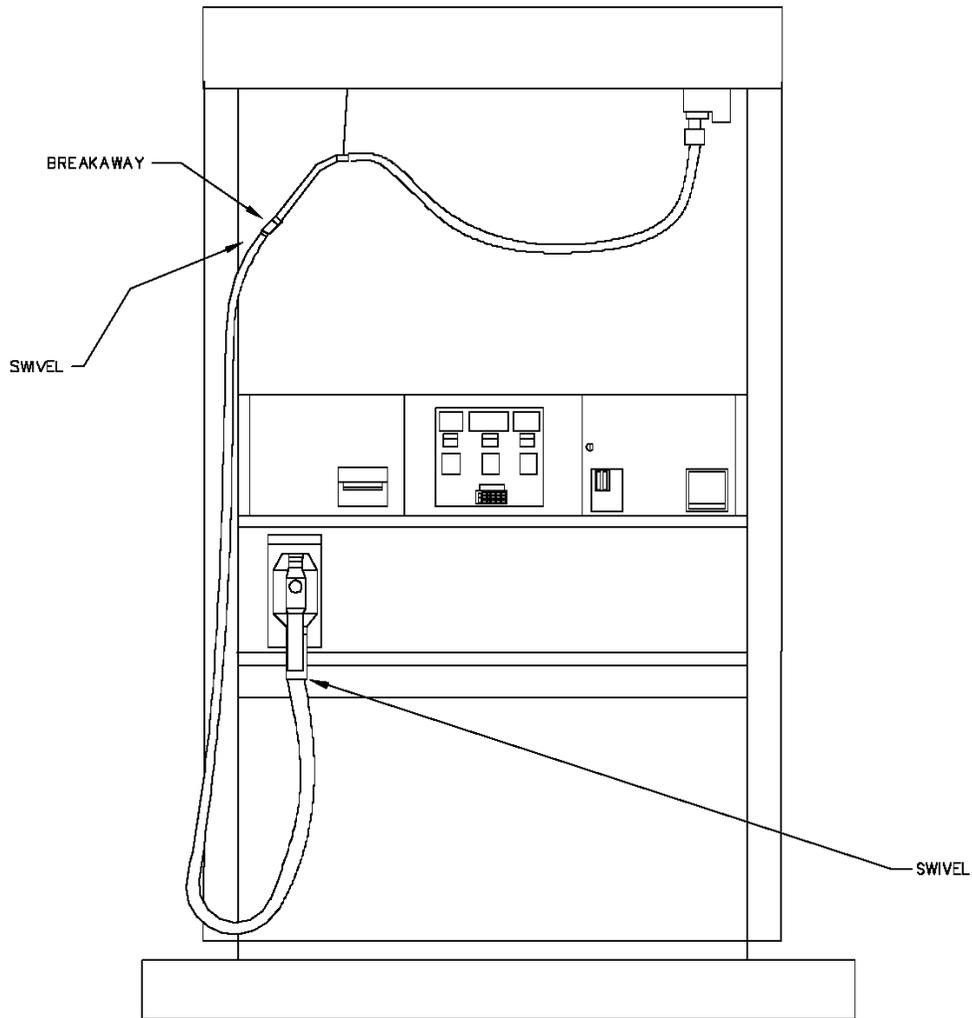
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-2  
Standard Hose Configuration**



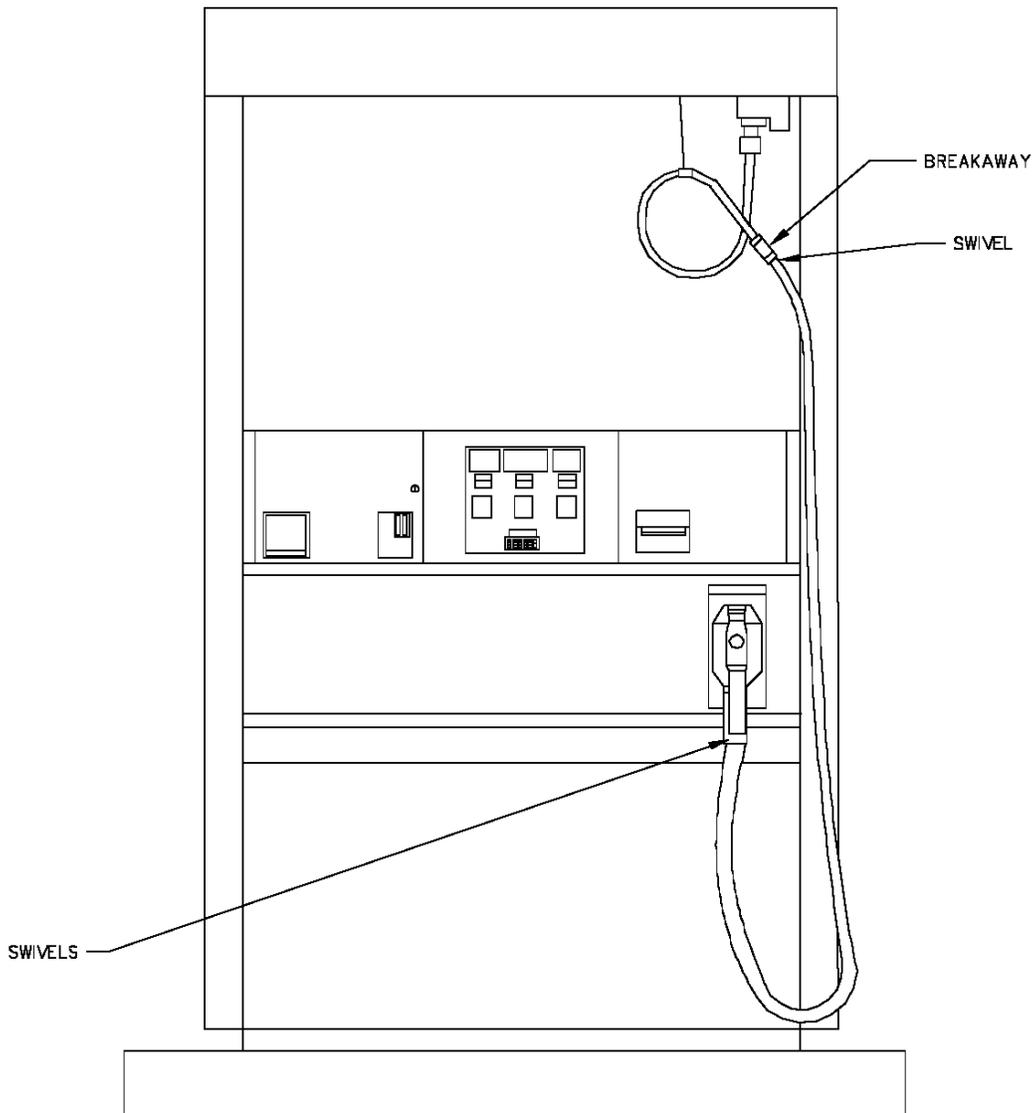
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-3  
Lazy J Hose Configuration**



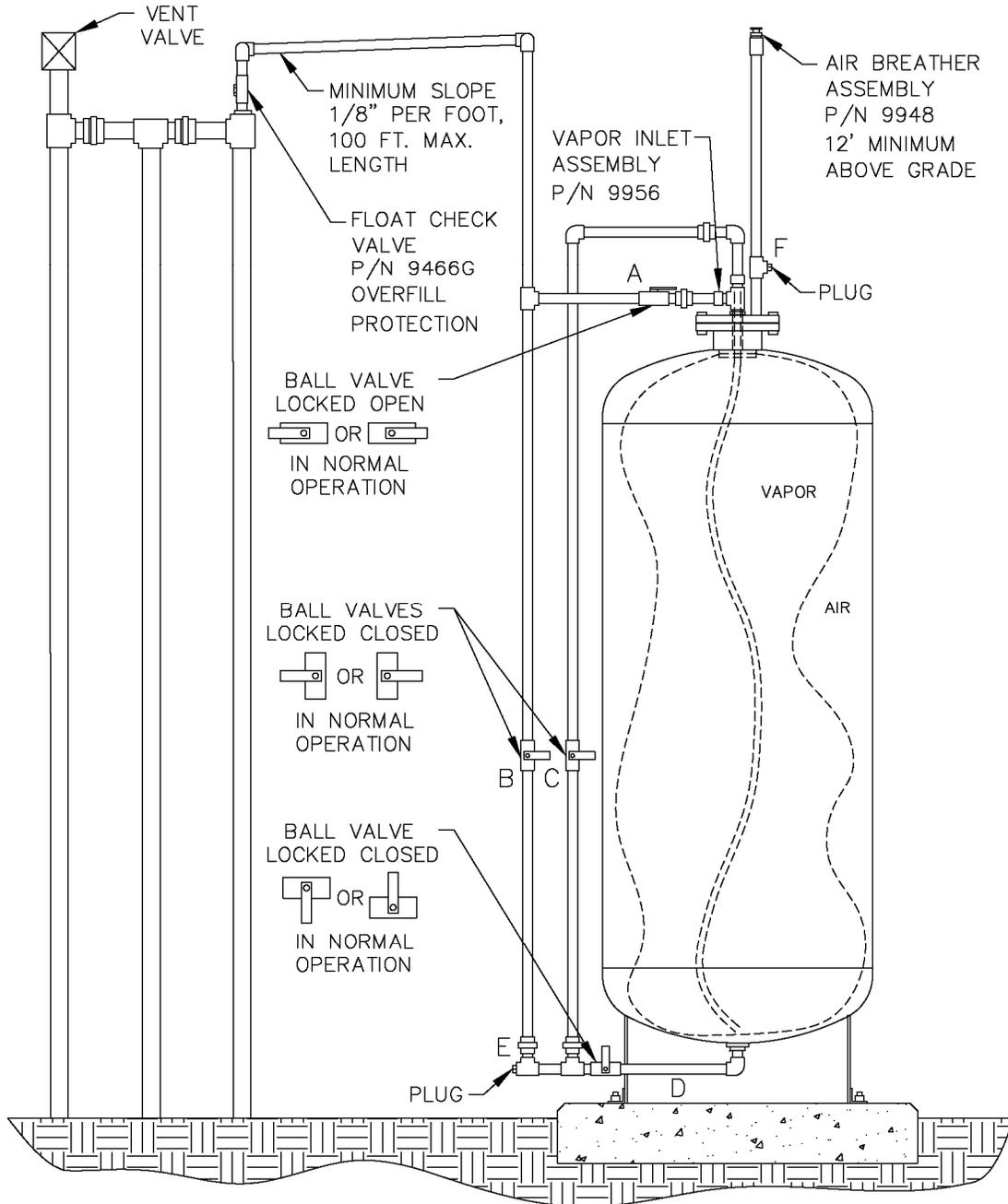
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-4  
Curly Q Hose Configuration**



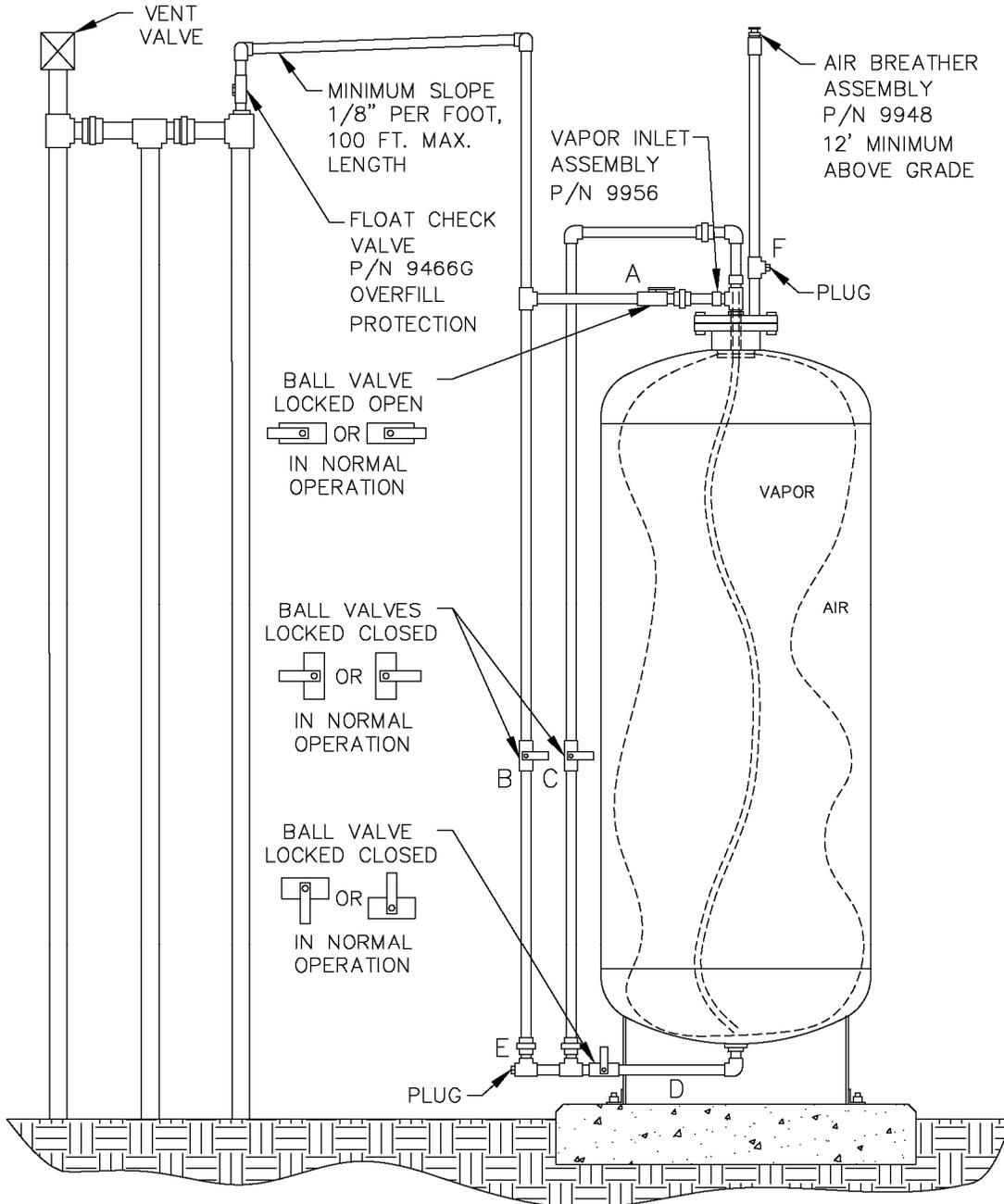
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-5  
Clean Air Separator Normal Operation Configuration**



**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

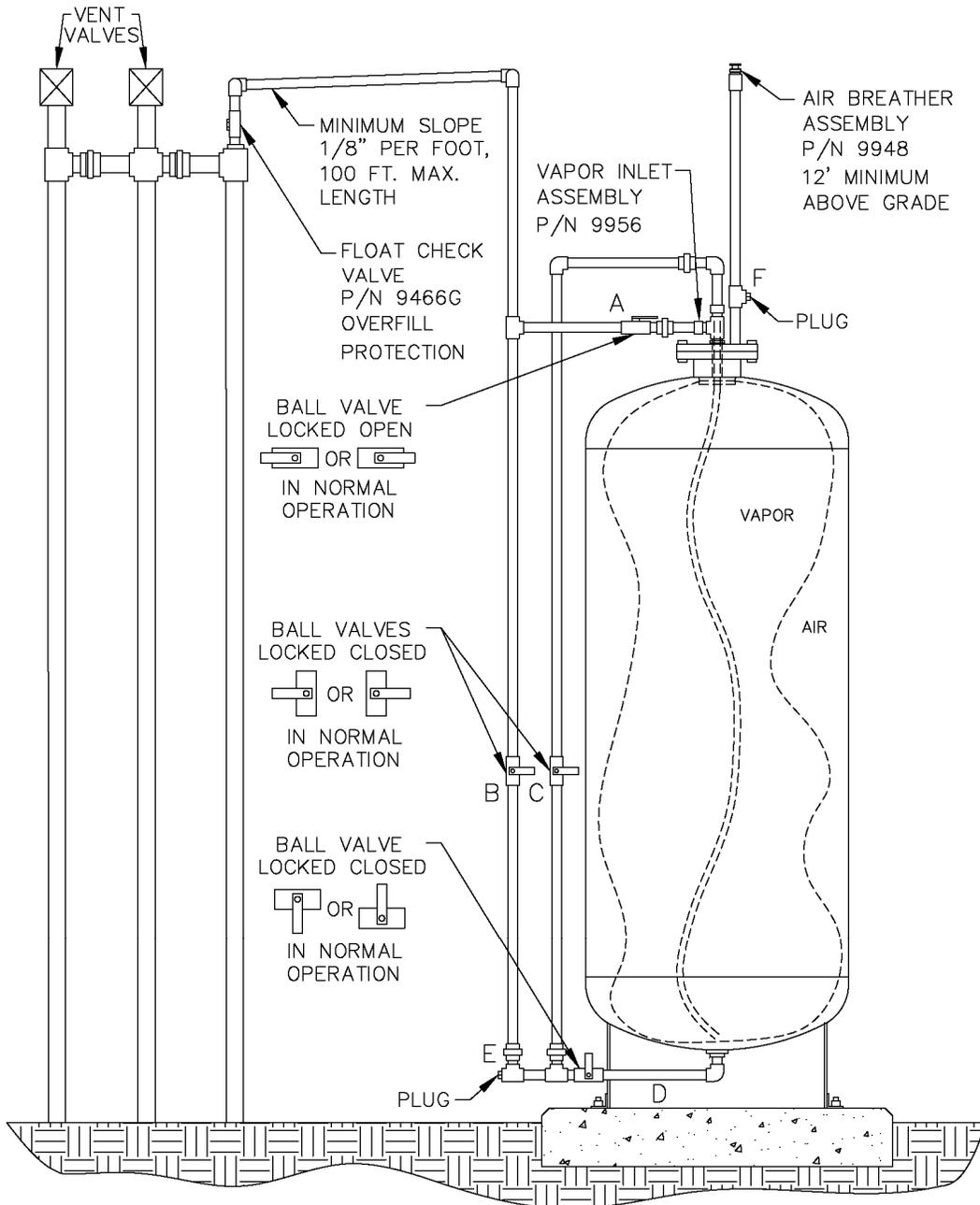
**Exhibit 2  
Figure 2B-6  
Typical Installation of a Single P/V Vent Valve Manifold  
with Healy Clean Air Separator**



**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-7  
Typical Installation of a Two P/V Vent Valve Parallel Manifold  
with Healy Clean Air Separator**

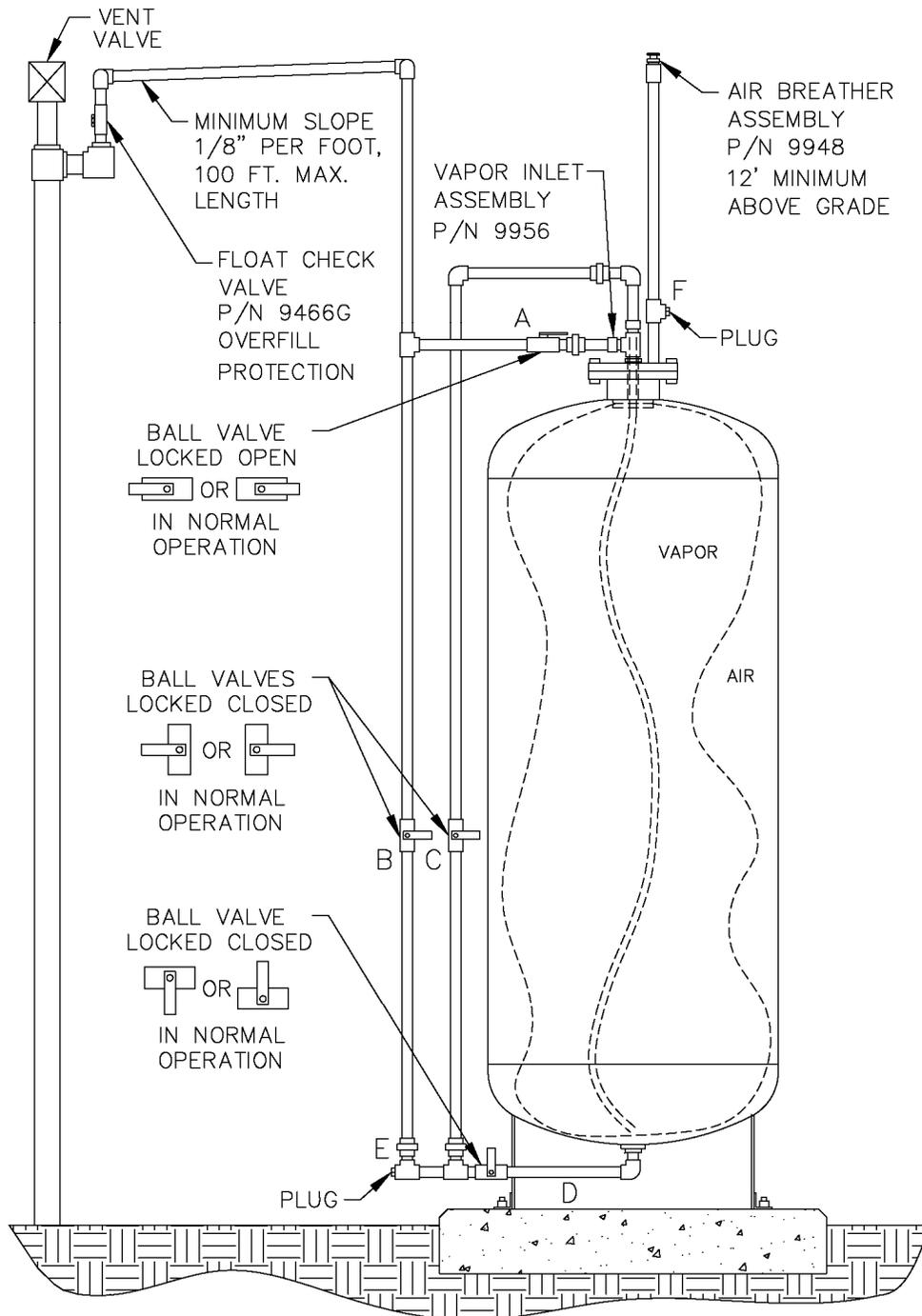
(This configuration requires additional P/V vent valves that are not supplied in the Healy installation kit)





**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

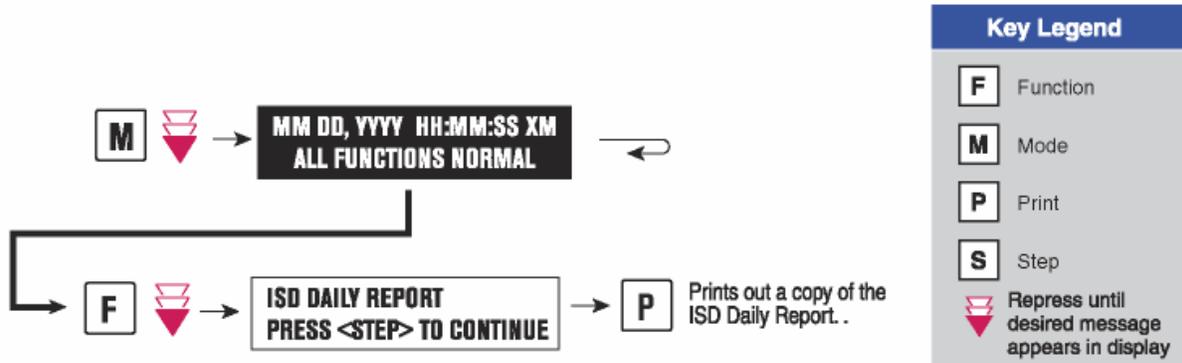
**Exhibit 2  
Figure 2B-9  
Typical Configuration of a P/V Vent Valve Mounted on a  
Single 3" Vent Line with the Clean Air Separator**



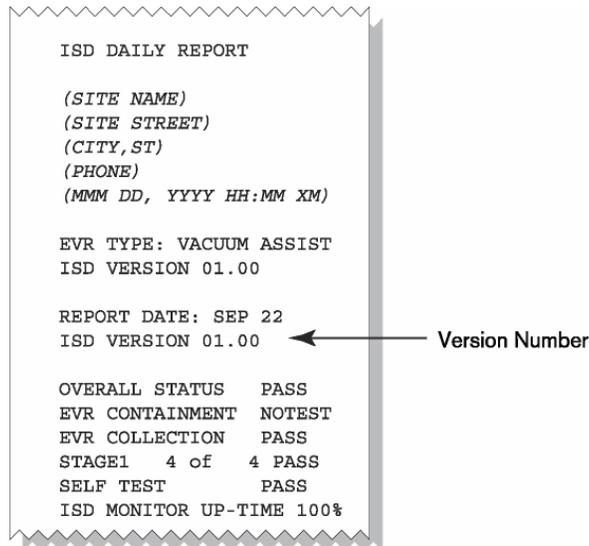
### Executive Order VR-202-A Healy Phase II EVR System Including Veeder-Root ISD

#### Exhibit 2 Figure 2B-10 Finding The Veeder-Root ISD Version Number

Use the TLS Console <FUNCTION> key to find the ISD Daily Report menu:



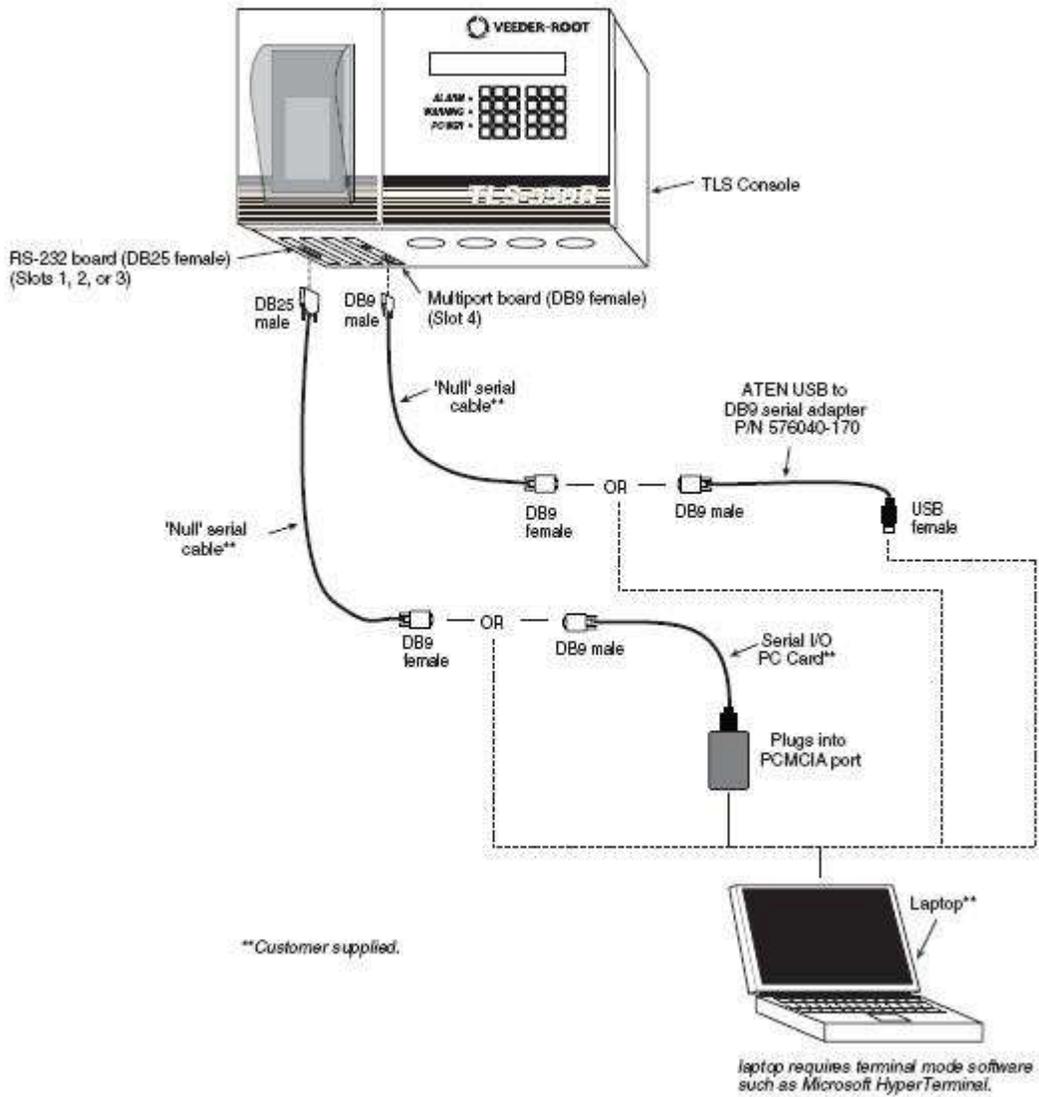
The ISD version number can be verified on the TLS Console LCD screen using the <STEP> key or by using the TLS Console <PRINT> key to print and review the latest ISD Daily Report:



Presence of the ISD Daily Report menu and correct ISD software version number is evidence that ISD is installed and activated in the TLS Console.

**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-11  
Standard TLS Console**



**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-12  
Vapor Flow Meter**



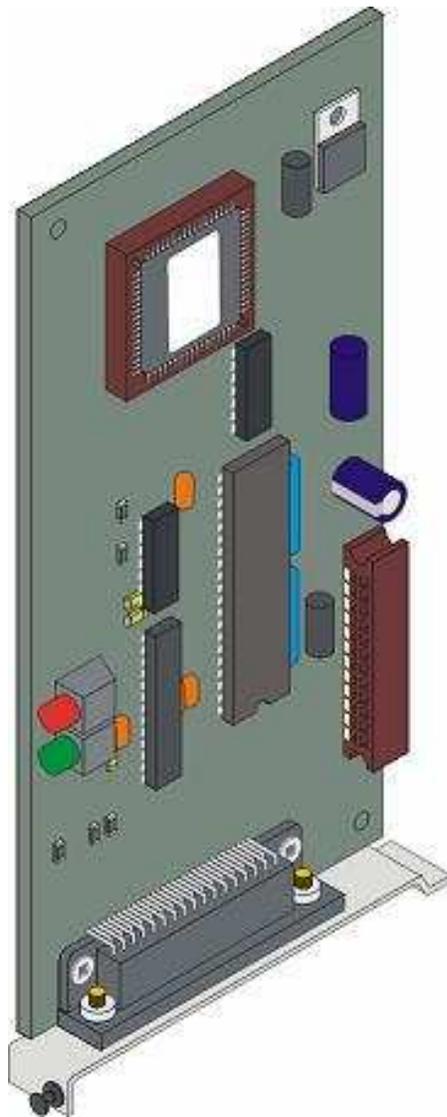
**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-13  
Vapor Pressure Sensor**



**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-14  
Dispenser Interface Module**



**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

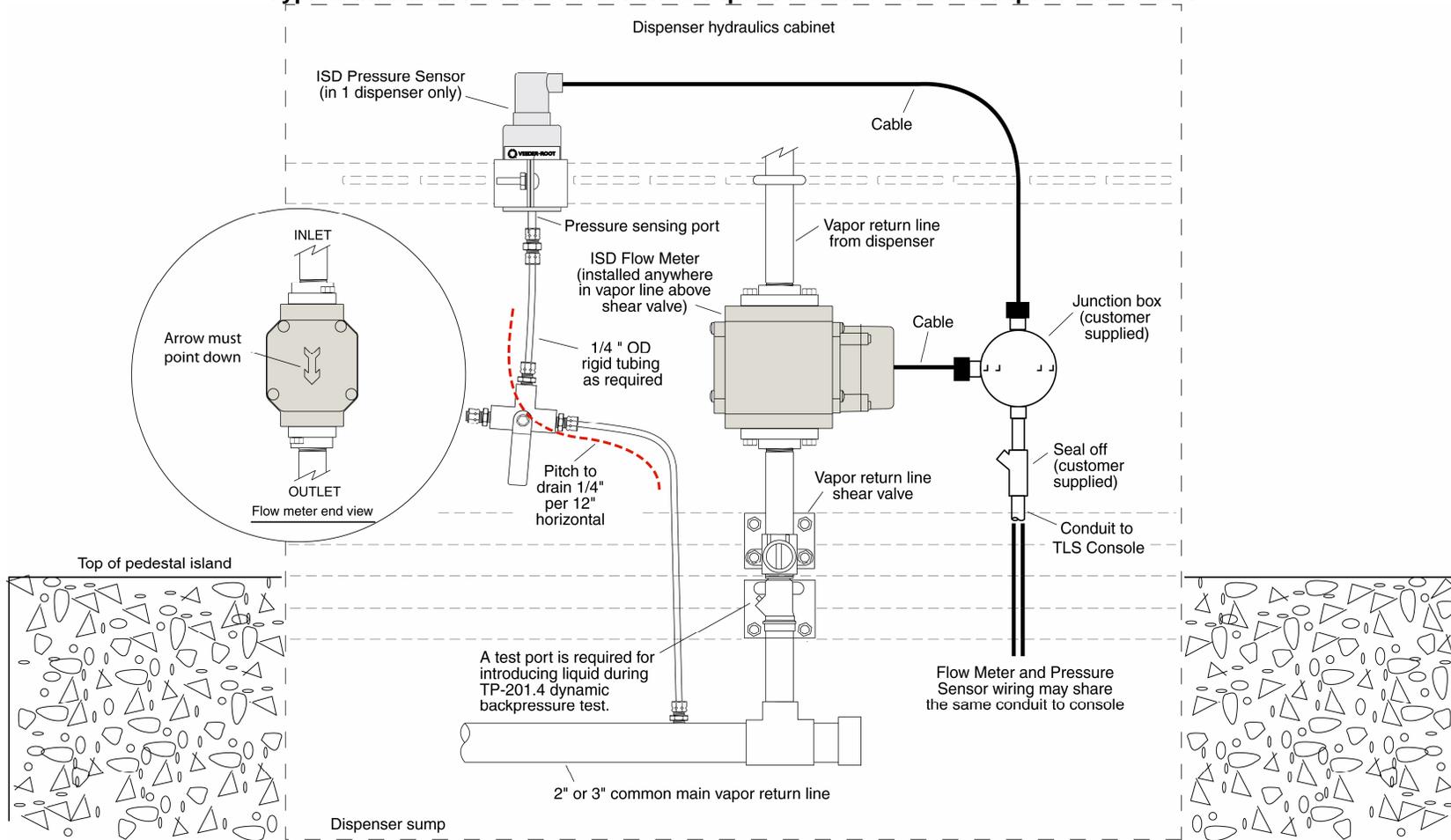
**Exhibit 2  
Figure 2B-15  
Tank Inventory Probe Sensor**



### Executive Order VR-202-A Healy Phase II EVR System Including Veeder-Root ISD

#### Exhibit 2 Figure 2B-16

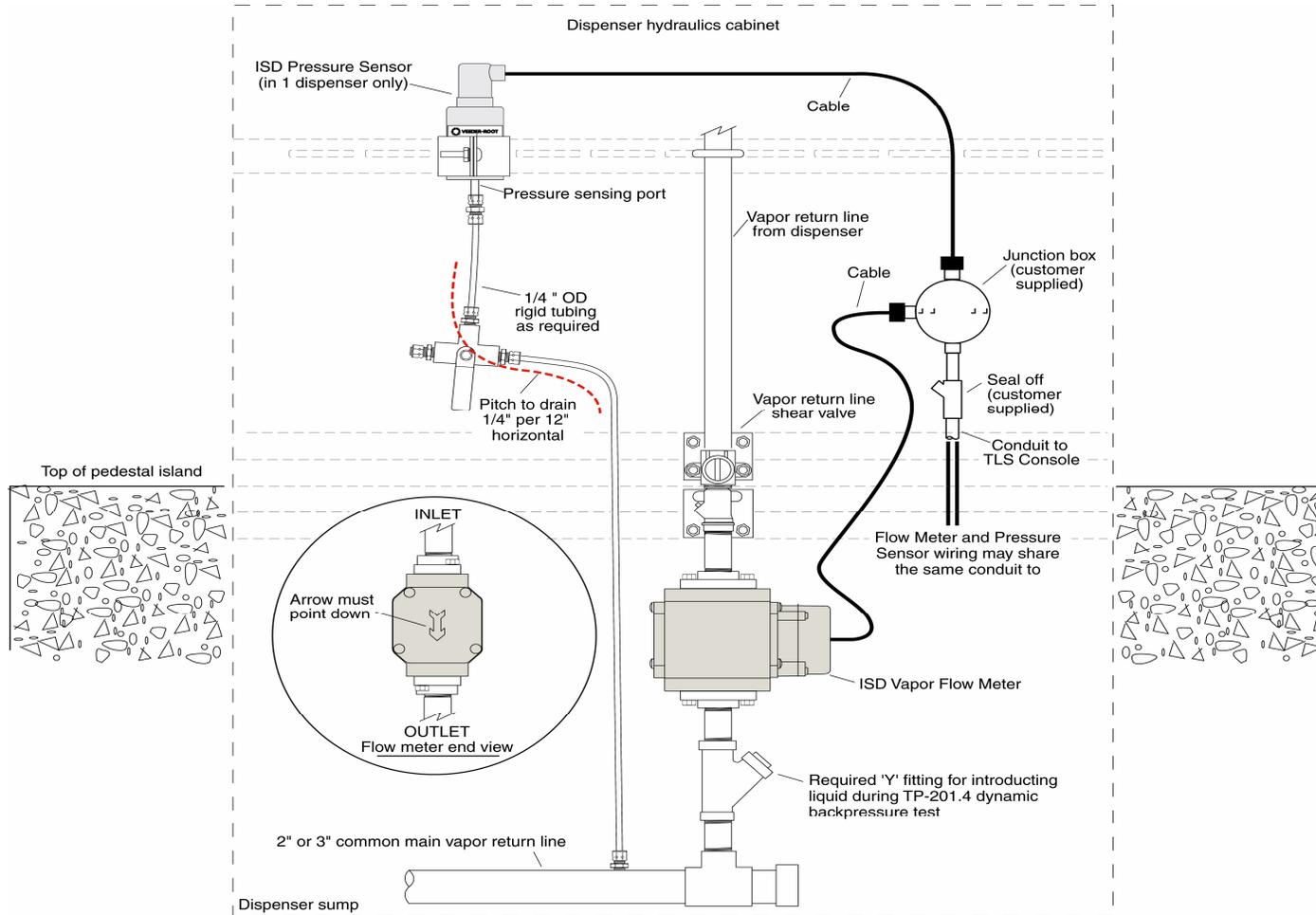
#### Typical Installation of the Veeder-Root Vapor Pressure Sensor & Vapor Flow Sensor



# Executive Order VR-202-A Healy Phase II EVR System Including Veeder-Root ISD

## Exhibit 2 Figure 2B-17

### Typical Installation of the Veeder-Root Vapor Pressure Sensor and Vapor Flow Sensor





**Executive Order VR-202-A  
Healy Phase II EVR System  
Including Veeder-Root ISD**

**Exhibit 2  
Figure 2B-19  
Healy Systems Scheduled Maintenance**

1.0 Scheduled Maintenance Instructions for a Healy Systems with VP1000 Vacuum Source and 900 Series EVR Nozzle.

By design, the Healy System requires limited maintenance. Initial problems are usually caused by installation irregularities that are easily detected and repaired by performing the “VP1000 Vacuum Performance Test Procedure” located in the dispenser installation manual. Periodic maintenance described here will eliminate problems and maintain peak operation of the system.

Note: Only a Healy Certified Technician can service any problems discovered while conducting the Weekly or Quarterly Inspection and Testing. For information regarding Healy Certified Training Courses please contact a local Healy Distributor. Healy Distributors can be found on the Healy website @ [www.healysystems.com](http://www.healysystems.com) - or you can call Healy Systems direct @ 603-882-2472 for more information.

1.1 Weekly Inspection and Testing

- Inspect each nozzle, hose, and breakaway for damage, loose connections, or leaks. Inspect nozzles for damaged vapor boots or spouts. Any nozzle with a vapor collection boot which is missing, or which has one half of the mini-boot faceplate or greater missing should be replaced or repaired as soon as practicable. Spouts with visible damage must be replaced.
- Inspect hoses for wear, severe kinks, cracks, and splitting. Replace if wire braid is visible.
- Test the VP1000 Vacuum Pump for normal operation using the following test procedure:
  - Normal operation will have the VP1000 Vacuum Pump running at low speed if only one side of a dispenser / pump is activated (ready to dispense fuel) and will run at full speed if both sides of the dispenser are activated (ready to dispense fuel). The VP1000 vacuum pump may continue to run for a few seconds after a nozzle is reholstered.

**NOTE:** If any of the four bullets below cannot be achieved, remove the dispenser from service and call a Healy Certified Technician.

- The VP1000 vacuum pump should come on immediately when a nozzle is lifted and the dispenser is activated and ready to dispense fuel.
- Repeat for each nozzle on both sides of the dispenser being tested, one at a time, to verify the VP1000 vacuum pump is running after the dispenser is activated and ready to dispense fuel.
- Leave one nozzle activated on the first side and with the pump running, lift a nozzle on the other side of the dispenser (activated as above) and listen for a change of speed (increase) in the pump motor. Return both nozzles to the dispenser.
- Repeat the above procedures to activate both sides of the dispenser, but start with the opposite side of the dispenser. If the above procedures can be confirmed by starting with the opposite side of the dispenser, the VP1000 vacuum pump is correctly installed. After the VP1000 vacuum pump gets to second speed, it will not drop back to single speed until one nozzle is reholstered.

**Note: In parts of the country where the outside temperature drops below 35° F, the VP1000 vacuum pump motor will automatically run at a very low RPM to prevent freezing. This is normal operation.**

## 1.2 Quarterly Inspection and Testing

- 1.2.1 Perform Weekly Inspection prior to Quarterly inspection.
- 1.2.2 Inspect the VP1000 vacuum pump for loose or damaged vapor line connections. If copper tubing is kinked or loose tag out dispenser and call a Healy Certified Technician for service.
- 1.2.3 Check product dispensing flow rate at maximum (handheld) dispensing position. Replace dispenser filters when flow rate is below 6.5 gpm. If flow rates exceed 10 gpm, install Healy 1301 Flow Limiter. Verify flow rate is between 6.0 gpm and 10.0 gpm.
- 1.2.4 Check Clean Air Separator for proper operating configuration. See EO VR-202-A, Exhibit 2, Figure 2B-5 for guidance.

1.3 Annual Inspection and Testing to Be Performed By a Healy Certified Technician.

The following procedures are recommended to be conducted in the order listed.

- 1.3.1 Perform weekly and quarterly inspection prior to Annual Inspection.
- 1.3.2 Conduct static pressure performance of the Healy Clean Air Separator (EO VR-202-A, Exhibit 4).
- 1.3.3 Conduct pressure decay test (TP 201.3 and EO VR-202-A, Exhibit 8).
- 1.3.4 Conduct dispenser vapor line tightness test found in the Healy dispenser manual under “testing the system” for each dispenser at GDF. Repair all leaks.
- 1.3.5 Conduct V/L test on all nozzles (EO VR-202-A, Exhibit 5). Adjust and replace as necessary.

1.4 Procedure for Reconnecting Breakaway and Testing Fueling Point after Drive-Off.

**Note: The following procedure does not require a Healy Certified Technician. If any of the tests listed requires removing the fueling point or dispenser from service, contact a Healy Certified Technician. Breakaway reconnections and/or service by a Healy Certified Technician shall be logged in the GDF Maintenance Log.**

- 1.4.1 After a Drive-Off, inspect the nozzle, hose and breakaway for damage. Spouts with visible damage must be replaced. Hoses with wire braid showing must be replaced.
- 1.4.2 Reconnect the breakaway assembly per the procedure in the Reconnectable Breakaway Coupling (P/N 8701VV) section of the *ARB Approved Installation, Operation and Maintenance Manual of the Healy Phase II EVR System Including Veeder-Root ISD System*. This procedure requires the use of the Healy reconnection clamp, P/N 795. Verify that the tip of the shear screw installed prior to the Drive-Off is removed from the dispenser end body (connected to the whip hose) of the breakaway.

**Note: Do not remove the hose or nozzle from the bottom section of the breakaway, as the breakaway is holding the liquid gasoline in the hose/nozzle.**

- 1.4.3 Authorize dispenser and inspect the hanging hardware for liquid leaks and meter creep (fueling position display is counting up

without dispensing product). If no liquid leaks or meter creep are observed, proceed to section 1.4.4 of this procedure. If liquid leaks or meter creep are observed, remove the fueling point from service and conduct the following:

- 1.4.3.1 Use the breakaway reconnection procedure, referenced in section 1.4.2, in reverse order to disconnect the breakaway. Remove the nozzle and hose from the dispenser. (A towel can be placed into the upper portion of the nozzle holster of the dispenser to stop the dispenser beep associated with the nozzle being removed from the holster).
  - 1.4.3.2 Install a plastic bag around the portion of the breakaway still connected to the dispenser whip hose. The plastic bag shall be large enough to enclose the breakaway and shall have a thickness of no greater than 2 mils. In California, 12" x 20" x 2 mil thick bags are available from the Air Resources Board by calling (800) 952-5588.
  - 1.4.3.3 Initialize the dispenser for fueling. **Do not dispense any fuel.**
  - 1.4.3.4 With the dispenser initialized, observe the bagged breakaway for a half a minute.
  - 1.4.3.5 If the bag collapses (indicating the breakaway is not maintaining vapor integrity), or liquid leaks or meter creep are observed, remove the dispenser from service. If the bag does not collapse (indicating the breakaway is maintaining vapor integrity) and no liquid leaks or meter creep are observed, the dispenser can remain in service.
- 1.4.4 Conduct the Nozzle Bag Test using the procedure from Exhibit 7 of Executive Order VR-202-A. If the bag around the nozzle does not collapse, proceed to section 1.4.5 of this procedure. A nozzle where the bag is collapsing indicates a defective vapor valve. If the nozzle bag test indicates a defective vapor valve, remove the fueling point from service and conduct the following:
- 1.4.4.1 Use the breakaway reconnection procedure, referenced in section 1.4.2, in reverse order to disconnect the breakaway. Remove the nozzle and hose from the dispenser. (A towel can be placed into the upper portion of the nozzle holster of the dispenser to stop the dispenser beep associated with the nozzle being removed from the holster).

- 1.4.4.2 Install a plastic bag around the portion of the breakaway still connected to the dispenser whip hose. The plastic bag shall be large enough to enclose the breakaway and shall have a thickness of no greater than 2 mils. In California, 12" x 20" x 2 mil thick bags are available from the Air Resources Board by calling (800) 952-5588.
  - 1.4.4.3 Initialize the dispenser for fueling. **Do not dispense any fuel.**
  - 1.4.4.4 With the dispenser initialized, observe the bagged breakaway for a half a minute.
  - 1.4.4.5 If the bag collapses (indicating the breakaway is not maintaining vapor integrity), or liquid leaks or meter creep are observed, remove the dispenser from service. If the bag does not collapse (indicating the breakaway is maintaining vapor integrity) and no liquid leaks or meter creep are observed, the dispenser can remain in service.
- 1.4.5 The following tests shall be performed after passing sections 1.4.3 and 1.4.4 of this procedure.
- 1.4.5.1 Test the insertion interlock feature of the nozzle using the procedures outlined in Sections 1.1.7 and 1.1.8 in the Healy Model 900 Nozzle section of the *ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System*. If the nozzle fails either of these tests, remove the fueling point from service.
  - 1.4.5.2 Test the automatic shutoff feature of the nozzle using the procedures outlined in Sections 1.2.8, 1.2.9 and 1.2.10 in the Healy Model 900 Nozzle section of the *ARB Approved Installation, Operation and Maintenance Manual for the Healy Phase II EVR System Including Veeder-Root ISD System*. If the nozzle fails any of the tests, remove the fueling point from service.

For more information about testing and /or maintenance of Healy products, contact Healy Technical Services @ (603) 882-2472.