# Exhibit 2

# Executive Order VR-104 Revision N

# Installation, Maintenance and Compliance Specifications

This exhibit contains the installation, maintenance and compliance standards and specifications applicable to a CNI Manufacturing Phase I Vapor Recovery System (CNI Manufacturing System) installed in a gasoline dispensing facility (GDF).

# **General Specifications**

- 1. Typical installations of the CNI Manufacturing System are shown in Figures 2A, 2B, 2C, 2D, 2E, 2F, and 2G.
- 2. The CNI Manufacturing System shall be installed, operated and maintained in accordance with the CARB Approved Installation, Operation and Maintenance Manual for the CNI Manufacturing Phase I Vapor Recovery System.
- 3. Any repair or replacement of system components shall be done in accordance with the CARB Approved Installation, Operation and Maintenance Manual for the CNI Manufacturing Phase I Vapor Recovery System.
- 4. Unless otherwise specified in this Executive Order (EO), the CNI Manufacturing Phase I Vapor Recovery System shall comply with the applicable performance standards and performance specifications in CP 201.
- 5. Installation, maintenance, and repair of system components, including removal and installation of such components in the course of any required tests, shall be performed by CNI Manufacturing certified technicians. Additional certifications may be required in accordance with District requirements.

# Pressure/Vacuum Vent Valves for Storage Tank Vent Pipes

- 1. No more than three certified pressure/vacuum vent valves (P/V Valves) listed in Exhibit 1 shall be installed on any GDF underground storage tank system.
- 2. Compliance determination of the following P/V valve performance specifications shall be at the option of the districts:
  - a. The leak rate of each P/V valve shall not exceed 0.05 cubic feet per hour (CFH) at 2.0 inches H2O positive pressure and 0.21 CFH at 4.0 inches H<sub>2</sub>O negative pressure as determined by TP 201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves (October 8, 2003).
  - b. The positive pressure setting is 2.5 to 6.0 inches of  $H_2O$  and the negative pressure setting is 6.0 to 10.0 inches of  $H_2O$  as determined by TP 201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves (October 8, 2003).
- 3. Compliance determination of the P/V valve performance specifications in items 2a and 2b for the FFS PV-Zero P/V vent valve shall be conducted with the valve remaining in its installed position on the vent line(s). The PV-Zero section of the CARB-Approved Installation, Operation and Maintenance Manual for the CNI

Manufacturing Phase I Vapor Recovery System outlines the equipment needed to test the valve in its installed position.

- 4. At least one pressure/vacuum (P/V) vent valve shall be installed on each tank vent. If two or more P/V vent valves are used, they shall be installed in parallel, so that each can serve as a backup to the other if one should fail to open properly. A manifold may be installed on the vent pipes to reduce the number of potential leak sources and P/V valves installed. Vent pipe manifolds shall be constructed of steel pipe or an equivalent material that has been listed for use with gasoline. If a material other than steel is used, the GDF operator shall make available information demonstrating that the material is compatible for use with gasoline. One example of a typical vent pipe manifold is shown in Figure 2H. This shows only one typical configuration: other manifold configurations may be used. For example, a tee may be located in a different position, or fewer vent pipes may be connected, or more than one P/V valve may be installed on the manifold.
- 5. Each P/V valve shall have permanently affixed to it a yellow, gold, or white colored label with black lettering stating the following specifications:

Positive pressure setting: 2.5 to 6.0 inches  $H_2O$ Negative pressure setting: 6.0 to 10.0 inches  $H_2O$ Positive Leak rate: 0.05 CFH at 2.0 inches  $H_2O$ Negative Leak rate: 0.21 CFH at 4.0 inches  $H_2O$ 

- 6. When installing either the VST-EVRPV-100 or VST-EVRPV-200, the VST-RC-200 rain cap must be installed with it. If multiple VST-EVRPV valves are installed, it is permissible to manifold above the VST-EVRPV valves so only a single VST-RC-200 rain cap is installed.
- 7. Conducting TP-201.1E on the VST-EVRPV-200 P/V valve can be performed with the VST Test In Place (TIP) device. This device isolates the P/V vent being tested from the rest of the UST system to allow for P/V testing without disturbing operations at the site. See Page 4 of the VST-EVRPV portion of the CARB-Approved Installation, Operation and Maintenance (IOM) manual for instructions.
- 8. The VST Test In Place (TIP) device may be used to isolate the VST-EVRPV-200 P/V from the rest of the UST to perform other system pressure tests as needed. See Page 4 of the VST-EVRPV portion of the CARB-Approved Installation, Operation and Maintenance (IOM) manual for instructions.

# Rotatable Product and Vapor Recovery Adaptors

 Rotatable product and vapor recovery adaptors shall be capable of at least 360 degree rotation and have an average static torque not to exceed 108 pound inch (9 pound foot). Compliance with this requirement shall be demonstrated in accordance with TP 201.1B, Static Torque of Rotatable Phase I Adaptors (October 8, 2003). Use CNI Manufacturing Torque Test Tool Part Number EVRSYS100, as an equivalent Torque Test Tool per section 5.2 of TP 201.1B, rather than Phil Tite Torque Test Tool Part Number 6004. The Phil Tite tool is not compatible with CNI Manufacturing dust caps. 2. The vapor adaptor poppet shall not leak when closed. Compliance with this requirement shall be verified by the use of commercial liquid leak detection solution, or by bagging, when the vapor containment space of the underground storage tank is subjected to a non zero gauge pressure. (Note: leak detection solution will detect leaks only when positive gauge pressure exists).

## Vapor Recovery and Product Adaptor Dust Caps

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

# Spill Container Drain Valve

The spill container drain valve shall be configured to drain liquid directly into the drop tube and shall be isolated from the underground storage tank ullage space. The leak rate of the drain valve shall not exceed 0.17 CFH at 2.0 inches H<sub>2</sub>O. Depending on the presence of the drop tube overfill prevention device, compliance with this requirement shall be demonstrated in accordance with either TP 201.1C, Leak Rate of Drop Tube/Drain Valve Assembly or TP-201.1D (July 12, 2021), Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves (July 12, 2021).

# Phase I Drop-Tubes with Overfill Prevention Devices

- 1. The Drop Tube Overfill Prevention Device (overfill device) is designed to restrict the flow of gasoline delivered to the underground storage when liquid levels exceed a specified capacity. The drop tube overfill device is not a required component of the vapor recovery system, but maybe installed as an optional component of the system. Other requirements may apply.
- 2. The leak rate of Phase I drop-tube overfill prevention devices shall not exceed 0.17 CFH at 2.0 inches H<sub>2</sub>O). The leak rate shall be determined in accordance with TP-201.1D, Leak Rate of Drop Tube Overfill Prevention Devices and Spill Container Drain Valves (July 12, 2021).
- 3. The discharge opening of the fill-pipe must be entirely submerged when the liquid level is six inches above the bottom of the tank.

## Phase I Drop-Tubes without Overfill Prevention Devices

- 1. Drop tubes that do not have an overfill prevention device shall not leak and shall be tested in accordance with TP-201.1C, Leak Rate of Drop Tube/Drain Valve Assembly (July 12, 2021).
- 2. The discharge opening of the fill-pipe must be entirely submerged when the liquid level is six inches above the bottom of the tank.

# Vapor Recovery Riser Offset

1. The vapor recovery tank riser may be offset from the tank connection to the vapor recovery Spill Container provided that the maximum horizontal distance (offset distance) does not exceed twenty (20) inches. One example of an offset is shown in Figure 2I.

2. The vapor recovery riser shall be offset using commercially available, four (4) inch diameter steel pipe fittings.

## Tank Gauge Port Components

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

## <u>Warranty</u>

Each manufacturer listed in Exhibit 1 shall include a warranty tag with the certified component(s). The manufacturer warranty tag, included with each component, shall be provided to the service station owner/operator at the time of installation.

## **Connections and Fittings**

All connections and fittings not specifically certified with an allowable leak rate shall not leak. The absence of vapor leaks shall 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.)

#### Maintenance Records

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

## Table 2-1

Gasoline Dispensing Facility Compliance Standards and Specifications

Component / System	Test Method	Standard or Specification	
Rotatable Phase I Adaptors	TP-201.1B	Minimum: 360-degree rotation Maximum: 108 pound-inch average static torque	
Overfill Prevention Device	TP-201.1D	$\leq$ 0.17 CFH at 2.00 in H <sub>2</sub> O	
Spill Container Drain Valve	TP-201.1C or TP-201.1D	$\leq 0.17$ CFH at 2.00 in $H_2O$	
P/V Valve <sup>1</sup>	TP-201.1E	Positive pressure setting: 2.5 to 6.0 in $H_2O$ Negative pressure setting: 6.0 to 10.0 in $H_2O$ Positive Leakrate: 0.05 CFH at 2.0 in $H_2O$ Negative Leakrate: 0.21 CFH at -4.0 in $H_2O$	
Gasoline Dispensing Facility	TP-201.3	As specified in TP-201.3 and/or CP-201	
Connections and fittings certified without an allowable leak rate	Leak Detection Solution or Bagging	No leaks	

<sup>&</sup>lt;sup>1</sup> Compliance determination is at the discretion of the district

## Table 2-2

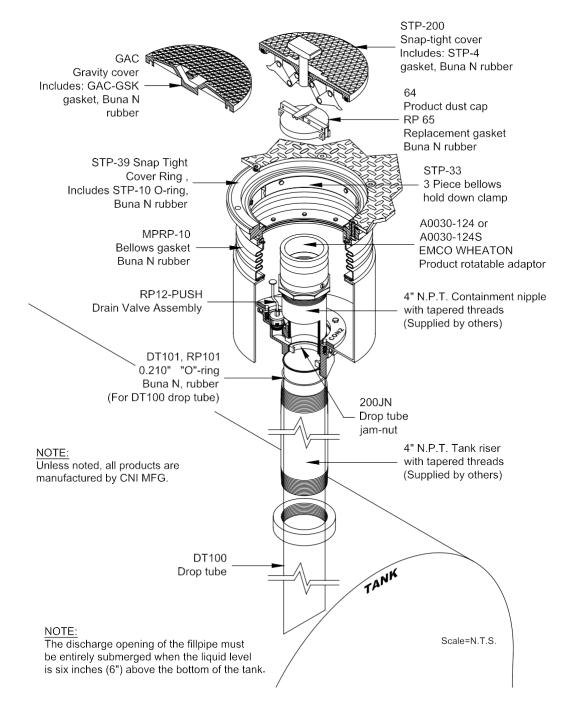
# Maintenance Intervals for System Components<sup>2</sup>

Manufacturer	Component	Maintenance Interval	
OPW	Pressure/Vacuum Vent Valve	Annual	
Husky	Pressure/Vacuum Vent Valve	Annual	
FFS	Pressure/Vacuum Vent Valve	Annual	
CNI Manufacturing	Tank Gauge Port Components	Annual Inspection	
CNI Manufacturing	Dust Caps	Annual Inspection	
CompX	Dust Caps	Annual Inspection	
OPW	Dust Caps	Annual Inspection	
CNI Manufacturing	Drop Tube	Annual Test	
EMCO Wheaton Retail	Rotatable Phase I Product and Vapor Adaptors	Annual Tests	
EMCO Wheaton Retail	Drop Tube Overfill Prevention Valve	Annual Tests	
CNI Manufacturing	Spill Container Drain Valve	18 Months	
CNI Manufacturing	Spill Containment	Annual Inspection	

<sup>&</sup>lt;sup>2</sup> Maintenance must be conducted within the interval specified from the date of installation and at least within the specified interval thereafter.

#### Figure 2A

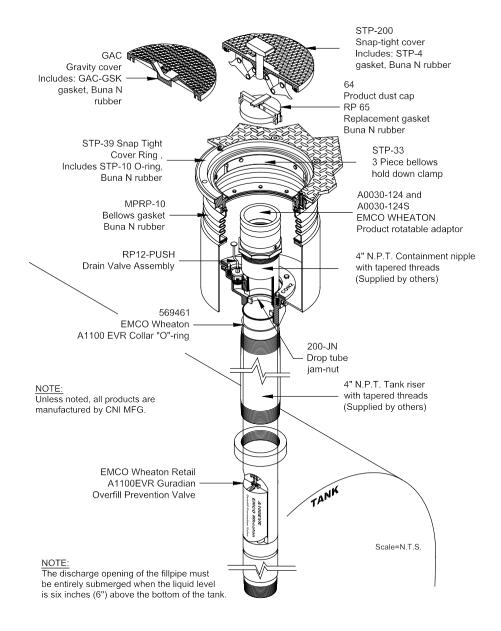
## Typical Product Side Installation of CNI Manufacturing 2 Point System Model CON2 using DT100 Drop Tube<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> McGard FL1 or FL2 Fuel Lock (Optional - Not Pictured), if installed, would be positioned inside the containment nipple below the rotatable adaptor.

## Figure 2B

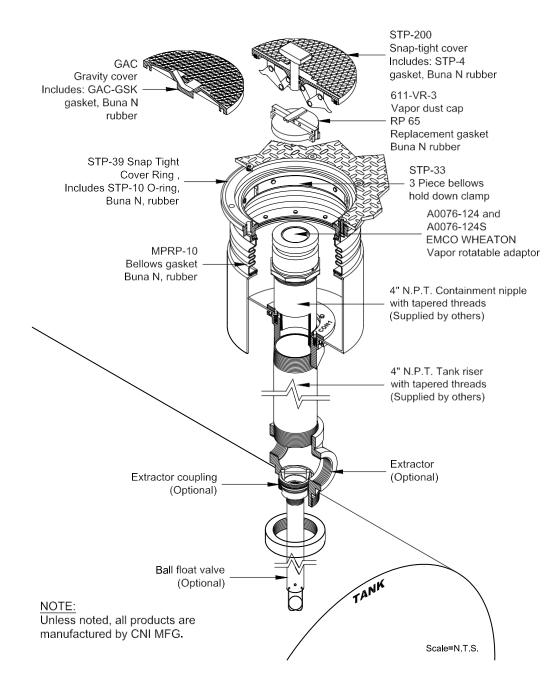
# Typical Product Side Installation of CNI Manufacturing 2 Point System Model CON2 using EMCO Wheaton A1100EVR Guardian Overfill Prevention<sup>2</sup>



<sup>&</sup>lt;sup>2</sup> McGard FL1 or FL2 Fuel Lock (Optional - Not Pictured), if installed, would be positioned inside the containment nipple below the rotatable adaptor

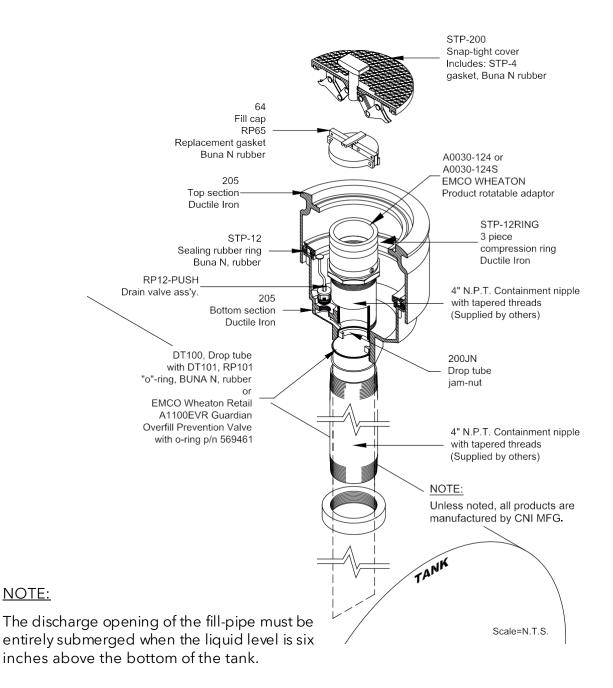
## Figure 2C

# Typical Vapor Side Installation of CNI Manufacturing 2 Point System Model CON1



#### Figure 2D

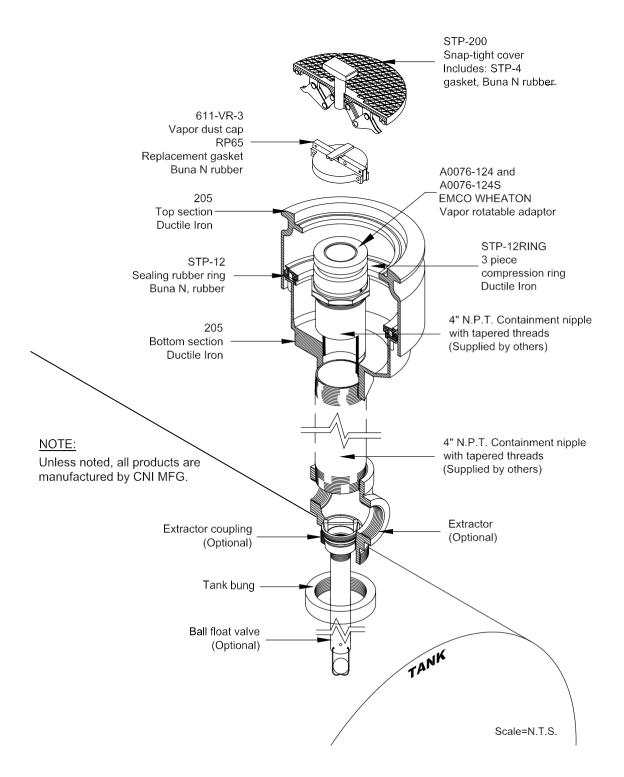
Typical Product Side Installation of CNI Manufacturing Stand Alone/Direct Bury System<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> McGard FL1 or FL2 Fuel Lock (Optional - Not Pictured), if installed, would be positioned inside the containment nipple below the rotatable adaptor

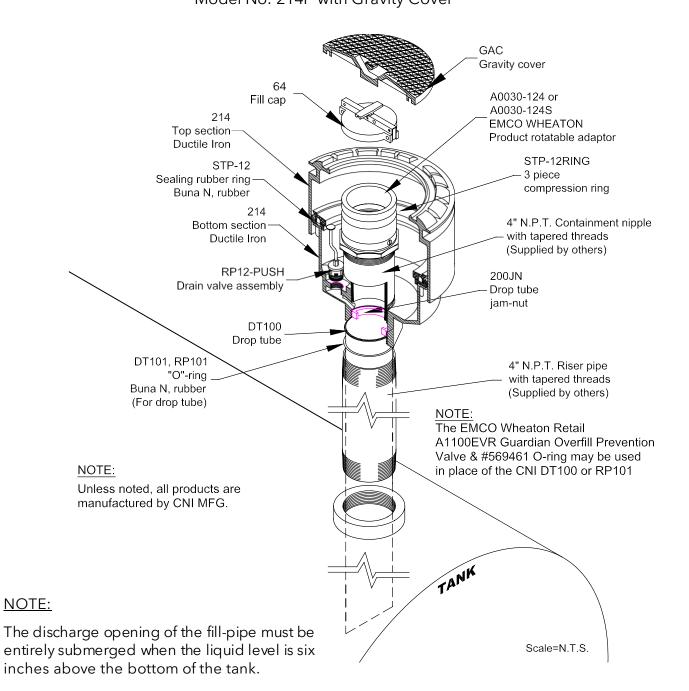
#### Figure 2E

Typical Vapor Side Installation of CNI Manufacturing Stand Alone/Direct Bury System



## Figure 2F

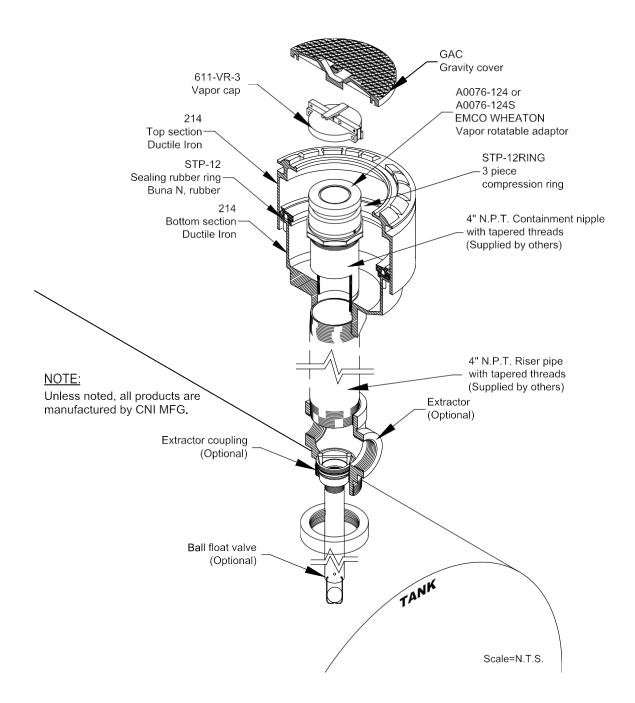
Typical Product Side Installation of CNI Manufacturing Stand Alone/ Direct Bury/ System Model No. 214P with Gravity Cover<sup>4</sup>



<sup>&</sup>lt;sup>4</sup> McGard FL1 or FL2 Fuel Lock (Optional - Not Pictured), if installed, would be positioned inside the containment nipple below the rotatable adaptor.

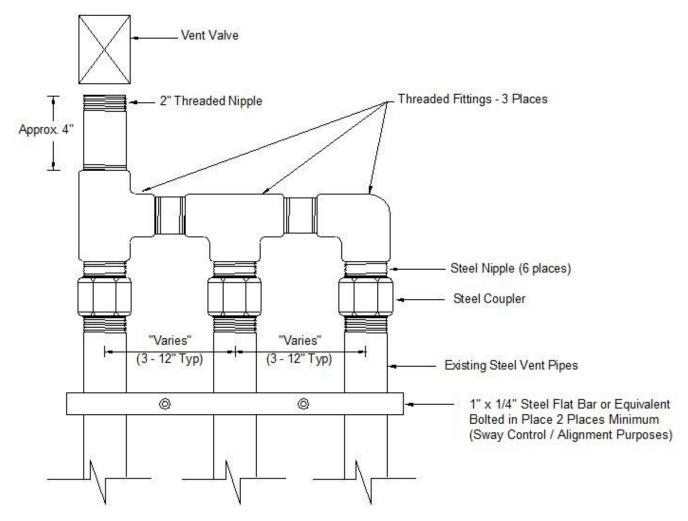
## Figure 2G

Typical Vapor Side Installation of CNI Manufacturing Stand Alone/Direct Bury System Model No. 214V with Gravity Cover



## Figure 2H

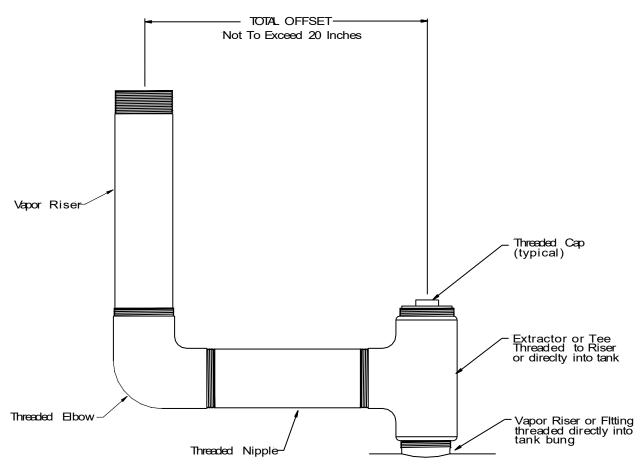
## Typical Vent Pipe Manifold



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

## Figure 2I

Typical Vapor Recovery Riser Offset



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

# <u>Figure 2J</u>

# Example of a GDF Maintenance Record

Days of Maintenance/Test Inspection Failure (Including date and time of maintenance call)	Repair Date to Correct Test Failure	Maintenance/Test Inspection performed and outcome	Affiliation	Name and Certified Technician Number of Individual Conducting Maintenance or Test	Telephone Number

Walter Ham (Oct 9, 2024 15:55 PDT)