#### EXHIBIT 2

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

This exhibit contains the installation, maintenance and compliance standards and specifications applicable to the Morrison Bros. Phase I Enhanced Vapor Recovery (EVR) system (Morrison Bros. System) installed on aboveground storage tanks (AST). Table 2-1summarizes the compliance standard and specification with the corresponding test method. Table 2-2 describes the maintenance interval for the Phase I EVR System components.

#### **General Specifications**

- 1. Typical installations of the Morrison Bros. System and system components areshown in Figures 2A, 2B, 2C, 2D, 2E, 2F, 2G, 2H, 2I, 2J, 2K, 2L, 2M, 2N, and 2O.
- The Morrison Bros. System shall be installed, operated, and maintained in accordance with the CARB Approved Installation, Operation and MaintenanceManual for Executive Order VR-402-G Morrison Bros. Phase I Enhanced Vapor Recovery System for Aboveground Storage Tanks (CARB Approved IOM).
- **3**. Any repair or replacement of system components shall be done in accordance with the CARB Approved IOM).
- 4. Unless otherwise specified in this Executive Order (EO), the Morrison Bros.System shall comply with the applicable performance standards and performance specifications in CP-206.
- 5. Maintenance and repair of system components, including removal and installation of such components in the course of any required tests, shall be performed by Morrison Certified Technicians. Additional certifications may be required in accordance with District requirements.

#### Non-rotatable Product and Vapor Adaptors

Morrison Bros. non-rotatable vapor adaptors and product adaptors are not specificallycertified with an allowable leak rate and shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution or bagging, when the vapor containment space of AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

The bung diameter and associated vapor return piping of the AST shall be greater thanor equal to the diameter of the Phase I product drop tube. In addition, no liquid condensate traps are allowed within the Phase I vapor return path piping under this configuration.

#### Product Coupler

Morrison Bros. product couplers shall fit the matching non-rotatable Morrison Bros. product adapters so that spillage of gasoline during fuel deliveries is minimized. During fuel deliveries, a Morrison Bros. coupler (928 Series) shall be used with a Morrison Bros. product adaptor (927 Series). The Morrison Bros. 928 Series coupler can be provided by the fuel supplier or provided by the gasoline dispensing facility (GDF) operator.

#### Vapor and Product Adaptor Dust Caps

Dust caps with intact gaskets shall be installed on all Phase I product and vaporadaptors.

#### **Emergency Vents**

The emergency vents are not specifically certified with an allowable leak rate and shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution or bagging, when the vapor containment space of AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks onlywhen positive gauge pressure exists).

#### **Overfill Prevention Valve Assembly and Drop Tube**

- 1. The overfill prevention device (overfill device) is designed to restrict the flow of gasoline delivered to AST when liquid levels exceed a specified capacity.
- 2. The overfill prevention device is installed below the Morrison Bros. product adaptor (see figure 2A and 2E) which has a built in poppet to prevent vapor leakage and spillage of product after delivery. The overfill prevention device is not specifically certified with an allowable leak rate and the leak rate cannot be determined by testing. Testing to determine the leak rate of the overfill prevention device is not needed since leaks from other components (e.g., product and vapor adaptors, emergency vents, spill container drain valves, dedicated gauging port, tank gauge components, connectors, and fittings) can be determined by procedures specified in this Exhibit.
- **3**. The discharge opening of the drop tube must be entirely submerged when the liquid level is above the bottom of the tank as shown in figures 2A, 2E, 2H, 2J,2K, 2L, 2M, 2N, and 2O (see figures for installation details).

#### **Direct Fill Spill Container Drain Valve**

The Morrison Bros. direct fill spill container does not contain a drain valve and is not specifically certified with an allowable leak rate. Excess liquid is to be evacuated anddisposed of according to local and federal regulations.

#### Direct Fill Integral Spill Container Drain Valve

The Convault direct fill integral spill container drain valve shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution when the vapor containment space of the AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

#### Dedicated Gauging Port with Drop Tube (Optional)

A dedicated port for manual tank gauging is used to measure gasoline levels in the AST with a gauging stick. The gauging port shall have a drop tube with a Morrison Bros. capand adapter. The dedicated port and all associated components are not specifically certified with an allowable leak rate and shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution or bagging, when the vapor containment space of AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

#### Tank Gauge Components (Optional)

The tank gauge components are not specifically certified with an allowable leak rate andshall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution or bagging, when the vapor containment space of an AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

#### Monitoring Cap And Adaptor (Optional)

The monitoring cap and adaptor is not specifically certified with an allowable leak rateand shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution by bagging, when the vapor containment space of the AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

#### Drop Tube Diffuser (Optional)

The drop tube diffuser is designed to reduce turbulence when filling a tank and minimizevapor generation. The diffuser is not specifically certified with an allowable leak rate andthe leak rate cannot be determined by testing. Testing to determine the leak rate of the diffuser is not needed because the device is submerged below the liquid level.

#### **Remote Fill Configuration**

Under remote fill configurations (also referred to as side fill), the Phase I vapor recoverypiping 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 AST operator shall provide a manufacturers' listing demonstrating that the material is compatible for use with gasoline. The diameter and associated vapor return piping of AST shall be greater than or equal to the diameter of the Phase I product drop tube opening. In addition, no liquid condensate traps are allowed within the Phase I vapor return path piping under this configuration. The fill pipe may have to be removed upon District request to verify that the bottom of the fill pipe is no greater than 6 inches from the bottom of the tank.

#### **Connections and Fittings**

All connections and fittings not specifically certified with an allowable leak rate shall not leak. Compliance with this requirement shall be verified using commercial liquid leak detection solution or bagging, when the vapor containment space of the AST is subjected to a non-zero pressure. (Note: Leak detection solution will detect leaks only when positive gauge pressure exists).

#### **Maintenance Records**

Each GDF operator/owner shall keep records of maintenance performed at the facility. Such record shall be maintained on site or in accordance with district requirements or policies. The records shall include at a minimum 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. Additional information may be required in accordance with district requirements. An example of a Phase I Maintenance Record is shown in Figure 2P.

#### TABLE 2-1

#### AST Compliance Standards and Specifications

Component / System	Test Method	Standard or Specification	
Phase 1 Adaptors.	Leak Detection Solution or Bagging.	No Leaks.	
Emergency Vents.	Leak Detection Solution of Bagging.	No Leaks.	
Dedicated Gauging Port with Drop Tube and Tank Guage Components.	Jging Port with d Tank Guage Leak Detection Solution of Bagging. Donents.		
Vapor Recovery Systems.	<b>EXHIBIT 6</b> Determination of Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Storage Tanks.	Exhibit 6.	
Drain Valve.	Drain Valve. Leak Detection Solution or Bagging.		
All Connections and Fittings Certified Without an Allowable Leak Rate.	Leak Detection Solution or Bagging	No Leaks.	

#### Table 2-2

#### Maintenance Intervals for Morrison Bros. Phase I EVR AST System Components

Manufacturer	Component	Maintenance Interval	
Morrison Bros.	Tank Gauge Components.	Gauge Components. Annual.	
Morrison Bros.	Dust Caps.	Annual.	
Morrison Bros.	Emergency Vents.	Emergency Vents. Annual.	
Morrison Bros.	Phase 1 Product and Vapor Adaptors. Annua		
Morrison Bros.	Spill Container.	Annual.	
Morrison Bros.	Drop Tube Overfill Prevention Device.	None.	
Morrison Bros.	Drop Tube.	None.	
Morrison Bros.	Drop Tube Extender. None		
Morrison Bros.	Product Coupler. Annual		
Morrison Bros.	Monitoring Caps. Annual.		
Morrison Bros.	Drop Tube Diffuser. None.		
Husky Corp.	Pressure / Vacuum Vent Valve 5885. Annual.		

#### **FIGURE 2A**

#### **Typical Direct Fill (Product Side) Installation**

of Morrison Bros. Phase I EVR System for AST



### FIGURE 2A-1

With Morrison 516 Series Spill Container



## FIGURE 2A-2

With Integral Spill Container

#### **FIGURE 2B**

#### Typical Vapor Recovery Adaptor Configuration

of Morrison Bros. Phase I EVR System for AST



#### **FIGURE 2C**

#### **Typical Emergency Vent Valve Installation**

of Morrison Bros. Phase I EVR System









**NOTE:** For flange models, use gasket material made by Fibreflex. More Information is available at <u>http://www.fibreflex.com</u>

#### **FIGURE 2D**

#### **Typical Remote Fill Configuration**

of Morrison Bros. Phase I EVR System for AST

(NOTE: The remote spill container is optional and not a vapor recovery component.)



#### FIGURE 2E



#### **Typical Remote Product Pathway Configuration for AST - Tank Side**

Figure 2F Typical Morrison Bros. Coupler and Adaptor



#### **FIGURE 2G**

**Typical Mechanical Tank Gauge Configuration** of Morrison Bros. Phase I EVR System for AST (Optional)



#### **FIGURE 2H**

#### **Typical Dedicated Gauging Port with Drop Tube**

of Morrison Bros. Phase I EVR System for AST



#### **FIGURE 2I**

# **Typical Monitoring Cap and Adaptor Configuration** for Morrison Bros. Phase I EVR System for AST



#### **FIGURE 2J**

#### Protected Double-Wall AST with Remote Fill



Remote Fill systems: 539 diffuser (shown, optional) or drop tube cut at 45 degree angle. The top of diffuseropening or top of drop tube cut to be no greater than 6" from the bottom of the tank (or per local requirements outside of the State of California).

The fill pipe may have to be removed upon District request to verify that the bottom of the fillpipe is no greater than 6" from the bottom of the tank.

#### **FIGURE 2K**

#### Protected Double-Wall AST with Direct Fill



Direct Fill systems: 539 diffuser (shown, optional) or drop tube cut at 45 degree angle. The top of diffuser opening or top of drop tube cut to be no greater than 6" from the bottom of the tank (or perlocal requirements outside of the State of California).

The fill pipe may have to be removed upon District request to verify that the bottom of the fill pipe isno greater than 6" from the bottom of the tank.

#### **FIGURE 2L**

#### Protected Double-Wall AST with Top Fill and Top Mounted Pump



Remote Fill systems: 539 diffuser (shown, optional) or drop tube cut at 45 degree angle. Thetop of diffuser opening or top of drop tube cut to be no greater than 6" from the bottom of the tank (or per local requirements outside of the State of California).

The fill pipe may have to be removed upon District request to verify that the bottom of the fillpipe is no greater than 6" from the bottom of the tank.

#### **FIGURE 2M**

#### Protected Double-Wall AST with

#### Tank Mounted Remote Fill



Remote Fill systems: 539 diffuser (shown, optional) or drop tube cut at 45 degree angle. Thetop of diffuser opening or top of drop tube cut to be no greater than 6" from the bottom of the tank (or per local requirements outside of the State of California).

The fill pipe may have to be removed upon District request to verify that the bottom of the fillpipe is no greater than 6" from the bottom of the tank.

#### **FIGURE 2N Convault Spill Containerwith Drain** Valve

#### **FIGURE 20 Typical Integral Spill Containerwith Drain Plug**

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Drain Plug National Pipe Thread (N

Use Exact Size Plug

Integral Spill

Container

Lid



20

#### FIGURE 2P

#### Example of a GDF Maintenance Record

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