

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

**Exhibit 3**

**Part I - Healy Manufacturing Performance Standards and Specifications**

The Healy Phase II EVR System Including Veeder-Root ISD and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended May 25, 2006), as well as the requirements specified in this Executive Order. All components (Exhibit 1) shall be manufactured as certified; no change to the equipment, parts, design, materials or manufacturing process shall be made unless approved in writing by the Executive Officer or Executive Officer delegate. Unless specified in Exhibit 2 or in the ***ARB Approved Installation, Operation and Maintenance Manual***, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a gasoline dispensing facility.

**1. NOZZLES**

Every nozzle shall be tested at the factory. Every nozzle shall have affixed to it a card or label stating the performance specifications listed below, and a statement that the nozzle was tested to, and met, the following specifications.

- a. The nozzle vapor valve leak rate shall not exceed 0.038 cubic feet per hour (CFH) at a pressure of +2 inches H<sub>2</sub>O when tested in accordance with the latest version of TP-201.2B.
- b. The nozzle vapor valve leak rate shall not exceed 0.10 CFH at a vacuum of -100 inches H<sub>2</sub>O when tested in accordance with the latest version of TP-201.2B.
- c. The nozzle automatic shut off feature is tested at all service clip settings (either two or three) as well as handheld in accordance with Underwriters Laboratories (UL) Standard 842.
- d. The nozzle is tested in accordance with the California Department of Food and Agriculture Division of Measurement Standards Article 2 (DMS 6-6-97).

- e. The nozzle is manufactured to the specifications that passed all tests conducted during the ARB certification for the following:
  - TP-201.2C - Spillage from Phase II Systems
  - TP-201.2D - Post Fueling Drips From Nozzles
  - TP-201.2E - Gasoline Liquid Retention in Nozzles and Hoses
- f. The nozzle is manufactured to meet the Vapor to Liquid Ratio as specified in Exhibit 2.
- g. The terminal end of each nozzle shall be manufactured in accordance with the specifications referenced in Section 4.7.3 of CP-201.

## **2. INVERTED COAXIAL HOSES**

- a. Every inverted coaxial hose is tested for continuity and pressure tests in accordance with UL Standard 330.

## **3. HOSE ADAPTORS**

- a. Every hose adaptor is tested for continuity and pressure tests in accordance with UL Standard 567.

## **4. RECONNECTABLE BREAKAWAY COUPLINGS**

- a. Every reconnectable breakaway coupling is tested for continuity and pressure tests in accordance with UL Standard 567.

## **5. FLOW LIMITER**

- a. Every flow limiter is tested to 50 pounds per square inch (psi) liquid pressure to verify maximum gasoline flow rate limited to 10.0 gpm.

## **6. VP1000 VACUUM PUMPS**

- a. Every vacuum pump is pressure tested in accordance with UL Standard 79.
- b. Every vacuum pump is manufactured to the exact specifications that passed all tests conducted during the ARB certification.
- c. Every MC100 control module is tested in the factory to verify proper operation.

**7. TANK PRESSURE MANAGEMENT SYSTEM**

- a. The Clean Air Separator tank is designed, constructed, tested, inspected and stamped per the American Society of Mechanical Engineers (ASME) Code Section VIII, Division 1, 2001 Edition, 2003 Addendum.
- b. Every Clean Air Separator bladder is performance and pressure tested using the **Clean Air Separator Performance Test** to ensure its integrity.

## **Part II - Veeder-Root ISD Manufacturing Performance Standards and Specifications**

The Veeder-Root ISD System and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended May 25, 2006), as well as the requirements specified in this Executive Order. All components (Exhibit 1) shall be manufactured as certified; no change to the equipment, parts, design, materials or manufacturing process shall be made unless approved in writing by the Executive Officer or Executive Officer delegate. Unless specified in Exhibit 2 or in the ***ARB Approved Installation, Operation and Maintenance Manual***, the requirements of this section apply to the manufacturing process and are not appropriate for determining the compliance status of a gasoline dispensing facility.

### **1. TLS CONSOLE**

- a. Every Veeder-Root TLS Console equipped with MAG Series Tank Inventory Probe Sensor is built, tested and manufactured as an Automatic Tank Gauge System. The TLS Console has been third-party tested by Midwest Research Institute as a UST fuel leak detection system meeting Volumetric Tank Tightness Testing Method standards.
- b. Every Veeder-Root TLS Console has been designed and manufactured to have an Operating Temperature Range of 32°F to 104°F (0°C to 40°C) and Storage Temperature Range of -40°F to 162°F (-40°C to +74°C).
- c. Every Veeder-Root TLS Console system including software, sensors and modules have been designed and is Underwriters Laboratories (UL), Canadian Standards Association (CSA), and Canadian Underwriters Laboratories (cUL) approved for operation near potentially hazardous fuel storage tanks.
- d. Every TLS Console system including software, sensors and modules have been designed and tested in accordance with ISO-9001 manufacturing quality standards.

### **2. ISD SOFTWARE**

- a. Every Veeder-Root TLS Console with ISD software is manufactured to the specifications that passed the operational test and is compliant with CP-201 ISD performance standards and specifications.

- b. Every Veeder-Root TLS Console with ISD software has been designed, manufactured and tested to continually monitor the connectivity and operability status of all ISD sensors and modules. All TLS Console ISD software has been designed, manufactured and tested to issue a visual, audible as well as printed notification upon failure of the connectivity or operability status of ISD sensors and modules.

### **3. VAPOR FLOW METER**

- a. Every Veeder-Root ISD Vapor Flow Meter is designed, tested and manufactured to interface to the TLS Console system. The ISD Vapor Flow Meter has been designed and tested for measuring flow between 1 - 30 GPM in HC concentrations between 0 – 100% saturation across a –40°F to 150°F (-40°C to 65°C) operating range.

### **4. VAPOR PRESSURE SENSOR**

- a. Every Veeder-Root ISD Vapor Pressure Sensor is designed, tested and manufactured to interface to the TLS Console system. The ISD Vapor Pressure Sensor has been designed and tested for measuring vapor pressure between –5 to +5 IWC in HC concentrations between 0 – 100% saturation across a –40°F to 150°F (-40°C to 150 °C) operating range.

### **5. TANK INVENTORY PROBE SENSOR**

- a. Every Veeder-Root MAG Series Tank Inventory Probe Sensor is designed, tested and manufactured to interface to the TLS Console System. The MAG Series Tank Inventory Probe Sensor has been designed and tested to have an Operating Temperature Range of 32°F to 104°F (0°C to 40°C) and Storage Temperature Range of –40°F to 162°F (-40°C to +74°C).

### **6. TLS CONSOLE MODULES**

- a. Every Veeder-Root TLS Console system module has been designed and tested to interface to the TLS Console System. The TLS Console system modules have been designed, tested and manufactured to have an Operating Temperature Range of 32°F to 104°F (0°C to 40°C) and Storage Temperature Range of –40°F to 162°F (-40°C to +74°C).