

Executive Order VR-201-AE

Assist Phase II EVR System Not Including ISD

Exhibit 3

MANUFACTURING PERFORMANCE STANDARDS AND SPECIFICATIONS

The Assist Phase II EVR System and all components shall be manufactured in compliance with the performance standards and specifications in CP-201 (amended April 23, 2015), 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 **CARB 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 H₂O 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 H₂O 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 specifications that passed the following tests during the CARB certification evaluation:
 - TP-201.2C - Spillage from Phase II Systems
 - TP-201.2D - Post Fueling Drips From Nozzle
 - 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**
Every inverted coaxial hose is tested for continuity and pressure tests in accordance with UL Standard 330.
- 3. HOSE ADAPTORS**
Every hose adaptor is tested for continuity and pressure tests in accordance with UL Standard 567.
- 4. RECONNECTABLE BREAKAWAY COUPLINGS**
Every re-connectable breakaway coupling is tested for continuity and pressure tests in accordance with UL Standard 567.
- 5. FLOW LIMITER**
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 CARB certification.
 - c. Every MC100 control module is tested in the factory to verify proper operation.
- 7. PASSIVE 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.
- 8. ACTIVE TANK PRESSURE MANAGEMENT SYSTEM**
- a. Every Permeator AT-150 processor is performance and pressure tested using the following three tests to ensure proper operation:
 - Vacuum Pump Motor Rotation** - Verifies Clockwise Motor Rotation
 - Low Oil Level** - Verifies that insufficient oil level will trigger audible and visual alarm on control panel.
 - Pressure Integrity** - Verifies that all internal components have been installed correctly.