Manufacturing Performance Standards and Specifications

The Healy Phase II EVR 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. **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 Under Writers 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 LIMITERS

   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.

8. **PRESSURE/VACUUM (P/V) VENT VALVES FOR UST VENT PIPES**
   
a. Every P/V vent valve is performance tested at the factory for cracking pressure and leak rate at each specified pressure setting and shall be done in accordance with TP-201.1E, *Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves*. Each P/V vent valve shall be shipped with a card or label stating the performance specifications listed below, and a statement that the valve was tested to, and met, these specifications.

1. The pressure settings for the P/V vent valve
   - Positive pressure setting of + 2.5 to + 6.0 inches H₂O.
   - Negative pressure setting of - 6.0 to - 10.0 inches H₂O.

2. The leak rate for each P/V vent valve, including connections, shall not exceed:
   - 0.05 CFH at + 2.0 inches H₂O.
   - 0.21 CFH at – 4.0 inches H₂O.

b. Every P/V vent valve shall have permanently affixed to it a yellow or gold label with black lettering listing the positive and negative pressure settings specified above. The lettering of the label shall be a minimum font size of 20.