State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER VR-203-O

Balance Phase II Enhanced Vapor Recovery (EVR) Systems
Not Including In-Station Diagnostics (ISD)

WHEREAS, the California Air Resources Board (ARB) has established, pursuant to California Health and Safety Code sections 25290.1.2, 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during motor vehicle fueling operations (Phase II EVR vapor recovery systems) in CP-201, ***Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities*** (Certification Procedure) as last amended January 9, 2013, incorporated by reference in title 17, California Code of Regulations, section 94011;

WHEREAS, ARB has established, pursuant to California Health and Safety Code sections 39600, 39601, 39607, and 41954, test procedures for determining the compliance of Phase II vapor recovery systems with emission standards;

WHEREAS, Vapor Systems Technologies (VST), Inc. requested amendment of the Balance Phase II EVR System Executive Order VR-203 to include the VST reattachable breakaway as an alternate breakaway;

WHEREAS, the Certification Procedure provides that ARB Executive Officer shall issue an Executive Order if he or she determines that the vapor recovery system conforms to all of the applicable requirements set forth in the Certification Procedure;

WHEREAS, G-01-032 delegates to the Chief of the Monitoring and Laboratory Division the authority to certify or approve modifications to certified Phase I and Phase II vapor recovery systems for gasoline dispensing facilities; and

WHEREAS, I, Michael T. Benjamin, Chief of the Monitoring and Laboratory Division, find that the Balance Phase II EVR System, as modified herein, conforms with all requirements set forth in the Certification Procedure, including compatibility when fueling vehicles equipped with onboard refueling vapor recovery systems, and results in a vapor recovery system which is at least 95 percent efficient and shall not exceed 0.38 pounds of hydrocarbons per 1,000 gallons of gasoline transferred when tested pursuant to TP-201.2, ***Efficiency and Emission Factor for Phase II Systems*** (July 26, 2012).

NOW, THEREFORE, IT IS HEREBY ORDERED that the Balance Phase II EVR Systems are certified to be at least 95 percent efficient and does not exceed 0.38 pounds of hydrocarbon per 1,000 gallons of gasoline transferred in attended and/or self-service mode when used with an ARB-certified Phase I vapor recovery system and

installed, operated, and maintained as specified herein and in the following exhibits. Exhibit 1 contains a list of the equipment certified for use with Balance Phase II EVR Systems. Exhibit 2 contains the performance standards, specifications, and typical installation drawings applicable to the Balance Phase II EVR Systems as installed in a gasoline dispensing facility (GDF). Exhibit 3 contains the manufacturing performance specifications and warranties. Exhibit 4 provides items required in conducting TP-201.3. Exhibit 5 is the liquid removal test procedure. Exhibit 6 provides items required in conducting TP-201.4. Exhibit 7 is the nozzle bag test procedure. Exhibit 8 is the VST ECS hydrocarbon sensor verification test procedure. Exhibit 9 is the test procedure for determining VST ECS vapor processor activation pressure. Exhibit 10 is the Veeder Root vapor pressure sensor verification test procedure. Exhibit 11 is the Veeder-Root vapor polisher operability test procedure. Exhibit 12 is the Veeder-Root vapor polisher hydrocarbon emissions verification test procedure. Exhibit 13 is the Hirt VCS 100 processor operability test procedure. Exhibit 14 is the Franklin Fueling Systems Clean Air Separator static pressure performance test procedure. Exhibit 15 is the VST Green Machine Compliance Test Procedure. Exhibit 16 is the Liquid Condensate Trap compliance test procedure. Exhibit 17 is reserved for a future procedure and intentionally left blank. Exhibit 18 is Accessing PMC and ISD Parameters at Gasoline Dispensing Facilities (GDFs) with Veeder-Root's "Maintenance Tracker" Security Feature Installed & Enabled.

IT IS FURTHER ORDERED that compliance with the applicable certification requirements, rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the Office of the State Fire Marshal of the Department of Forestry and Fire Protection, the Division of Occupational Safety and Health of the Department of Industrial Relations, and the Division of Water Quality of the State Water Resources Control Board are made conditions of this certification.

IT IS FURTHER ORDERED that each component manufacturer listed in Exhibit 1 shall provide a warranty for the vapor recovery component(s) to the initial purchaser. The warranty shall be passed on to each subsequent purchaser within the warranty period. The warranty shall include the ongoing compliance with all applicable performance standards and specifications and shall comply with all warranty requirements in Section 16.5 of the Certification Procedure. Manufacturers may specify that the warranty is contingent upon the use of trained installers. The manufacturer warranty tag, included with each component, shall be provided to the service station owner/operator at the time of installation.

IT IS FURTHER ORDERED that every certified component manufactured by VST, EMCO, Goodyear, Veeder-Root, Hirt, OPW, and Franklin Fueling Systems shall meet the manufacturing performance specifications as provided in Exhibit 3.

IT IS FURTHER ORDERED that the certified Balance Phase II EVR Systems shall be installed, operated, and maintained in accordance with the ***ARB Approved Installation, Operation, and Maintenance Manual***. Equipment shall be inspected weekly, quarterly, and annually per the procedures identified in the ***ARB Approved***

Installation, Operation, and Maintenance Manual. These inspections shall also apply to systems certified by Executive Orders VR-203-A to N, Executive Order VR-205-A to B, and Executive Order VR-209-A. A copy of the Executive Order and the ***ARB Approved Installation, Operation and Maintenance Manual*** shall be maintained at each GDF where a certified Balance Phase II EVR System is installed.

IT IS FURTHER ORDERED that equipment listed in Exhibit 1, unless exempted, shall be clearly identified by a permanent identification showing the manufacturer's name, model number, and serial number.

IT IS FURTHER ORDERED that any alteration in the equipment parts, design, installation, or operation of the system provided in the manufacturers' certification application or documents and certified hereby is prohibited and deemed inconsistent with this certification, unless the alteration has been submitted in writing and approved in writing by the Executive Officer or Executive Officer delegate.

IT IS FURTHER ORDERED that the following requirements are made a condition of certification. The owner or operator of the Balance Phase II EVR System shall conduct and pass the following tests no later than 60 days after startup and at least once in each twelve month period, using the following test procedures:

- TP-201.3, ***Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities*** (July 26, 2012);
- TP-201.4, ***Dynamic Back Pressure*** (July 3, 2002) in accordance with the condition listed in item 1 of the Vapor Collection section of Exhibit 2;
- Exhibit 4, ***Required Items in Conducting TP-201.3***;
- Exhibit 5, ***Liquid Removal Test Procedure***;
- Exhibit 6, ***Required Items for Conducting TP-201.4.***
- Exhibit 8, ***VST ECS Hydrocarbon Sensor Verification Test Procedure*** (if a VST ECS membrane processor is installed);
- Exhibit 9, ***Determination of VST ECS Processor Activation Pressure*** (if a VST ECS membrane processor is installed);
- Exhibit 10, ***Veeder-Root Vapor Pressure Sensor Verification Test Procedure*** (if a VST ECS membrane processor or Veeder-Root Vapor Polisher is installed);
- Exhibit 11, ***Veeder-Root Vapor Polisher Operability Test Procedure*** (if a Veeder-Root Vapor Polisher is installed);
- Exhibit 12, ***Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification Test Procedure*** (if a Veeder-Root Vapor Polisher is installed);
- Exhibit 13, ***Hirt VCS 100 Processor Operability Test Procedure*****;** (if a Hirt VCS 100 is installed);
- Exhibit 14, ***Franklin Fueling Systems Healy Clean Air Separator Static Pressure Performance Test Procedure*** (if a Clean Air Separator is installed);
- Exhibit 15, ***VST Green Machine Compliance Test Procedure*** (if a Green Machine is installed);

- Exhibit 16, ***Liquid Condensate Trap Compliance Test Procedure*** (if a Liquid Condensate Trap is installed);
- *Exhibit 17, Reserved for future procedure and intentionally left blank; and*
- Exhibit 18, ***Accessing PMC and ISD Parameters at Gasoline Dispensing Facilities (GDFs) with Veeder-Root's "Maintenance Tracker" Security Feature Installed & Enabled*** (if Maintenance Tracker is installed).

Local districts at their option may specify the testing frequency and related sequencing of the above tests. Notification of testing, and submittal of test results, shall be done in accordance with local district requirements and pursuant to policies established by that district. Local districts may require the use of alternate test form(s), provided they include the same minimum parameters identified in the datasheet referenced in the test procedure(s). Alternative test procedures, including most recent versions of the test procedures listed above, may be used if determined by the ARB Executive Officer or Executive Officer delegate, in writing, to yield equivalent results.

IT IS FURTHER ORDERED that the following requirements are made a condition of certification. The owner or operator of the Balance Phase II EVR System shall conduct, and pass, the following test no later than 60 days after startup using the following test procedure: Exhibit 7, ***Nozzle Bag Test Procedure***. Notification of testing, and submittal of test results, shall be done in accordance with local district requirements and pursuant to the policies established by that district. Alternative test procedures, including most recent versions of the test procedures listed above, may be used if determined by ARB Executive Officer or Executive Officer delegate, in writing, to yield equivalent results.

IT IS FURTHER ORDERED that, except as provided above, local districts at their option may specify the testing, related sequencing, and testing frequency of the nozzle vapor valves. If the district requires the nozzle vapor valve be tested, the test shall be conducted in accordance with Exhibit 7, ***Nozzle Bag Test Procedure***.

IT IS FURTHER ORDERED that the Balance Phase II EVR System shall be compatible with gasoline in common use in California at the time of certification. The Balance Phase II EVR System is not compatible with gasoline that has a methanol content greater than 5 percent or an ethanol content greater than 10 percent. Any modifications to comply with future California gasoline requirements shall be approved in writing by the Executive Officer or Executive Officer delegate.

IT IS FURTHER ORDERED that the certification of the VST Phase II EVR System is valid through April 1, 2014.

IT IS FURTHER ORDERED that Executive Order VR-203-N issued on February 8, 2013, is hereby superseded by this Executive Order. VST Phase II EVR Systems certified under Executive Order VR-203-A through N may remain in use at existing installations up to four years after the expiration date of this Executive Order when the certification is not renewed.

IT IS FURTHER ORDERED that this Executive Order shall apply to new installations or major modification of Phase II Systems with a throughput of less than or equal to 600,000 gallons per year. Use of this Executive Order for new installations or major modifications at a GDF with a throughput of more than 600,000 gallons per year is not authorized.

Executed at Sacramento, California, this 11th day of October 2013.

Michael T. Benjamin, Chief
Monitoring and Laboratory Division

Attachments: Next Page

General Requirements

Exhibit 1 Equipment List

- Hanging Hardware
- Processors
- Liquid Condensate Traps
- Optional Wireless Components
- Optional Maintenance Tracker Kit

Exhibit 2 System Specifications

- Hanging Hardware
- Processors
- Pressure/Vacuum Vent Valves for Storage Tank Vents
- Warranty
- Vapor Recovery Piping Configurations
- Dispensers
- Liquid Condensate Traps
- Phase I Systems
- Maintenance Records
- Vapor Recovery Equipment Defects
- Veeder-Root PMC System Specifications
- Wireless Components
- Maintenance Tracker Kit

Exhibit 3 Manufacturing Performance Specifications and Warranties

- Vapor Systems Technologies
- EMCO Wheaton Retail
- Veeder-Root
- Goodyear
- Hirt
- Franklin Fueling Systems
- OPW

General Compliance Procedures

Exhibit 4 Required Items in Conducting TP-201.3
Exhibit 5 Liquid Removal Test Procedure
Exhibit 6 Required Items for Conducting TP-201.4
Exhibit 7 Nozzle Bag Test Procedure

Processor Specific Compliance Procedures

Exhibit 8 VST ECS Hydrocarbon Sensor Verification Test Procedure
Exhibit 9 VST ECS Determination of Processor Activation Pressure
Exhibit 10 Veeder-Root Vapor Pressure Sensor Verification Test Procedure
Exhibit 11 Veeder-Root Vapor Polisher Operability Test Procedure
Exhibit 12 Veeder-Root Vapor Polisher Hydrocarbon Emissions Verification Test Procedure

Exhibit 13 Hirt VCS 100 Processor with Indicator Panel Operability Test Procedure
Exhibit 14 Franklin Fueling Systems Healy Clean Air Separator Static Pressure Performance Test Procedure
Exhibit 15 VST Green Machine Compliance Test Procedure

LCT Specific Compliance Procedure
Exhibit 16 Liquid Condensate Trap Compliance Test Procedure

Other Compliance Procedures
Exhibit 17 Reserved for a future procedure and intentionally left blank
Exhibit 18 Accessing PMC and ISD Parameters at Gasoline Dispensing Facilities (GDFs) with Veeder-Root's "Maintenance Tracker" Security Feature Installed & Enabled.