

**State of California
Air Resources Board**

Executive Order VR-102-X

Relating to Certification of Vapor Recovery Systems

**OPW Phase I Vapor Recovery System
(Including Remote-Fill and Remote-Additive
Configuration)**

Whereas, the California Air Resources Board (CARB) 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 the filling of underground gasoline storage tanks (Phase I EVR System), in its Certification Procedure for Vapor Recovery Systems at Gasoline Dispensing Facilities Using Underground Storage Tanks (CP-201) as last amended July 12, 2023, incorporated by reference in Title 17, California Code of Regulations, Section 94011;

Whereas, CARB has established, pursuant to California Health and Safety Code Sections 39600, 39601, 39607, and 41954, test procedures for determining the compliance of Phase I EVR Systems with emission standards;

Whereas, OPW Fueling Components, Inc. (OPW) requested and was granted certification of the OPW Phase I Vapor Recovery System (OPW System) pursuant to CP 201 by Executive Order VR-102-A, first issued on October 10, 2002, and last modified on November 8, 2023, by Executive Order VR-102-W;

Whereas, VaporSystems Technologies, Inc. (VST) requested a modification to the OPW System to add the VST-EVRPV-100 Pressure/Vacuum (P/V) Valve and VST-EVRPV-200 P/V Valve with Test In Place (TIP) feature as modifications of the OPW System;

Whereas, CP-201 provides that the CARB Executive Officer shall issue an Executive Order if he or she determines that the vapor recovery system, including modifications, conforms to all applicable requirements set forth in CP-201;

Whereas, Executive Order G-21-474 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 (GDF); and

Whereas, I, Walter Ham, Chief of MLD, find that the OPW System, as amended to include the modification listed above, conforms with all the requirements set forth in CP-201, and results in a vapor recovery system which is at least 98.0 percent efficient when tested pursuant to test procedure TP-201.1, Volumetric Efficiency for Phase I Systems (July 26, 2012).

Now therefore, it is hereby ordered that the OPW System is certified to be at least 98.0 percent efficient when installed and maintained as specified herein and in the following exhibits. Exhibit 1 contains a list of the certified components. Exhibit 2 contains the

performance standards and specifications, typical installation drawings, and maintenance intervals for the OPW System as installed in a GDF. Exhibit 3 contains the manufacturing specifications. Exhibit 4 contains the manufacturer warranties. Exhibit 5 is the below grade vaulted tank configuration.

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 Prevention, 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 CP 201. Manufacturers may specify that the warranty is contingent upon the use of trained installers. The manufacturer's 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 the certified OPW system shall be installed, operated, and maintained in accordance with the CARB Approved Installation, Operation, and Maintenance Manual. Equipment shall be inspected annually per the procedures identified in the CARB Approved Installation, Operation, and Maintenance Manual. This inspection requirement shall also apply to systems certified by Executive Orders VR-102-A to W. A copy of this Executive Order and the CARB Approved Installation, Operation, and Maintenance Manual shall be maintained at each GDF where a certified OPW 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 manufacturer's certification application or documents and certified hereby is prohibited and deemed inconsistent with this certification, and is subject to enforcement action, unless the alteration has been submitted in writing pursuant to the process for Executive Order amendments set forth in Section 18 of CP-201 and approved in writing by the CARB Executive Officer delegate. Any sale, offer for sale, or installation of any system or component without CARB's approval as set forth above is subject to enforcement action.

It is further ordered that the following requirements be made a condition of certification. The owner or operator of the OPW system shall conduct and pass the following tests no later than 60 days after startup and at least once every three (3) years after startup testing, using the following test procedures. Shorter time periods may be specified by the District.

- TP-201.3, Determination of 2 Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities (July 26, 2012);
- TP-201.1B, Static Torque of Rotatable Phase I Adaptors (October 8, 2003); and
- Depending on the system configuration, either TP 201.1C, Leak Rate of Drop Tube/Drain Valve Assembly (July 12, 2021) or TP 201.1D, Leak Rate of Drop Tube Overfill Prevention Devices, and Spill Container Drain Valves (July 12, 2021).

Districts may specify the sequencing of the above tests. Notification of testing and submittal of test results shall be done in accordance with District requirements and pursuant to the policies established by that District. 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). Alternate test procedures, including the most recent versions of test procedures listed above, may be used if determined by the CARB Executive Officer or his or her delegate, in writing, to yield equivalent results. Testing the Pressure/Vacuum (P/V) vent valve will be at the option of the District. If P/V vent valve testing is required by the District, the test shall be conducted in accordance with TP-201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves (October 8, 2003) and Exhibit 2.

It is further ordered that the OPW system shall be compatible with gasoline in common use in California at the time of certification, including E85 (85% ethanol/15% gasoline) for specific components listed in Exhibit 1. Any modifications to comply with future California gasoline requirements shall be approved in writing by the CARB Executive Officer or his or her delegate.


It is further ordered that GDF installations permitted for dispensing E85 fuel shall be subject to a throughput limitation of 1.2 million gallons per year (100,000 gallons per month).

It is further ordered that the certification of the OPW System shall remain valid through June 1, 2025.

It is further ordered that Executive Order VR-102-W issued on November 8, 2023, is hereby superseded by this Executive Order. OPW Phase I Vapor Recovery Systems certified under Executive Orders VR-102-A through W 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 the Phase I system of existing gasoline dispensing facilities.

Executed at Sacramento, California, this 4th day of October 2024.



 Walter Ham (Oct 4, 2024 14:41 PDT)
 Walter Ham, Ph.D., Chief
 Monitoring and Laboratory Division

Attachments: See next page.

Attachments:

- Exhibit 1 OPW Phase I Vapor Recovery System Equipment List
- Exhibit 2 Installation, Maintenance and Compliance Specifications
- Exhibit 3 Manufacturing Performance Standards and Specifications
- Exhibit 4 Manufacturer Warranties
- Exhibit 5 Vaulted Aboveground Storage Tank Configuration
Installation, Operation and Maintenance Manual