

Attachment L

Vapor Recovery Tests for Phase I Underground Storage Tanks and Balance Phase II EVR Systems (Veeder Root Vapor Polisher)

Phase I EVR Executive Orders VR-101-X, VR-102-X, VR-103-X, VR 104-X, VR-105-X. Phase II EVR Executive Orders VR-203-X (Non-ISD), Phase II-VR-204-X (ISD) Unless otherwise specified by a District representative, the tests noted in the table below shall be conducted in the following order. The order is specified to not bias any test(s) and for practicality purposes.

Test Order	Test	Notes
1	TP 201.1E P/V Vent Valve Test	Phase I
2	TP 201.1B Static Torque of Rotatable Phase I Adaptors	Phase I
3	TP 201.1C/D Pressure Integrity Check Drop Tube/Drain Valve	Phase I
4	ISD Operability Test (Ex.10 Veeder Root Vapor Pressure Sensor Verification)	Phase II. If ISD is installed at the facility. This test can be conducted during the pressure decay test. The vapor space shall be pressurized to 2.0" WC.
5	Exhibit 7 (Nozzle Bag Test)	Phase II. This test can be conducted during the pressure decay test. The vapor space shall be pressurized to 2.0" WC.
6	TP 96-1 Ten Inch Pressure Decay or TP 201.3 Two Inch Pressure Decay	<p>Phase I/II. TP 201.3 shall be conducted and completed between sundown and a half hour after sunrise. TP 96-1 can be conducted at any time except when daytime temperatures exceed 100°F and there is direct sunlight on exposed metal vent pipe(s) and metal manhole cover(s) that are in contact with vapor space of the storage tanks.</p> <p>Exhibit 4 (Required items) of EO VR 203/204 must be conducted in conjunction with either TP 201.3 or 96-1.</p> <p>If nitrogen is introduced through the vapor adaptor, the vapor coupler test assembly shall be leak checked in accordance with TP 201.3 (sections 5.5, 6.7-6.7.2) prior to conducting the TP 96-1 test.</p> <p>The submersible fuel pumps shall be turned off prior to conducting the TP 96-1 test.</p> <p>All P/V valves are to be removed and vent risers capped prior to conducting TP 96-1 test. The valves are to be reinstalled and vent risers un capped after the test is complete. Vapor valve must be in manual mode in the closed position.</p>
7	Liquid Condensate Trap (Ex.16 of VR-203/VR-204)	Phase II. Liquid Condensate Trap. If Installed

8	Exhibit 5 Liquid Removal Option 1 Pre EVR Balance Systems TP 201.6C Option 1 (Exhibits 8c, 9c, 10, 11 of EO G-70-52-AM)	Phase II. Must conduct flow rate verification for each grade point prior to starting liquid removal test. The flow rates for all grade points must be tested and verified to be with the range of 6.0-10.0 gallons per minute (gpm). A minimum of one gallon of gasoline must be dispensed when measuring flowrate. If the flowrate is determined to be outside of 6.0-10.0 gpm during the initial flow rate screening that grade point must be retested by timing for a minimum of 30 seconds.
9	TP 201. 4 Dynamic Back Pressure Methodology 1	Phase II. Exhibit 6 (Required items) of EO VR 203/204 must be conducted in conjunction with TP 201.4
10	Exhibit 17 Veeder-Root Vapor Flow Meter Operability Test	Phase II. If ISD is installed at the facility. EO 204-X
11	Exhibit 11 Veeder Root Vapor Polisher Operability Test	Phase II EO 203-X/204-X
12	Exhibit 12 Veeder Root Vapor Polisher Hydrocarbon Emissions Verification Test	Phase II EO 203-X/204-X

Attachment L-1-Veeder Root Vapor Polisher ISD Alarm Response Requirements and Instructions

Alarm conditions shall not be cleared unless at a minimum the applicable troubleshooting tests and/or inspections listed have been conducted to clear the alarm condition. Other tests and/or inspections may be performed in lieu of those cited below provided the same ISD alarm does not occur within the next consecutive assessment period after resetting the alarm. Unless otherwise specified alarms conditions should only be cleared by person(s) that have the applicable certification/training as specified in Attachment K-Certification Requirements. All alarms and associated repairs and testing including inspection results shall be recorded in Attachment I-Inspection, Maintenance and Alarm Response log and made available to the District upon request.

Troubleshooting Tests and Inspections also include, but are not limited to, the lists referenced in the Veeder-Root ISD Troubleshooting Manual P/N 577013-819 located at <https://www.arb.ca.gov/vapor/isdresponse072208a.pdf>.

Alarm Condition- ISD Display Message	Indicator Light and Alarm Condition	Alarm Response	Tests/Inspections
Vapor Leak Alarm Veeder Root -ISD Vapor Leakage Warn	Yellow –Leak alarm warning. Alarm will go to failure after 7 days.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. Record alarm condition and any tests/repairs in Attachment I.	Perform a check on the processor and make sure it is turned on and processing vapors. Verify the Vapor Polisher valve is operating in accordance with Table 6-Section 12 of VR-204-X-IOM Exhibit 10, 11 of VR-204-X TP-201.1E- P/V Valve TP-201.1C or TP-201.1D-Drop Tube Integrity Test. TP-96-1- 10 inch Pressure Decay
Vapor Leak Alarm Veeder Root -ISD Vapor Leakage Fail	Red – Leak alarm failure on 8 th day after 7 day warning alarm	This alarm must be cleared by a certified technician only. Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.	

Alarm Condition- ISD Display Message	Indicator Light and Alarm Condition	Alarm Response	Tests/Inspections
Pressure Alarm (Overpressure) Veeder Root -ISD Gross Pressure Warning	Yellow —Gross overpressure alarm warning. Alarm will go to failure after 7 days.	<p>Per ARB Advisory 405-D. Operators can clear these alarms (without repairs or testing) only during the winter months from November 1-March 31st. The advisory remains in effect until formally rescinded by ARB. Record alarm condition in Attachment I.</p> <p>This alarm must be cleared by a certified technician from April 1-October 31.</p> <p>Warning alarm Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears.</p> <p>Failure Alarm: Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.</p>	<p>Verify processor is in the on and automatic vapor processor mode TP-201.1E- P/V Valve TP-201.1C or TP-201.1D-Drop tube integrity test. TP-96-1- 10 inch Pressure Decay Exhibit 10, 11 of VR-204-X</p> <p>Visually inspect hanging hardware at the affected dispenser(s) including; a) Replacing any damaged or worn face seals b) Repair or replace any misaligned face seals c) Replace any damaged or torn boots d) Tighten any loose boot clamps e) Replace any damaged or loose spouts</p>
Pressure Alarm (Overpressure) Veeder Root -ISD Gross Pressure Failure	Red —Gross overpressure alarm failure on 8 th day after 7 day warning alarm		
Degradation Pressure Alarm (Overpressure) Veeder Root -ISD Degr Pressure Warning	Yellow —Degradation overpressure alarm warning. Alarm will go to failure after 30 days.		
Degradation Pressure Alarm (Overpressure) Veeder Root -ISD Degr Pressure Warning	Red —Degradation overpressure alarm failure on 31 st day after 30 day warning alarm.		

Alarm Condition- ISD Display Message	Indicator Light and Alarm Condition	Alarm Response	Tests/Inspections
Vapor Processor Status Alarm Veeder Root-ISD VP Status Warning	Yellow –Vapor Processor Status Emissions or Duty Cycle. Alarm will go to failure after 1 day.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. Record alarm condition and any tests/repairs in Attachment I.	
Vapor Processor Status Alarm Veeder Root-ISD VP Status Fail	Red – Vapor Processor Status Emissions or Duty Cycle. Alarm will go to failure on 2nd day.	This alarm must be cleared by a certified technician only. Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.	See Emissions and Duty Cycle troubleshooting guidelines.
Vapor Processor Emission Alarm Veeder Root-VP Emission Warn	Yellow –Mass emission warning. Alarm will go to failure after 1 day.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. Record alarm condition and any tests/repairs in Attachment I.	
Vapor Processor Emission Alarm Veeder Root-VP Emission Fail	Red – Mass emission warning. Alarm will go to failure on 2nd day.	This alarm must be cleared by a certified technician only. Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.	Check processor ball valve positions, verify processor is in the on and automatic vapor processor mode Inspector boots for damage Exhibit 10, 11 of VR-204-X

Alarm Condition- ISD Display Message	Indicator Light and Alarm Condition	Alarm Response	Tests/Inspections
Vapor Processor Duty Cycle Alarm Veeder Root-VP Duty Cycle Warn	Yellow –Vapor Processor Duty Cycle. Alarm will go to failure after 1 day.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. Record alarm condition and any tests/repairs in Attachment I.	
Vapor Processor Status Alarm Veeder Root-VP Duty Cycle Fail	Red – Vapor Processor Duty Cycle. Alarm will go to failure on 2nd day.	This alarm must be cleared by a certified technician only. Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.	TP-96-1, 10 inch pressure decay Exhibit 9, 10 of VR-204-X Section 12 of VR-204-X IOM (Setup procedure).
Collection Alarm Veeder Root-Flow Collect Warn	Yellow –Collection alarm warning. Alarm will go to failure after 1 day.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. . Record alarm condition and any tests/repairs in Attachment I.	
Collection Alarm Veeder Root-Flow Collect Fail	Red – Collection alarm failure on 2nd day after 1 day warning alarm	This alarm must be cleared by a certified technician only. Contact certified technician and inform of alarm failure condition. The technician must perform all repairs and testing prior to clearing the alarm condition. Record alarm condition and any tests/repairs in Attachment I.	Visually inspect hanging hardware at the affected dispenser(s) including; Replace any damaged or torn boots Exhibit 5, Option 1 of VR-204-X Exhibit 6, TP 201.4 Methodology 1 Exhibit 17 (Veeder Root)

Alarm Condition- ISD Display Message	Indicator Light and Alarm Condition	Alarm Response	Tests/Inspections
PMC Sensor/Fault Communication Alarm (for NON ISD facilities)	Yellow –Self Test, component failed or reported error condition	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. . Record alarm condition and any tests/repairs in Attachment I.	See table 5 found in Section 15 of IOM of VR-203-X
PMC Setup (for NON ISD facilities)	Red -Self Test, component missing or not configured.	Contact certified technician and inform of alarm warning condition. This alarm must be cleared by a certified technician unless the ISD self clears. . Record alarm condition and any tests/repairs in Attachment I.	PMC setup diagnostic checklist in trouble shooting section found in Section 15, IOM of VR-203-X