

<i>Standard Operating Procedure</i>	Page 1 of 15
Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)	Rev. 3
No. VPR 307	Date: 05/30/2017

1. Introduction

This procedure is designed for gasoline dispensing facilities with Stage I vapor recovery systems that operate under Arizona Administrative Code (A.A.C.) Title 3, Article 10 (sites that only have Stage I vapor recovery and do not have Stage II vapor recovery). The fee code for the stations covered by this procedure is 056. The procedure sets forth testing requirements and identifies the responsibilities and authorities for the Registered Service Representative (RSR) and the State Inspector. Within each section of the Standard Operating Procedure (SOP) there are four subsections. The first subsection explains the responsibility and authorities for the RSR, the second subsection explains the responsibility and authorities for the State Inspector. The third subsection is to be used by the State Inspector for documenting the results of test, and the fourth subsection is to be used by the State Inspector for enforcement actions. When the State Inspector is not present during the inspection, the RSR shall document all indicated test results and submit them to the Division within 7 calendar days of test completion.

2. Purpose

The purpose of this SOP is to set forth a consistent procedure for testing vapor recovery systems at gasoline dispensing facilities based on Arizona Revised Statutes (A.R.S.) and California Air Resources Board (CARB) Executive Orders. This SOP sets forth the responsibilities and authorities for both the vapor recovery RSR and the State Inspector with respect to the initial or annual vapor recovery test. The inspection and testing of the vapor recovery system under these procedures will be conducted during scheduled inspections. Inspection schedules will be made in advance as arranged by the RSR and the Division. This SOP is meant to summarize CARB test procedures. Unless specifically stated, CARB test procedures shall be followed in the event of conflicts between the summary and the test procedure. CARB test procedures can be found at..

<http://www.arb.ca.gov/testmeth/vol2/currentprocedures.htm>.

3. Responsibility and Authority

3.1. Authority – This inspection is conducted under A.R.S. 3-3414 and A.R.S. 3-3512.

3.2. Responsibility – The RSR is responsible for conducting the initial or annual test using the methods required under state statute and rule. Failure to conduct required testing in accordance with statute or rule may result in grounds for suspension, revocation, or refusal to renew the RSR license per A.A.C. R3-7-603.

3.3. It is the responsibility of the State Inspector to conduct his or her inspection as required under this SOP, conform to Field Force Manager (FFM) protocols, and represent the Division as scheduled for witnessed initial or annual tests. Failure to do so by the State Inspector could be grounds for disciplinary action which could include dismissal.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

4. Forms

4.1. Vapor Recovery Test Forms

- a. Pressure Decay Test TP-201.3 & TP-201.3C (DWM-77A)
- b. P/V Vent Valve Test TP-201.1E (DWM-77B)
- c. Stage II Decommissioning Checklist (DWM-80)

4.2. Division Forms

- a. Regulatory Bill of Rights (DWM-149)
- b. Administrative Order (DWM-53)
- c. Inspection Comments/Notes (DWM-179)
- d. Placed in Service Report (DWM-38)

5. Equipment

5.1. *RSR Necessary Equipment:* It is the responsibility of the RSR to have all of the equipment necessary to conduct the required testing. If the appropriate equipment is not available, or is not calibrated, the test shall be canceled and owner/operator and/or the RSR may be subject to a civil penalty under A.A.C. R3-7-905 or R3-7-910.

5.2. *State Inspector Necessary Equipment:* State Inspectors shall have a laptop computer in order to record test result data and to communicate this data to the office and the regulated facility. Other necessary equipment includes a digital scanner, a portable printer with paper, a cellular phone with FFM application and digital camera, hand sanitizer or waterless soap, a first aid kit, CARB test procedures (TP-201.1E, TP-201.3, and TP-201.3C), the most recent copy of A.R.S. and A.A.C. regulations, blue enforcement tags and blue tape in the event of non-compliance, plastic and/or wire seals for attaching enforcement tags, soapy water solution with sprayer for leak-tight integrity, a leak check device for testing fill tubes and drybreaks and caps (if issued), and a mechanical or electronic pressure gauge that meets the specifications of applicable CARB Executive Orders.

6. Pre-Inspection

6.1. If the RSR must to cancel an initial or annual witnessed test less than one hour prior to the scheduled start time, the RSR must remain at that location until the State Inspector arrives to review the reason for cancellation and release the location for reschedule. It is the responsibility of the RSR to call the Division at 602-771-4920 to notify of the cancellation if the cancellation occurs at least one hour prior to the scheduled start time.

6.2. All allowable repairs by the RSR must be complete at least one hour prior to the start time of the scheduled test. At the scheduled time of the witnessed annual test, the RSR will present the following documents to the State Inspector prior to the start of inspection:

<p><i>Standard Operating Procedure</i></p> <p>Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p>No. VPR 307</p>	<p>Page 3 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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- a. Current tank inventory
- b. Last fuel delivery (per Veeder-Root or Encompass systems)
- c. Device License for the station being tested
- d. Inspection and maintenance logs (Stage I equipment must be inspected by site representatives at least one time every 7 days)
- e. Tank Chart

NOTE: If the required documentation is not presented before the time of the test, the owner / operator or RSR may be subject to a civil penalty under A.A.C. R3-7-905.

- 6.3. In order to expedite the inspection, the RSR or site owner/operator may remove dispenser panels from both sides to allow viewing of under-dispenser piping for leaks and open the appropriate panels to allow the State Inspector to inspect for credit card skimming devices.
- 6.4. The RSR will ensure that spill buckets are drained of residual liquid prior to testing.
- 6.5 State Inspector Responsibilities and Authorities:
 - a. The State Inspector will follow the FFM procedure prior to the start of the inspection. Once this information has been entered, the State Inspector may begin the inspection.
 - b. The State Inspector will verify on the CTU that a Stage II Vapor Recovery Decommissioning Checklist has been submitted for the site. If a checklist has not been submitted within 10 days of the completion of the decommissioning process, refer to section 11.1 under Enforcement Guidelines.
 - c. The State Inspector will identify him or herself, present their Department photo identification, and state the purpose of the visit as required under Division Policies and Procedures No. 100.
 - d. If the RSR does not show up for the test, document the reason why (if known). Check the tank monitoring system and/or stick the tanks to verify that the fuel level meets the requirements outlined in CARB TP-201.3. Also verify the time of the last fuel delivery to identify if it meets the requirements outlined in CARB TP-201.3. Document the findings on inspection form DWM-179 (comments/notes).
 - d. The State Inspector will request to see the RSR's license to verify that it is valid and permits them to conduct the annual or initial test for the vapor recovery system.
 - e. The State Inspector will review with the owner, manager, or responsible party, the Regulatory Bill of Rights (DWM-149) and have them sign, acknowledging receipt of the document. The State Inspector will also review the location's device license in CTU or at the facility to verify that the fee

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

codes, number of devices, and contact information is correct. If a location is not licensed, fill out a Placed in Service Report (DWM-38) in its entirety listing: device fee code, device service code, pump number, NTEP Certificate of Conformance (CC) number, and BMF number. If assistance is required, inform the site representatives of his/her responsibility to provide assistance and any special equipment as needed.

- f. The State Inspector will verify that the equipment to be used by the RSR is correct and has been calibrated as required by A.A.C. R3-7-602(A)(3) and CARB test procedures.

7. Pre-Test Requirements

The following shall be completed by the State Inspector if the test is witnessed, or by the RSR if the test is unwitnessed:

- 7.1. Verify that no gasoline sales have occurred at least 30 minutes prior to the start of the inspection. Gasoline shall not be dispensed at the test location at any time during the inspection until allowed by the State Inspector.
- 7.2. Check the product fill tube (drop tube) length at each gasoline product storage tank. The distance between the bottom of the product storage tank and the bottom of the product fill tube at its highest point may not be greater than 6 inches. If the measured distance is greater than 6 inches, the State Inspector shall issue Stop Sale/Stop Use Order (DWM-53). For a non-witnessed test, the RSR shall stop gasoline sales and notify the Division.
- 7.3. During a witnessed test, the State Inspector will examine the tanks for fuel levels, water content, and drop tube length. Perform this examination with no pressure introduced into the tanks. Physically "stick" the tanks using water finding paste to check for water content and to obtain fuel volume levels. Record liquid volume amount and stick readings on the Pressure Decay Form (DWM-77A). If any water content is discovered as a result of this examination, issue a Stop Sale/Stop Use Order (DWM-53) if the gasoline is oxygenated per Product Transfer Documents (PTD's). If the gasoline is not oxygenated, issue a Stop Sale/Stop Use Order (DWM-53) only if the water level exceeds 1 inch.
- 7.4. Verify that the liquid level in the storage tank is at least 4 inches above the highest opening at the bottom of the submerged product fill tube.
- 7.5. Conduct calculations for tank capacity and ullage.
CALCULATION: Fuel volume (V) subtracted from tank capacity (C) equals ullage (U)... (C - V = U)
The tank ullage must meet the following requirements:
 - a. Minimum total ullage for each individual tank must be 1,000 gallons or 25% of the tank capacity, whichever is less.
 - b. A maximum combined ullage of 25,000 gallons.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

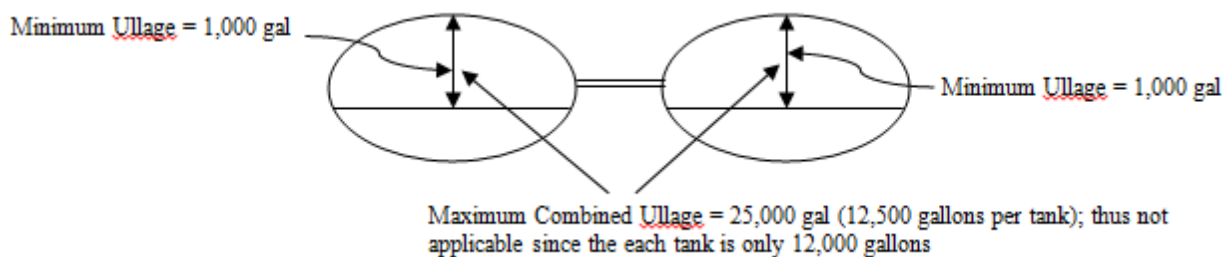
Rev. 3

Date: 05/30/2017

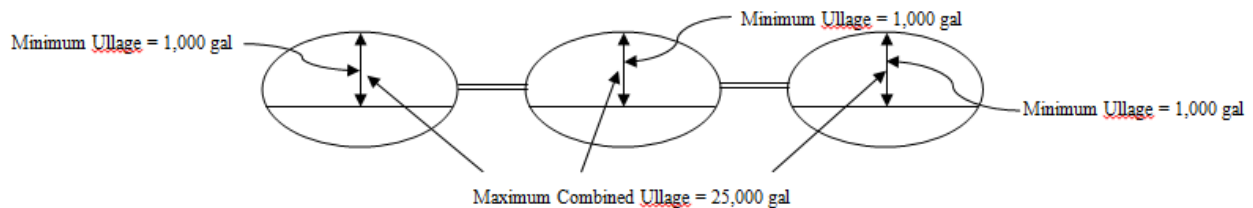
No. VPR 307

All capacity, volume, and ullage information is reported on the Pressure Decay Form (DWM- 77A).

Example: Site with 2-12,000 gallon manifolded tanks:



Example: Site with 3-30,000 gallon manifolded tanks:



- 7.6. Once the tank ullage has been obtained, refer to the last page of this document or Table 1 in A.A.C. Title 3, Article 10 to determine the allowable pressure decay rate for the vapor recovery system. You will need this decay rate for the Pressure Decay Test TP-201.3.
- 7.7. Check the tank monitoring system or fuel delivery receipts to verify when the last fuel delivery occurred. No fuel deliveries may occur into the product storage tanks within 3 hours prior to the start of the inspection.
- 7.8. Ensure that the P/V Vent Valve risers are painted to meet the requirements of A.A.C. R3-7-1004(D)(13) (55% or greater reflectivity).
- 7.9. Verify that all installed equipment meets the CARB requirements for the approved vapor recovery system. A State Inspector shall note any modifications on the CTU Vapor Device screen.
- 7.10. Visually inspect the vault emergency vents (using a flashlight, mirror, etc.). **NOTE:** State Inspectors shall not enter a confined space according to Division Policy and Procedure 109.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

- 7.11. If available, obtain a print-out from the location's tank monitoring system and include it with the inspection report.
- 7.12. Twenty (20) minutes prior to the start of testing, the electronic manometer shall begin warming up. The electronic manometer shall have a warm-up period of 15 minutes, followed by a 5 minute drift check. If the drift exceeds 0.01 inches H₂O, the instrument shall not be used. The manometer shall be warmed up in a location with consistent temperatures that will be observed during testing (i.e. the manometer shall not be maintained in an air conditioned vehicle during warm up and then introduced to warmer temperatures during the test.)
- 7.13. Equipment shall meet the range, sensitivity, and precision as indicated in the test procedures (TP-201.3, section 3 and TP-201.1E, section 4). Equipment shall be calibrated at least one time every 6 months and the calibration certification shall be maintained onsite with the RSR as well as provided to the State Metrology Lab.
- 7.14. The headspace pressure in the product storage tank shall not exceed 0.50 inches H₂O prior to the start of the test. If the pressure measures greater than 0.50 inches H₂O, the pressure shall be carefully relieved in accordance with all safety requirements and CARB test procedures.

8. Pressure/Vacuum Vent Valve Test (TP-201.1E)

- 8.1. The pressure/vacuum (P/V) vent valves shall be removed from the vent risers by the RSR and tested prior to conducting the pressure decay test. The P/V vent shall be tested following CARB TP 201.1E, ensuring the pressure, vacuum, and leak rates are within the following CARB limits:

- 2.5 to 6.0 inches H₂O Positive Cracking Pressure
- 6.0 to 10.0 inches H₂O Negative Cracking Vacuum

The following leak rates are applicable as a combined leak rate for the entire vapor recovery system (e.g. if there are 3 P/V vent valves for the vapor system, the total leak rate for all three P/V vent valves must meet the following limits):

- Leak rate at +2.0 inches H₂O ≤ 0.17 CFH
- Leak rate at -4.0 inches H₂O ≤ 0.63 CFH

- 8.2. Results shall be documented on the form for recording the Pressure Vacuum Vent Valve Test using TP 201.1E. If the P/V vent cannot meet these requirements, note the failure on the inspection form. Open a re-inspection test for the same date and allow the tester to test an alternate P/V vent valve (usually new out of the box) and document the results on the re-inspection form. Note in the inspection "civil penalty recommended". If no replacement P/V vent is available at the time of the test, issue a blue tag and Stop Sale/Stop Use Order (DWM-53) for the associated vapor recovery system.
- 8.3. The P/V Vent Valves shall be re-installed by the RSR following a pass result for TP 201.1E, prior to conducting the pressure decay test.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

9. Pressure Decay Test (TP-201.3)

The introduction of nitrogen for the test shall begin within 30 minutes of the scheduled test time. NO REPAIRS shall be made after the start of the inspection.

If the spill containment bucket is equipped with a drain valve, the test shall be conducted with the drain valve installed and the manhole cover removed.

NOTE: For the purposes of this test, "stabilized" is defined as a measured pressure fluctuation of no more than +/- 0.02 inches H₂O over a period of 30 seconds.

9.1. Fuel sales are prohibited at least 30 minutes prior to the start of the pressure decay test. Before introducing nitrogen into the product storage tank(s), ensure that the headspace pressure in the tank(s) is below 0.50 inches H₂O. If the headspace pressure measures greater than 0.50 inches H₂O, the pressure shall be carefully relieved in accordance with all safety requirements and CARB test procedures. The headspace pressure shall only be relieved through a small relief valve. This test shall be performed with all gasoline fill tube and vapor recovery dust caps removed, and the P/V vent valve(s) installed on the riser(s) according to CARB TP-201.3.

9.2. Registered Service Representative (RSR), Responsibilities and Authorities:

- a. Either at the start of the scheduled test time or at a time mutually agreed with the State Inspector, the RSR may start introducing nitrogen. Nitrogen shall be introduced into the system at a constant flow rate between 1 and 5 cubic feet per minute (CFM). This rate shall be verified using an air flow meter/rotameter.
- b. The RSR shall pressurize the tank(s) to 2.0 inches H₂O while the State Inspector measures the initial pressurization time calculated using Equation 9.3 found in TP-201.3.
- c. If the initial pressurization time does not exceed twice the time derived from Equation 9.3, the RSR shall continue to pressurize the tank(s) to at least 2.2 inches H₂O, and maintain nitrogen flow until the pressure stabilizes. **NOTE:** If the initial pressurization time exceeds twice the time derived from Equation 9.3, this demonstrates the inability of the vapor recovery system to meet the performance criteria. The Pressure Decay Test shall be stopped and the RSR shall investigate for possible leaks and/or faulty components and restart the test according to section 9.1. of this procedure.
- d. After the pressure has stabilized at 2.2 inches H₂O, the RSR shall carefully bleed the system pressure down to 2.0 inches H₂O. This pressure shall only be relieved through a small relief valve.

<p><i>Standard Operating Procedure</i></p> <p>Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p>No. VPR 307</p>	<p>Page 8 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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- e. Once the pressure has stabilized at 2.0 inches H₂O, the State Inspector will start the stopwatch for the 5 minute pressure decay countdown.
- f. At the 5 minute mark the State Inspector will record the pressure reading on the manometer and determine if this reading falls within the allowable decay rate. Refer to the last page of this procedure or Table 1 in A.A.C. Title 3, Article 10 for the chart of allowable decay rates based on system ullage.
- g. *This procedure will be done in conjunction with the Tie-Tank Test below:* Upon successful completion of the Pressure Decay Test the RSR shall check the drybreaks to ensure leak tightness integrity. This will be determined by quickly depressing and releasing the plunger and testing the seal with a soapy water solution. If a leak is detected, the drybreak shall be tested no more than 3 times (2 additional), before it is considered defective. If the drybreak fails, it must be repaired or replaced, retested by the RSR, and documented on the maintenance log. A civil penalty shall be recorded and the product shut down because the equipment is not operating as intended by design. If this failure also results in failure of the Pressure Decay test, the site is to be issued a Stop Sale/Stop Use Order (DWM-53). The Division shall be notified of any repairs and/or retests under A.A.C. R3-7-1010.

9.3. State Inspector Responsibilities and Authorities:

- a. Ensure ZERO on the manometer prior to the start of pressurization and at the end of the test.
- b. Ensure that the headspace pressure of the vapor recovery system is less than 0.50 inches H₂O prior to beginning introduction of nitrogen. If the headspace pressure is greater than 0.50 inches H₂O, refer to section 9.1 of this procedure.
- c. Calculate the minimum time required to achieve the initial pressure of 2.0 inches H₂O by using the equation explained on the following page (see CARB TP-201.3 section 9.3). **NOTE:** The RSR shall decide upon a constant flow rate between 1 and 5 CFM to be used during system pressurization. Record the flow rate on the test form. This flow rate shall be continually monitored by the State Inspector during this portion of the test. The flow rate shall not be adjusted unless it is necessary to compensate for any fluctuation from the nitrogen supply regulator.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

Equation 9.3:

$$\frac{V}{(1522) F} = t2$$

Where...

- **V** = The total ullage affected by the test (gallons)
- **F** = The nitrogen flowrate into the system as measured in the air flow meter/rotameter (CFM)
- **1522** = The conversion factor for pressure and gallons (multiply this number by the flow rate)
- **t2** = The minimum time to pressurize the ullage to two inches H₂O (minutes)

Example:

Total ullage (**V**): 19000 gallons
 Nitrogen flowrate (**F**): 2.5 CFM

For this example the equation should look like...

$$\frac{19000}{(1522) 2.5} = t2$$

$$1522 \times 2.5 = 3805$$

$$\frac{19000}{3805} = 4.9934297$$

The result of the example equation shows that your pressure reading should reach 2.0 inches H₂O in approximately 5 minutes (4.99 was rounded to 5) by introducing nitrogen at a constant rate of 2.5 CFM into a vapor recovery system with 19,000 gallons of ullage.

NOTE: The initial pressurization time to reach 2.0 inches H₂O shall not exceed twice the calculated initial pressurization time. Using our example equation from above where the initial pressurization time is approximately 5 minutes, the State Inspector shall multiply this value by 2 to obtain our maximum time to achieve system pressurization to 2.0 inches H₂O.

<p><i>Standard Operating Procedure</i></p> <p>Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p>No. VPR 307</p>	<p>Page 10 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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Equation Continued...

$$5 \times 2 = 10$$

Therefore, if it takes more than 10 minutes to pressurize the vapor recovery system to 2.0 inches H₂O at a constant flow rate of 2.5 CFM, this demonstrates the inability of the vapor recovery system to meet the performance criteria. In this situation, the State Inspector shall stop the Pressure Decay Test, document the initial failure on form DWM-179 (comments/notes), and direct the RSR to investigate for possible leaks and/or faulty components. If the RSR is able to identify and correct a leak and/or faulty component within a reasonable time frame (approximately 30 minutes), the Pressure Decay Test shall be restarted according to Section 9.1. of this procedure. If the RSR is unable to identify a leak and/or faulty component, the Pressure Decay Test may be restarted. If the restarted test fails to achieve a pressure of 2.0 inches H₂O in the allowable time frame, attempt to complete the remaining portion of the Pressure Decay Test with the knowledge that leak tightness integrity of the vapor recovery system may be compromised, which could adversely affect the final test results.

- d. If it takes less than twice the time derived from Equation 9.3. (e.g. 10 minutes from the previous example) to pressurize the vapor recovery system to 2.0 inches H₂O at a constant flow rate between 1 and 5 CFM, the test procedure continues to the next step.
- e. Once the pressure has reached 2.0 inches H₂O, the RSR shall continue to pressurize the tanks to at least 2.2 inches H₂O, and allow the pressure to stabilize.
- f. When the pressure has stabilized at or above 2.2 inches H₂O, the RSR shall carefully bleed the system pressure down to 2.0 inches H₂O. This pressure shall only be relieved through a small relief valve.
- g. After the pressure has stabilized at 2.0 inches H₂O, the State Inspector will start the stopwatch for the 5 minute pressure decay countdown.
- h. At the 5 minute mark, record the pressure reading shown on the manometer. Compare this reading with the allowable decay rate based on system ullage, obtained prior to the start of the Pressure Decay Test (see section 7.6). If the final system pressure value is higher than the allowable final pressure result, the test is documented as a pass. If final system pressure value is lower than the allowable final pressure result, the test is documented as a failure and the State Inspector shall issue a blue tag and a Stop Sale/Stop Use Order (DWM-53) for the associated vapor recovery system.

<p><i>Standard Operating Procedure</i></p> <p>Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p>No. VPR 307</p>	<p>Page 11 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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10. Tie-Tank Test (TP-201.3C)

10.1. Responsibilities and Authorities:

- a. After the successful completion of the pressure decay test, the RSR shall leave the manometer connected to the vapor recovery drybreak.
- b. At the instruction of the State Inspector, the RSR will depress the vapor recovery drybreak starting at a tank other than the one where the nitrogen was introduced during the Pressure Decay Test.
- c. The State Inspector will observe the pressure readings on the manometer as the RSR depresses each drybreak. If there is a similar release of pressure as each drybreak is depressed, the tanks are adequately manifolded.
- d. If the pressure gauge indicates a minimal drop or no drop in pressure, the tanks are not manifolded and a separate Pressure Decay Test shall be performed on each non-manifolded tank (refer to Section 9.1. of this procedure).
- e. In addition, the State Inspector shall perform new ullage and pressure decay calculations for the tank involved in the initial Pressure Decay Test to ensure that the measured 5-minute decay rate is not lower than the allowable decay rate based on the ullage of that single tank. Ullage and allowable decay rate determination shall also be performed for each subsequent Pressure Decay Test on the remaining non-manifolded tanks.
- f. The State Inspector shall verify that the vapor recovery system is accurately described on the CTU Vapor Device screen for that location (e.g. tanks are listed as manifolded, but are not manifolded, or have been modified to non-manifolded after completion of the Stage II Decommissioning process).

11. Further Instructions for Stage II Decommissioning

11.1 Refer to the Petroleum Equipment Institute Recommended Practices 300

- a. Complete form DWM-80 (Stage II Decommissioning Checklist)
- b. If the decommissioning contractor noted on their Stage II Decommissioning Checklist that the Stage II vapor recovery line from the fuel dispensers to the storage tank was disconnected at the tank end, the following procedure will apply:
 1. With the manometer connected to a vapor recovery drybreak, have the RSR open one fuel dispenser to access the internal piping. RSR will then remove the vapor plug under that dispenser while the State Inspector observes the manometer for any drop in pressure. If a drop in pressure is observed, the vapor line is still connected to the tank. If the pressure on the line holds steady, the vapor line has been disconnected. If there is any discrepancy between the work performed on the Stage II

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

Decommissioning Checklist, and the test results from this portion of the inspection, note the differences on the decommissioning checklist for the initial Stage I vapor recovery (decommissioning) inspection.

2. If the decommissioning contractor noted that the Stage II vapor recovery line was disconnected at the tank top, and no drop in pressure was observed when removing the plug from beneath the fuel dispenser, a test must be performed to ensure that the vapor vent line for each tank was not mistakenly disconnected. This test must be performed for EACH P/V vent riser. Have the RSR remove and replace the P/V Vent Valve on each riser while the inspector observes the manometer connected to the vapor recovery drybreak for a pressure drop. If each tank has a dedicated P/V riser, this test must be performed with the manometer connected to the drybreak associated with the respective P/V Vent Valve. If a drop in pressure is observed on the manometer when the vent cap is removed, the vapor vent line is connected to the tank. If no drop in pressure is observed when the vent cap is removed, the vapor vent line may have been disconnected and proper enforcement procedures must be carried out as the Stage I vapor recovery system is not in compliance. This test must also be performed for each P/V vent riser when there is a riser installed for each tank but the vent lines are manifolded at the tank.
3. Request the RSR to demonstrate that the vacuum motors have been properly disabled and inspect each dispenser. If verification cannot be determined, pump at least 1 gallon of fuel from a dispenser and listen to determine if the vacuum motor is operational.

12. State Inspector Documentation of Results:

- 12.1. *State Inspector Responsibilities and Authorities:*
State Inspector will observe the test and record results on the state forms.
- 12.2 All information will be entered onto the appropriate Division forms.
 - a. BMF # (License #): Get off license or assignment sheet
 - b. Inspection #: Found on assignment sheet
 - c. Test Date: Date of the inspection
 - d. Actual time test(s) begins
 - e. Actual time test(s) ends
 - f. Product: List actual grades (i.e. 87, 89, 91)
 - g. Capacity: Actual capacity in gallons
 - h. Physical stick reading: Record stick reading in inches
 - i. Liquid Volume: Convert the stick reading to liquid volume amount using appropriate tank chart or tank monitor print-out
 - j. Ullage: Capacity minus liquid volume

<p><i>Standard Operating Procedure</i></p> <p>Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p>No. VPR 307</p>	<p>Page 13 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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- k. Flow rate to be used during Pressure Decay Test
- l. Calculated allowable time to pressure to 2.0 inches H₂O
- m. Actual time pressure decay test begins
- n. Actual time pressure decay test ends
- o. Elapsed time: Total amount of time test ran (end time - start time = total elapsed time)
- p. Record actual test gauge value at start of test
- q. Record actual test gauge value at end of test. If the value is less than in Table 1 the site fails, and you must issue a blue tag and a Stop Sale/ Stop Use Order (DWM53). (Note: if there is a shift (gain or loss from zero) the Inspector will use the difference to determine pass or fail)
- r. Record pass or fail for the test. (Failure to pass this test is considered to be a site failure and you must issue a blue tag and a Stop Sale/Stop Use Order DWM 53)
- s. Have owner/operator initial form or indicate that they "refused to sign"
- t. Have the RSR print and sign their name on forms DWM-77A and DWM-77B

13. Enforcement Guidelines

- 13.1. If the State Inspector has verified that a Stage II Vapor Recovery Decommissioning Checklist has not been submitted within 10 days of the completed decommission process, issue an Administrative Order (DWM-53) for site representatives to obtain the completed checklist from the decommissioning contractor.
- 13.2. If the site does not meet the decommissioning requirements of PEI RP 300 or other issues are identified the completion checklist, issue an Administrative Order (DWM-53) to the site with a detailed written description of the corrections that are required to be made by the contractor and/or site. Inform site representatives that a re-inspection is required to be scheduled with the Division after repairs have been made.
- 13.2. Blue Tags. During a witnessed test, any documented failure during the Pressure Decay test will result in the issuance of a blue tag in order to prevent fuel deliveries if the non-compliant component is unable to be repaired and retested. The product fill tube(s) or component shall be placed out of service. The blue tag does not prohibit gasoline sales at a Stage I site. Blue tags are issued along with a Stop Sale/Stop Use Order (DWM-53).
- 13.3. During an non-witnessed test, in the event of a documented failure, it is the responsibility of the RSR to place the system or component out of service until it can be repaired, retested, and send in the appropriate test report

<p style="text-align: center;"><i>Standard Operating Procedure</i></p> <p style="text-align: center;">Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)</p> <p style="text-align: center;">No. VPR 307</p>	<p>Page 14 of 15</p> <p>Rev. 3</p> <p>Date: 05/30/2017</p>
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(including results), along with a placed in service report to the Department. The RSR shall notify the Department as required under R3-7-602(B)(2).

14. Post Inspection Procedure

- 14.1. DATA ENTRY, EXIT INTERVIEW; Complete CTU Screens for test results, DWM-40, and DWM-53 Administrative Order (to record deficiencies regarding tags affixed to devices etc.). Report findings to on-site representative and explain the reports and re-inspection process.
- 14.2. Close the inspection activity in the FFM by ending Shift and log into the new activity.

15. Unwitnessed Inspection Procedure

An RSR that is conducting a test that is not witnessed by a State Inspector is responsible to conduct all testing at the scheduled test time as outlined in this Standard Operating Procedure, Arizona Revised Statutes, Arizona Administrative Code, and appropriate CARB test methods. All tests conducted shall be documented on forms provided by the Department and available on the website at <https://dwm.az.gov/resource/vapor-recovery-rsr>. All test results shall be submitted to the department R3-7-602(A)(6).

16. Further Site Recommendations

As part of the Stage I vapor recovery test, it is recommended that the site dispensers be inspected for the installation of Skimmers and under dispenser piping leaks.

Vapor Recovery Annual Test for Sites with Stage I Vapor Recovery Only (No Stage II Vapor Recovery)

Rev. 3

Date: 05/30/2017

No. VPR 307

Table 1. Acceptability of Final System Pressure Results for Systems Tested Using TP-201.3

<u>Ullage (gallons)</u>	<u>Minimum Pressure after Five Minutes (Inches Water Column)</u>
<u>500</u>	<u>0.73</u>
<u>550</u>	<u>0.80</u>
<u>600</u>	<u>0.87</u>
<u>650</u>	<u>0.93</u>
<u>700</u>	<u>0.98</u>
<u>750</u>	<u>1.03</u>
<u>800</u>	<u>1.07</u>
<u>850</u>	<u>1.11</u>
<u>900</u>	<u>1.15</u>
<u>950</u>	<u>1.18</u>
<u>1000</u>	<u>1.21</u>
<u>1200</u>	<u>1.32</u>
<u>1400</u>	<u>1.40</u>
<u>1600</u>	<u>1.46</u>
<u>1800</u>	<u>1.51</u>
<u>2000</u>	<u>1.56</u>
<u>2400</u>	<u>1.62</u>
<u>2600</u>	<u>1.65</u>
<u>2800</u>	<u>1.67</u>
<u>3000</u>	<u>1.69</u>
<u>3500</u>	<u>1.73</u>
<u>4000</u>	<u>1.76</u>
<u>4500</u>	<u>1.79</u>
<u>5000</u>	<u>1.81</u>
<u>6000</u>	<u>1.84</u>
<u>7000</u>	<u>1.86</u>
<u>8000</u>	<u>1.88</u>
<u>9000</u>	<u>1.89</u>
<u>10000</u>	<u>1.90</u>
<u>15000</u>	<u>1.93</u>
<u>20000</u>	<u>1.95</u>
<u>25000</u>	<u>1.96</u>

Procedure reviewed and approved by:



Kevin Allen, Vapor/Fuel Program Compliance Manager

5/30/17

Date