Arizona Department of Agriculture
Weights and Measures Service Division

Vapor Recovery RSR (VRRSR)
Training and Testing
April 7 & 14, 2020
Training Outline

- Review of the regulations, responsibilities, and enforcement actions
- SOP review
- Exam
Acronyms

- **RSA** – Registered Service Agency - means any agency, firm, company or corporation that for hire, award, commission or any other payment of any kind installs, services, repairs or reconditions a commercial device or tests or repairs vapor recovery systems or vapor recovery components and that has been issued a license by the Division. (A.R.S. 3-3401)

- **RSR** – Registered Service Representative - means any individual who for hire, award, commission or any other payment of any kind installs, services, repairs or reconditions a commercial device or tests or repairs vapor recovery systems or vapor recovery components and who has been issued a license by the Division. (A.R.S. 3-3401)

- **EO** – CARB Executive Order
State Program Authority

State Implementation Plan (SIP)

- In 1999, the EPA designated Maricopa County a non-attainment area for the 1 hour ozone standard.
- Arizona had to submit a plan for compliance with the Federal standards.
- One of the measures in the plan, Arizona adopted a Vapor Recovery program similar to that of California.
State Program Authority (cont.)

- The State delegated to our Division the administrative responsibility for this program.

- The Division developed regulations governing the program. Those regulation are delineated in A.A.C. Title 3, Articles 9 and 10 of the Division’s rules.
Figure 1

Phase I, Phase II & ORVR Vapor Recovery Operations at California Service Stations
Eight-Hour Ozone Monitoring Data

Highest 3-Year Average of the 4th Highest 8-Hour Ozone Concentration in the Maricopa Nonattainment Area

1997 8-hour standard = .084 ppm

2008 8-hour standard = .075 ppm

2015 8-hour standard = .070 ppm

- Exceedances from potential exceptional events for the 2008 Eight-Hour Ozone Standard on June 20, 2015 and July 7, 2017 have been excluded.
  - There were multiple large wildfires in California and other western states in 2018 and multiple wildfires have occurred in Arizona and the eight-hour ozone nonattainment area in 2019. Exceedances of the 2015 Eight-Hour Ozone Standards in 2018 and 2019 are being evaluated for possible impacts from wildfire exceptional events which may result in lower concentrations. The 2019 values are based on preliminary data through August 21, 2019.
- Note: Due to mathematical rounding, values greater than or equal to 0.085 ppm are necessary to exceed the 0.080 ppm standard.

- March 2014 – proposed attainment 1997 standard
- December 2015 - attainment date for 2008 standard

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Regulatory Requirements

- Statutes
- Rules
- CARB Executive Orders
Below are sections where you can find the regulatory requirements for RSAs and RSRs.

R3-7-601 - Qualification; License and renewal Application
R3-7-602 - Duties
R3-7-603 - Grounds for Denying License or Renewal: Disciplinary Action; and Certification of Standards and Testing Equipment
R3-7-604 - Prohibited Acts
R3-7-605 - Material Incorporated by Reference
R3-7-104 - Administrative Enforcement Action
State Program Authority (cont.)

Below are sections where you can find the regulatory requirements for the Stage I Vapor Recovery Program.

R3-7-1001 - Material Incorporated by reference
R3-7-1002 - Exemptions
R3-7-1003 - Equipment and Installation
R3-7-1004 - Application Requirement and Process for Authority to Construct Plan Approval
R3-7-1005 - Initial Inspection and Testing
R3-7-1006 - Fees
R3-7-1007 - Operation
R3-7-1008 - Training and Public Education
R3-7-1009 - Recordkeeping and Reporting
R3-7-1010 - Annual Inspection and Testing
R3-7-1011 - Compliance Inspections
R3-7-1012 – Enforcement
R3-7-1013 – Stage II Vapor Recovery
Registered Service Agency (RSA)

- R3-7-601 (A)(1)(a)
  RSA’s need to be licensed with the Division.
- R3-7-601(A)(1)(d)
  Ensure RSR operates equipment per Statutes, rules, and CARB Eos
- R3-7-601 (A)(2)(a)
  Complete a Placed In Service Report (PISR) within Seven(7) calendar days.

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The RSA shall give a copy to the owner/operator of the equipment. Also retain a copy of the PISR or any required vapor recovery report for one year.

The RSA shall ensure that the PISR is completed and signed by the RSR noting each rejected commercial device restored to service and for each newly installed device placed in service.
Registered Service Representative (RSR) Qualification

- R3-7-601 (C)
  1. A thorough knowledge of all appropriate law within Statutes, rules, CARB Executive Orders (EOs).
  2. Has necessary training/experience
  3. Will operate according to laws/CARB EOs
  4. Pass competency exam
RSR Training/Exam Requirements

- R3-7-601 (D)
- Complete the Division’s training class, Take and pass a written Vapor Recovery exam, administered by the Division.
RSRs have 5 duties:

1. Install equipment components that meet the requirements
2. Perform all Vapor Recovery tests according rule;
3. Perform all appropriate tests when: “repairing a commercial device or: repairing or replacing a vapor recovery system or component,”
4. Report to the owner/operator components or commercial devices that do not conform with Statute, rule, or CARB EO.

5. Complete the Division’s place-in-service reports accurately. By the RSR performing repairs.
RSR Duties for Non-Compliant Equipment

- R3-7-602 (B)(2)
  - If a vapor recovery RSR cannot correct a violation and has to leave the vapor recovery site, the RSR shall secure the non-compliant vapor recovery system or component from commercial use.
RSR Duties for Non-Compliant Equipment

- R3-7-602 (B)(2), cont....
  - The non-compliant system or component shall not be used for commercial purpose until it is repaired and passes the test(s) required by R3-7-910.
  - The RSR shall notify the Division of the stop-sale, stop-use by 6:00 am of the day after the non-compliant vapor recovery system or component is secured or one hour before the test, whichever is sooner, so that the Division can witness the test.
The Division may deny a license or renewal for:

1. Providing false or misleading information;
2. Failure to meet annual certification requirements for standards or testing equipment;
3. Failure to meet the requirements stated in this Article;
4. For any reason that would be grounds for suspension, revocation, or refusal to renew.
The Division may suspend, revoke, or refuse to renew a licensee if the applicant is not qualified to perform those duties required or has been found to have violated any provision of A.R.S. Title 3, Chapter 19.
VRRSR Certification

- Application
- Certification exam...
  - Passing result: 75% or higher
  - Must wait 7 days for retake
  - May not take exam more than 3 times in 6 months
- VRRSR Training Class required once every 36 months
OUT OF SERVICE TAG
Is a red tag that signifies that a commercial device does not meet legal requirements and that the owner or operator cannot use the device commercially until repaired. A RSR can place a device back into service and permanently remove the red tag once the device is meets Handbook 44 requirements.

STOP-SALE STOP-USE TAG
Is a blue tag that signifies that an owner or operator cannot sell or use a commercial device, including a vapor recovery system component, commodity or liquid fuel, because it does not meet legal requirements. A RSR cannot place a device back into service and permanently remove the blue tag until the Department grants specific approval.

WARNING TAG
Is a yellow tag that signifies a commercial device does not comply with legal requirements (generally the violation is in error of the consumer) and the device may only be used within the period specified on the tag but not after unless the device is in compliance. A RSR can permanently remove the yellow tag meets Handbook 44 requirements.
Program Permitting and Testing Requirements

- Authority To Construct (ATC)
- Pre-burial Inspection
- Initial Inspection and Testing
- Modifications to Existing System
Program Permitting and Testing Requirements
R3-7-1004

- Authority To Construct (ATC)
  - Cannot start construction without a permit issued by WMSD.
  - Major Modification is considered to be:
    - Adding or replacing a gasoline storage tank with stage I
    - Adding, modifying, or replacing underground vent piping
    - Conducting construction that would expose vapor piping at tank top not previously disconnected during stage II decommissioning.
Program Permitting and Testing Requirements

- Pre-burial Inspection – R3-7-1004(G)
  - Inspection of underground piping
  - Piping configuration
  - Tank connections

- Must provide 2 days notice for inspection
R3-7-1004, ATC Requirements

D. A person shall ensure that an installed or modified stage I vapor recovery system meets the following requirements:

1. Has CARB-certified product and vapor adaptors that prevent loosening or over-tightening of the stage I product and vapor adaptors;
2. Consists of a two-point stage I system with separate fill and vapor connection points. Coaxial stage I vapor recovery systems shall not be used;
3. Has a submerged fill pipe that has the fill pipe's highest point of discharge no more than six inches from the tank bottom;
4. Has no tank containing motor fuel other than gasoline connected to the vapor piping;
5. Uses cement that is resistant to deterioration from exposure to water, hydrocarbons, and alcohol to join all pipes;
6. Has tank vent pipes that extend at least 12 feet above the elevation of the stage I fill points;
7. Has tank vent pipes with a minimum inside diameter of:
   a. Two inches if the pipe is not manifolded, or
   b. Three inches from the point of manifold if the pipe is manifolded;
8. Has pressure vacuum vent valves that are attached to the tank vent pipes by a threaded connection;
9. If a gasoline tank is installed in an enclosed vault, has an emergency vent in addition to the pressure vacuum vent valve required under subsection (D)(8);
10. Has a one-eighth inch threaded tap on the vent pipe between six and eight feet above ground level;
11. Has risers into gasoline storage tanks that are capped with UL-approved caps;
12. Has lead wires for instrumentation that pass through a leak-tight grommet with a compression fitting suitable for exposure to gasoline vapors;
13. Has storage tank vent pipes and fill and vapor manhole tops that are painted a color that minimizes solar gain and has a reflective effectiveness of at least 55 percent. Reflectivity shall be determined by visually comparing the paint with paint-color cards obtained from a paint manufacturer that uses the Master Pallet Notation to specify the paint color (i.e. 58YY 88/180 where the number in italics is the paint reflectivity). Examples of colors have a reflective effectiveness of at least 55 percent include, but are not limited to, yellow, light gray, aluminum, tan, red iron oxide, cream or pale blue, light green, glossy gray, light blue, light pink, light cream, white, silver, beige, tin plate, and mirrored finish. A manhole cover that is color coded for product identification is exempt from this subsection; and
14. Complies with other requirements outlined in the authority to construct permit.
ATC Requirements, cont.

- R3-7-1005
  - Schedule vapor test within 10 days after construction/start of dispensing
  - Perform vapor test within 60 days
  - Test must be witnessed by the division
Failing equipment shall remain out of service until the system/component passes appropriate tests (905(C)).

A person who cancels an initial inspection shall notify the Division by calling the Division’s designated telephone number at least one hour before the scheduled inspection and shall reschedule the inspection within 10 days after this notification. (1005(D))

Notify Division for repairs. Re-inspection date/time must be approved. (1005(E))
If a RSR does not start an initial inspection pressure decay test within 30 minutes of the scheduled start time, the Division shall fail the initial inspection of the site. (1005(F))
Annual Testing

- Annual Inspection
  - R3-7-1010
    - The same procedures used for the initial test are used for the annual test.
    - Cancellation of an annual test.
      - When cancelled less than one hour before the scheduled test time, the tester must stay on site until WMSD Investigator arrives.
An annual inspection *shall* be conducted by a RSR on or before the annual inspection date. The *annual inspection date* is the last day of the month in which the last scheduled annual inspection was performed.

- RSA notify 10 business days before test, WMSD must approve the test date and time.
Annual Inspection and Testing

- R3-7-1010 (B)
  - The annual inspection *shall* include the tests defined in R3-7-1005 (A)(1) through (3) that pertain to the specific vapor recovery system installed at that site.
    - Pressure decay (TP-201.3 using the final pressure criteria included in table 1)
    - Pressure vacuum vent valve (TP-201.1E)
    - Tie-Tank Test (TP-201.3C)
If the site fails to pass any tests, the affected site/component shall remain out of service until the appropriate tests are passed.
After an annual inspection begins the RSR shall not make a repair to the vapor recovery system or component until the results of the inspection are recorded.
A RSR *shall* notify the Division when a vapor recovery system or component is repaired after failing an annual inspection. The RSR shall not conduct a re-inspection until the Division approves the re-inspection date and time.
A person who cancels a witnessed inspection shall notify the Division by calling the Division’s designated telephone number at least one hour before the scheduled inspection and shall reschedule the test to be completed by the Annual Inspection date.

RSA notify 10 business days before test, Division must approve the test date and time.
If a RSA submits to the Division an inaccurate or incomplete Placed-In-Service or test report, the Division may:

1. Return the inaccurate or incomplete place-in-service or test report to the agency for correction, and
2. Impose a $50 civil penalty on the agency each time the agency resubmits a place-in-service report or test report without making all needed corrections.
Administrative Enforcement Action
R3-7-104 (N)(2)

- The Division may impose a $300 civil penalty on a RSR who incorrectly:
  1. Installs a commercial device or,
  2. Repairs a commercial device or,
  3. Tests a vapor recovery system or,
  4. Repairs a vapor recovery system.
If an unlicensed person represents himself as a RSA, the Division may:

1. Issue an administrative order and
2. Impose a $500 civil penalty and confiscate the unlicensed person’s calibration standards if the administrative order is violated
3. Deny a RSA license if the person fails to comply with the enforcement action
Administrative Enforcement Action R3-7-104 (N)(5)

The Division may issue an administrative order if an RSR places a commercial device into service without the Division’s authorization and impose a $500 civil penalty on the RSA.
The Division may issue an administrative order to a vapor recovery RSA or person who owns a vapor recovery system that does not, according to A.R.S. Title 3, Chapter 19, and this Chapter:

1. Notify the Division of a test date and time,
2. Begin a test at the approved time,
3. Appear for a witnessed test,
4. Close a vapor recovery system for repairs if the system fails, or
5. Perform a test
The Division may impose a $300 civil penalty on a vapor recovery RSA that violates subsection (N)(7) twice in 12 months.
If a RSR determines that a vapor recovery system or component is not in compliance with A.R.S. Title 3, Chapter 19, or this chapter, the RSR shall:

- Secure the non-compliant vapor recovery system or component from use before the RSR leaves the vapor recovery site or until the system or component passes the tests required by R3-7-910;
- Notify the Division of the secured, non-compliant vapor recovery system or component before leaving the site; and
- Notify the Division of the time of the test required by R3-7-910 by 6:00 am of the day after the non-compliant vapor recovery system or component is secured or one hour before the test, whichever is sooner.
If a RSR fails to comply with subsection (N)(10)(b) or (N)(10)(c), the Division may:

1. Impose a $300 civil penalty on the RSR.
2. Issue an administrative order, if the RSR is penalized under this subsection three times in 12 months, requiring the RSR to take and pass the licensing competency examination; and
3. Suspend or revoke the license of the RSA employing the RSR does not comply with an order issued under subsection (N)(11)(b)
Credit Card Skimmers

- R3-7-602(B)(1)(f)... RSR must report to WMSD within one hour by e-mail or phone of finding skimmer.

- If an RSR fails to notify WMSD of finding a skimmer, WMSD may impose a civil penalty of up to $300.
Updated Stage I Requirements

- Changed reporting requirements for throughput-exempt stations from monthly to annual
- Incorporated minimum standards for installation of Stage I systems to clarify ATC requirements
- Maintained annual testing requirements
- Eased VR inspection log requirements from daily to once every 7 days
Weights & Measures inspections

- R3-7-1011 Compliance inspections and additional test methods.
  - The Division shall not announce when it plans to conduct a compliance inspection of a stage 1 site.

- R3-7-1012 Enforcement
  - If the Division finds that a stage 1 system or component is defective or non-compliant. The Division shall issues a stop-sale stop-use tag until the site is proven compliant.
Weights & Measures inspections

- R3-7-717(C) Motor fuel dispensing site equipment.
  - (1) All gasoline, gasoline-alcohol blends, and ethanol flex fuel dispensers have a 10 micron or smaller nominal pore-sized filter.
  - (3) All biodiesel, biodiesel blends, diesel, and kerosene dispensers have a 30 micron or smaller nominal pore-sized filter.
Weights & Measures inspections

- P/V Vent Valve Testing (NEW)
  - If a new P/V vent valve is being installed during a Stage 1 annual test that fails leak rate or cracking pressure. The inspection will be allowed to continue provided a new passing vent is available. No failure or civil penalties will be issued.
Weights & Measures inspections

- P/V Vent Valve Testing (USED)
  - If a used P/V vent valve is being tested as part of the Stage 1 annual test. The vent may be cleaned provided it is dry and free of all soap residue prior to be tested. If the vent fails leak rate, cracking pressure, found to have liquid or soap on the sealing surface. The Stage 1 test will be recorded as a failure and civil penalties may be assessed.
SOP VPR307
Questions?

602-542-4373
dwm@azda.gov
Written Test

- You will have 1 hour and 30 min to complete the written test
- The test is open book only, no phones/computers
- If you do not pass, you must wait 7 days to retake
- You may not take exam more than 3 times in 6 months