# San Joaquin Valley Air Pollution Control District Vapor Recovery Requirements for Permitted Agricultural Gasoline Storage and Dispensing Operations

The purpose of this document is to coalesce the various District and State air pollution control rules and regulations that establish the vapor recovery requirements which affect aboveground gasoline storage and dispensing equipment at **permitted** agricultural operations. Permitting for agricultural operations is dependent on whether or not facility emissions are greater than 5 tons/year (50% of the major source threshold). This information is presented in summary format and the applicable rules, regulations, and Executive Orders should be consulted for detailed requirements. Furthermore, this document does not address permitting issues or vapor recovery requirements for gasoline delivery vessels or mobile fuelers.

## **Relevant Rules and Regulations:**

- District Rule 4621 (Gasoline Transfer into Stationary Storage Containers, Delivery Vessels, and Bulk Plants) – last amended December 19, 2013
- District Rule 4622 (Gasoline Transfer into Motor Vehicle Fuel Tanks) last amended December 19, 2013
- D-200 (Definitions for Vapor Recovery Procedures) as codified in 17 CCR § 94010 last amended April 23, 2015
- CP-206 (Certification Procedures for Vapor Recovery Systems as Gasoline Dispensing Facilities
  Using Aboveground Storage Tanks) as codified in 17 CCR § 94016 last amended April 23, 2015
- California Health & Safety Code § 41950 41962

#### **Relevant Definitions:**

- ARB Certified Vapor Recovery System a vapor recovery system certified by ARB pursuant to California Health & Safety Code § 41954.
- Existing Installation any gasoline dispensing facility (i.e., Aboveground Storage Tank
   (hereafter referred to as "AST")) that is not a new installation. Note: Existing AST for SLC
   purposes is an AST that was installed at their current location prior to April 1, 2009. Existing
   AST for Phase I EVR is an AST that was installed in their current location prior to July 1, 2010.
- Existing Storage Container an AST which was in existence on or before May 21, 1992 (per Rule 4622).
- **Implement of Husbandry** a vehicle that is used primarily in the conduct of agricultural operations pursuant to California Vehicle Code § 36000.
- **Major Modification** the modification of an existing installation that makes it subject to the same requirements to which a new installation is subject.
  - Replacement of an AST. The installation of an AST after retrofitting with Standing Loss Control (SLC) or the exchange of an AST for an SLC retrofitted AST of equal capacity to comply with the requirements of CP-206 is <u>not</u> a major modification.

- Modification of the Phase II system that involves the addition, replacement, or removal of 50% or more of any buried vapor piping, or the replacement of dispensers that were not occasioned by end user damage to the dispenser(s).
- Motor Vehicle a vehicle that is self-propelled.
- New Installation an AST that is not installed as of the operative date(s) of the latest
  amendments to CP-206, or an AST installed as of the operative date of the latest amendments
  to CP-206 that has undergone a major modification on or after the operative date(s) of the
  amendments. Currently the applicable operative dates are as follows:
  - SLC vapor recovery control system April 1, 2009
  - o Phase I Enhanced Vapor Recovery (EVR) July 1, 2010
  - o Phase II EVR March 13, 2015
- **Phase I** the control of vapors during the transfer of gasoline from the cargo tank (i.e., delivery vessel) to the AST.
- **Phase II** the control of vapors during the transfer of gasoline from the AST to a vehicle and the storage of gasoline in the AST.
- **Standing Loss Control (SLC)** the control of vapors from an AST when no Phase I or Phase II gasoline transfers are occurring.
- **Submerged Fill Pipe** any fill pipe (e.g., drop tube), the discharge opening of which, is entirely submerged when the liquid level is 6 inches above the bottom of the AST. When applied to an AST which is loaded from the side, any fill pipe, the discharge opening of which, is entirely submerged when the liquid level is 18 inches above the bottom of the AST.
- Vapor Recovery System all equipment used in association with an AST to recover, contain, and transfer the gasoline vapors generated by refueling vehicle tanks, gasoline storage tanks, and portable fuel containers, including, but not limited to, dispensing equipment, couplers, fittings, processors, control boards, gauges, valves, and monitors.
- Vehicle a device by which any person or property may be propelled, moved, or drawn upon a highway, excepting a device moved exclusively by human power or used exclusively upon stationary rails or tracks.

## **Exemptions:**

- ASTs used exclusively for diesel storage and dispensing are exempt from ALL District permitting and vapor recovery requirements.
- ASTs with a gasoline storage capacity of 250 gallons or less are exempt from ALL District permitting and vapor recovery requirements.
- The following existing ASTs at agricultural operations are exempt from ALL SLC, Phase I & Phase II vapor recovery requirements (EXCEPT for the requirement that the AST must be equipped with a permanently installed submerged fill pipe):
  - An AST with a capacity of 550 gallons or less used PRIMARILY for the fueling of implements of husbandry.
  - An AST with a capacity of 2,000 gallons or less installed prior to July 1, 1975, provided no major modification has been made on the tank since that time.

- o An AST installed prior to July 1, 1975, which is equipped with an offset fill pipe, provided no major modification has been made on the tank since that time.
- The following ASTs at agricultural operations are exempt from Phase II vapor recovery requirements:
  - o An AST which does not dispense gasoline into motor vehicle fuel tanks.
  - An AST which qualifies as an existing storage container (installed on or before May 21, 1992) and which has an aggregate dispensing operation throughput (i.e., the entire throughput from the operation which may comprise multiple ASTs), as verified through required recordkeeping, of:
    - Less than or equal to 24,000 gallons per calendar year; and
    - Less than or equal to 10,000 gallons in any consecutive 30-day period.
  - An AST that serves a dedicated fleet consisting entirely of ORVR (onboard refueling vapor recovery) equipped vehicles.

## **Requirements:**

The following requirements apply to ALL gasoline ASTs <u>at permit required agricultural operations</u> with a capacity greater than 250 gallons and <u>WHICH ARE NOT</u> completely or partially exempt as detailed in the previous section.

- Submerged Fill Pipe:
  - o ASTs at agricultural operations are required to be equipped with a submerged fill pipe.
- SLC:
  - Required for all ag ASTs that are subject to Phase I vapor recovery. Also required for ALL new installations with a tank capacity greater than 250 gallons.
  - o For existing installations, ARB SLC requirements may be satisfied by installing a certified pressure/vacuum vent valve and painting the AST with a certified coating in accordance with ARB Executive Order VR-301. An Authority to Construct (ATC) is not required to complete the installation of SLC on an existing tank.
  - For NEW installations, or existing installations which have undergone a major modification after April 1, 2009, ASTs must comply with more stringent ARB SLC requirements in accordance with ARB Executive Order VR-302 at the time of installation or major modification, as applicable. VR-302 requires the installation of a certified protected tank. Single-walled tanks are no longer allowed for **new installations** at an ag operation.

## Phase I Vapor Recovery:

- ARB certified Phase I vapor recovery (i.e., pre-EVR) is currently required on existing installations, except as detailed above in the Exemptions section.
  - For existing installations with an annual throughput of 18,000 gallons or less per tank, ARB certified Phase I EVR is NOT required. To qualify for this exemption, an annual throughput limit of 18,000 gallons or less must be a condition on the permit to operate. If not already present, an application to modify the existing permit to request an 18,000 gallon throughput limit is required.
  - For existing installations with an annual throughput greater than 18,000 gallons,
     ARB certified Phase I EVR was required by July 1, 2014.

- For new installations or existing installations which have undergone a major modification on or after July 1, 2010, ARB certified Phase I EVR is required at the time of installation or major modification, as applicable.
- There are currently two ARB certified Phase I EVR systems, which are specified in ARB Executive Orders VR-401 and VR-402 respectively.
- Existing installations that are configured such that they cannot be retrofitted with an ARB certified Phase I EVR system will be required to install such a system within four years of certification, in accordance with Executive Order G-70-216 (please contact the District to discuss if a tank falls into this category). Following are examples of ASTs that cannot be retrofitted with an ARB certified Phase I EVR system at this time:
  - bottom/side fill tanks (i.e., a remote fill pipe penetrates the tank within 18" of grade);
  - tanks that are not equipped with an emergency vent; and
  - tanks that do not have an adequate number of bungs or the proper size opening to accommodate the required Phase I components.
- An ATC is required prior to the installation of an ARB certified Phase I vapor recovery system and may be required prior to modifications to an existing Phase I vapor recovery system.

# • Phase II Vapor Recovery:

- ARB certified Phase II vapor recovery (i.e., pre-EVR) is currently required on existing installations, except as detailed above.
- Existing installations consisting of a protected tank (i.e., a tank certified under VR-302) with one or more remote dispensers will have four years from March 13, 2015, to install a Phase II EVR system.
  - There is currently one ARB certified Phase II EVR system for protected tanks with remote dispensing, VR-501.
  - There is currently no ARB certified Phase II EVR system for protected ASTs with integral dispensing, nor for unprotected (i.e., single-walled) ASTs with remote dispensing. The applicable compliance dates for such tanks will be established by ARB once the first system is certified.
- For new installations consisting of a protected tank with one or more remote dispensers, or existing installations which have undergone a major modification on or after March 13, 2015, ARB certified Phase II EVR is required at the time of installation or major modification, as applicable.
- For tanks that are subject to Phase II vapor recovery, an Operations & Maintenance
   (O&M) manual must be maintained and made available for inspection.
  - The required contents of the O&M manual are prescribed in Section 6.3 of District Rule 4622.
- An ATC is required prior to the installation of an ARB certified Phase II vapor recovery system and may be required prior to modifications to an existing Phase II vapor recovery system.

## Vapor Recovery Performance Testing:

 For ASTs required to be equipped with Phase I vapor recovery, BUT which are exempt from Phase II vapor recovery requirements:

- Start-up performance testing as specified in District Rule 4621 and any applicable ARB executive order(s) must be conducted WITHIN 60 DAYS of start-up of a new or modified AST.
  - These testing requirements will be specified on the required ATC.
- Ongoing performance testing as specified in District Rule 4621 and any applicable ARB executive order(s) must be conducted at least once every 36 MONTHS – unless specified more frequently on the ATC/PTO or the ARB Executive Order.
  - These testing requirements will be specified on the required ATC or PTO.
- o For ASTs required to be equipped with BOTH Phase I and Phase II vapor recovery:
  - Start-up performance testing as specified in District Rules 4621 and 4622 and any applicable ARB executive order(s) must be conducted WITHIN 60 DAYS of start-up of a new or modified AST.
    - These testing requirements will be specified on the required ATC.
  - Ongoing performance testing as specified in District Rules 4621 and 4622 and any applicable ARB executive order(s) must be conducted at least once every 12 MONTHS.
    - These testing requirements will be specified on the required ATC or PTO.
- The District must be notified at least 7 DAYS prior to performing vapor recovery testing and the results must be submitted to the District WITHIN 30 DAYS of test completion.
- Testing may only be performed by individuals certified by the District in accordance with District Rule 1177 (Gasoline Dispensing Facility Tester Certification).

#### Maintenance Inspections:

- Vapor recovery components must be inspected by the owner/operator or contracted party on a periodic basis for defects. The frequency of the inspections is based on the highest monthly throughput from the previous calendar year.
  - For monthly throughputs of less than 2,500 gallons One day per month (most agricultural operations fall in this category).
  - For monthly throughputs of 2,500 to less than 25,000 gallons One day per week.
- The facility must maintain a record of the inspections, the results of the inspections and a log of all repairs made to the system. The District has forms available to assist with this recordkeeping.

## Installation, Maintenance & Repair:

- o For Phase I and Phase II vapor recovery systems, installation and maintenance contractors must possess the following certifications to perform work:
  - ICC certification for Vapor Recovery System Installation and Repair; and
  - Any and all manufacturer certifications required by the applicable Executive
     Order and/or ARB approved Installation and Operation Manual.
- Owners and operators may replace their own hanging hardware (nozzles, hoses, and select breakaways). There are no required certifications to do so.

## **Loss of Exemption:**

In many circumstances a new, modified, relocated (to a different facility) or replacement AST at an agricultural operation may result in the loss of any vapor recovery exemptions and/or trigger the early implementation of EVR systems. Prior to installing a new AST or modifying, relocating, or replacing an existing AST, it is recommended that the District be consulted to ensure that the operator understands all applicable requirements.

If an existing AST at an agricultural operation becomes subject to the requirements above through loss of exemption (via an increase in gasoline throughput, no longer fueling implements of husbandry exclusively, or the fleet changes and is no longer 100% ORVR vehicles), the agricultural operation shall comply with requirements above as follows:

- 1. Within 30 days of loss of exemption, submit a complete application for an ATC.
- 2. Compliance with the requirements shall be completed within six (6) months from the issuance of the ATC. Any required testing for compliance shall be completed within six (6) months of the issuance of the ATC or within 60 days of the start-up, whichever is sooner.