# San Joaquin Valley **Unified Air Pollution Control District**

# District Policy SSP 2215

# Organic Liquid Storage Tanks – Voluntary Inspection and Maintenance Program

Approved By:

**Director of Permit Services** 

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### I. Purpose:

To provide guidelines for District staff, industry representatives, and other interested parties regarding District requirements when electing to participate in the voluntary tank inspection and maintenance (I&M) program. This policy also establishes the criteria for determining the need for obtaining permits when a source is not subject to the requirements of District Rule 4623.

In order to avoid confusion and violation of District rules and regulations, all users of this policy are encouraged to contact the District for clarification of any questionable issues.

### II. **Background:**

Tank I&M is a necessary operation to ensure that fugitive VOC emissions are minimized. The purpose of the voluntary I&M program is to allow operators to inspect and repair tanks on their own. This leads to ensured compliance with District Rules, minimization of emissions, alleviating some of the workload from Compliance staff, and allows the operator of storage tanks to remedy problems without receiving violations.

#### III. Requirements

Facilities subject to the requirements of District Rule 4623 may choose to participate in the Voluntary Inspection and Maintenance Program, as outlined in Tables 3 through 5 of District Rule 4623 (5/19/05).

Further, facilities subject to District Rule 4623 do not need to have tank I&M conditions placed on their operating permits, therefore they do not need to submit applications solely to be able to inspect and maintain their tanks. Owners/operators only need to send a letter to the District requesting inclusion into the program, and to comply with the requirements of Tables 3 through 5. The letter should include a list of the tanks to be included in the program, identified by tank ID number and location, and/or PTO number.

The District will confirm that it has received the program participation letter in writing within 30 days of receipt.

# IV. Tank I&M Conditions Placed on Facility Permits to Operate

Although not required, if a facility wishes to add tank I&M conditions to their operating permits, the District has honored these requests.

For facilities that have received their Title V permits, only a minor modification application need be submitted. This will allow US EPA to review the added conditions and comment on any concerns that they might have.

For facilities that do not have their Title V permits, an application for Authority to Construct must be submitted in order to add the conditions to their operating permits. Note that the addition of the tank I&M conditions outlined in this policy are not considered modifications, for they do not meet the definition of one as defined in Section 3.25 of Rule 2201 (latest SIP-approved version amended 9/17/14). Rule 2201 does not apply, and the rule referenced after each condition should be Rule 4623 for tanks subject to this rule, and Rule 2080, Conditional Approval, for tanks not subject to the tank rule.

## V. I&M Permit Conditions

The following permit conditions are to be placed on the tank's permit to reflect the requirements of the voluntary tank I&M program:

## CONDITIONS FOR FIXED ROOF TANKS

- 1. Operator shall visually inspect tank shell, hatches, seals, seams, cable seals, valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 3]
- 2. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 3]
- 3. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 3]
- 4. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 3]
- 5. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 3 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 3 shall constitute a violation of this rule. [District Rule 4623, Table 3]
- 6. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 3]
- 7. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 3]

## CONDITIONS FOR EXTERNAL FLOATING ROOF TANKS

- 1. Operator shall visually inspect tank valves, flanges, and connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually or ultrasonically inspect as appropriate, the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 4]
- 2. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 4]
- 3. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 4]
- 4. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 4]
- 5. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 4 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 4 shall constitute a violation of this rule. [District Rule 4623, Table 4]
- 6. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 4]
- 7. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 4]

## CONDITIONS FOR INTERNAL FLOATING ROOF TANKS

- 1. Operator shall visually inspect valves, flanges, connectors, and any other piping components directly affixed to the tank and within five feet of the tank at least once per year for liquid leaks, and with a portable hydrocarbon detection instrument conducted in accordance with EPA Method 21 for gas leaks. Operator shall also visually inspect the external shells and roofs of uninsulated tanks for structural integrity annually. [District Rule 4623, Table 5]
- 2. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623, Table 5]
- 3. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623, Table 5]
- 4. Components found to be leaking either liquids or gases shall be immediately affixed with a tag showing the component to be leaking. Operator shall maintain records of the liquid or gas leak detection readings, date/time the leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 4623, Table 5]
- 5. Leaking components that have been discovered by the operator that have been immediately tagged and repaired within the timeframes specified in District Rule 4623, Table 5 shall not constitute a violation of this rule. Leaking components as defined by District Rule 4623 discovered by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within the timeframes specified in District Rule 4623, Table 5 shall constitute a violation of this rule. [District Rule 4623, Table 5]
- 6. If a component type for a given tank is found to leak during an annual inspection, operator shall conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If no components are found to leak after four consecutive quarters, the operator may revert to annual inspections. [District Rule 4623, Table 5]
- 7. Any component found to be leaking on two consecutive annual inspections is in violation of this rule, even if covered under the voluntary inspection and maintenance program. [District Rule 4623, Table 5]