

**SAN JOAQUIN VALLEY UNIFIED
AIR POLLUTION CONTROL DISTRICT
COMPLIANCE DEPARTMENT**

COM 2140

APPROVED: Signed **DATE:** December 28, 2006
 Jon Adams
 Director of Compliance

TITLE: **RULE 4402 – CRUDE OIL PRODUCTION SUMPS**

SUBJECT: **INSPECTION OF CRUDE OIL PRODUCTION SUMPS**

To establish District policy and procedures for implementation of Rule 4402 – Crude Oil Production Sumps.

OBJECTIVE:

Rule 4402 and associated permit conditions require air pollution sources to limit the volatile organic compound (VOC) emissions discharged to the atmosphere. District inspectors are responsible for determining compliance with VOC limits through procedures designated to ensure accurate and consistent evaluations.

PURPOSE:

To establish District policy and procedures for implementation of Rule 4402.

POLICY STATEMENT:

District staff will enforce Rule 4402 and permit conditions pertaining to the discharge of VOC emissions. Failure to comply with the requirements of this rule is a violation and may subject the source to enforcement action. The rule sets forth the VOC limits for petroleum refineries and chemical plants. Specific sources may be permitted with special conditions to a requirement that is more restrictive than that allowed under Rule 4402.

I. AUTHORITY AND REFERENCES

Rule 4402 limits the emissions of VOC from crude oil production sumps by requiring emission control devices. Additionally, Rule 4402 provides the administrative requirements for record keeping, test methods and compliance schedules.

II. GENERAL GUIDELINES

A. Inspector Assignments

Due to the location of crude oil production sumps, Area Inspectors will be responsible for compliance verifications, complaint investigations and record keeping requirements for all facilities within the inspector's area.

B. Complaint Assignments

Complaints against any crude oil production sump will be assigned to the area inspector for investigation. If the area inspector is unavailable to respond to the complaint then the back-up inspector will be assigned to the complaint. The inspector will investigate all aspects dealing with the complaint or observed problems with the facility. Common complaints are VOC emissions and/or that the crude oil production sump does not fall within the specified guidelines of Rule 4402.

III. CRUDE OIL PRODUCTION SUMPS INSPECTION PROCEDURES

A. Pre-Inspection Procedures

Preparation for a routine compliance inspection includes, but is not limited to the following:

1. Review facility files including past year's inspection reports and active breakdowns and/or variances, as well as permit/rule requirements.
2. Verify that the TLV or halogenated hydrocarbon analyzer is charged and has been calibrated in the last 30 days. (Use the TLV to inspect above-ground tanks that may be used in lieu of sumps.)

B. Inspection Equipment

1. Hard hat
2. Safety shoes
3. Hydrogen sulfide (H₂S) monitor
4. Copy of permit
5. Field inspection sheets
6. Other safety equipment as required by the facility
7. TLV or halogenated hydrocarbon analyzer

C. Inspection Procedures

1. Obtain facility determination that it is safe to enter the sump area.
2. Verify that the sump is regulated under Rule 4402. See Section 4.0 of Rule 4402 to determine if the sump is exempt from rule requirements.
3. Determine that the type of control device (flexible floating cover, rigid floating cover or fixed-roof cover) is properly installed, maintained and operated.
4. Determine that control device used to achieve compliance with Section 5.1 of Rule 4402 is constructed and maintained to meet the following criteria:
 - a. The cover is impermeable to VOCs;
 - b. There are no holes, tears or other such openings, except pressure/vacuum valves, in the cover that allow the emission of VOCs to the atmosphere;
 - c. All valves are kept closed and gap-free, except during maintenance, inspection or repair;
 - d. The edge of any cover, except a rigid floating roof, forms a gap-free seal with the top edge of the sump. A rigid floating roof is equipped with a closure device that maintains the gap between the sump wall and the edge of the cover at every point around the perimeter at no more than one (1) inch.
 - e. All pressure/vacuum vales are set to within ten (10) percent of the maximum safe working pressure of the cover.
5. If a sump is replaced by an above-ground tank in lieu of complying with Section 5.1 of Rule 4402, verify that such tank is compliant with the applicable requirements of Rule 4623.

D. Records Review

1. Review records to determine the exempt status of small producers.
2. Review annual reports from facility documenting and justifying exemption.

E. Compliance Schedule

1. Verify compliance schedule outlined in Section 7.0 of Rule 4402.