



COMPLIANCE ASSISTANCE BULLETIN
March 2010

District Rule 4402 – Crude Oil Production Sumps

District Rule 4402, Crude Oil Production Sumps, was adopted on April 11, 1991, and amended on December 17, 1992. The purpose is to limit volatile organic compound (VOC) emissions from oil production sumps.

Rule 4402 requires *non-exempt* 1st, 2nd, and 3rd-stage sumps to be equipped with a flexible floating cover, a rigid cover, or a fixed-roof cover. All covers must be impermeable to VOC and free from holes, tears, or punctures. Cover hatches must be kept closed except during use, and pressure/vacuum vents must be set to within 10% of the maximum working pressure of the cover. Alternatively, the sump may be replaced by a tank meeting the requirements of Rule 4623.

Exemptions from Rule 4402 control requirements are based on oil gravity, production, surface area, and the VOC content of the water in the sump. Rule exemptions are listed below:

- 2nd or 3rd-stage sumps used by a small producer with less than 1000 square feet of surface area, used in heavy oil production,
- 2nd or 3rd-stage sumps containing clean produced water,
- 2nd or 3rd-stage sumps used by a very-small producer with less than 5000 square feet of surface area, used exclusively in heavy oil production,
- Sumps that have emissions of less than 0.007 lb of VOC per square foot per day as determined with a flux-box test,
- Sumps used less than 8 days per month, and less than 22 days per year,
- Sumps at petroleum refineries,
- Pits or ponds as defined by the rule.

Definitions:

- A sump is a surface impoundment or excavated depression used to separate crude oil, water and solids in oil fields. Sump stages are determined by their position in line with all separation devices. For example, a sump immediately downstream of a wash tank is a 2nd-stage sump,
- A Small Producer has less than 6000 barrels of crude production per day, per county, and does not engage in marketing, refining, or transportation of petroleum products,
- A Very Small Producer has less than 50 barrels of crude production per day, per lease and less than 300 barrels per day, per county,
- Heavy Oil is crude oil less than 30° API gravity,
- Clean Produced Water contains less than 35 mg/l of VOC as determined by laboratory test. Samples must be taken within a 5' radius of each sump inlet and results averaged,
- A pit is an excavation that's intended use is the intermittent or emergency collection of crude oil and water and that is not used for the separation of oil and water,
- A pond is a very large excavation for the storage and disposal of clean produced water, is not used for separation, and whose surface has less than 5% oil covering.

Facilities that do not meet one of the rule exemptions must install a control device or otherwise modify the sump to gain compliance. Facilities that meet a rule exemption must submit records annually to justify the exemption (see Rule 4402, Section 6.1). Failure to properly control a non-exempt sump, or failure to submit the required exemption justification will result in enforcement action.

As required by Section 6.1 and under the authority of the California Health and Safety Code Sections 42303 and 42304 the District is hereby requiring the submission of the exemption records specified in the rule. These records must be submitted to the Compliance Department of the nearest District Office by April 22, 2010 to avoid enforcement action for late submission.

This rule may affect your operation in other ways. Please read it. You may obtain a copy from any District Office or view this and other rules at: <http://valleyair.org/rules/1ruleslist.htm>. Compliance Department phone numbers:

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