

Chapter 129 -- Standards for Sources

SOURCES OF VOCs

§ 129.58. Petroleum refineries--fugitive sources.

(a) The owner or operator of a petroleum refinery shall do the following:

(1) Develop and conduct a monitoring program consistent with the provisions of subsection (d).

(2) Record leaking refinery components which have a VOC concentration exceeding 10,000 ppm when tested in accordance with the provisions of §139.14 (relating to emissions of VOCs and place an identifying tag on each refinery component consistent with the provisions in subsection (d)(3).

(3) Repair and retest the leaking refinery components as soon as possible. Every reasonable effort shall be made to repair each leak within 15 days unless a refinery unit shutdown is required to make the necessary repair.

(4) Identify leaking refinery components which cannot be repaired until the unit is shutdown for turnaround.

(b) Except for safety pressure relief valves and fittings on all valves 1 inch or smaller, no owner or operator of a petroleum refinery shall install or operate a valve at the end of a pipe or line containing VOCs unless the pipe or line is sealed with a second valve, a blind flange, a plug or a cap. The sealing device may be removed only when a sample is being taken or during maintenance operations.

(c) Pipeline valves and pressure relief valves in gaseous VOC service shall be marked in some manner that will be readily obvious to both refinery personnel performing monitoring and the Department.

(d) Monitoring shall be done as follows:

(1) The owner or operator of a petroleum refinery shall conduct a monitoring program consistent with the following requirements:

(i) Check yearly, by methods referenced in §139.14, pump seals and pipeline valves in liquid service.

(ii) Check quarterly by methods referenced in §139.14, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.

(iii) Check monthly, by visual methods, all pump seals.

(iv) Check within 24 hours, by methods referenced in §139.14, pump seal from which VOC liquids are observed to be dripping.

(v) Check, by methods referenced in §139.14, relief valve within 24 hours after it has vented to the atmosphere.

(vi) Check within 27 hours after repair, by methods referenced in §139.14, refinery component that was found leaking.

(2) Pressure relief devices which are connected to an operating flare header, vapor recovery devices, inaccessible valves, storage tank valves and valves that are not externally regulated are exempt from the monitoring requirements in paragraph (1).

(3) The owner or operator of a petroleum refinery, upon the detection of a leaking refinery component, shall affix a weatherproof and readily visible tag, bearing an identification number and the date upon which the leak is located to the leaking refinery component. This tag shall remain in place until the leaking refinery component is repaired.

(e) Record keeping shall comply with the following:

(1) The owner or operator of a petroleum refinery shall maintain a leaking refinery components' monitoring log which shall contain, at a minimum, the following data:

(i) The name and process unit where the refinery component is located.

(ii) The type of refinery component-- for example, valve, seal.

(iii) The tag number of refinery component.

(iv) The dates on which the leaking refinery component was discovered and repaired.

(v) The date and instrument reading of the recheck procedure after a leaking refinery component was repaired.

(vi) A record of the calibration of the monitoring instrument.

(vii) Those leaks that cannot be repaired until turnaround.

(viii) The total number of refinery components checked and the total number of refinery components found leaking.

(2) Copies of the monitoring log shall be retained by the owner for 2 years after the date on which the record was made or the report was prepared.

(3) Copies of the monitoring log shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

(f) Reporting shall comply with the following:

(1) The owner or operator of a petroleum refinery, upon completion of each yearly and quarterly monitoring procedure, shall do the following:

(i) Submit a report to the Department by the last business day of January, April, July, and October that lists all leaking refinery components that were located during the previous calendar quarter but not repaired within 15 days, all leaking refinery components awaiting unit turnaround, the total number of refinery components inspected and the total number of refinery components found leaking.

(ii) Submit a signed statement with the report attesting to the fact that, with the exception of those leaking refinery components listed in subparagraph (i), monitoring and repairs were performed as stipulated in the monitoring program.

(g) The owner or operator of a petroleum refinery may submit an alternative plan for the control of leaks from petroleum refinery equipment to the Department. If the Department finds that the alternative plan will achieve an emission reduction which is equivalent to or greater than the reduction which can be achieved under this section and that the alternative plan is as enforceable as this section, then the Department will allow the implementation of this alternative plan.

(h) The owner or operator of a petroleum refinery may submit to the Department a list of refinery components the inspection of which would involve a significant element of danger. The Department may exempt the refinery components on this list from the requirements of this section if the owner or operator can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated and that these exemptions will not result in a significant reduction in the effectiveness in the control of VOC emissions.