

Regulation No. 24 Control of Volatile Organic Compound Emissions

APPENDIX "F"

Test Methods and Compliance Procedures:

Leak Detection Methods for Volatile Organic Compounds (VOCs).

- a. Owners or operators required to carry out a leak detection monitoring program shall comply with the following requirements:
 1. Monitoring shall be performed in accordance with Method 21 of 40 CFR, Part 60, **Appendix A** (July 1, 1992).
 2. The detection instrument shall meet the performance criteria of Method 21.
 3. The detection instrument shall be calibrated before and after use on each day of its use by the methods specified in Method 21. Failure to achieve a post-use calibration precision of less than 10 percent shall constitute grounds for rejecting all tests performed since the last pre-use calibration. In such cases, required leak tests must be reperformed.
 4. Calibration gases shall be:
 - i. Zero air (less than 10 parts per million [ppm] of hydrocarbon in air).
 - ii. A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
 5. The detection instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in Method 21.
- b. When equipment is tested for compliance with the requirement that there be no detectable emissions, the test shall comply with the following:
 1. The requirements of paragraphs (a)(1) through (a)(5) of this Section shall apply and shall be met, and
 2. The background level shall be determined as set forth in Method 21.
- c. Leak detection tests shall be performed consistent with:
 1. "APTI Course SI 417-Controlling Volatile Organic Compound Emissions from Leaking Process Equipment", EPA-450/2-82-015.

2. "Portable Instrument User's Manual for Monitoring VOC Sources," EPA-340/1-86-015.
 3. "Protocols for Generating Unit--Specific Emission Estimates for Equipment Leaks of VOC and VHAP," EPA-450/3-88-010.
 4. "Petroleum Refinery Enforcement Manual", EPA-340/1-80-008.
- d. Use of adaptations to test methods. Use of an adaptation to any of the analytical methods specified in paragraphs (a), (b), and (c) of this Section shall be approved by the Department on a case-by-case basis. An owner or operator shall submit sufficient documentation for the Department to find that the analytical methods specified in paragraphs (a), (b), and (c) will yield inaccurate results and that the proposed adaptation is appropriate.