



South Coast Air Quality Management District

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AQMD Rule 1173 COMPLIANCE ADVISORY

October 24, 2008

Amendments to Rule 1173 – Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants

Definition of Term “Tamper-proof” and Other Amended Rule Revisions Regarding Pressure Relief Devices (PRDs)

BACKGROUND:

South Coast Air Quality Management District (AQMD) Rule 1173 – Control of Volatile Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants controls volatile organic compound (VOC) leaks from components and releases from atmospheric process pressure relief devices (PRDs). This rule applies to components at refineries, chemical plants, lubricating oil and grease re-refiners, marine terminals, oil and gas production fields, natural gas processing plants, and pipeline transfer stations. Rule 1173 also requires monitoring and reporting of releases from atmospheric process PRDs and the option of either venting PRDs that release significant amounts of VOCs to vapor recovery or payment of a \$350,000 mitigation fee.

On June 1, 2007, Rule 1173 was amended by the AQMD to include the following:

- ✦ Requires **refineries** to install “*tamper-proof*” electronic monitoring devices to continuously monitor atmospheric process PRDs.
 - Refineries with less than 50 atmospheric PRDs must install monitoring devices:
 - (1) on 50% of all atmospheric PRDs *by January 1, 2009*; and,
 - (2) on the remaining atmospheric PRDs *by July 1, 2009*.
 - Refineries with more than 50 PRDs must install monitoring devices:
 - (1) on 20% of all atmospheric PRDs *by January 1, 2009*;
 - (2) on 40% of all atmospheric PRDs *by July 1, 2009*; and,
 - (3) on the remaining atmospheric PRDs *by July 1, 2010*.
 - Provides alternative PRD monitoring installation dates and technology subject to AQMD approval.
- ✦ Requires **lubricating oil, grease re-refiners and marine terminals** to install telltale indicators on atmospheric PRDs *by December 31, 2007*, and the start of monitoring *by January 1, 2009*.

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- ✚ Requires **lubricating oil, grease re-refiners and marine terminals** to notify the AQMD of any atmospheric PRD releases that are greater than 100 pounds and to submit reports indicating the details of those releases.
- ✚ Requires **all facilities (refineries, chemical plants, lubricating oil, grease re-refiners and marine terminals)** to notify the AQMD by telephone or any other approved method, any atmospheric PRD release in excess of 100 pounds of VOC, within one hour of such occurrence.
- ✚ Requires **all facilities (refineries, chemical plants, lubricating oil, grease re-refiners and marine terminals)** to submit a written report to the AQMD within 30 days following notification of an atmospheric process PRD release.
- ✚ Requires **all facilities (refineries, chemical plants, lubricating oil, grease re-refiners and marine terminals)** to submit quarterly electronic reports for all process atmospheric reports PRDs indicating the process parameters monitored as a function of time, no later than 30 days after the end of each calendar quarter

DEFINITION OF "TAMPER-PROOF":

Since the adoption of these amendments on June 1, 2007, various meetings were conducted between AQMD staff and representatives from the Western States Petroleum Association and other industry representatives to clarify the meaning of "tamper-proof" as it relates to the installation and operation of electronic monitoring devices. Pursuant to Rule 1173(c)(29), Tamper Proof means: *that all data collected shall be encrypted such that it cannot be modified.* Consensus was reached by the participants of the meetings, and the definition of "tamper-proof" was clarified by describing the requirements for what constitutes "encrypted." Accordingly, as it relates to Rule 1173 electronic monitoring devices at refineries, the following explanation was agreed upon:

Encryption is defined to include transmission and handling of the signal from the field device to the base radio. If the handling of the data from the base radio to the data storage device is wireless, that transmission shall be encrypted, and the data transmitted and stored within the data storage unit shall be labeled by date and time (i.e., data are date stamped). If the handling of the data from the base radio to the data storage device is transmitted through a hard-wired communication connection, then such equipment shall be considered "tamper-proof" as required by Rule 1173 if the data transmitted and stored within the data storage unit is labeled by date and time (i.e., data are date stamped).

All changes to data transmitted from field device to the base radio and from the base radio to the data storage unit must be documented and available to the Executive Officer, upon request. Requests for such changes should be addressed to Edwin Pupka, Senior Enforcement Manager, Refinery/Energy Team, Office of Engineering and Compliance.

Please contact Melesio Hernandez, Program Supervisor, Engineering and Compliance, at 909.396.2421 should you have questions or require additional information regarding these and other recent Rule 1173 amendments and requirements.

Sincerely,



Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering and Compliance