NOTICE OF INTENT

Department of Environmental Quality

Office of the Secretary

Legal Affairs and Criminal Investigations Division

Louisiana MACT Determinations for Non-HON Sources (Equipment Leaks)

(LAC 33:III.5130 and 5132) (AQ373)

 Under the authority of the Environmental Quality Act, R.S. 30:2001 et seq., and in accordance with the provisions of the Administrative Procedure Act, R.S. 49:950 et seq., the secretary gives notice that rulemaking procedures have been initiated to amend the air regulations, LAC 33:III.5130 and 5132 (AQ373).

 This Rule will codify the following leak detection and repair (LDAR) programs in Louisiana’s Air Quality regulations (LAC 33:III):

• Louisiana MACT Determination for Non-HON Sources, and

• Louisiana MACT Determination for Non-HON Sources with Consent Decree Enhancements.

These LDAR programs represent the department’s maximum achievable control technology (MACT) determinations under LAC 33:III.5109.A for fugitive emissions from components such as pumps, compressors, valves, and connectors at certain process units within chemical manufacturing facilities.

Appendix B of LAC 33:III.2199 addresses the Louisiana Consolidated Fugitive Emissions Program. Table 9 therein (Stringency Table) lists potentially applicable LDAR programs in order of decreasing stringency, including the two identified above. However, unlike most of the other LDAR programs identified in the table, the subject Louisiana MACT Determinations have not been codified.

Codification of these LDAR programs is needed to ensure that their provision remain uniform and to facilitate the department’s assessment of how any future revisions to leak definitions, monitoring methods, or monitoring frequencies might impact their position in Table 9.

Further, codification would require any future revisions to be effected through the rulemaking process in accordance with the Administrative Procedure Act 9R.S. 49:950 et seq.), thus ensuring transparency and providing an opportunity for affected sources and the public to submit comments. The basis and rationale for this Rule are to codify the aforementioned LDAR programs in Louisiana’s Air Quality regulations. This Rule meets an exception listed in R.S. 30:2019(D)(2) and R.S. 49:953(G)(3); therefore, no report regarding environmental/health benefits and social/economic costs is required.

**Family Impact Statement**

This Rule has no known impact on family formation, stability, and autonomy as described in R.S. 49:972.

**Poverty Impact Statement**

This Rule has no known impact on poverty as described in R.S. 49:973.

**Small Business Analysis**

This Rule has no known impact on small business as described in R.S. 49:965.2 - 965.8.

**Provider Impact Statement**

This Rule has no known impact on providers as described in HCR 170 of 2014.

**Public Comments**

 All interested persons are invited to submit written comments on the proposed regulation. Persons commenting should reference this proposed regulation by AQ373. Such comments must be received no later than November 6, 2019, at 4:30 p.m., and should be sent to Deidra Johnson, Attorney Supervisor, Office of the Secretary, Legal Affairs and Criminal Investigations Division, P.O. Box 4302, Baton Rouge, LA 70821-4302 or to fax (225) 219-4068 or by e-mail to DEQ.Reg.Dev.Comments@la.gov. Copies of these proposed regulations can be purchased by contacting the DEQ Public Records Center at (225) 219-3168. Check or money order is required in advance for each copy of AQ373. These proposed regulations are available on the Internet at www.deq.louisiana.gov/portal/tabid/1669/default.aspx.

**Public Hearing**

A public hearing will be held on October 30, 2019, at 1:30 p.m. in the Galvez Building, Oliver Pollock Conference Room, 602 N. Fifth Street, Baton Rouge, LA 70802. Interested persons are invited to attend and submit oral comments on the proposed amendments. Should individuals with a disability need an accommodation in order to participate, contact Deidra Johnson at the address given below or at (225) 219-3985. Two hours of free parking are allowed in the Galvez Garage with a validated parking ticket.

 These proposed regulations are available for inspection at the following DEQ office locations from 8 a.m. until 4:30 p.m.: 602 N. Fifth Street, Baton Rouge, LA 70802; 1823 Highway 546, West Monroe, LA 71292; State Office Building, 1525 Fairfield Avenue, Shreveport, LA 71101; 1301 Gadwall Street, Lake Charles, LA 70615; 111 New Center Drive, Lafayette, LA 70508; 110 Barataria Street, Lockport, LA 70374; 201 Evans Road, Bldg. 4, Suite 420, New Orleans, LA 70123.

 Herman Robinson

 General Counsel

Title 33

ENVIRONMENTAL QUALITY

Part III. Air

Chapter 51. Comprehensive Toxic Air Pollutant Control Program

Subchapter D. ~~Reserved~~Louisiana Maximum Achievable Control Technology (MACT) Determinations for Equipment Leaks

 §5130. Louisiana MACT Determination for Non-HON Sources

 A. Applicability and Designation of Affected Sources

 1. The leak detection and repair (LDAR) provisions of this Section apply only when referenced by the terms and conditions of an air permit issued in accordance with LAC 33:III.Chapter 5.

 2. The provisions of this Section apply to each of the following sources that are intended to operate in volatile organic toxic air pollutant (VOTAP) service in excess of 300 hours during a calendar year:

 a. pumps;

 b. compressors;

 c. pressure relief devices;

 d. instrumentation systems;

 e. sampling connection systems;

 f. open‑ended valves or lines;

 g. valves;

 h. flanges and other connectors;

 i. bottoms receivers;

 j. surge control vessels;

 k. agitators; and

 l. control devices or systems.

 B. Definitions. The terms used in this MACT determination are defined in LAC 33:III.111, with the exception of those terms specifically defined in LAC 33:III.5103.A, or herein as follows.

 *Bottoms Receiver—*a tank that collects distillation bottoms before the stream is sent for storage or for further downstream processing.

 *Closed-Loop System—*an enclosed system that returns process fluid to the process.

 *Closed-Purge System—*a system or combination of systems and portable containers to capture purged liquids. Containers for purged liquids must be covered or closed when not being filled or emptied.

 *Closed‑Vent System—*a system that is not open to the atmosphere and that is composed of piping, connections, and if necessary, flow‑inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

 *Connector—*flanged, screwed, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment. A common connector is a flange. Joined fittings welded completely around the circumference of the interface are not considered connectors for the purpose of this MACT determination.

 *Control Device—*an enclosed combustion device, vapor recovery system, or flare.

 *Double Block and Bleed System—*two block valves connected in series with a bleed valve that can vent the line between the two block valves.

 *Equipment—*each pump, compressor, pressure relief device, sampling connection system, open‑ended valve or line, valve, flange or other connector, agitator, bottoms receiver, surge control vessel, and instrumentation system in VOTAP service; and any control devices or systems required by this MACT determination.

 *First Attempt at Repair—*to take action within 5 days of determining the equipment is leaking for the purpose of stopping or reducing leakage of VOTAP to the atmosphere using best practices.

 *In Gas/Vapor Service—*that a piece of equipment in VOTAP service contains a gas or vapor at operating conditions.

 *In Heavy Liquid Service—*that a piece of equipment in VOTAP service is not in gas/vapor service and is not in light liquid service.

 *In Light Liquid Service—*the equipment contacts a fluid which meets the following conditions:

 a. the vapor pressure of one or more of the components is greater than 0.3 kPa at 20°C. (Vapor pressure may be obtained from standard reference texts or may be determined by ASTM D-2879);

 b. the total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20°C is equal to or greater than 20 percent by weight; and

 c. the fluid is a liquid at operating conditions.

 *In Liquid Service—*that a piece of equipment in VOTAP service is not in gas/vapor service.

 *In‑Situ Sampling Systems—*nonextractive samples or in‑line samplers.

 *Instrumentation System—*a group of equipment, including valves, connectors, and/or other components, used to condition and convey a sample of the process fluid to analyzers and instruments for the purpose of determining process operating conditions (e.g., composition, pressure, flow, etc.). Only valves nominally 0.5 inches and smaller and connectors nominally 0.75 inches and smaller in diameter are considered instrumentation systems for the purposes of this MACT determination. Valves greater than nominally 0.5 inches and connectors greater than nominally 0.75 inches associated with instrumentation systems are not considered part of instrumentation systems and must be monitored individually.

 *In Vacuum Service—*that equipment is operating at an internal pressure, which is at least 20 inches of water below ambient pressure.

 *In VOC Service—*for the purposes of this MACT determination, that

 a. the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight; and

 b. the piece of equipment is not in heavy liquid service.

 *In VOTAP Service—*that a piece of equipment either contains or contacts a volatile fluid (liquid or gas) that is at least 5 percent by weight the sum of Class I and Class II organic toxic air pollutants listed in Table 51.1 of LAC 33:III.5112.

 *Light Liquid—*a fluid with a vapor pressure greater than 0.3 kPa at 20°C.

 *New Source Performance Standards (NSPS)—*standards of performance for new stationary sources promulgated under Section 111 of the Clean Air Act.

 *Open‑Ended Valve or Line—*any valve, except pressure relief valves, having one side of the valve seat in contact with process material and one side open to atmosphere, either directly or through open piping.

 *Pressure Release—*the emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.

 *Process Unit—*equipment assembled to produce a VOTAP or its derivatives as intermediates or final products, or equipment assembled to use a VOTAP in the production of a product. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.

 *Process Unit Shutdown—*a work practice or operational procedure that stops production from a process unit, or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit, or part of a process unit, for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

 *Pseudorandom—*of, pertaining to, or being random numbers generated by a definite, nonrandom computational process.

 *Repaired—*equipment is adjusted, or otherwise altered, to eliminate a leak as indicated by one of the following:

 a. an instrument reading of less than 1000 ppm for valves and connectors, less than 1000 ppm for instrumentation systems and pressure relief devices in heavy liquid service, less than 2000 ppm for pumps, less than 5000 ppm for compressors, less than 10,000 for agitators in heavy liquid service, less than 500 ppm for pressure relief devices in gas/vapor service and closed-vent systems, and less than 500 for compressors that are designated as no detectable emissions for equipment required to be monitored;

 b. for equipment listed in Subsections D and K of this Section, there is no indication of liquids dripping; or

 c. for equipment equipped with a leak detection sensor(s), there is no indication by a sensor(s) that a seal or barrier fluid system has failed.

 *Quarterly—*a three-month period.

 *Semiannual—*a six‑month period.

 *Sensor—*a device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

 *Surge Control Vessel—*feed drums, recycle drums, and intermediate vessels. Surge control vessels serve several purposes including equalization of load, mixing, recycle, and emergency supply.

 *Volatile—*any fluid which has a vapor pressure of 1.5 pounds per square inch absolute or greater under actual flow or storage conditions.

 *Volatile Organic Toxic Air Pollutant or VOTAP—*any Class I, Class II, or Class III volatile organic air pollutant in Table 51.1 of LAC 33:III.5112.

 C. General

 1. Each owner or operator subject to the provisions of this MACT determination shall demonstrate compliance with the requirements of Subsections C-O of this Section for each new and existing source.

 2. Compliance with this MACT determination will be determined by review of records, review of performance test results, and/or inspection using the methods and procedures specified in Subsection P of this Section.

 3. Each piece of equipment in a process unit to which this MACT determination applies shall be identified such that it can be readily distinguished from equipment that is not subject this MACT determination. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification.

 4. Equipment that is in vacuum service is excluded from the requirements of Subsections D-O of this Section if it is identified as required in Subparagraph Q.5.d of this Section.

 5. Any equipment that has been physically removed from service, disassembled or dismantled must be monitored to determine if it is leaking within 90 days of placing the equipment back in service. A record of the monitoring must be maintained in the log required in Paragraph Q.5 of this Section. Repair of any equipment found leaking must be performed in accordance with the appropriate subsection for that type of equipment monitored.

 D. Pumps in Light Liquid Service

 1. Monitoring

 a. Each pump shall be monitored quarterly to detect leaks by the method specified in Paragraph P.2 of this Section, except as provided in Paragraphs C.4, D.4, and D.5 of this Section.

 b. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, the pump shall be monitored within 5 days by the method specified in Paragraph P.2 of this Section.

 2. If an instrument reading of 2000 ppm or greater is measured, a leak is detected.

 3. Repairs

 a. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Subsection M of this Section.

 b. A first attempt at repair shall be made no later than five calendar days after each leak is detected.

 4. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Paragraph D.1 of this Section, provided the following requirements are met.

 a. Each dual mechanical seal system is:

 i. operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure;

 ii. equipped with a barrier fluid degassing reservoir that is connected by a closed‑vent system to a control device that complies with the requirements of Subsection N of this Section; or

 iii. equipped with a system that purges the barrier fluid into a process stream with zero VOTAP emissions to the atmosphere.

 b. The barrier fluid is not in VOTAP service and, if the pump is covered by standards under NSPS, is not in VOC service.

c. Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

 d. Each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

 e. Sensors

 i. Each sensor as described in Subparagraph D.4.c of this Section is checked daily or is equipped with an audible alarm; and

 ii. The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

 f. If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in Clause D.4.e.ii of this Section, a leak is detected and shall be repaired in accordance with Subparagraphs D.3.a and b of this Section.

 5. If any pump is equipped with a closed‑vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of Subsection N of this Section, it is exempt from the requirements of Paragraphs D.1-4 of this Section.

 E. Compressors

 1. In lieu of complying with Paragraphs E.2-7 of this Section, compressor seals may be monitored quarterly to detect leaks by method specified in Paragraph P.2 of this Section. A leak is detected if an instrument reading of 5000 ppm is measured.

 2. Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluid to the atmosphere, except as provided for in Paragraphs C.4, E.9, and E.10 of this Section.

 3. Each compressor seal system as required in Paragraph E.2 of this Section shall be:

 a. operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure;

 b. equipped with a barrier fluid system that is connected by a closed‑vent system to a control device that complies with the requirements of Subsection N of this Section; or

 c. equipped with a system that purges the barrier fluid into a process stream with zero VOTAP emissions to atmosphere.

 4. The barrier fluid shall not be in VOTAP service and, if the compressor is covered by a standard under NSPS, shall not be in VOC service.

 5. Each barrier fluid system as described in Paragraphs E.2-4 of this Section shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

 6. Failure Determination

 a. Each sensor as required in Paragraph E.5 of this Section shall be checked daily or shall be equipped with an audible alarm.

 b. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

 7. If the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined under Subparagraph E.6.b of this Section, a leak is detected.

 8. Repairs

 a. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Subsection M of this Section.

 b. A first attempt at repair shall be made no later than five calendar days after each leak is detected.

 9. A compressor is exempt from the requirements of Paragraphs E.1-7 of this Section if it is equipped with a closed‑vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of Subsection N of this Section.

 10. Any compressor that is designated for no detectable emissions is exempt from the requirements of Paragraphs E.2-7 of this Section, if the compressor:

 a. is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the method specified in Paragraph P.3 of this Section; and

 b. is tested for compliance with Paragraph E.10 of this Section initially upon designation, annually, and at other times requested by the department.

 F. Pressure Relief Devices in Gas/Vapor Service

 1. Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no leakage, as indicated by an instrument reading of less than 500 ppm, as measured by the method specified in Paragraph P.3 of this Section.

 2. Monitoring

 a. After each pressure release, the pressure relief device shall be returned to a condition of no leakage, as indicated by an instrument reading of less than 500 ppm, as soon as practicable, but no later than five calendar days after each pressure release, except as provided in Subsection M of this Section.

 b. No later than five calendar days after the pressure release, the pressure relief device shall be monitored to confirm the condition of no leakage, as indicated by an instrument reading of less than 500 ppm, as measured by the method specified in Paragraph P.3 of this Section.

 3. Any pressure relief device that is equipped with a closed‑vent system capable of capturing and transporting leakage from the pressure relief device to a control device as described in Subsection N of this Section is exempt from the requirements of Paragraphs F.1 and 2 of this Section.

 G. Sampling Connection Systems

 1. Each sampling connection system shall be equipped with a closed-loop system, closed‑purge system, or closed‑vent system, except as provided for in Paragraph C.4 of this Section. This system shall collect or capture the sample purge for return to the process. Gases displaced during filling of the sample container are not required to be collected or captured.

 2. Each closed-loop system, closed‑purge system, or closed‑vent system as required in Paragraph G.1 of this Section shall:

 a. return the purged process fluid directly to the process line with zero VOTAP emissions to the atmosphere;

 b. collect and recycle the purged process fluid with zero VOTAP emissions to the atmosphere; or

 c. be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of Subsection N of this Section.

 3. In‑situ sampling systems are exempt from the requirements of Paragraph G.1 of this Section.

 H. Open-Ended Valves or Lines

 1. Line Sealing

 a. Each open‑ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in Paragraph C.4 of this Section.

 b. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open‑ended valve or line or during maintenance and repair.

 2. Each open‑ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

 3. When a double block and bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Paragraph H.1 of this Section at other times.

 4. Opened-ended valves and lines shall be monitored and repaired in accordance with Subsection I of this Section.

 5. Open-ended valves or lines in an emergency shutdown system that are designed to open automatically in the event of a process upset are exempt from the requirements of Paragraphs H.1-3 of this Section.

 I. Valves in Gas/Vapor Service and in Light Liquid Service

 1. Monitoring. Each valve shall be monitored quarterly to detect leaks by the method specified in Paragraph P.2 of this Section and shall comply with Paragraphs I.2-4, except as provided in Paragraphs C.4, I.5, I.6, and I.7 of this Section.

 2. If an instrument reading of 1000 ppm or greater is measured, a leak is detected.

 3. Repairs

 a. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Subsection M of this Section.

 b. A first attempt at repair shall be made no later than five calendar days after each leak is detected.

 4. First attempts at repair include, but are not limited to, the following best practices where practicable:

 a. tightening of bonnet bolts;

 b. replacement of bonnet bolts;

 c. tightening of packing gland nut; and

 d. injection of lubricant into a lubricated packing.

 5. Any valve that is designated as an unsafe‑to‑monitor valve and identified in accordance with Subparagraph Q.6.a of this Section is exempt from the requirements of Paragraph I.1 of this Section if:

 a. the owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Paragraph I.1 of this Section; and

 b. the owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

 6. Any valve that is designated as a difficult‑to‑monitor valve and identified in accordance with Subparagraph Q.6.b of this Section is exempt from the requirements of Paragraph I.1 of this Section if:

 a. the owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface;

 b. the process unit within which the valve is located is in an existing process unit; and

 c. the owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

 7. If the percent of leaking valves in a process unit equals or exceeds 4.0, then all valves in the process unit must be monitored monthly. The monthly monitoring must be initiated within 60 days of the previous monitoring. The monthly monitoring of valves shall continue until the percent of leaking valves is less than 4.0. Once the percent of leaking valves is less than 4.0, monitoring can be performed in accordance with Paragraph I.1 of this Section.

 8. The leak percentage shall be determined by dividing the number of valves in VOTAP service for which leaks are detected, including the number of unrepairable valves, by the number of valves in VOTAP service monitored, then multiplying by 100.

 J. Valves in VOTAP Service – Skip Period Leak Detection and Repair

 1. An owner or operator:

 a. may elect for all valves within a process unit to comply with one of the alternative work practices specified in Subparagraphs J.2.a and b of this Section; and

 b. must notify the Office of Environmental Services at least 30 days before implementing one of the alternative monitoring schedules.

 2. Alternate Monitoring

 a. After two consecutive quarterly leak detection periods performed in accordance with Subsection I of this Section with the percent of valves leaking equal to or less than 2.0 or if the process unit has an existing monitoring program prescribed by its air permit that is currently operating with a leak rate of less than or equal to 2 percent using a leak definition of 10,000 ppm or less for valves, an owner or operator may monitor semiannually.

 b. After two consecutive semiannual leak detection periods with the percentage of valves leaking equal to or less than 2.0, an owner or operator may begin to monitor annually.

 c. If the percentage of valves leaking is greater than 2.0 for any monitoring period, the owner or operator shall comply with the requirements as described in Subsection I of this Section.

 3. Monitoring shall be performed in accordance with the test method in Paragraph P.2 of this Section.

 4. The leak percentage shall be determined by dividing the number of valves in VOTAP service for which leaks are detected, including unrepairable valves, by the number of valves in VOTAP service monitored, then multiplying by 100.

 K. Instrumentation Systems and Pressure Relief Devices in Liquid Service; and Pumps, Valves, Connectors, and Agitators in Heavy Liquid Service

 1. Instrumentation systems and pressure relief devices in liquid service and pumps, valves, connectors, and agitators in heavy liquid service shall be monitored within five days by the method specified in Paragraph P.2 of this Section if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method. If a potential leak in an instrumentation system is repaired as required in Subparagraph K.3.a and b of this Section, it is not necessary to monitor the system for leaks by the method specified in Paragraph P.2 of this Section.

 2. A leak is detected if an instrument reading of 10,000 ppm or greater for agitators, 2000 ppm or greater for pumps, or 1000 ppm or greater for valves, connectors, instrumentation systems, and pressure relief devices is measured.

 3. Repairs

 a. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in Subsection M of this Section.

 b. The first attempt at repair shall be made no later than five calendar days after each leak is detected.

 c. For instrumentation systems that are not monitored by the method specified in Paragraph P.2 of this Section, repaired shall mean that the visual, audible, olfactory, or other indications of a leak have been eliminated; that no bubbles are observed at potential leak sites during a leak check using soap solution; or that the system will hold a test pressure.

 4. First attempts at repair include, but are not limited to, the best practices described under Paragraph I.4 of this Section.

 L. Surge Control Vessels and Bottoms Receivers. Each surge control vessel and bottoms receiver that is not routed back to the process shall be equipped with a closed-vent system that routes the organic vapors vented from the vessel back to the process or to a control device that complies with the requirements in Subsection N of this Section or to an alternate method of control which has been approved by the department.

 M. Delay of Repair

 1. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

 2. Delay of repair of equipment for which leaks have been detected will be allowed for equipment that is isolated from the process and that does not remain in VOTAP service.

 3. Delay of repair for valves, connectors, and agitators will be allowed if:

 a. the owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and

 b. when repair procedures are effected, the purged material is collected and destroyed, or recovered in a control device complying with Subsection N of this Section.

 4. Delay of repair for pumps will be allowed if:

 a. repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and

 b. repair is completed as soon as practicable, but not later than six months after the leak was detected.

 5. Equipment placed on the repair list are exempt from further monitoring until they have been repaired.

 N. Closed-Vent Systems and Control Devices

 1. Owners or operators of closed‑vent systems and control devices used to comply with provisions of this MACT determination shall comply with the provisions of this Section, except as provided in Paragraph C.4 of this Section.

 2. Vapor recovery systems (e.g., condensers and absorbers) shall be designed and operated to recover the VOTAP vapors vented to them with an efficiency of 95 percent or greater.

 3. Enclosed combustion devices shall be designed and operated to reduce the VOTAP emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.5 seconds at a minimum temperature of 760°C (1400°F).

 4. Flares

 a. Flares shall be designed for and operated with no visible emissions as determined by the method specified in Paragraph P.5 of this Section, except for periods not to exceed a total of five minutes during any two consecutive hours.

 b. Flares shall be operated with a flame present at all times, as determined by the method specified in Paragraph P.5 of this Section.

 c. Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam‑assisted or air‑assisted, or with the net heating value of the gas combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the method specified in Paragraph P.5 of this Section.

 d. Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the method specified in Subparagraph P.5.d of this Section, less than 18 m/sec (60 ft/sec).

 e. Air‑assisted flares shall be designed for and operated with an exit velocity less than the velocity (Vmax) as determined by the method specified in Subparagraph P.5.e of this Section.

 f. Flares used to comply with this Paragraph shall be steam‑assisted, air‑assisted, or nonassisted.

 5. Owners or operators of control devices that are used to comply with the provisions of this MACT determination shall monitor these control devices to ensure that they are operated and maintained in conformance with their design.

 6. No Detectable Emissions

 a. Closed‑vent systems shall be designed for and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and by visual inspections, as determined by the method specified in Paragraph P.3 of this Section.

 b. Closed‑vent systems shall be monitored to determine compliance with this Subsection initially, annually, and at other times requested by the department.

 c. Leaks, as indicated by an instrument reading greater than 500 ppm and visual inspection, shall be repaired as soon as practicable, but not later than 15 calendar days after the leak is detected.

 d. A first attempt at repair shall be made no later than five calendar days after the leak is detected.

 7. Delay of repair of a closed-vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator demonstrates that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

 8. Any parts of the closed-vent system that are designated, as described in Subparagraphs Q.6.a and b of this Section, as unsafe to inspect are exempt from the inspection requirements of Paragraph N.6 of this Section if:

 a. the owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with Paragraph N.6 of this Section; and

 b. the owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

 9. Closed‑vent systems and control devices used to comply with provisions of this Section shall be operated at all times when emissions may be vented to them.

 O. Connectors in Gas/Vapor Service and in Light Liquid Service

 1. The owner or operator of an affected process unit shall monitor connectors in gas/vapor and light liquid service, at the intervals specified in Paragraphs O.2-6 of this Section.

 a. The connectors shall be monitored to detect leaks by the method specified in Paragraph P.2 of this Section.

 b. If an instrument reading greater than or equal to 1000 parts per million is measured, a leak is detected. All leaks shall be repaired in accordance with Paragraph O.9 of this Section except as provided in Subsection M of this Section.

 2. The owner or operator shall monitor the connectors in accordance with the following requirements.

 a. Initially, 200 (or 10 percent, whichever is less) of the process connectors shall be monitored. The connectors to be monitored shall be selected in accordance with a sampling plan approved by the Office of Environmental Services. A connector selection method, including but not limited to those listed below, shall be proposed for approval:

 i. computer randomly or pseudorandomly generated;

 ii. monitoring of every nth connector in relation to an identified equipment with n varying for subsequent monitoring periods;

 iii. monitoring of every nth connector along an established pathway, with the starting point varying for subsequent monitoring periods; or

 iv. other random or pseudorandom statistical method.

 b. The connector selection method shall require that at least 66 percent of the connectors to be monitored during the monitoring period have not been previously monitored until all connectors within the process unit have been monitored.

 3. After conducting the initial monitoring required by Paragraph O.2 of this Section, the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in Paragraphs O.4-6 of this Section.

 4. If good performance (i.e., the percent of leaking connectors is less than or equal to 2.0 for the process unit) is obtained, monitoring shall be performed annually. The monitoring must be performed within one year from the previous monitoring.

 5. If the percent of leaking connectors is greater than 2.0 for the process, monitoring must be performed quarterly until good performance is obtained or until four quarterly monitorings have been performed. The level of performance shall be determined by using the equation in Paragraph O.12 of this Section and all the monitoring data obtained over the quarterly monitoring periods performed since good performance was not obtained.

 6. If good performance has not been obtained after four quarters of monitoring, then the remaining unchecked connectors in the process unit must be monitored within six months of the last quarterly monitoring period.

 a. If monitoring of the remaining connectors indicates good performance, then monitoring shall be performed in accordance with Paragraph O.4 of this Section.

 b. If monitoring of the remaining connectors indicates that good performance has not been obtained, then monitoring shall be performed in accordance with Paragraph O.5 of this Section.

 7. If an owner or operator eliminates a connector subject to monitoring under Paragraph O.2 of this Section either by welding it completely around the circumference of the interface or by physically removing the connector and welding the pipe together, the owner or operator shall check the integrity of the weld by monitoring it within three months after being welded according to the procedure in Paragraph P.2 of this Section or by testing using X-ray, acoustic monitoring, hydrotesting, or other applicable method. If an inadequate weld is found or the connector is not welded completely around the circumference, the connector is not considered a welded connector and is therefore not exempt from the provisions of this MACT determination.

 8. Except as provided in Paragraph O.13 of this Section, each connector that has been opened or has otherwise had the seal broken shall be monitored for leaks within the first 90 days after being returned to VOTAP service, including those determined to be unrepairable prior to process unit shutdown. If the follow-up monitoring detects a leak, it shall be repaired according to the provisions of Paragraph O.9 of this Section, unless it is determined to be unrepairable, in which case it is counted as unrepairable for the purposes of this Subsection.

 9. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Paragraph O.8 of this Section. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. If a leak is detected, the connector shall be monitored for leaks within the first 90 days after its repair.

 10. Any connector that is designated as an unsafe-to-monitor connector and identified in accordance with Paragraph Q.8 of this Section is exempt from the requirements of Paragraphs O.1 of this Section if:

 a. the owner or operator determines that the connector is unsafe to monitor because personnel would be exposed to an immediate danger as a result of complying with Paragraphs O.2-6 of this Section; and

 b. the owner or operator has a written plan that requires monitoring of the connector as frequently as practicable during safe to monitor periods.

 11. Inaccessible or Glass or Glass-Lined Connectors

 a. Any connector that is designated as inaccessible or is glass or glass-lined is exempt from the monitoring requirements of Paragraphs O.2-6 of this Section and from the recordkeeping and reporting requirements. An inaccessible connector is one that:

 i. is buried;

 ii. is insulated in a manner that prevents access to the connector by a monitor probe;

 iii. is obstructed by equipment or piping that prevents access to the connector by a monitor probe;

 iv. is unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold, which would allow access to connectors up to 7.6 meters (25 feet) above the ground;

 v. would require elevating the monitoring personnel more than 2 meters above a permanent support surface for access;

 vi. would require the erection of scaffold for access; or

 vii. is not able to be accessed at any time in a safe manner to perform monitoring. (Unsafe manners include, but are not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized manlift basket in areas where an ignition potential exists, or where access would require near proximity to hazards such as electrical lines or would risk damage to equipment.)

 b. If any inaccessible or glass or glass-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the leak shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in Paragraph O.8 of this Section.

 c. A first attempt at repair shall be made no later than five calendar days after the leak is detected.

 12. For use in determining the monitoring frequency, as specified in Paragraphs O.2-6 of this Section, the percent leaking connectors shall be calculated as follows:

 % CL = [ CL/CT ] x 100

where:

% CL = percent leaking connectors in process unit.

CL = number of connectors measured at 1000 parts per million or greater, including unrepairable connectors, in the process unit.

CT = total number of monitored connectors in the process unit.

 13. As an alternative to the requirements of Paragraph O.2 of this Section, each screwed connector 1 inch in diameter or less installed in a process unit before January 1, 1995, may:

 a. comply with the requirements of Subsection K of this Section; and

 b. be monitored for leaks within the first 90 days after being returned to VOTAP service after having been opened or otherwise had the seal broken. (If the follow-up monitoring detects a leak, it shall be repaired according to the provisions of Paragraph O.9 of this Section.)

 P. Test Methods and Procedures

 1. Each owner or operator subject to the provisions of this MACT determination shall comply with the test methods and procedures provided in this Subsection.

 2. Monitoring as required in Subsections C-O of this Section shall comply with the following requirements:

 a. Monitoring shall comply with an appropriate reference method in 40 CFR 60, 61, or 63 or an alternative method approved by the department.

 b. The detection instrument shall meet the performance criteria of an appropriate reference method.

 c. The instrument shall be calibrated before use on each day of its use by the procedures specified in an appropriate reference method.

 d. Calibration gases shall be:

 i. zero air (less than 10 ppm of hydrocarbon in air); and

 ii. a mixture of methane or n‑hexane and air at a concentration of approximately, but less than, 1000 ppm methane or n-hexane.

 e. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible as described in an appropriate reference method.

 3. When equipment is tested for compliance with no emissions, as required in Paragraphs E.10, F.1, and N.6 of this Section, the test shall comply with the following requirements:

 a. The requirements of Subparagraphs P.2.a-d of this Section shall apply.

 b. The background level shall be determined, as set forth in an appropriate reference method.

 c. The instrument probe shall be traversed around all potential leak interfaces as close to the interface as possible, as described in an appropriate reference method.

 d. The arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared to the concentration of the leak definition for determining compliance.

 4. VOTAP Service

 a. Each piece of equipment in a process unit that can conceivably contain equipment in VOTAP service is presumed to be in VOTAP service unless an owner or operator demonstrates that the piece of equipment is not in VOTAP service. For a piece of equipment to be considered not in VOTAP service, it must be determined that the content can be reasonably expected never to exceed 5 percent by weight the sum of Class I and Class II VOTAPs. For purposes of determining the percent VOTAP content of the process material that is contained in or contacts equipment, procedures that conform to the methods described in ASTM Method D-2267 shall be used.

 b. An owner or operator may use engineering judgment rather than the procedures in Subparagraph P.4.a of this Section to document that the percent VOTAP content does not exceed the percentage requirements, provided that the engineering judgment demonstrates that the VOTAP content clearly does not exceed the percentage limit. When the owner or operator and the department do not agree on whether a piece of equipment is not in VOTAP service, the procedures in Subparagraph P.4.a of this Section shall be used to resolve the disagreement.

 c. If an owner or operator determines that a piece of equipment is in VOTAP service, the determination can be revised only after following the procedures in Subparagraph P.4.a of this Section.

 d. Samples used in determining the percent VOTAP content shall be representative of the process fluid that is contained in or contacts the equipment.

 5. Flares

 a. Reference Method 22 of 40 CFR 60, Appendix A, shall be used to determine compliance of flares with the visible emission provisions of this MACT determination.

 b. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

 c. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:



where:

HT = net heating value of the sample, MJ/scm, where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20°C;

K = constant, 1.740 x 10‑7 (1/ppm) (g mole/scm) (MJ/kcal) where standard temperature for (g mole/scm) is 20°C;

Ci = concentration of sample component *i* in ppm, as measured by Reference Method 18 of 40 CFR 60, Appendix A; and

Hi = net heat of combustion of sample component *i*, Kcal/g mole. The heats of combustion may be determined using ASTM D2382‑76 if published values are not available or cannot be calculated.

 d. The actual exit velocity of a flare shall be determined by dividing the volumetric flow rate (in units of standard temperature and pressure), as determined by Reference Method 2, 2A, 2C, or 2D of 40 CFR 60, Appendix A, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

 e. The maximum permitted velocity, V max, for air‑assisted flares shall be determined by the following equation:



where:

Vmax = maximum permitted velocity, m/sec; and

 HT = the net heating value as determined in Subparagraph P.5.c of this Section.

 Q. Recordkeeping Requirements

 1. Records

 a. Each owner or operator subject to the provisions of this MACT determination shall comply with the recordkeeping requirements of this Subsection.

 b. An owner or operator of more than one process unit subject to the provisions of this MACT determination may comply with the recordkeeping requirements for these process units in one recordkeeping system if the system identifies each record by each process unit.

 2. When each leak is detected as specified in Subsections D-K, N, and O of this Section, the following requirements apply:

 a. A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

 b. The identification on equipment which identifies it as leaking equipment may be removed after it has been repaired.

 3. When each leak is detected as specified in Subsections D-K, N, and O of this Section, the following information shall be recorded in a log and shall be kept for five years in a readily accessible location:

 a. the instrument, operator, and equipment identification;

 b. the date the leak was detected and the dates of each attempt to repair the leak;

 c. repair methods applied in each attempt to repair the leak;

 d. above 1000 (or above the applicable definition of leak) if the maximum instrument reading measured by the method specified in Paragraphs P.2 or P.3 of this Section after each repair attempt is equal to or greater than 1000 ppm (or above the applicable definition of leak);

 e. repair delayed and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;

 f. the signature of the owner or operator, or designee, whose decision it was that repair could not be effected without a process shutdown;

 g. the expected date of successful repair of the leak if a leak is not repaired within 15 calendar days;

 h. dates of process unit shutdowns that occur while the equipment is unrepaired; and

 i. the date of successful repair of the leak.

 4. The following information pertaining to the design requirements for closed‑vent systems and control devices described in Subsection N of this Section shall be recorded and kept in a readily accessible location:

 a. detailed schematics, design specifications, and piping and instrumentation diagrams;

 b. the dates and descriptions of any changes in the design specifications;

 c. a description of the parameter or parameters monitored, as required in Paragraph N.5 of this Section, to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter or parameters was selected for the monitoring;

 d. periods when the closed‑vent systems and control devices required in Subsections D, E, F, G, and L of this Section are not operated as designed, including periods when a flare pilot light does not have a flame; and

 e. dates of start-ups and shutdowns of the closed‑vent systems and control devices required in Subsections D, E, F, G, and L of this Section.

 5. The following information pertaining to all equipment subject to the requirements in Subsections D-O of this Section shall be recorded in a log that is kept in a readily accessible location:

 a. a list of equipment identification, except welded fittings, subject to the requirements of this MACT determination;

 b. a list of equipment identification for pressure relief devices required to comply with Paragraph F.1 of this Section;

 c. for the monitoring required in Paragraph F.2 of this Section:

 i. the dates of each test;

 ii. the background level measured during each test; and

 iii. the maximum instrument reading measured at the equipment during each test; and

 d. a list of equipment identification for equipment in vacuum service.

 6. The following information pertaining to all valves subject to the requirements of Paragraphs I.5 and 6 of this Section shall be recorded in a log that is kept in a readily accessible location:

 a. a list identifying the valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve; and

 b. a list identifying the valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.

 7. The following information shall be recorded for valves complying with Subsections I and J of this Section:

 a. a schedule of monitoring; and

 b. the percentage of valves found leaking during each monitoring period.

 8. A list identifying the connectors that are designated as unsafe-to-monitor, an explanation for each connector stating why the connector is unsafe-to-monitor, and the plan for monitoring each connector shall be recorded in a log that is kept in a readily accessible location.

 9. The following information shall be recorded for connectors complying with Subsection O of this Section:

 a. a schedule of monitoring; and

 b. the percentage of connectors found leaking during each monitoring period.

 10. The following information shall be recorded in a log that is kept in a readily accessible location:

 a. design criteria required in Clause D.4.e.ii and Subparagraph E.6.b of this Section and an explanation of the design criteria; and

 b. any changes to this criteria and the reasons for the changes.

 11. Information and data used to demonstrate that a piece of equipment is not in VOTAP service shall be recorded in a log that is kept in a readily accessible location.

 12. The operator shall retain the required records for 5 years and make the records available to the department upon request.

 R. Reporting Requirements

 1. An owner or operator of any piece of equipment to which this MACT determination applies shall submit a statement in writing by 90 days after the approval of the Compliance Plan/Certificate of Compliance, if applicable, or within 90 days of becoming subject to the provisions of this Section, notifying the department of the following information for each source:

 a. equipment identification and process unit identification;

 b. type of equipment (e.g., a pump or pipeline valve);

 c. percent by weight VOTAP in the fluid at the equipment;

 d. process fluid state at the equipment (i.e., gas/vapor or liquid); and

 e. method of compliance with the MACT determination (e.g., quarterly leak detection and repair, or equipped with dual mechanical seals).

 2. A report shall be submitted to the Office of Environmental Compliance semiannually starting six months after the initial report required in Paragraph R.1 of this Section that includes the following information for each process unit:

 a. identification of process;

 b. for each monitoring period during the semiannual reporting period:

 i. number of valves monitored in accordance with Subsection I of this Section and determined to be leaking;

 ii. number of leaking valves monitored in accordance with Subsection I of this Section and not repaired;

 iii. number of valves monitored in accordance with Subsection I of this Section;

 iv. percent valves monitored in accordance with Subsection I of this Section and determined to be leaking;

 v. number of valves monitored in accordance with Subsection J of this Section and determined to be leaking;

 vi. number of leaking valves monitored in accordance with Subsection J of this Section and not repaired;

 vii. number of valves monitored in accordance with Subsection J of this Section;

 viii. percent valves monitored in accordance with Subsection J of this Section and determined to be leaking;

 ix. number of valves monitored in accordance with Subsection K of this Section and determined to be leaking;

 x. number of leaking valves monitored in accordance with Subsection K of this Section and not repaired;

 xi. number of valves monitored in accordance with Subsection K of this Section;

 xii. number of pumps for which leaks were detected which were monitored in accordance with Subsection D of this Section;

 xiii. number of pumps for which leaks were not repaired as required in Subsection D of this Section;

 xiv. number of compressors for which leaks were detected which were monitored in accordance with Subsection E of this Section;

 xv. number of compressors for which leaks were not repaired as required in Subsection E of this Section;

 xvi. number of connectors monitored in accordance with Subsection K of this Section and determined to be leaking;

 xvii. number of leaking connectors monitored in accordance with Subsection K of this Section and not repaired;

 xviii. number of connectors monitored in accordance with Subsection K of this Section;

 xix. percent connectors monitored in accordance with Subsection K of this Section and determined to be leaking;

 xx. number of connectors monitored in accordance with Subsection O of this Section and determined to be leaking;

 xxi. number of leaking connectors monitored in accordance with Subsection O of this Section and not repaired;

 xxii. number of connectors monitored in accordance with Subsection O of this Section;

 xxiii. percent connectors monitored in accordance with Subsection O of this Section and determined to be leaking; and

 xxiv. the facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible;

 c. dates of process unit shutdowns, which occurred within the semiannual reporting period;

 d. revisions to items reported according to Paragraph R.1 of this Section if changes have occurred since the initial report or subsequent revisions to the initial report; and

 e. the results of all of the tests to determine compliance with Paragraphs E.10, F.1, and N.6 of this Section conducted within the semiannual reporting period.

 3. In the first report submitted as required in Paragraph R.1 of this Section, the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule unless a revised schedule has been submitted in a previous semiannual report.

 4. An owner or operator electing to comply with the provisions of Subsection J of this Section shall notify the Office of Environmental Services of the alternate provision selected 30 days before implementing any of the provisions.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45:

 §5132. Louisiana MACT Determination for Non-HON Sources with Consent Decree Enhancements

 A. Applicability. The leak detection and repair (LDAR) provisions of this Section apply only when referenced by the terms and conditions of an air permit issued in accordance with LAC 33:III.Chapter 5.

 B. The owner or operator of a subject facility or process unit shall comply with the provisions of the Louisiana MACT Determination for Non-HON Sources as set forth in LAC 33:III.5130, except as modified below.

 1. For valves in gas/vapor service, if an instrument reading of 200 ppm or greater is measured, a leak is detected.

 2. For valves in light liquid service, if an instrument reading of 500 ppm or greater is measured, a leak is detected.

 3. Each pump in light liquid service shall be monitored monthly to detect leaks by the method specified in LAC 33:III.5130.P.2, except as provided in LAC 33:III.5130.C.4, D.4, and D.5.

 4. The owner or operator may not comply with the alternate monitoring provisions for valves in VOTAP service (i.e., skip periods) under LAC 33:III.5130.J.

 5. The owner or operator shall monitor leaking components by the method specified in LAC 33:III.5130.P.2 or P.3, as applicable, following the first attempt at repair as described in LAC 33:III.5130.D.3.b, E.8.b, I.3.b, K.3.b, N.6.d, O.9, and O.11.c no later than five calendar days after the leak is detected; and

 6. Delay of Repair

 a. For valves, other than control valves and pressure relief devices, leaking at 10,000 ppm or greater which cannot be repaired using the techniques described in LAC 33:III.5130.I.4.a-d, the owner or operator shall attempt repair using the drill and tap method, or an equivalent repair method, for each leaking valve unless the valve is isolated from the process and does not remain in VOTAP service, prior to placing the valve on the delay of repair list, unless the owner or operator can demonstrate that there is a safety, mechanical, or major environmental concern posed by repairing the leak in this manner. If not repaired within 15 days by other means, the owner or operator shall perform the first drill and tap, or equivalent repair method, within 15 days after the leak is detected and a second attempt, if necessary, within 30 days after the leak is detected. After two unsuccessful attempts to repair a leaking valve through the drill and tap method, or equivalent repair method, the owner or operator may place the leaking valve on its delay of repair list. The requirement to make two attempts to repair a leaking valve by the drill and tap method may be satisfied by making two sealant injection attempts rather than by making multiple taps into the valve body.

 b. Notwithstanding the exemption provided by LAC 33:III.5130.M.5, the owner or operator must continue to monitor equipment placed on the delay of repair list in accordance with the applicable provisions of LAC 33:III.5130.

 c. Within 30 days of identifying that a piece of equipment is leaking at a rate greater than the applicable leak definition, the supervisor of the subject facility or process unit shall certify in writing that such equipment qualifies for delay of repair under LAC 33:III.5130.M. These records shall be maintained with the records required by LAC 33:III.5130.Q.3.e-h.

 AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 and 2060 et seq.

 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Affairs and Criminal Investigations Division, LR 45

FISCAL AND ECONOMIC IMPACT STATEMENT

 FOR ADMINISTRATIVE RULES LOG #: AQ373

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PersonPreparingStatement: | Bryan D. Johnston |  | Dept.: | Environmental Quality |
| Phone: | (225) 219-3450 |  | Office: | Environmental Services |
|  | bryan.johnston@la.gov |  |  |  |
| Return Address: | 602 North Fifth Street |  | Rule Title: | Louisiana MACT Determination for |
|  | Baton Rouge, LA 70802 |  |  | Non-HON Sources; Louisiana |
|  |  |  |  | MACT Determination for Non-HON |
|  |  |  |  | Sources with Consent Decree |
|  |  |  |  | Enhancements |
|  |  |  |  | (LAC 33:III.5130 and 5132) |
|  |  |  |  |  |
|  |  |  | Date Rule Takes Effect: | Upon Promulgation |

SUMMARY

(Use complete sentences)

In accordance with Section 953 of Title 49 of the Louisiana Revised Statutes, there is hereby submitted a fiscal and economic impact statement on the rule proposed for adoption, repeal or amendment. THE FOLLOWING STATEMENTS SUMMARIZE ATTACHED WORKSHEETS, I THROUGH IV AND WILL BE PUBLISHED IN THE LOUISIANA REGISTER WITH THE PROPOSED AGENCY RULE.

I. ESTIMATED IMPLEMENTATION COSTS (SAVINGS) TO STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There are no estimated implementation costs or savings to the Department of Environmental Quality (DEQ) or local governmental units as a result of the proposed rule changes which codify the leak detection and repair (LDAR) programs in the state’s air regulations. This will impact facilities subject to the Maximum Achievable Control Technology (MACT) determinations for Non-Hazardous Organic NESHAP (Non-HON) sources and for non-HON sources with Consent Decree Enhancements.

II. ESTIMATED EFFECT ON REVENUE COLLECTIONS OF STATE OR LOCAL GOVERNMENTAL UNITS (Summary)

There is no estimated effect on revenue collections of state or local governmental units as a result of the proposed rule.

III. ESTIMATED COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NON-GOVERNMENTAL GROUPS (Summary)

Owners or operators of process units at chemical manufacturing facilities that are subject to the Louisiana MACT Determination for Non-HON Sources or the Louisiana MACT Determination for Non-HON Sources with Consent Decree Enhancements will be directly affected by the proposed action. There will be no costs, including workload adjustments or additional paperwork, or economic benefits to affected entities as a result of the proposed codification of current practice.

IV. ESTIMATED EFFECT ON COMPETITION AND EMPLOYMENT (Summary)

There is no estimated effect on competition or employment in the public or private sector as a result of the proposed rule.

 a

Signature of Agency Head or Designee Legislative Fiscal Officer or Designee

Herman Robinson, General Counsel

Typed Name and Title of Agency Head or Designee

 a

Date of Signature Date of Signature

FISCAL AND ECONOMIC IMPACT STATEMENT

FOR ADMINISTRATIVE RULES

The following information is requested in order to assist the Legislative Fiscal Office in its review of the fiscal and economic impact statement and to assist the appropriate legislative oversight subcommittee in its deliberation on the proposed rule.

A. Provide a brief summary of the content of the rule (if proposed for adoption, or repeal) or a brief summary of the change in the rule (if proposed for amendment). Attach a copy of the notice of intent and a copy of the rule proposed for initial adoption or repeal (or, in the case of a rule change, copies of both the current and proposed rules with amended portions indicated).

This rule will codify the following leak detection and repair (LDAR) programs in Louisiana’s Air regulations (LAC 33:III):

* Louisiana MACT Determination for Non-HON Sources
* Louisiana MACT Determination for Non-HON Sources with Consent Decree Enhancements

These LDAR programs represent the department’s maximum achievable control technology (MACT) determinations under LAC 33:III.5109.A for fugitive emissions from components such as pumps, compressors, valves, and connectors at certain process units within chemical manufacturing facilities.

1. Summarize the circumstances which require this action. If the Action is required by federal regulation, attach a copy of the applicable regulation.

Appendix B of LAC 33:III.2199 addresses the Louisiana Consolidated Fugitive Emissions Program. Table 9 therein (Stringency Table) lists potentially applicable LDAR programs in order of decreasing stringency, including the two identified above. However, unlike most of the other LDAR programs identified in Table 9, the Louisiana MACT Determinations have not been codified.

Codification of these LDAR programs is needed to ensure that their provisions remain uniform and to facilitate the department’s assessment of how any future revisions to leak definitions, monitoring methods, or monitoring frequencies might impact their position in Table 9.

Further, codification would require any future revisions to be effected through the rulemaking process in accordance with the Administrative Procedure Act (R.S. 49:950 et seq.), thus ensuring transparency and providing an opportunity for affected sources and the public to submit comments.

C. Compliance with Act 11 of the 1986 First Extraordinary Session

(1) Will the proposed rule change result in any increase in the expenditure of funds? If so, specify amount and source of funding.

No, the proposed rule will not result in any increase in the expenditure of funds.

(2) If the answer to (1) above is yes, has the Legislature specifically appropriated the funds necessary for the associated expenditure increase?

(a) Yes. If yes, attach documentation.

(b) No. If no, provide justification as to why this rule change should be published at this time.

This question is not applicable.

FISCAL AND ECONOMIC IMPACT STATEMENT

WORKSHEET

I. A. COSTS OR SAVINGS TO STATE AGENCIES RESULTING FROM THE ACTION PROPOSED

1. What is the anticipated increase (decrease) in costs to implement the proposed action?

No costs or savings to state agencies are anticipated as a result of the proposed action.

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COSTS FY 20-21 FY 21-22 FY 22-23

PERSONAL SERVICES -0- -0- -0-

OPERATING EXPENSES -0- -0- -0-

PROFESSIONAL SERVICES -0- -0- -0-

OTHER CHARGES -0- -0- -0-

EQUIPMENT -0- -0- -0-

MAJOR REPAIR & CONSTR. -0- -0- -0-

POSITIONS (#) -0- -0- -0-

TOTAL -0- -0- -0-

2. Provide a narrative explanation of the costs or savings shown in "A.1.", including the increase or reduction in workload or additional paperwork (number of new forms, additional documentation, etc.) anticipated as a result of the implementation of the proposed action. Describe all data, assumptions, and methods used in calculating these costs.

This question is not applicable.

3. Sources of funding for implementing the proposed rule or rule change.

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SOURCE FY 20-21 FY 21-22 FY 22-23

STATE GENERAL FUND -0- -0- -0-

AGENCY SELF-GENERATED -0- -0- -0-

DEDICATED -0- -0- -0-

FEDERAL FUNDS -0- -0- -0-

OTHER (Specify) -0- -0- -0-

TOTAL -0- -0- -0-

4. Does your agency currently have sufficient funds to implement the proposed action? If not, how and when do you anticipate obtaining such funds?

No additional funds are required to implement the proposed action.

B. COST OR SAVINGS TO LOCAL GOVERNMENTAL UNITS RESULTING FROM THE ACTION PROPOSED.

1. Provide an estimate of the anticipated impact of the proposed action on local governmental units, including adjustments in workload and paperwork requirements. Describe all data, assumptions and methods used in calculating this impact.

 No impact on local governmental units is anticipated.

2. Indicate the sources of funding of the local governmental unit which will be affected by these costs or savings.

 There will be no costs or savings to local governmental units, so no funding sources will be affected.

FISCAL AND ECONOMIC IMPACT STATEMENT

WORKSHEET

II. EFFECT ON REVENUE COLLECTIONS OF STATE AND LOCAL GOVERNMENTAL UNITS

A. What increase (decrease) in revenues can be anticipated from the proposed action?

No increase or decrease in revenues to state or local governmental units will be realized.

REVENUE INCREASE/DECREASE FY 20-21 FY 21-22 FY 22-23

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

STATE GENERAL FUND -0- -0- -0-

AGENCY SELF-GENERATED -0- -0- -0-

RESTRICTED FUNDS\* -0- -0- -0-

FEDERAL FUNDS -0- -0- -0-

LOCAL FUNDS -0- -0- -0- a

TOTAL -0- -0- -0-

\*Specify the particular fund being impacted.

B. Provide a narrative explanation of each increase or decrease in revenues shown in "A." Describe all data, assumptions, and methods used in calculating these increases or decreases.

No increase or decrease in revenues will be realized.

III. COSTS AND/OR ECONOMIC BENEFITS TO DIRECTLY AFFECTED PERSONS OR NONGOVERNMENTAL GROUPS

1. What persons or non-governmental groups would be directly affected by the proposed action? For each, provide an estimate and a narrative description of any effect on costs, including workload adjustments and additional paperwork (number of new forms, additional documentation, etc.), they may have to incur as a result of the proposed action.

Owners or operators of process units at chemical manufacturing facilities that are subject to the Louisiana MACT Determination for Non-HON Sources or the Louisiana MACT Determination for Non-HON Sources with Consent Decree Enhancements will be directly affected by the proposed action. The proposed rule simply codifies the existing LDAR programs and does not seek to expand their applicability or make substantive changes to their requirements. Therefore, there should be no costs, including workload adjustments or additional paperwork, or economic benefits to affected entities.

B. Also provide an estimate and a narrative description of any impact on receipts and/or income resulting from this rule or rule change to these groups.

No impact on receipts or income of the affected persons or non-governmental groups is expected.

IV. EFFECTS ON COMPETITION AND EMPLOYMENT

Identify and provide estimates of the impact of the proposed action on competition and employment in the public and private sectors. Include a summary of any data, assumptions and methods used in making these estimates.

There will be no effect on competition or employment in the public or private sector.