OPERATION AND MAINTENANCE PRACTICES **FORM AQ231 INSTRUCTIONS**

Explanation

LRAPA Title 32, Section 32-007 requires that specific operation and maintenance (O&M) requirements be included in permits if LRAPA finds that they are appropriate to ensure that source is operated and maintained at the highest reasonable efficiency and effectiveness to minimize emissions. This requirement is intended to ensure that pollution control devices achieve the emission reduction they are capable of at all levels of production, even if these reductions result in emissions significantly less than the applicable emission limits and standards.

The highest reasonable efficiency and effectiveness takes into consideration the capability of air pollution control equipment and emission reduction processes to reduce emissions, as well as the normal variability in the performance of the equipment and processes. It represents the level of emission reduction that can be routinely achieved if the equipment and processes are properly operated and maintained.

Instructions

1. Enter the facility name.

2. For existing permitted facilities, fill in the number of the facility's current permit.

3. Provide an identifier for each emissions point, including fugitive emission sources, such as storage piles or unpaved roads. Emission points and fugitive emission sources with common O&M practices may be grouped and assigned one identification number.

4. Identify the criteria pollutants emitted from the emissions point. Criteria pollutants are particulate matter (PM), particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), sulfur dioxide (SO_2), nitrogen oxides (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), and lead (Pb).

5. Indicate "yes" if the emissions can be varied by changes in operating parameters or maintenance procedures for the emissions point. Otherwise, indicate "no". For instance, if the emissions point is a thermal oxidizer, the VOC emissions could vary depending on the operating temperatures so you would indicate "yes" for this emissions point.

6. For each item marked "yes" in column 6, specify one of the following O&M options for the emissions point.

   - **Option 1: Process Work Practices.** Process O&M work practices include process parameter monitoring (e.g., temperature, pressure, residence time), fuel sampling and analysis, maintenance procedures, and material recordkeeping.
   - **Option 2: Control Device Work Practices.** Control device O&M work practices include parameter monitoring (e.g., pressure drop, scrubber flow, ESP voltage) and maintenance procedures.
   - **Option 3: Emissions Action Level.** An emission action level is the lowest level of emissions that indicates that the source is not operating at the highest reasonable efficiency and effectiveness. For example, visible emissions from baghouse could be an indicator that the baghouse is not functioning properly. It is important to note that excursions of emission action levels that are more stringent than the applicable emission limit or standard are not a violation of the emission limit or standard,. Excursions of emissions action levels will require the source to take corrective action and maintain records. Emission action levels may be used in conjunction with or instead of O&M work practices where the work practices are not sufficient to ensure good pollution control practices. Emission action levels may be appropriate where emission monitoring is already use to determine compliance with a standard or where work practices cannot be well correlated with emissions.

7. For each item marked "yes" on column 6, describe specific O&M work practices or Emission Action Levels to ensure that the process, control device, or fugitive emission source is operated and maintained at the highest reasonable efficiency and effectiveness to minimize emissions. If the work practices or emission

action levels are different during startup, shutdown, or different levels of production than during normal operations, provide the information separately for those operating modes. Also provide a description of the monitoring or recordkeeping, including frequency, that is necessary to ensure that the O&M measures are effective. Examples:

- Process or control device monitoring. Identify the parameters or procedures that have the most significant effect on proper operation of the equipment. List the minimum and/or maximum parameter values associated with good operation of the process or control device based on normal operations and/or design criteria. For example, the O&M parameter value for a thermal oxidizer may be a minimum exhaust gas temperature of 1200°F to ensure that all of the VOC are combusted. For this type of parameter, the monitoring might involve measuring and recording the exhaust gas temperature on a continuous basis (e.g., strip chart recorder).
- Maintenance procedures. Identify the procedures that ensure proper maintenance of the process or equipment. For example, it may be necessary to inspect the bags in a baghouse on a routine schedule to ensure that they are replaced before they are damaged. For this type of maintenance procedure, the permittee will need to establish an inspection frequency and record the results of the inspections and corrective action, if necessary. Another type of maintenance procedure might be routine cleaning of building roofs and grounds within a sawmill.
- Material recordkeeping. Identify the types of materials that are used to ensure efficient operations. For example, wood fuel with moisture in the range of 30 to 40% will provide for more complete combustion and lower emissions than fuel with a moisture content of 40 to 50%. For coating operations, VOC emissions will be minimized if water based materials are used instead of materials that include high levels of solvents.
- Fuel sampling and analysis. Fill in the normal range of the fuel sulfur content if it is less than the sulfur content that would cause a deviation of the standard. For example, the pollutant emission limit may be based on 0.5% sulfur in the fuel being burned but the normal sulfur content of the fuel being burned is 0.05%. If shipments of fuel are delivered with greater than 0.05% sulfur, corrective action may consist of blending the fuel or changing suppliers.
- Emission action levels. Identify the opacity or pollutant emission level that indicates the highest reasonable efficiency and effectiveness. Indicate whether the emission action level will be measured periodically or on a continuous basis.

LRAPA
Lane Regional Air Protection Agency

FORM AQ231
ANSWER SHEET

OPERATION AND MAINTENACE PRACTICES

1. Facility Name: _____ 2. Permit Number: _____

3. Emission Point or Fugitive Emission Source ID	4. Criteria Pollutants Emitted	5. Emission Level Depends on O&M (yes/no)	6. O&M Option Number(s) Selected	7. Describe specific O&M work practices or Emission Action Levels to ensure that the process, control device or fugitive emission source is operated and maintained at the highest reasonable efficiency and effectiveness to minimize emissions.