WAC 173-408-110 Monitoring. (1) Surface emissions monitoring: The owner or operator of a MSW landfill with a gas collection and control system must conduct quarterly instantaneous or integrated surface monitoring of the entire landfill surface according to this subsection and the procedures in WAC 173-408-120(3).

(a) A surface monitoring design plan must be developed that includes a topographical map that, at a minimum, clearly identifies the monitoring traverse and the working face, and describes the rationale for any site-specific deviations. The plan must be updated quarterly if changes are made to the monitoring traverse or working face, and the surface monitoring design plan must be provided upon request by the department or local authority.

(b) The owner or operator of a MSW landfill must notify the department or local authority within two working days after all corrective actions and remonitoring taken to address exceedances detected under (c) or (d) of this subsection, and subsection (2)(c) of this section. The notification must include a description of the corrective actions taken. The owner or operator of a MSW landfill may request alternative compliance measures to replace the requirements of this subsection in accordance with WAC 173-408-130.

(c) Instantaneous surface monitoring: Any reading exceeding the limit in WAC 173-408-100 (2)(a) must be recorded and reported as an exceedance and the following actions must be taken:

(i) The owner or operator must record the date, location, and value of each exceedance, along with retest dates and results. The location of each exceedance must be clearly marked and identified on a topographic map, at a minimum, of the MSW landfill, drawn to scale with the location of both the grids and the gas collection system clearly identified.

(ii) Corrective action must be taken by the owner or operator such as, but not limited to, cover maintenance or repair, and well vacuum adjustments, and the location must be remonitored within 10 calendar days of a measured exceedance.

(A) If the remonitoring of the location shows a second exceedance, additional corrective action must be taken, and the location must be remonitored again within 10 calendar days of the second exceedance.

(B) If the remonitoring required by (c)(ii)(A) of this subsection shows a third exceedance, the owner or operator must install a new or replacement well, or an alternative active methane control approved by the department or local authority, as needed to achieve compliance no later than 120 calendar days after detecting the third exceedance.

(iii) Any closed MSW landfill that has no monitored exceedances of the limit in WAC 173-408-100 (2)(a) after four consecutive quarterly monitoring periods may monitor annually. Any exceedances of the limit in WAC 173-408-100 (2)(a) detected during the annual monitoring will result in a return to quarterly monitoring of the landfill.

(iv) Any exceedances of the limit in WAC 173-408-100 (2)(a) detected during any compliance inspections will result in a return to quarterly monitoring of the landfill.

(d) Integrated surface monitoring: Any reading exceeding the limit in WAC 173-408-100 (2)(b) must be recorded and reported as an exceedance and the following actions must be taken:

(i) The owner or operator must record the average surface methane concentration measured for each grid along with retest dates and results. The location of the grids and the gas collection system must be

clearly marked and identified on a topographic map, at a minimum, of the MSW landfill drawn to scale.

(ii) Within 10 calendar days of a measured exceedance, corrective action must be taken by the owner or operator such as, but not limited to, cover maintenance or repair, and well vacuum adjustments, and the grid must be remonitored.

(A) If the remonitoring of the grid shows a second exceedance, additional corrective action must be taken, and the location must be remonitored again within 10 calendar days after the second exceedance.

(B) If the remonitoring required by (d) (ii) (A) of this subsection shows a third exceedance, the owner or operator must install a new or replacement well, or an alternative active methane control approved by the department or local authority, as needed to achieve compliance no later than 120 calendar days after detecting the third exceedance.

(iii) Any closed MSW landfill that has no monitored exceedances of the limit in WAC 173-408-100 (2)(b) after four consecutive quarterly monitoring periods may monitor annually. Any exceedances of the limit in WAC 173-408-100 (2)(b) detected during the annual monitoring event will result in a return to quarterly monitoring of the landfill.

(iv) Any exceedances of the limit in WAC 173-408-100 (2)(b) detected during any compliance inspections will result in a return to quarterly monitoring of the landfill.

(e) An owner or operator of a closed MSW landfill that can demonstrate that, in the three years before the effective date of this chapter, there were no exceedances of the limit in WAC 173-408-100(2), as measured by annual or quarterly monitoring, may monitor annually. Any exceedances of the limit in WAC 173-408-100(2) detected during the annual monitoring event will result in a return to quarterly monitoring of the landfill.

(2) Gas control system equipment monitoring: The owner or operator, or third-party owner or operator, of a MSW landfill with a gas collection and control system must monitor the system according to the following procedures:

(a) For enclosed flares, the following equipment must be installed, calibrated, maintained, and operated according to the manufacturer's specifications:

(i) A temperature monitoring device equipped with a continuous recorder which has an accuracy of plus or minus (±) one percent of the temperature being measured expressed in degrees Celsius or Fahrenheit, which may be recorded in 15-minute average increments.

(ii) At least one gas flow rate measuring device which must record the flow to the control device(s) at least every 15 minutes.

(b) For a gas control device other than an enclosed flare, the owner or operator must demonstrate compliance by providing information describing the operation of the gas control device, the operating parameters that would indicate proper performance, and appropriate monitoring procedures. The owner or operator, or third-party owner or operator, may request alternative compliance measures to replace the requirements of this subsection in accordance with WAC 173-408-130. The department may specify additional monitoring procedures as a condition of approving alternative compliance measures.

(c) Components containing landfill gas must be monitored quarterly for leaks. Any component leak must be tagged, repaired, and remonitored within 10 calendar days, and the department or local authority must be notified in accordance with subsection (1) (b) of this section.

At facilities which combust landfill gas for energy production, or which treat landfill gas for other beneficial uses, and which are located at MSW landfills subject to this chapter, component leak testing may be conducted prior to scheduled maintenance or planned outage periods, if the maintenance or planned outage periods would conflict with the quarterly monitoring schedule.

(3) Wellhead monitoring: The owner or operator of a MSW landfill with a gas collection and control system must monitor each individual wellhead monthly to determine the gauge pressure. If there is any positive pressure reading other than as provided in WAC 173-408-080(7), the owner or operator must take the following actions:

(a) Initiate corrective action within five calendar days of the positive pressure measurement;

(b) If the problem is not corrected within 15 days of the date the positive pressure was first measured, the owner or operator must initiate further corrective action including, but not limited to, any necessary expansion of the gas collection system, to mitigate any positive pressure readings; and

(c) Corrective actions, including any expansion of the gas collection and control system, must be completed and any new wells must be operating within 120 days of the date the positive pressure was first measured.

[Statutory Authority: Chapter 70A.540 RCW. WSR 24-11-052 (Order 22-15), § 173-408-110, filed 5/13/24, effective 6/13/24.]