

15A NCAC 02D .1705 OPERATIONAL STANDARDS

The owner and operator of a MSW landfill required to install a landfill gas collection and control system to comply with 15A NCAC 02D .1703(b) and (c) shall:

- (1) operate the collection system such that gas is collected from each area, cell, or group of cells in the MSW landfill in which solid waste has been in place for:
 - (a) five years or more if active; or
 - (b) two years or more if closed or at final grade;
- (2) operate the collection system with negative pressure at each wellhead except under the following conditions:
 - (a) for a fire or increased well temperature, the owner or operator shall record instances when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in 40 CFR 60.38f(h)(1);
 - (b) for the use of a geomembrane or synthetic cover, the owner or operator shall develop acceptable pressure limits in the design plan; and
 - (c) for a decommissioned well, a well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the Division as specified in 40 CFR 60.38f(d);
- (3) operate each interior wellhead in the collection system with a landfill gas temperature less than 55 degrees Celsius (131 degrees Fahrenheit). The owner or operator may establish a higher operating temperature value at a particular well. A higher operating value demonstration shall be submitted to the Division for approval and shall include supporting data demonstrating that the elevated parameter neither causes fires nor inhibits anaerobic decomposition by killing methanogens;
- (4) operate the collection system so that the methane concentration is less than 500 parts per million above background at the surface of the landfill. To determine if this level is exceeded, the owner and operator shall conduct surface testing using an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications provided in 40 CFR 60.36f(d). The owner or operator shall conduct surface testing around the perimeter of the collection area and along a pattern that traverses the landfill at no more than 30-meter intervals and where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover and all cover penetrations. The owner or operator shall monitor any openings that are within an area of the landfill where waste has been placed and a gas collection system is required. The owner or operator may establish an alternative traversing pattern that ensures equivalent coverage. A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site-specific deviations from the 30-meter intervals. Areas with steep slopes or other dangerous areas may be excluded upon request of the owner or operator from the surface testing;
- (5) operate the collection system such that all collected gases are vented to a control system designed and operated in compliance with 40 CFR 60.33f(c). In the event that the gas collection and control system is not operating, the gas mover system shall be shut down and all valves in the collection and control system contributing to venting of the gas to the atmosphere shall be closed within one hour of the collection or control system not operating;
- (6) operate the control system at all times when the collected gas is routed to the system; and
- (7) if monitoring demonstrates that the operational requirements in Item (2), (3), or (4) of this Rule are not met, corrective action shall be taken as specified in 40 CFR 60.36f(a)(3) and (a)(5) or (c). If corrective actions are taken as specified in 40 CFR 60.36f, the monitored exceedance shall not be a violation of the operational requirements in this Rule.

The owner or operator may choose to comply with the provisions of 40 CFR 63.1958 in lieu of Items (1) through (7) of this Rule. Once the owner or operator begins to comply with the provisions of 40 CFR 63.1958, the owner or operator shall continue to operate the collection and control device according to those provisions and shall not return to the provisions of this Rule.

History Note: Authority G.S. 143-215.3(a)(1); 143-215.107(a)(5); 143-215.107(a)(10); Eff. July 1, 1998; Readopted Eff. October 1, 2020; Amended Eff. July 1, 2021.