

## **Greenhouse Gas Reporting Rule for Municipal Solid Waste Landfills**

### **Introduction**

On September 22, 2009 the final Greenhouse Gas Reporting Rule (40 CFR Part 98) was signed by the USEPA Administrator. Subpart HH of this rule addresses the reporting requirements for municipal solid waste landfills. Complete information on the final rule can be found at <http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>.

### **Affected Landfills**

The reporting rule applies to municipal solid waste landfills that meet both of the following criteria:

- The landfill accepted waste on or after **January 1, 1980**; and
- The landfill generates methane in amounts equivalent to 25,000 metric tons of carbon dioxide (25,000 metric tons CO<sub>2</sub>e) per year.

Note that the rule lists the relative global warming potential of methane to be 21 times that of carbon dioxide, so **1,190 metric tons of methane equals 25,000 metric tons CO<sub>2</sub>e**. Weaver Boos' preliminary analysis suggests that nearly all active and recently closed landfills will be required to report under the rule.

The following sources are covered under Subpart HH of the rule:

- Municipal solid waste landfills;
- Landfill gas collection systems; and
- Landfill gas destruction devices (including flares).

### **Exclusions**

The following source categories are not included under Subpart HH:

- Hazardous waste landfills;
- Construction and demolition landfills; and
- Industrial landfills.

These facilities are not required to report unless they utilize stationary fuel combustion sources with a rated heat input of 30 MMBtu/year or more, and emit more than 25,000 metric tons of CO<sub>2</sub>e per year from these combustion sources.

### **Reporting Schedule**

Data collection will begin on January 1, 2010. The first greenhouse gas emission report is due on March 31, 2011 and should cover emissions from calendar year 2010. Subsequent emission reports are due on March 31 of following years.

### **Information to be Reported**

The following emissions must be included in the annual report:

- Methane generation and methane emissions from the landfill;

- Methane destruction resulting from landfill gas collection and combustion systems; and
- Carbon dioxide, methane, and nitrous oxide emissions from stationary combustion sources (boilers, process heaters, etc.), regardless of size.

### **Parameters to be Monitored**

Beginning January 1, 2010 the following parameters must be monitored at all municipal solid waste landfills that are covered under Subpart HH:

- Fuel consumed by stationary combustion sources;
- Annual quantity of waste landfilled; and
- Quantities or waste fractions for the following materials, if available: food waste, garden waste, paper, wood/straw, textiles, diapers, and sewage sludge.

In addition, each affected municipal solid waste landfill that utilizes a gas collection system must also monitor the following parameters:

- Flow rate of landfill gas before any treatment equipment (daily);
- Methane concentration, temperature, pressure, and moisture content of landfill gas (daily, if available, or weekly);
- Total annual methane recovered prior to destruction;
- Operating hours for all destruction devices;
- Gas collection system operating hours per year; and
- Areas and depths of waste for active areas, areas with gas collection, areas with intermediate cover, and closed areas.

### **Weaver Boos Qualifications**

Weaver Boos can provide the following services to assist landfill owners/operators in complying with the new greenhouse gas reporting requirements:

- Identification of affected landfills and emission sources.
- Development of a monitoring program to meet the requirements of the rule.
- Monitoring of landfill gas collection and control systems.
- Calculation of emissions.
- Preparation of the annual report.

For additional information regarding the above, please contact Steve Niehoff or Brian Horvath of Weaver Boos Consultants at (630) 717-4848.

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