

## Subpart TT, Greenhouse Gas Reporting Program

*Under the Greenhouse Gas Reporting Program (GHGRP), owners or operators of facilities that contain industrial waste landfills (as defined below) and that emit 25,000 metric tons or more of greenhouse gases (GHGs) per year (expressed as carbon dioxide equivalents) from the industrial waste landfill, stationary combustion, miscellaneous use of carbonates, and other source categories (see information sheet on General Provisions) must report emissions from industrial waste landfills and all other source categories located at the facility for which methods are defined in the rule. Owners and operators are required to collect emission data, calculate greenhouse gas (GHG) emissions, and follow the specified procedures for quality assurance, missing data, recordkeeping, and reporting per the requirements of 40 CFR Part 98 Subpart TT – Industrial Waste Landfills.*

### How Is This Source Category Defined?

An industrial waste landfill is any landfill other than a municipal solid waste landfill, a RCRA Subtitle C hazardous waste landfill, or a TSCA hazardous waste landfill, in which industrial solid waste, such as RCRA Subtitle D wastes (non-hazardous industrial solid waste, defined in 40 CFR 257.2), commercial solid wastes, or conditionally exempt small quantity generator wastes, is placed. An industrial waste landfill includes all disposal areas at the facility.

This source category consists of industrial waste landfills that accepted waste on or after January 1, 1980, and that are located at a facility whose total landfill design capacity is greater than or equal to 300,000 metric tons. It includes the landfill, any landfill gas collection systems at the landfill, and destruction devices for landfill gases (including flares).

An industrial waste landfill is *not* subject to the rule if it is a dedicated construction and demolition waste landfill, or a landfill that receives only inert waste materials (as defined in the subpart) such as coal combustion residue (e.g., fly ash), cement kiln dust, rocks and/or soil from excavation and construction and similar activities, glass, non-chemically bound sand (e.g., green foundry sand), clay, gypsum, pottery cull, bricks, mortar, cement, furnace slag, refractory material, or plastics.

### What Greenhouse Gases Must Be Reported?

Industrial waste landfill owners and operators must report:

- Annual CH<sub>4</sub> generation and CH<sub>4</sub> emissions from the landfill.
- Annual CH<sub>4</sub> destruction (for landfills with gas collection and control systems).
- Annual CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O emissions from stationary combustion devices using the calculation methods specified in 40 CFR Part 98 Subpart C (General Stationary Combustion Sources). The information sheet on general stationary combustion sources summarizes calculating and reporting emissions from these units.

In addition, each facility must report GHG emissions for any other source categories for which calculation methods are provided in other subparts of the rule, as applicable.

### How Must Greenhouse Gas Emissions Be Calculated?

Industrial waste landfills must calculate modeled annual CH<sub>4</sub> generation based on:

- Measured or estimated values of historic annual waste disposal quantities; and

- Appropriate values for model inputs (i.e., degradable organic carbon fraction in the waste, CH<sub>4</sub> generation rate constant). Default parameter values are specified for certain industries and for industrial waste generically.

Landfills that do not collect and destroy landfill gas must adjust the modeled annual CH<sub>4</sub> generation to account for soil oxidation (CH<sub>4</sub> that is converted to CO<sub>2</sub> as it passes through the landfill cover before being emitted) using a default soil oxidation factor. The resulting value must be reported and represents both CH<sub>4</sub> generation and CH<sub>4</sub> emissions.

Industrial Waste Landfill facilities that collect and control landfill gas will use the same calculations specified in subpart HH – Municipal Solid Waste (MSW) Landfills for monitoring, calculation, and reporting requirements related to CH<sub>4</sub> recovery, destruction, and emissions. See the subpart HH Information Sheet for further details.

A checklist for data that must be monitored is available at: <https://www.epa.gov/ghgreporting/monitoring-checklist-subpart-tt-industrial-waste-landfills>.

## What Information Must Be Reported?

In addition to the information required by the General Provisions at 40 CFR 98.3(c), each facility must report the following landfill information:

- General information about the landfill, including whether the landfill is “open” or “closed,” the year in which the landfill first started accepting waste for disposal, the last year the landfill accepted waste or the projected year of landfill closure, the capacity of the landfill, and an indication of whether leachate recirculation is used at the landfill.
- Waste characterization information, such as the number of waste streams accepted at the landfill and a description of each waste stream.
- Waste stream-specific information, such as the decay rate (k) value used in the calculations, the method(s) for estimating historical waste disposal quantities, and the range of years for which each method applies. When historical disposal rates are estimated based on production or filled capacity, the production or filled capacity parameters needed to estimate the historical disposal rates must also be reported.
- Historic and current annual landfill operating information, such as the quantity of waste disposed of in the landfill for each waste stream type for each year, the degradable organic carbon content value for each waste stream or waste stream type for each year, an indication as to whether this was the default value, a measured value using a 60-day anaerobic biodegradation test, or a value based on total and volatile solids measurements, and if the DOC value was determined using a 60-day anaerobic biodegradation test, which test was used.
- The fraction of CH<sub>4</sub> in the landfill gas for the reporting year and an indication as to whether this was the default value or a value determined through measurement data.
- Description of the landfill cover, such as the type(s) of cover material used, and the landfill surface area at the start of the reporting year associated with each cover type.
- Modeled annual CH<sub>4</sub> generation rate for the reporting year.
- Annual CH<sub>4</sub> emissions (which is CH<sub>4</sub> generation adjusted for oxidation for landfills without gas collection systems) and an indication of whether passive vents and/or passive flares are present at the landfill.

Industrial waste landfills with gas collection systems must report the same additional information as required by MSW landfills with landfill gas collection. See the subpart HH information sheet for further details on the reporting requirements.

Facilities must enter required data into the electronic Greenhouse Gas Reporting Tool (e-GGRT) to be reported in the annual report, and must also enter into e-GGRT's *Inputs Verifier Tool* (IVT) the inputs to emission equations for which reporting is not required. IVT uses these entered data to calculate the equation results.

## **When and How Must Reports Be Submitted?**

Annual reports must be submitted by March 31 of each year, unless the 31st is a Saturday, Sunday, or federal holiday, in which case the reports are due on the next business day. Annual reports must be submitted electronically using [e-GGRT](#), the GHGRP's online reporting system. Additional information on setting up user accounts, registering a facility and submitting annual reports is available at <https://ccdsupport.com/confluence/>.

## **When Can a Facility Stop Reporting?**

There are several scenarios under which a facility may discontinue reporting. These scenarios are summarized in the [Subpart A Information Sheet](#) as well as in an [FAQ](#).

## **For More Information**

For additional information on Subpart TT, visit the [Subpart TT Resources](#) webpage. For additional information on the Greenhouse Gas Reporting Program, visit the [Greenhouse Gas Reporting Program Website](#), which includes information sheets on other rule subparts, [data](#) previously reported to the Greenhouse Gas Reporting Program, [training materials](#), and links to [frequently asked questions](#).

This document is provided solely for informational purposes. It does not provide legal advice, have legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person. The series of information sheets is intended to assist reporting facilities/owners in understanding key provisions of the Greenhouse Gas Reporting Program.