

Environmental Protection Agency

Pt. 98, Subpt. TT, Table TT

§ 98.460(c)(2)(xii) or used to determine landfill-specific DOC_x values.

[76 FR 73910, Nov. 29, 2011]

§ 98.468 Definitions.

Except as provided below, all terms used in this subpart have the same meaning given in the CAA and subpart A of this part.

Construction and demolition (C&D) waste landfill means a solid waste disposal facility subject to the requirements of subparts A or B of part 257 of this chapter that receives construction and demolition waste and does not receive hazardous waste (defined in § 261.3 of this chapter) or industrial solid waste (defined in § 258.2 of this chapter) or municipal solid waste (defined in § 98.6 of this part) other than residential lead-based paint waste. A C&D waste landfill typically receives any one or more of the following types of solid wastes: roadwork material, excavated material, demolition waste, construction/renovation waste, and site clearance waste.

Design capacity means the maximum amount of solid waste a landfill can accept. For the purposes of this subpart, for landfills that have a permit, the *design capacity* can be determined in terms of volume or mass in the most recent permit issued by the state, local, or Tribal agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design

capacity from volume to mass to determine its design capacity, the calculation must include a site-specific density. If the design capacity is within 10 percent of the applicability threshold in § 98.460(a) and there is a change in the production process that can reasonably be expected to change the site-specific waste density, the site-specific waste density must be redetermined and the design capacity must be recalculated based on the new waste density.

Solid waste has the meaning established by the Administrator pursuant to the Solid Waste Disposal Act (42 U.S.C.A. 6901 *et seq.*).

Waste stream means industrial solid waste material that is generated by a specific manufacturing process or client. For wastes generated at the facility that includes the industrial waste landfill, a waste stream is the industrial solid waste material generated by a specific processing unit at that facility. For industrial solid wastes that are received from off-site facilities, a waste stream can be defined as each waste shipment or group of waste shipments received from a single client or group of clients that produce industrial solid wastes with similar waste properties.

[75 FR 39773, July 12, 2010, as amended at 76 FR 73910, Nov. 29, 2011]

TABLE TT-1 TO SUBPART TT—DEFAULT DOC AND DECAY RATE VALUES FOR INDUSTRIAL WASTE LANDFILLS

| Industry/Waste Type | DOC (weight fraction, wet basis) | k [dry climate ^a] (yr ⁻¹) | k [moderate climate ^a] (yr ⁻¹) | k [wet climate ^a] (yr ⁻¹) |
|--|--|---|--|---|
| Food Processing | 0.22 | 0.06 | 0.12 | 0.18 |
| Pulp and Paper | 0.20 | 0.02 | 0.03 | 0.04 |
| Wood and Wood Product | 0.43 | 0.02 | 0.03 | 0.04 |
| Construction and Demolition | 0.08 | 0.02 | 0.03 | 0.04 |
| Inert Waste [<i>i.e.</i> , wastes listed in § 98.460(c)(2)] | 0 | 0 | 0 | 0 |
| Other Industrial Solid Waste (not otherwise listed) | 0.20 | 0.02 | 0.04 | 0.06 |

^aThe applicable climate classification is determined based on the annual rainfall plus the recirculated leachate application rate. Recirculated leachate application rate (in inches/year) is the total volume of leachate recirculated from company records or engineering estimates and applied to the landfill divided by the area of the portion of the landfill containing waste [with appropriate unit conversions].

- (1) Dry climate = precipitation plus recirculated leachate less than 20 inches/year
 - (2) Moderate climate = precipitation plus recirculated leachate from 20 to 40 inches/year (inclusive)
 - (3) Wet climate = precipitation plus recirculated leachate greater than 40 inches/year
- Alternatively, landfills that use leachate recirculation can elect to use the k value for wet climate rather than calculating the recirculated leachate rate.
- (1) Dry climate = precipitation plus recirculated leachate less than 20 inches/year.
 - (2) Moderate climate = precipitation plus recirculated leachate from 20 to 40 inches/year (inclusive).
 - (3) Wet climate = precipitation plus recirculated leachate greater than 40 inches/year.

§ 98.470

[75 FR 39773, July 12, 2010, as amended at 76 FR 73910, Nov. 29, 2011]

Subpart UU—Injection of Carbon Dioxide

SOURCE: 75 FR 75086, Dec. 1, 2010, unless otherwise noted.

§ 98.470 Definition of the source category.

(a) The injection of carbon dioxide (CO₂) source category comprises any well or group of wells that inject a CO₂ stream into the subsurface.

(b) If you report under subpart RR of this part for a well or group of wells, you are not required to report under this subpart for that well or group of wells.

(c) A facility that is subject to this part only because it is subject to subpart UU of this part is not required to report emissions under subpart C of this part or any other subpart listed in § 98.2(a)(1) or (a)(2).

§ 98.471 Reporting threshold.

(a) You must report under this subpart if your facility injects any amount of CO₂ into the subsurface.

(b) For purposes of this subpart, any reference to CO₂ emissions in § 98.2(i) shall mean CO₂ received.

§ 98.472 GHGs to report.

You must report the mass of CO₂ received.

§ 98.473 Calculating CO₂ received.

(a) You must calculate and report the annual mass of CO₂ received by pipeline using the procedures in paragraphs (a)(1) or (a)(2) of this section and the procedures in paragraph (a)(3) of this section, if applicable.

(1) For a mass flow meter, you must calculate the total annual mass of CO₂ in a CO₂ stream received in metric tons by multiplying the mass flow by the CO₂ concentration in the flow, according to Equation UU-1 of this section. You must collect these data quarterly. Mass flow and concentration data measurements must be made in accordance with § 98.474.

$$CO_{2T,r} = \sum_{p=1}^4 (Q_{r,p} - S_{r,p}) * C_{CO_{2,p,r}} \quad (\text{Eq. UU-1})$$

where:

CO_{2T,r} = Net annual mass of CO₂ received through flow meter r (metric tons).

Q_{r,p} = Quarterly mass flow through a receiving flow meter r in quarter p (metric tons).

S_{r,p} = Quarterly mass flow through a receiving flow meter r that is redelivered to another facility without being injected into your well in quarter p (metric tons).

C_{CO_{2,p,r}} = Quarterly CO₂ concentration measurement in flow for flow meter r in quarter p (wt. percent CO₂, expressed as a decimal fraction).

p = Quarter of the year.

r = Receiving flow meter.

(2) For a volumetric flow meter, you must calculate the total annual mass of CO₂ in a CO₂ stream received in metric tons by multiplying the volumetric flow at standard conditions by the CO₂ concentration in the flow and the density of CO₂ at standard conditions, according to Equation UU-2 of this section. You must collect these data quarterly. Volumetric flow and concentration data measurements must be made in accordance with § 98.474.

$$CO_{2T,r} = \sum_{p=1}^4 (Q_{r,p} - S_{r,p}) * D * C_{CO_{2,p,r}} \quad (\text{Eq. UU-2})$$