§ 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 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.

\[
CO_2T,r = \sum_{p=1}^{4} (Q_{r,p} - S_{r,p}) \cdot C_{CO2,p,r} \quad \text{(Eq. UU-1)}
\]

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);

\( C_{CO2,p,r} \) = 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.

\[
CO_2T,r = \sum_{p=1}^{4} (Q_{r,p} - S_{r,p}) \cdot D \cdot C_{CO2,p,r} \quad \text{(Eq. UU-2)}
\]