

Miscellaneous Uses of Carbonate

Subpart U, Greenhouse Gas Reporting Program

OVERVIEW

Subpart U of the Greenhouse Gas Reporting Program (GHGRP) (40 CFR §§ 98.210 – 98.218) applies to any facility that uses any form of carbonate (CO_3^{2-}) in a manufacturing process and meets the Subpart U source category definition. Some subparts have thresholds that determine applicability for reporting, and some do not. To decide whether your facility must report under this Subpart, please refer to 40 CFR § 98.211 and the GHGRP [Applicability Tool](#).

This Information Sheet is intended to help facilities reporting under Subpart U understand how the source category is defined, what greenhouse gases (GHGs) must be reported, how GHG emissions must be calculated and shared with EPA, and where to find more information.



How is This Source Category Defined?

This source category consists of any facility that is covered by the rule and that uses any form of carbonate (CO_3^{2-}) in a manufacturing process that emits carbon dioxide (CO_2). Carbonates covered by this rule include limestone (CaCO_3), dolomite ($\text{CaMg}(\text{CO}_3)_2$), ankerite ($\text{Ca}(\text{Fe},\text{Mg},\text{Mn})(\text{CO}_3)_2$), magnesite (MgCO_3), siderite ($\text{Fe}^{++}\text{CO}_3$), rhodochrosite (MnCO_3), and sodium carbonate (Na_2CO_3). Facilities are considered to emit CO_2 if they consume at least 2,000 short tons (tons) per year of CO_3^{2-} heated to a temperature sufficient to allow the calcination reaction to occur.

This subpart does not cover the use of CO_3^{2-} for producing cement, ferroalloys, glass, iron (Fe) and steel, lead (Pb), lime, phosphoric acid (H_3PO_4), pulp and paper, soda ash, sodium bicarbonate (NaHCO_3), sodium hydroxide (NaOH), and zinc (Zn), because these processes are covered by other parts of this rule.



What GHGs Must Be Reported?

Each facility must report CO_2 process emissions for all miscellaneous CO_3^{2-} use at the facility. If multiple Greenhouse Gas Reporting Program (GHGRP) source categories are co-located at a facility, the facility may need to report greenhouse gas (GHG) emissions under a different subpart. Please refer to the relevant information sheet for a summary of the rule requirements for any other source categories located at the facility.



How Must GHG Emissions Be Calculated?

Calculate annual process emissions of CO_2 using one of the following two methods:

- Use an emission factor (EF), the annual mass of each CO_3^{2-} consumed, and the calcination fraction achieved (based on an annual emission test or assuming a value of 100%).
- Perform a mass balance using an EF and the annual mass of CO_3^{2-} inputs and outputs.

A checklist for data that must be monitored is available here: [Subpart U Monitoring Checklist](#).



What Information Must Be Reported?

In addition to the information required by the General Provisions in Subpart A, found at 40 CFR § 98.3(c), the following must be reported:

- Annual CO₂ emissions from CO₃²⁻ use (metric tons (tonnes)).
- Measurement method used to determine the mass of CO₃²⁻.
- Method used to calculate emissions.
- Number of times in the reporting year that missing data procedures were followed to measure CO₃²⁻ consumption, CO₃²⁻ input, or CO₃²⁻ output (months).
- If using the EF method:
 - The standard method used to determine calcination fraction.



What Records Must Be Maintained?

Reporters are required to retain records that pertain to their annual GHGRP report for at least three years after the date the report is submitted. Please see the [Subpart A Information Sheet](#) and 40 CFR § 98.3(g) for general recordkeeping requirements. Specific recordkeeping requirements for Subpart U are listed at 40 CFR § 98.217.



When and How Must Reports Be Submitted?

Reporters must submit their annual GHGRP reports for the previous calendar year to the EPA by March 31st, unless the 31st falls on a Saturday, Sunday, or federal holiday, in which case reports are due on the next business day. Annual reports must be submitted electronically using the [electronic Greenhouse Gas Reporting Tool \(e-GGRT\)](#), the GHGRP's online reporting system. For facilities required to use the e-GGRT *Inputs Verifier Tool* (IVT), reporters must enter required data into the e-GGRT IVT, which includes inputs to emission equations for which reporting is not required. IVT uses these data to calculate the equation results.

Each report may be prepared by either a designated representative, an alternate designated representative or agent(s) of the owner or operator. The report must be signed by a designated representative of the owner or operator, certifying under penalty of law that the report has been prepared in accordance with the requirements of the rule. Additional information on setting up user accounts, registering a facility, and submitting annual reports is available on the [GHGRP Help webpage](#).



When Can a Facility Stop Reporting?

A facility may discontinue reporting under several scenarios, which are summarized in Subpart A (found at 40 § CFR 98.2(i)) and the [Subpart A Information Sheet](#).



For More Information

For additional information on Subpart U, visit the [Subpart U webpage](#). For additional information on the GHGRP, please visit the [GHGRP website](#), which includes additional information sheets, [data](#) previously reported to the GHGRP, [training materials](#), and links to Frequently Asked Questions ([FAQs](#)). For questions that cannot be answered through the GHGRP website, please contact us at: GHGReporting@epa.gov.

This Information Sheet is provided solely for informational purposes. It does not replace the need to read and comply with the regulatory text contained in the rule. Rather, it is intended to help reporting facilities and suppliers understand key provisions of the GHGRP. It does not provide legal advice; have a legally binding effect; or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits with regard to any person or entity.