

# Using e-GGRT to Prepare Your Subpart AA Report for RY2014 and Later

Subpart AA consists of facilities that manufacture pulp using chemical pulping processes, including integrated mills that produce virgin pulp for use in on-site paper making and non-integrated mills that produce only market pulp.

This page provides an overview of subtopics that are central to Subpart AA reporting:

- [Subpart AA Summary Information for this Facility](#)
- [Subpart AA Makeup Chemical Usage Information](#)
- [Subpart AA Process Unit Information](#)
- [Subpart AA Emissions Information](#)
- [Subpart AA Validation Report](#)

If you reported for the previous reporting year, the Agency has carried some of your data from last year into the current reporting year to reduce the reporting burden. It is still your responsibility to review and ensure that all of the information in your submission is correct, but the Agency believes that most of the data that is carried forward is unlikely to change significantly from year to year. For more information about carry forward data, please see the Carry forward of data from previous submissions help content

The end of the page contains links you can use for more information on these topics.

## Subpart AA Summary Information for this Facility

Subpart AA requires you to report the following data about your facility:

- The annual steam purchases (pounds)
- The annual production of unbleached virgin chemical pulp products (air-dried metric tons). You may enter zero only if no virgin chemical pulp was produced and you are reporting zero emissions under Subpart AA. [98.276(k)]

Please note that Subpart AA required you to report the annual production of paper products (metric tons) in Reporting Years 2010, 2011, and 2012. You will not be required to report the annual production of paper products for Reporting Year 2013 and onward.

## Subpart AA Makeup Chemical Usage Information

For Makeup Chemical Usage within your facility, Subpart AA requires you to report the following data:

- A unique name or identifier, plus optional description for this unit. See also [About Unique Unit Names](#)

## Subpart AA Process Unit Information

For each process unit at your facility, the following unit information is required:

- A unique name or identifier, plus optional description for this unit. See also [About Unique Unit Names](#).
- The type of unit, selected from the following:
  - Pulp mill lime kiln
  - Chemical recovery furnace
  - Chemical recovery combustion unit
- An indication of whether the unit is monitored by Continuous Emissions Monitoring System (CEMS)

## Subpart AA Emissions Information

The required emissions information and the manner by which required emissions information is entered into e-GGRT is different for makeup chemical usage, process units that are monitored by a CEMS, and process units that are NOT monitored by a CEMS.

As a result, separate help content has been created in this subpart for entering emissions information for makeup chemical usage, process units monitored by CEMS and process units NOT monitored by CEMS.

For **makeup chemical usage**, the following emissions information is required:

- The annual CO<sub>2</sub> process emissions calculated by IVT, which will require the following inputs for Equation AA-3:
  - Make-up quantity of CaCO<sub>3</sub> used for the reporting year (metric tons/year)
  - Make-up quantity of Na<sub>2</sub>CO<sub>3</sub> used for the reporting year (metric tons/year)
- An indication of whether a substitute value was used for CaCO<sub>3</sub>
- An indication of whether a substitute value was used for Na<sub>2</sub>CO<sub>3</sub>

For each **chemical recovery furnace** that is NOT monitored by CEMS at your facility, the following emissions information is required:

- The annual biogenic CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O process emissions calculated by IVT, which will require the following inputs for Equation AA-1:

- Mass of spent liquor solids combusted in short tons in the reporting year, determined according to §98.274(b)
  - Annual high heat value of the spent liquor solids determined according to §98.274(b) (mmBtu/kilogram)
  - Default emission factor for CO<sub>2</sub> from Table AA-1
- The basis for annual mass of spent liquor solids, selected from the following:
  - TAPPI method
  - On-line metering/measuring system
- An indication of whether a substitute value was used for annual mass of spent liquor solids
- The total annual mass emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from fossil fuel calculated by IVT, which requires entry of various equation inputs depending on the methodology selected
- Calculation methodology start date and end date, for each fuel type
- Calculation methodology used for the emissions calculation period specified, for each fuel type:
  - Tier 1/Equation C-1: Annual fuel combusted, default heating value, and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1a: Annual natural gas usage from billing records (therms) and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1b: Annual natural gas usage from billing records (mmBtu) and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2a: Annual fuel combusted, measured heating value, and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2c: Steam generation, ratio of maximum rated heat input capacity to design rated steam output capacity, and default CO<sub>2</sub> emission factor (for MSW and solid fuels listed in Table C-1)
  - Tier 3/Equation C-3: Annual mass of solid fuel combusted and average carbon content of the solid fuel
  - Tier 3/Equation C-4: Annual mass of liquid fuel combusted and average carbon content of the liquid fuel
  - Tier 3/Equation C-5: Annual volume of gaseous fuel combusted, average carbon content of the gaseous fuel, and average molecular weight of the gaseous fuel

**For each chemical recovery combustion unit that is NOT monitored by CEMS at your facility, the following emissions information is required:**

- The annual biogenic CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O process emissions, calculated by IVT, which will require the following inputs for Equations AA-1 and AA-2:
  - Annual carbon content of the spent liquor solids, determined according to §98.274(b) (percent by weight, expressed as a decimal fraction)
  - Mass of spent liquor solids combusted in short tons in the reporting year, determined according to §98.274(b)
  - Annual high heat value of the spent liquor solids determined according to §98.274(b) (mmBtu/kilogram)
- The basis for annual mass of spent liquor solids, selected from the following:
  - TAPPI method
  - On-line metering/measuring system
- An indication of whether a substitute value was used for annual mass of spent liquor solids
- The total annual mass emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from fossil fuel, calculated by IVT, which requires entry of various equation inputs depending on the methodology selected
- Calculation methodology start date and end date, for each fuel type
- Calculation methodology used for the emissions calculation period specified, for each fuel type:
  - Tier 1/Equation C-1: Annual fuel combusted, default heating value, and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1a: Annual natural gas usage from billing records (therms) and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1b: Annual natural gas usage from billing records (mmBtu) and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2a: Annual fuel combusted, measured heating value, and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2c: Steam generation, ratio of maximum rated heat input capacity to design rated steam output capacity, and default CO<sub>2</sub> emission factor (for MSW and solid fuels listed in Table C-1)
  - Tier 3/Equation C-3: Annual mass of solid fuel combusted and average carbon content of the solid fuel
  - Tier 3/Equation C-4: Annual mass of liquid fuel combusted and average carbon content of the liquid fuel
  - Tier 3/Equation C-5: Annual volume of gaseous fuel combusted, average carbon content of the gaseous fuel, and average molecular weight of the gaseous fuel

**For each pulp mill lime kiln that is NOT monitored by CEMS at your facility, the following emissions information is required:**

- The total annual mass emissions of CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, calculated with IVT, which requires entry of various equation inputs depending on the methodology selected
- Calculation methodology start date and end date, for each fuel type
- Calculation methodology used for the emissions calculation period specified, for each fuel type:
  - Tier 1/Equation C-1: Annual fuel combusted, default heating value, and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1a: Annual natural gas usage from billing records (therms) and default CO<sub>2</sub> emission factor
  - Tier 1/Equation C-1b: Annual natural gas usage from billing records (mmBtu) and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2a: Annual fuel combusted, measured heating value, and default CO<sub>2</sub> emission factor
  - Tier 2/Equation C-2c: Steam generation, ratio of maximum rated heat input capacity to design rated steam output capacity, and default CO<sub>2</sub> emission factor (for MSW and solid fuels listed in Table C-1)
  - Tier 3/Equation C-3: Annual mass of solid fuel combusted and average carbon content of the solid fuel
  - Tier 3/Equation C-4: Annual mass of liquid fuel combusted and average carbon content of the liquid fuel
  - Tier 3/Equation C-5: Annual volume of gaseous fuel combusted, average carbon content of the gaseous fuel, and average molecular weight of the gaseous fuel
- The quantity of calcium oxide (CaO) produced (metric tons)
- The percent of annual heat input, individually for each fossil fuel type

**For each CEMS Monitoring Location, provide the following information:**

- A unique unit name or identifier for the CML (see also [About Unique Unit Names](#))
- An optional description or label for the CML
- The configuration of processes or process units that are monitored by the CML that may include:
  - Single industrial process or process unit that exhausts to a dedicated stack

- Multiple industrial processes or process units share a common stack
- Industrial process or process unit shares a common stack with one or more stationary fuel combustion units
- The name of each fuel combusted in the unit(s) monitored by the CEMS
- The Tier 4/CEMS methodology start and end dates
- The cumulative total of hourly CO<sub>2</sub> mass emissions for each quarter of the reporting year (in metric tons) (*Do not cumulate emissions data between quarters*)
- The total annual CO<sub>2</sub> mass emissions measured by the CEMS (in metric tons)
- An indication whether emissions reported for the CEMS include emissions calculated according to 98.33(a)(4)(viii) for a slipstream that bypassed the CEMS
- The total annual biogenic CO<sub>2</sub> emissions from the combustion of all biomass fuels combined (in metric tons) (*if applicable*)
- The total annual non-biogenic CO<sub>2</sub> emissions (includes fossil fuel, sorbent, and process CO<sub>2</sub> emissions, in metric tons)
- The total annual CH<sub>4</sub> and N<sub>2</sub>O emissions associated with the combustion of all [Table C-2](#) fuels combusted in all processes/process units monitored by the CEMS derived from application of [Equation C-10](#) (in metric tons) (*if there are no combustion emissions in this CML, please enter zero*)
- The total number of source operating hours in the reporting year
- The total operating hours in which a substitute data value was used in the emissions calculations for the CO<sub>2</sub> concentration parameter
- The total operating hours in which a substitute data value was used in the emissions calculations for the stack gas flow rate parameter
- If moisture correction is required and a continuous moisture monitor is used, the total operating hours in which a substitute data value was used in the emissions calculations for the stack gas moisture content parameter
- An indication of the process units monitored by the CML


## Subpart AA Validation Report

The Validation Report assists you with determining the completeness and quality of your reported data.

We strongly encourage you to use the Validation Report to check your work. The Validation Report performs two types of checks:

- Data Completeness: Data required for reporting that are missing or incomplete.
- Data Quality: Data that are outside of the expected range of values.

Certain validation checks which are considered to represent critical errors must be corrected before you can successfully generate and submit your Annual

Report. These checks are signified with a stop sign . If you feel that you have triggered one of these critical “stop signs” checks in error, or if there's a reason why your report should be submitted despite the check being triggered, please submit a request to the e-GGRT Help Desk at [GHGReporting@epa.gov](mailto:GHGReporting@epa.gov).

You may view the Validation Report at any time.



Note that the Validation Report is intended to assist users in entering data, **but it is not an indication that the reporter has entered all necessary information, nor is it an indication that the reporter is in compliance with part 98.** Furthermore, a negative finding on the validation report is not a guarantee that a data element was entered incorrectly. For more detail on the Validation Report and its functionality please review the [Subpart Validation Report](#) page.

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## See Also

### Screen Errors

[Using e-GGRT to Prepare Your Subpart AA Report for RY2014 and Later](#)

[Using e-GGRT to Prepare Your Subpart AA Report for RY2014 and Later](#)

[Using e-GGRT to Prepare Your Subpart AA Report for RY2014 and Later](#)

[Subpart AA Process Unit Information for Units NOT Monitored by CEMS for All Reporting Years](#)

[Subpart AA Process Unit Information for Units Monitored by CEMS for All Reporting Years](#)

[Subpart AA Emissions Information for Makeup Chemical Usage for RY2014 and Later](#)

[Subpart AA Emissions Information for Units NOT Monitored CEMS for RY2014 and Later](#)

[Entering Emissions Information for Chemical Recovery Furnaces Using IVT](#)

[Entering Emissions Information for Chemical Recovery Combustion Units Using IVT](#)

[Entering Fuel-Specific Emissions Using IVT](#)

[Subpart AA Emissions Information for Units Monitored by CEMS for All Reporting Years](#)

[Subpart Validation Report](#)