



**e-GGRT Training Webinar on
Reporting GHG Data for Subparts G, V, and PP**

U.S. Environmental Protection Agency
Greenhouse Gas Reporting Program (GHGRP)

Updated 4-10-14

Hello, and welcome to the e-GGRT training webinar on using EPA's electronic Greenhouse Gas Reporting Tool to report GHG Data for Subparts G, V, and PP.



This training is provided by EPA 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.

Basic Resources



- General e-GGRT Reporting Overview
<http://www.epa.gov/ghgreporting/reporters/training/index.html>
- e-GGRT webinars posted include:
 - User and Facility/Supplier Registration
 - Subparts C and D
 - Subparts P, X, and Y

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Before we begin, I just wanted to remind participants that this webinar focuses on introducing you to the e-GGRT web forms for reporting emissions under Subparts G, V, and PP.

See the training website to review changes for reporting , web forms for Subpart C, D, P, X, and Y.

Those and other slides from previous training presentations are posted at EPA's GHG reporting Program web site shown here.

Webinar Outline / Overview



- Adding Subparts
- Subpart G – Ammonia Manufacturing
 - Web forms for units without CEMS
 - Web forms for units with CEMS
 - Review/Validation Warning Messages
- Subpart V -Nitric Acid Production Reporting Forms/Spreadsheets
- Subpart PP – CO₂ Supply
- Review Subpart Data - GHG emissions details
- Questions

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Here is an overview of the topics we will cover.

We will begin by reviewing adding subparts to your facility.

We will review reporting for Subpart G – Ammonia Manufacturing. Facilities subject to Subpart G will be using 1 of 2 methods to report emissions. You will either be using (1) CEMS or (2) the calculation methods provided in 98.73 (b).

So for Subpart G - we will first review and focus on the web forms for adding and reporting data for units NOT using continuous emission monitoring systems to monitor and report annual greenhouse gas emissions.

Next, we will review forms for reporting emissions monitored by CEMS.

Then, we will then briefly show you how to review and check validation/warning messages for Subpart G.

We will then review reporting for Subpart V using Reporting Forms that you download, complete, and then upload back into e-GGRT.

We will then review reporting under Subpart PP using e-GGRT web forms.

Finally we will show you how to review your reported emissions for these subparts, in addition to submitting your report.

Now let's start with Subpart G.

Adding Subparts

G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Data Reporting
 Select Facility: [Facility or Supplier Overview](#)

FACILITY OR SUPPLIER OVERVIEW
 This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.
 After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).
 Facility's GHG Reporting Method: Data entry via e-GGRT web-forms (Change)

REPORT DATA
 2010 Reporting Source or Supplier Category: Validation Messages?: Subpart Reporting
 Subpart A—General Information None [OPEN](#)
[ADD or REMOVE Subparts](#)

If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report.
 SUBMIT ANNUAL REPORT

Report	Uploaded File Name	Status	Submitted Date	Certification Date
GENERATE / RESUBMIT				

FACILITIES NOT SUBMITTING AN ANNUAL REPORT
 If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.
 This facility is NOT required to submit a report
[SAVE](#)

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[Note: To get to this point, you may want to review the general e-GGRT training slides at <http://epa.gov/climatechange/emissions/training.html>.]

In order to use the web forms within e-GGRT to report data for a particular subpart – you need to add all applicable subparts to your facility on from the Facility Overview page.

Click the blue hyperlinked text to “ADD or REMOVE Subparts” so that you can add the relevant subparts.

Subpart Selection

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

1 **G—Ammonia Manufacturing**
Description (SHOW | HIDE)

H—Cement Production
Description (SHOW | HIDE)

I—Electronics Manufacturing
Description (SHOW | HIDE)

K—Ferrous Iron Production
Description (SHOW | HIDE)

L—Fluorinated Gas Production
Description (SHOW | HIDE)

N—Glass Production
Description (SHOW | HIDE)

O—HCFC-22 Production and HFC-23 Destruction
Description (SHOW | HIDE)

P—Hydrogen Production
Description (SHOW | HIDE)

Q—Iron and Steel Production
Description (SHOW | HIDE)

R—Lead Production
Description (SHOW | HIDE)

S—Lime Manufacturing
Description (SHOW | HIDE)

T—Magnesium Production
Description (SHOW | HIDE)

U—Miscellaneous Uses of Carbonates
Description (SHOW | HIDE)

2 **V—Nitric Acid Production**
Description (SHOW | HIDE)

W—Petroleum and Natural Gas Systems
Description (SHOW | HIDE)

X—Petrochemical Production
Description (SHOW | HIDE)

Y—Petroleum Refineries
Description (SHOW | HIDE)

TT—Industrial Waste Landfills
Description (SHOW | HIDE)

SUPPLIER SUBPARTS

LL—Suppliers of Coal-based Liquid Fuels
Description (SHOW | HIDE)

MM—Suppliers of Petroleum Products
Description (SHOW | HIDE)

NN—Suppliers of Natural Gas and Natural Gas Liquids
Description (SHOW | HIDE)

OO—Suppliers of Industrial Greenhouse Gases
Description (SHOW | HIDE)

3 **PP—Suppliers of Carbon Dioxide**
Description (SHOW | HIDE)

QQ—Importers and Exporters of Fluorinated Greenhouse Gases Contained in Pre-Charged Equipment or Closed-Cell Foams
Description (SHOW | HIDE)

Note: Removing (un-checking) a subpart will erase any data that has been entered for that subpart.

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This is the Subpart Selection page. Use the checkboxes to select the subparts that are applicable to your facility. We will cover the data entry for subpart G first, but we are assuming that this facility is covered by Subpart V and Subpart PP as well. To save time, we have checked the boxes for all three subparts, as shown by the three arrows.

You can also come back and access this page after entering the data for subpart G.

Next, you should scroll all the way to the bottom of the page and hit “SAVE” so you can return to the Facility Overview Page.

List of Applicable Subparts



G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Data Reporting
Select Facility » [Facility](#) or [Supplier Overview](#)

FACILITY OR SUPPLIER OVERVIEW
This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.
After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).
Facility's GHG Reporting Method: Data entry via e-GGRT web-forms (Change)

REPORT DATA

2010 Reporting Source or Supplier Category	Validation Messages?	Subpart Reporting
Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO2)	None	OPEN

ADD or REMOVE Subparts
If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report.

SUBMIT ANNUAL REPORT

Report	Uploaded File Name	Status	Submitted Date	Certification Date
GENERATE / RE-SUBMIT				

FACILITIES NOT SUBMITTING AN ANNUAL REPORT
If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.
This facility is NOT required to submit a report

On the Facility Overview page you should now see Subpart G (Ammonia Manufacturing) listed in the Report Data table. See it listed in the second row. Note that Subpart PP (Suppliers of CO2), Subpart V (Nitric Acid Production) are also shown.

To begin reporting data, let's open the reporting module for Subpart G by clicking the BLUE "OPEN" button to the right of Subpart G, as shown by the arrow.



Reporting Instructions (1)



A screenshot of the EPA website's reporting interface. At the top, the EPA logo and "United States Environmental Protection Agency" are displayed. Below this is a navigation bar with tabs for "HOME", "FACILITY REGISTRATION", "FACILITY MANAGEMENT", and "DATA REPORTING". The "DATA REPORTING" tab is active. On the left side, there is a sidebar menu with a question mark icon and the text "e-GGRT Help" and "Using e-GGRT for Subpart G reporting". This sidebar menu is circled in orange. The main content area is titled "G-Ammonia 1 (2010) Subpart G: Ammonia Manufacturing" and includes a "Subpart Overview" section. The overview text states: "OVERVIEW OF SUBPART REPORTING REQUIREMENTS Subpart G requires affected facilities to report carbon dioxide (CO2) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided."

The next screen is the Subpart Overview page. On the top section, you will see a question mark in the left hand corner of the screen, as shown by the orange circle. By clicking on the link below the question mark, you can get additional Reporting Instructions for Subpart G.

Reporting Instructions (2)



/ Pages / Home / GHG Reporting Instructions / ... / Subpart Reporting Instructions

Subpart G - Ammonia Manufacturing

Please select a help topic from the list below:

- Using e-GGRT to Prepare Your Subpart G Report
 - Subpart G Summary Information for this Facility
 - Subpart G Process Unit Information for Units NOT Monitored by CEMS
 - Subpart G Process Unit Information for Units Monitored by CEMS
 - Subpart G Emissions Information for Process Units NOT Monitored by CEMS
 - Subpart G Emissions Information for Process Units Monitored by CEMS
- Using Subpart G Calculation Spreadsheets
- Carry forward of data from previous submissions
- Subpart G Rule Guidance
- Subpart G Rule Language (eCFR)

Additional Resources:

- [Part 98 Terms and Definitions](#)
- [Frequently Asked Questions \(FAQs\)](#)
- [Webinar Slides](#)

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This slide shows the content of the Reporting Instructions help available for the for Subpart G. You can choose one of the ten main topics:

- Using e-GGRT to Prepare Your Subpart G Report;
- Subpart G Summary Information for this Facility;
- Subpart G Process Unit Information for Units NOT Monitored by CEMS;
- Subpart G Process Unit Information for Units Monitored by CEMS;
- Subpart G Emissions Information for Process Units NOT Monitored by CEMS;
- Subpart G Emissions Information for Process Units Monitored by CEMS;
- Using Subpart G Calculation Spreadsheets
- Carry forward of data from previous submissions
- Subpart G Rule Guidance; and
- Subpart G Rule Language (eCFR).

G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81350, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: View Validation

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
No units have been added				

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			

¹ A status of "Incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

Note that you can check your location within the system using the heading in red font at the top of the page as indicated by the circle. The Subpart G overview page, like the facility overview page is the “home page” for Subpart G reporting. As you go to specific data entry forms within this module the text circled at the top of the page will change.

On the subpart overview page, there are 3 main sections where you will need to enter Subpart G specific data.

The first section is “Subpart G SUMMARY INFORMATION FOR THIS FACILITY”. This table will include facility-wide information so it is best to complete this section after entering unit-specific information in the other two sections.

The second section is the “UNIT SUMMARY” table. Here you will enter information required for each ammonia unit that is not monitored by CEMS, such as the unit identification (including feedstock type) and information on methods to determine mass and carbon content for each unit. This will be the first step as noted on the screen.

The last section, “UNIT SUMMARY (Units monitored by CEMS)”, is where you will enter emissions data for ammonia units that are monitored by CEMS. We will do this as the second step.

Subpart G: Add Non-CEMS Units



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81350, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

[Subpart G: View Validation](#)

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

[OPEN](#)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
No units have been added				
+ ADD a Unit				

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			
+ ADD a Unit Monitored by CEMS			

[+ Facility Overview](#)


¹ A status of "Incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

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Let's start with the second section which covers reporting of unit level information.

Let's first focus on entering information for units NOT using continuous emission monitoring systems (CEMS). The emissions for these units should be calculated using the procedures provided in Subpart G of Part 98.

To enter information required for each ammonia unit, let's begin by clicking on the blue hyperlink "Add a Unit" as shown by the step 1 arrow on the screen.

Subpart G: Add Non-CEMS Unit (2)

G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

[Subpart Overview](#) » [Add/Edit a Unit](#)

CONTINUOUS EMISSIONS MONITORING SYSTEMS (CEMS)

Please indicate whether or not the emissions for this ammonia manufacturing unit are measured by a CEMS. For additional information about reporting CEMS emissions, please use the e-GGRT Help link(s) provided. * denotes a required field

CONTINUOUS EMISSIONS MONITORING

Is this unit's emissions monitored using a CEMS? * Yes No

CANCELSAVE

After selecting “Add a Unit” you will be directed to the “Add/Edit a Unit” form where you should confirm that the monitoring method for this Ammonia Unit is not CEMS. This form radio button will default to the answer “no.”

Let’s confirm this choice. To accept your selection and continue to the next form, hit the green “SAVE” button at the bottom of the form.

Once you select “save” you will be directed to the second part of the Add/Edit a unit form.

This page has 3 main sections where you will need to enter data.

In the first section – enter the unit name or identification number. You can also enter a description if needed to help identify the unit.

In the second section, enter the type of feedstock used in this unit.

Finally, confirm again that the ammonia unit is not monitored by CEMS. You can change this unit to a CEMS unit under the heading “Continuous Emissions Monitoring”. Keep in mind that if you do decide to switch at this point, then you will lose any previously entered data for this unit once you hit the green “SAVE” button.

Once you have entered all the relevant information and confirmed the emissions methodology – hit the save button to continue.

After this form you will be redirected to the Subpart G Overview page.

Subpart G: Subpart Overview



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81350, published Dec. 27, 2010. E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: View Validation

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	OPEN	Delete
Unit 1	Gaseous		Incomplete	OPEN	
Unit 2	Liquid		Incomplete	OPEN	
Unit 3	Solid		Incomplete	OPEN	

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			

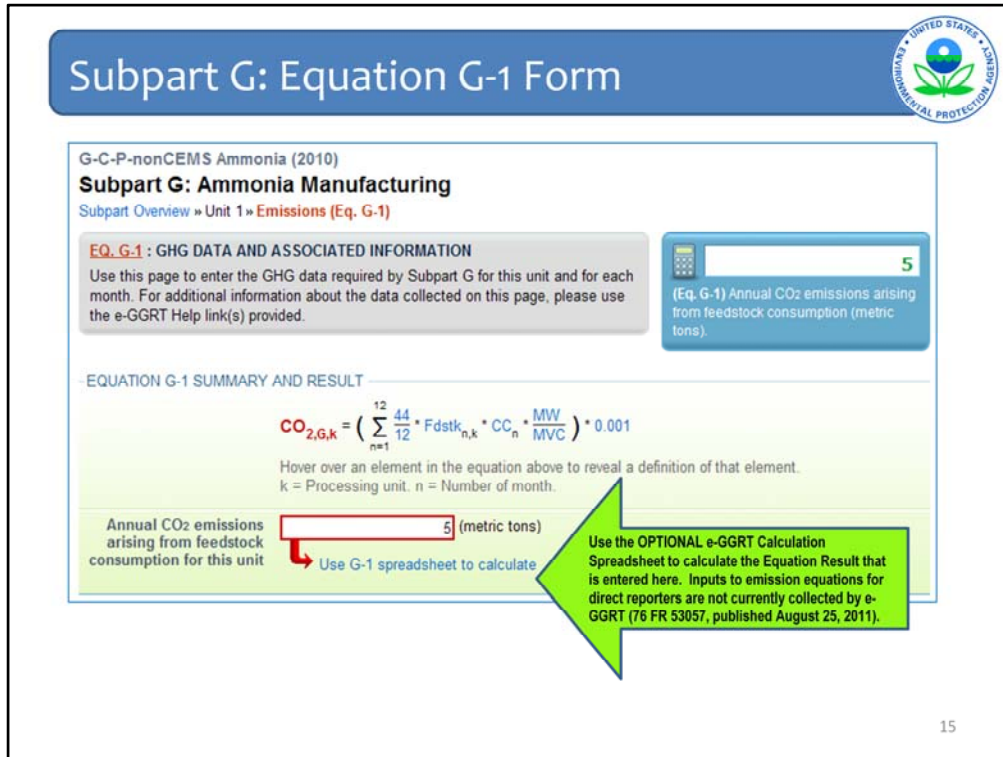
¹ A status of "incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).



When you return to the Subpart G Overview page, the UNIT SUMMARY page (shown by arrow 1) will contain the units you have entered along with the type of feedstock for each unit. I repeated the steps I described and added Unit 2 and Unit 3 in the same manner as Unit 1, with each one having a different type of feedstock.

As you read across the rows, you can see that the "Status" fields are "incomplete" for the units because we need to enter emissions information.

We will begin by entering the additional information for Unit 1. Click the blue "OPEN" button for "Unit 1" as shown by arrow 2.



G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

Subpart Overview » Unit 1 » Emissions (Eq. G-1)

EQ. G-1: GHG DATA AND ASSOCIATED INFORMATION

Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

(Eq. G-1) Annual CO₂ emissions arising from feedstock consumption (metric tons): 5

EQUATION G-1 SUMMARY AND RESULT

$$CO_{2,G,k} = \left(\sum_{n=1}^{12} \frac{44}{12} \cdot Fdstk_{n,k} \cdot CC_n \cdot \frac{MW}{MVC} \right) \cdot 0.001$$

Hover over an element in the equation above to reveal a definition of that element.
k = Processing unit. n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit: 5 (metric tons)

[Use G-1 spreadsheet to calculate](#)

Use the **OPTIONAL e-GGRT Calculation Spreadsheet** to calculate the Equation Result that is entered here. Inputs to emission equations for direct reporters are not currently collected by e-GGRT (76 FR 53057, published August 25, 2011).

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After selecting “OPEN” you will be directed to the Eq. G-1 form because Unit 1 uses gaseous feedstock. Here you see the top half of the form.

You will enter unit level GHG emissions using Equation G-1 and other associated information, such as the methods used for determining volume and carbon content of feedstock for a given unit, and the months in which missing data procedures were applied.

Enter the annual CO₂ emissions for Unit 1 in the red box. Above the red box, for reference, you can see Equation G-1 from the rule, which is used to determine annual CO₂ emissions from an ammonia unit with gaseous feedstock.

As I will discuss on the next slide, EPA has prepared optional worksheets to assist reporters in calculating emissions applying equations provided in Part 98. You are not required to use these worksheets and they are NOT collected by e-GGRT. The optional worksheet for equation G-1 is available by clicking on the blue hyperlink below the red box, indicated by the large arrow.

Calculation Spreadsheets, CBI and Inputs



- All elements included in e-GGRT are required reporting elements, as applicable
- E-GGRT currently reflects the rule deferring reporting of inputs to emission equations (See 76 FR 53057, published August 25, 2011). A link to the final rule can be found at the GHG Reporting Program Website: <http://www.epa.gov/climatechange/emissions/CBI.html>
- Data elements that have been determined to be CBI must be reported
- Reporting elements that have been determined to be CBI will be protected under the Clean Air Act (Sec. 114(c)) and EPA regulations (40 CFR Part 2)

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The calculation spreadsheets may have changed from previous years, so always download the most recent version of the calculation spreadsheets.

E-GGRT currently reflects the rule deferring reporting of inputs to emission equations for direct emitters.

The inputs of the equation are NOT currently collected by e-GGRT. This means that in certain web forms in e-GGRT, you can view a required equation, but you will only enter the RESULT of that equation into e-GGRT.

EPA is providing OPTIONAL calculation spreadsheets that you can use to perform the calculations called for in the emission equations. These Microsoft Excel spreadsheets can be downloaded and opened on your own computer. Just click the hyperlink on the web-form to view and download the appropriate calculation spreadsheet for the equation you are working on. You can enter the data, including equation inputs, necessary to perform the calculation for the equation, and the spreadsheets will calculate the result for you. Once you have completed the calculation, enter the result into the e-GGRT web form.

E-GGRT will NOT collect the calculation spreadsheets and you should NOT submit them outside of e-GGRT. The use of these calculation spreadsheets is voluntary. The spreadsheets are meant to support reporters as they complete the e-GGRT online reporting process. You do not need to use EPA's spreadsheets to perform the calculations for the emissions equations, but you do need to keep records of these calculations (under 40 CFR 98.3(g) and additional subpart-specific provisions) whether or not you use the calculation spreadsheets provided by EPA. If you do use the spreadsheets, you may choose to maintain copies to help meet your recordkeeping requirements.

Subpart G: Equation G-1 Worksheet



Subpart G - Ammonia Manufacturing - Calculating Unit Emissions from Gaseous Feedstock (Equation G-1)

OPTIONAL SPREADSHEET FOR FACILITY USE (CONSOLIDATING PURPOSES)

Version: e-GGRT R12010 R.01

Today's date: 8/26/2011

Use one spreadsheet for each process unit. Make additional copies as needed.

This spreadsheet is protected and contains locked cells to ensure that you do not inadvertently alter any of the included formulas and/or calculations. To remove this protection and alter this spreadsheet, right-click the "worksheet" tab near the bottom of the screen and select "Unprotect Sheet." When prompted for the password, type "GHG" and click "OK." Please note that making changes to an unprotected sheet could result in incorrect calculations and that you are responsible for the accuracy of the data you report to EPA. For additional help, visit the Microsoft Excel Support website (<http://office.microsoft.com/en-us/excel/help>).

Equation G-1:

$$CO_{2, g, k} = \left(\frac{44}{12} \cdot \text{rate}_{g, k} \cdot CC_{g, k} \cdot \frac{MFC}{MWC} \right) \cdot 0.001$$

Facility Name: _____

Register Name: _____

Unit Name or Identifier: _____

Unit Description: _____

Comments: _____

Unit Type: Ammonia Manufacturing Process Unit

Annual CO₂ Process Emissions From Gaseous Feedstock (G-1)

Month	[Gasek] = Volume of the Gaseous Feedstock (used each)	[CC] = Carbon Content of the Gaseous Feedstock (by Case of Feedstock)	[MW] = Molecular Weight of the Gaseous Feedstock (lb/lbmole)	[MVC] = Molar Volume Conversion Factor (scf/lb-mole)	[44/12] = Ratio of Molecular Weights, CO ₂ to Carbon (constant)	[6.001] = Conversion Factor from lb to Metric Tons (constant)	Calculated Monthly CO ₂ Emissions for the Unit
January	849.5	44.72	0.001	0.00			
February	849.5	44.72	0.001	0.00			
March	849.5	44.72	0.001	0.00			
April	849.5	44.72	0.001	0.00			
May	849.5	44.72	0.001	0.00			
June	849.5	44.72	0.001	0.00			
July	849.5	44.72	0.001	0.00			
August	849.5	44.72	0.001	0.00			
September	849.5	44.72	0.001	0.00			
October	849.5	44.72	0.001	0.00			
November	849.5	44.72	0.001	0.00			
December	849.5	44.72	0.001	0.00			
[CO _{2, g, k}] = Annual CO ₂ Process Emissions (Metric Tons)							0.00

Enter this value

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This is a screenshot of the Equation G-1 Worksheet that you could use to calculate annual CO₂ emissions from an ammonia unit with gaseous feedstock and is not monitored by a CEMS.

If you choose to use the worksheets, you should use one for each ammonia unit with gaseous feedstock.

The worksheet uses monthly feedstock data (volume, carbon content, and molecular weight) to estimate the annual CO₂ emissions from an ammonia unit using gaseous feedstock.

As you scroll further down the worksheet, you will see that the worksheet highlights the data to be entered into e-GGRT with a red box, as indicated by the circle.

Subpart G: Equation G-1 Form (2)



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview: Unit 1 = Emissions (Eq. G-1)

EQ. G-1 : GHG DATA AND ASSOCIATED INFORMATION
Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

Annual CO₂ emissions arising from feedstock consumption for this unit: (metric tons)
(Eq. G-1) Annual CO₂ emissions arising from feedstock consumption (metric tons).

EQUATION G-1 SUMMARY AND RESULT

$$CO_{2,G,k} = \left(\sum_{n=1}^{12} \frac{M}{12} \cdot Fdstk_{k,n} \cdot CC_n \cdot \frac{MW}{MVC} \right) \cdot 0.001$$

Hover over an element in the equation above to reveal a definition of that element.
k = Processing unit. n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit: (metric tons)
[Use G-1 spreadsheet to calculate](#)

JANUARY
Volume of feedstock, determination method: [Make all months same](#)
Volume of feedstock, substitute value used:
Carbon content, basis: [Make all months same](#)
Carbon content, substitute value used:
Molecular Weight, substitute value used:

FEBRUARY
Volume of feedstock, determination method:
Volume of feedstock, substitute value used:
Carbon content, basis:
Carbon content, substitute value used:
Molecular Weight, substitute value used:

MARCH
Volume of feedstock, determination method:
Volume of feedstock, substitute value used:

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After completing the optional worksheet, return to the Eq. G-1 form and enter the total annual CO₂ emissions for the unit. This screen shows additional portions of the G-1 form (initially we focused on the equation).

The emissions total that you entered should also appear in the blue box in the upper right hand corner which is outlined by a green box on this screenshot.

The form is organized to support the reporting of required monthly information used in equation G-1. You are required to enter the determination methods used to estimate the volume and carbon content of the gaseous feedstock. If you do not select a method you will see a data completeness validation error on the validation report.

You also need to use the checkboxes to indicate the months in which missing data procedures were used.

If you used the same methods and same missing data procedures for each month, you can click “Make all months same” as shown by the circles.

Subpart G: Equation G-1 Form (3)



SEPTEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input checked="" type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D1945-03"/>
Carbon content, substitute value used	<input type="checkbox"/>
Molecular Weight, substitute value used	<input type="checkbox"/>

OCTOBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input checked="" type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D1945-03"/>
Carbon content, substitute value used	<input type="checkbox"/>
Molecular Weight, substitute value used	<input type="checkbox"/>

NOVEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input checked="" type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D1945-03"/>
Carbon content, substitute value used	<input type="checkbox"/>
Molecular Weight, substitute value used	<input type="checkbox"/>

DECEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input checked="" type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D1945-03"/>
Carbon content, substitute value used	<input type="checkbox"/>
Molecular Weight, substitute value used	<input type="checkbox"/>

Measured Carbon Content (from sample analysis)	<input type="text"/>
---	----------------------

Required if the carbon content data is based on supplier records. Enter value on an annual basis, the resulting measured carbon content. See §98.76(b)(6)

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If all months are not identical, check each month to ensure that you have entered data for every drop-down box and check box.

If supplier records were used as the basis for the carbon content, enter the results from the QA/QC test of supplier data required by (98.74(e) and 98.76(b)(6)) at the bottom of the page, as shown by the circle.

If supplier records were not used, this field is not required.

Once complete, be sure to click SAVE at the bottom of the page.

To return to the Subpart Overview page, click the link at the top of the page (red font).

Subpart G: Subpart Overview (1 unit complete)



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81360, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: View Validation

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons) Quantity of CO₂ used to produce urea (metric tons)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status	Delete
Unit 1	Gaseous	5	Complete	OPEN
Unit 2	Liquid		Incomplete	OPEN
Unit 3	Solid		Incomplete	OPEN

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			

¹ A status of "Incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

When you return to the Subpart G Overview page, the UNIT SUMMARY section now shows Unit 1 as Complete.

As you read across the rows, you can see that the "Status" fields are still "incomplete" for the other two units because we need to enter emissions information for the units. This information is shown by the circle.

Continue by clicking the blue "OPEN" button for "Unit 2" as shown by the arrow.

G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

Subpart Overview » Unit 2 » Emissions (Eq. G-2)

EQ. G-2: GHG DATA AND ASSOCIATED INFORMATION

Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

(Eq. G-2) Annual CO₂ emissions arising from feedstock consumption (metric tons): 15000

EQUATION G-2 SUMMARY AND RESULT

$$CO_{2,L,k} = \left(\sum_{n=1}^{12} \frac{44}{12} * Fdstk_{n,k} * CC_n \right) * 0.001$$

Hover over an element in the equation above to reveal the definition of that element.
 k = Processing unit. n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit: (metric tons)

[Use G-2 spreadsheet to calculate](#)

Use the OPTIONAL e-GGRT Calculation Spreadsheet to calculate the Equation Result that is entered here. Inputs to emission equations for direct reporters are not currently collected by e-GGRT (76 FR 53057, published August 25, 2011).

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After selecting “OPEN” you will be directed to the Eq. G-2 form because Unit 2 uses liquid feedstock. You will enter unit level GHG emissions using Equation G-2 and other associated information, such as the determination methods used for volume and carbon content, and the months in which missing data procedures were applied.

Enter the annual CO₂ emissions for Unit 2 in the red box. Above the red box, for reference, you can see Equation G-2 from the rule, which is used to determine annual CO₂ emissions from an ammonia unit with liquid feedstock.

As mentioned previously, EPA has prepared optional worksheets to assist reporters in calculating emissions applying equations provided in Part 98. You are not required to use this worksheet, but the worksheet for equation G-2 is available by clicking on the blue hyperlink below the red box. Once you click on this link you will be directed to download the worksheet for Equation G-2.

Again, this optional worksheet is not collected by e-GGRT.

NOTE: The inputs of the equation are NOT currently collected by e-GGRT. E-GGRT will be updated to reflect the final deferral rule.

Subpart G: Equation G-2 Worksheet



Subpart G - Ammonia Manufacturing - Calculating Unit Emissions from Liquid Feedstock (Equation G-2)

OPTIONAL SPREADSHEET FOR FACILITY RECORDKEEPING PURPOSES
 Version: e-GGRT RY2010, R 01
 Today's date: 9/29/2011
 Use one spreadsheet for each process unit. Make additional copies as needed.

This spreadsheet is protected and contains locked cells to ensure that you do not inadvertently alter any of the included formulas and/or calculations. To remove this protection and alter this spreadsheet, right-click the "worksheets" tab near the bottom of the screen and select "Unprotect Sheet." When prompted for the password, type "GHG" and click "OK." Please note that making changes to an unprotected sheet could result in incorrect calculations and that you are responsible for the accuracy of the data you report to EPA. For additional help, visit the Microsoft Excel Support website (<http://office.microsoft.com/en-us/excel-help>).

Equation G-2:

$$CO_{2,t,h,k} = \left(\sum_{n=1}^{44} \frac{44}{12} * Fdst_{n,h,k} * CC_n \right) * 0.001$$

Facility Name: _____
 Reporter Name: _____
 Unit Name or Identifier: _____
 Unit Description: _____
 Comments: _____
 Unit Type: Ammonia Manufacturing Process Unit

Annual CO₂ Process Emissions From Liquid Feedstock (G-2)

Month	[Fdst] _n = Volume of the Liquid Feedstock Used (gallons)	[CC] _n = Carbon Content of the Liquid Feedstock (g C per gallon of feedstock)	[44/12] = Ratio of Molecular Weights, CO ₂ to Carbon (constant)	[0.001] = Conversion Factor from kg to Metric Tons (constant)	Calculated Monthly CO ₂ Emissions for the Unit
January			44/12	0.001	0.00
February			44/12	0.001	0.00
March			44/12	0.001	0.00
April			44/12	0.001	0.00
May			44/12	0.001	0.00
June			44/12	0.001	0.00
July			44/12	0.001	0.00
August			44/12	0.001	0.00
September			44/12	0.001	0.00
October			44/12	0.001	0.00
November			44/12	0.001	0.00
December			44/12	0.001	0.00
[CO_{2,t,h,k}] = Annual CO₂ Process Emissions (metric tons)					0.00

Enter this value in e-GGRT

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This is a screenshot of the Equation G-2 Worksheet that can be used to calculate annual CO₂ emissions from an ammonia unit with liquid feedstock that is not monitored by a CEMS.

If you choose to use the worksheets, you should use one for each ammonia unit with liquid feedstock.

The worksheet uses monthly feedstock data (volume and carbon content) to estimate the annual CO₂ emissions from an ammonia unit using liquid feedstock.

As you scroll further down the worksheet, you will see that the worksheet highlights the data to be entered into e-GGRT with a red box.

Subpart G: Equation G-2 Form (2)



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview » Unit 2 » Emissions (Eq. G-2)

EQ. G-2: GHG DATA AND ASSOCIATED INFORMATION
Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

15000
(Eq. G-2) Annual CO₂ emissions arising from feedstock consumption (metric tons)

EQUATION G-2 SUMMARY AND RESULT

$$CO_{2,L,k} = \left(\sum_{n=1}^{12} \frac{44}{12} \cdot Fdstk_{n,k} \cdot CC_n \right) \cdot 0.001$$

Hover over an element in the equation above to reveal a definition of that element.
k = Processing unit. n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit: 15000 (metric tons)
Use G-2 spreadsheet to calculate

JANUARY
Volume of feedstock, determination method: Flow meter Make all months same
Volume of feedstock, substitute value used:
Carbon content, basis: ASTM D2502-04 (Reapproved 2002) Make all months same
Carbon content, substitute value used:

FEBRUARY
Volume of feedstock, determination method: Flow meter
Volume of feedstock, substitute value used:
Carbon content, basis: ASTM D2502-04 (Reapproved 2002)
Carbon content, substitute value used:

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After completing the optional worksheet, return to the Eq. G-2 form for the unit you are working on. Be sure to check the heading for the form. This form is similar to the G-1 web form.

As in the G-1 form, this form requests that you enter required monthly information for your reporting year as required by the rule. You are required to enter the determination methods used to estimate the volume and carbon content of the liquid feedstock.

You also need to use the checkboxes to indicate the months in which missing data procedures were used.

If you used the same methods and same missing data procedures for each month, you can click "Make all months same" as shown by the circles.

Subpart G: Equation G-2 Form (3)



SEPTEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D2502-04 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

OCTOBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D2502-04 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

NOVEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D2502-04 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

DECEMBER	
Volume of feedstock, determination method	<input type="text" value="Flow meter"/>
Volume of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D2502-04 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

Measured Carbon Content (from sample analysis)	<input type="text"/>
<small>Required if any Carbon content data is based on supplier records. Enter value on an annual basis, the resulting measured carbon content. See §98.76(b)(6)</small>	

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Again, check each month to ensure that you have entered data for every drop-down box. You can make all months the same.

If supplier records/data were used as the basis for the carbon content, enter results from the required QA/QC test (See 98.74(e) and 98.76(b)(6)) at the bottom of the page, as shown by the circle.

If supplier records/data were not used, this field is not required. Leave the cell blank.

Once you have completed reviewing and entering information, be sure to click SAVE at the bottom of the page.

To return to the Subpart Overview screen, click the link at the top of the page (red font).

Subpart G: Subpart Overview (2 Units complete)



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81350, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: View Validation

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
Unit 1	Gaseous	5	Complete	OPEN ✖
Unit 2	Liquid	15,000	Complete	OPEN ✖
Unit 3	Solid		Incomplete	OPEN ✖

[ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			

[ADD a Unit Monitored by CEMS](#)

[Facility Overview](#)

¹ A status of "incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

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When you return to the Subpart G Overview page, the UNIT SUMMARY section now shows Unit 1 and Unit 2 as Complete.

As you read across the rows, you can see that the "Status" field is still "incomplete" for Unit 3 because we need to enter emissions information for the unit. This information is shown by the circle.

Continue by clicking the blue "OPEN" button for "Unit 3" as shown by the arrow.

After selecting “OPEN” you will be directed to the Eq. G-3 form because Unit 3 uses solid feedstock. You will enter unit level GHG emissions using Equation G-3 and other associated information, such as the determination methods used for volume and carbon content, and the months in which missing data procedures were applied.

Enter the annual CO2 emissions for Unit 3 in the red box. Above the red box, for reference, you can see Equation G-3 from the rule, which is used to determine annual CO2 emissions from an ammonia unit using solid feedstock.

Again, EPA has prepared these optional worksheets to assist reporters in calculating emissions applying equations provided in Part 98. You are not required to use this worksheet, but the worksheet for equation G-3 is available by clicking on the blue hyperlink below the red box. Once you click on this link you will be directed to download the worksheet for Equation G-3.

This worksheet is not collected by e-GGRT.

Again note: The inputs of the equation are NOT currently collected by e-GGRT.

Subpart G: Equation G-3 Worksheet



Equation G-3:
$$CO_{2,S,k} = \left(\sum_{n=1}^{44} \frac{44}{12} * Fdstk_{n,k} * CC_n \right) * 0.001$$

Facility Name: _____
 Reporter Name: _____
 Unit Name or Identifier: _____
 Unit Description: _____
 Comments: _____
 Unit Type: Ammonia Manufacturing Process Unit

Month	(Fdstk) = Mass of the Solid Feedstock Used (kg)	(CC) = Carbon Content of the Solid Feedstock (kg C per kg of feedstock)	(44/12) = Ratio of Molecular Weights, CO ₂ to Carbon (constant)	(0.001) = Conversion Factor from kg to Metric Tons (constant)	Calculated Monthly CO ₂ Emissions for the Unit
January			44/12	0.001	0.00
February			44/12	0.001	0.00
March			44/12	0.001	0.00
April			44/12	0.001	0.00
May			44/12	0.001	0.00
June			44/12	0.001	0.00
July			44/12	0.001	0.00
August			44/12	0.001	0.00
September			44/12	0.001	0.00
October			44/12	0.001	0.00
November			44/12	0.001	0.00
December			44/12	0.001	0.00

(CO_{2,S,k}) = Annual CO₂ Process Emissions (metric tons) 0.00

Enter this value in e-GGRT

This is a screenshot of the Equation G-3 Worksheet that you could use to calculate annual CO₂ emissions from an ammonia unit with solid feedstock and is not monitored by a CEMS.

If you choose to use the worksheets, you should use one for each ammonia unit with solid feedstock.

The worksheet uses monthly feedstock data (mass and carbon content) to estimate the annual CO₂ emissions from an ammonia unit using solid feedstock.

As you scroll further down the worksheet, you will see that the worksheet highlights the data to be entered into e-GGRT with a red box.

Subpart G: Equation G-3 Form (2)



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview » Unit G » Emissions (Eq. G-3)

EQ. G-3 : GHG DATA AND ASSOCIATED INFORMATION
Use this page to enter the GHG data required by Subpart G for this unit and for each month. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

10000
(Eq. G-3) Annual CO₂ emissions arising from feedstock consumption (metric tons)

EQUATION G-3 SUMMARY AND RESULT

$$CO_{2,S,k} = \left(\sum_{n=1}^{12} \frac{d_d}{12} * Fdstk_{n,k} * CC_n \right) * 0.001$$

Hover over an element in the equation above to reveal a definition of that element.
k = Processing unit. n = Number of month.

Annual CO₂ emissions arising from feedstock consumption for this unit **10000** (metric tons)
Use G-3 spreadsheet to calculate

JANUARY

Mass of feedstock, determination method: Company records Make all months same

Mass of feedstock, substitute value used:

Carbon content, basis: ASTM D3176-89 (Reapproved 2002) Make all months same

Carbon content, substitute value used:

FEBRUARY

Mass of feedstock, determination method: Company records

Mass of feedstock, substitute value used:

Carbon content, basis: ASTM D3176-89 (Reapproved 2002)

Carbon content, substitute value used:

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After completing the optional worksheet, return to the Eq. G-3 form.

Like the G-1 and G-2 web forms, the G-3 form requires entry of information by month for the reporting year. You are required to enter the determination methods used to estimate the mass and carbon content of the solid feedstock.

You also need to use the checkboxes to indicate the months in which missing data procedures were used.

If you used the same methods and same missing data procedures for each month, you can click “Make all months same” as shown by the circles.

Subpart G: Equation G-3 Form (3)



SEPTEMBER	
Mass of feedstock, determination method	<input type="text" value="Company records"/>
Mass of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D3176-89 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

OCTOBER	
Mass of feedstock, determination method	<input type="text" value="Company records"/>
Mass of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D3176-89 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

NOVEMBER	
Mass of feedstock, determination method	<input type="text" value="Company records"/>
Mass of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D3176-89 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

DECEMBER	
Mass of feedstock, determination method	<input type="text" value="Company records"/>
Mass of feedstock, substitute value used	<input type="checkbox"/>
Carbon content, basis	<input type="text" value="ASTM D3176-89 (Reapproved 2002)"/>
Carbon content, substitute value used	<input type="checkbox"/>

Measured Carbon Content (from sample analysis)	<input type="text"/>
<small>Required if any carbon content data is based on supplier records. Enter value on an annual basis, the resulting measured carbon content. See §98.76(b)(6)</small>	

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If all months are not identical, check each month to ensure that you have entered data for every drop-down box and check box.

Again, if supplier records were used as the basis for the carbon content, enter results from the QA/QC analysis (98.74(e) and 98.76(b)(6)) at the bottom of the page, as shown by the circle.

If supplier records were not used, this field is not required.

Once complete, be sure to click SAVE at the bottom of the page.

To return to the Subpart Overview page click the link at the top of the page.

Subpart G: CEMS Unit Add/Edit Information



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GORT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81350, published Dec. 27, 2010.) e-GORT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

[Subpart G: View Validation](#)

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

[OPEN](#)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status	OPEN	Delete
Unit 1	Gaseous	5	Complete	OPEN	
Unit 2	Liquid	15,000	Complete	OPEN	
Unit 3	Solid	10,000	Complete	OPEN	

[ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
No units have been added			

[ADD a Unit Monitored by CEMS](#)

[Facility Overview](#)

¹ A status of "incomplete" means that one or more required data elements are incomplete. For details, refer to the Data Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

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When you return to the Subpart G Overview page you should now see that the "Status" for Unit 1, Unit 2, and Unit 3 have changed to "Complete" (as shown by the circle). This is good and indicates that you have completed entering information for these non-CEMS units.

Now let's enter information for a unit that is monitored by CEMS.

As in the case of a unit without a CEMS, the first step under the Unit Summary (Units monitored by CEMS) is to add a unit.

So, to begin, let's click on the blue hyperlink text to "ADD a Unit Monitored by CEMS," indicated by the arrow.

Subpart G: Unit with CEMS




G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
Subpart Overview » [Add/Edit a Unit](#)

CONTINUOUS EMISSIONS MONITORING SYSTEMS (CEMS)
Please indicate whether or not the emissions for this ammonia manufacturing unit are measured by a CEMS. For additional information about reporting CEMS emissions, please use the e-GGRT Help link(s) provided. * denotes a required field

CONTINUOUS EMISSIONS MONITORING

Is this unit's emissions monitored using a CEMS? Yes No



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You will then be directed to another “Unit” information form. On this form you are asked to confirm the emissions methodology for Unit 5 is a CEMS.

For this 2nd example, you see that the radio button or answer now defaults to “yes” and we will keep this choice.

Remember to then hit the green “SAVE” at the bottom of the page to accept your selection and continue.

Subpart G: Unit with CEMS



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
[Subpart Overview](#) » [Add/Edit a Unit](#)

AMMONIA MANUFACTURING UNIT INFORMATION
Subpart G requires a facility to uniquely identify each ammonia manufacturing unit and provide the information described below for each. For additional information about adding and editing an ammonia manufacturing process unit, please use the e-GGRT Help link(s) provided. * denotes a required field

UNIT INFORMATION

Name or ID* (10 characters maximum)

Description (optional)

Type Ammonia Manufacturing Process Unit

FEEDSTOCK TYPE

Please select the type of feedstock used by this unit

Gaseous
 Liquid
 Solid

CONTINUOUS EMISSIONS MONITORING

Is this unit's emissions monitored using a CEMS? Yes
 No

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Once you select “save” you will be directed to this form.

This form, like the “Add/Edit a Unit” form we saw previously, has 3 main sections where you will need to enter data.

In the first section – enter the unit name or identification number. You can also enter a description if needed to help identify the unit.

In the second section, enter the type of feedstock used in this unit.

Finally, confirm again that the ammonia unit is monitored by CEMS. You can change this unit to a non-CEMS unit under the heading “Continuous Emissions Monitoring”. Keep in mind that if you do decide to switch at this point, then you will lose any previously entered data for this unit once you hit the green “SAVE” button.

Once you have entered all the relevant information and confirmed the emissions methodology – hit the save button to continue.

Clicking save on this form will direct you to the Subpart G Overview page.

Subpart G: Review Ammonia Units



G-C-P-nonCEMS Ammonia (2010)
Subpart G: Ammonia Manufacturing
 Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
 Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81355, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: View Validation

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)
	OPEN

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status	Actions
Unit 1	Gaseous	5	Complete	OPEN X
Unit 2	Liquid	75,000	Complete	OPEN X
Unit 3	Solid	10,000	Complete	OPEN X

[ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status	Actions
Unit 5	Gaseous	Incomplete	OPEN X
Unit 6	Liquid	Incomplete	OPEN X
Unit 7	Solid	Incomplete	OPEN X

[ADD a Unit Monitored by CEMS](#)

CEMS MONITORING LOCATION SUMMARY

CML Name/Identifier	CML Configuration	Monitored Unit(s)	Total CO ₂ emissions (metric tons)	Status	Delete
No CEMS monitoring locations present.					

[ADD a CEMS Monitoring Location](#)

[Facility Overview](#)



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Once returned to the Subpart G Overview Page, as shown by arrow 1, in the Units Monitored by CEMS section will now reflect the unit we just entered, including the type of feedstock consumed by this unit. Also notice that I entered two other units, Unit 6 and Unit 7, in the same manner as Unit 5, only with different types of feedstocks.

As you read across the row you can see that the “Status” field is marked as “Incomplete” because we need to enter emissions information.

Notice also, as shown by arrow number 2, there is now a new table on the overview page titled “CEMS MONITORING LOCATION SUMMARY” table.

Let’s first complete the Unit 5 data entry by clicking the blue “OPEN” button as shown by arrow 3 and then come back to the new table, “CEMS MONITORING LOCATION SUMMARY”.

Subpart G: Add Feedstock Quantity and Method for CEMS units



G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

[Subpart Overview](#) » [Unit 5](#) » [Feedstock Quantity and Method](#)

GREENHOUSE GAS DATA AND ASSOCIATED INFORMATION

Use this page to enter the greenhouse gas data required by Subpart G for an ammonia manufacturing unit that is monitored by CEMS. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

ANNUAL FEEDSTOCK QUANTITY AND DETERMINATION METHOD

The quantity of gaseous feedstock consumed	10000 (scf)
The method used for determining the quantity of gaseous feedstock consumed	Flow meter

CANCEL SAVE

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Once you click the “OPEN” button for Unit 5 you will be directed to the Feedstock Quantity and Method Form.

Here you should enter the annual quantity of feedstock consumed (for gaseous feedstocks the units are standard cubic feet). You should also add the method used for determining this quantity by using the drop down menu.

Once you have completed this form, hit the green “SAVE” button and return to the Subpart G Overview page.

Subpart G: Add CEMS Monitoring Location



G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the eCGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 8120, published Dec. 27, 2010; 14-05047 currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.)

[Subpart G: View Validation](#)

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons) Quantity of CO₂ used to produce urea (metric tons)

[OPEN](#)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status	OPEN	Delete
Unit 1	Gaseous	5	Complete	OPEN	X
Unit 2	Liquid	15,000	Complete	OPEN	X
Unit 3	Solid	10,000	Complete	OPEN	X

[ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status	OPEN	Delete
Unit 5	Gaseous	Complete	OPEN	X
Unit 6	Liquid	Complete	OPEN	X
Unit 7	Solid	Complete	OPEN	X

[ADD a Unit Monitored by CEMS](#)

CEMS MONITORING LOCATION SUMMARY

CML Name/Identifier	CML Configuration	Monitored Unit(s)	Total CO ₂ emissions (metric tons)	Status	Delete
No CEMS monitoring locations present					

[ADD a CEMS Monitoring Location](#)

[Facility Overview](#)

Add →

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When you return to the Subpart G Overview page, the status for Unit 5 should be complete as shown here with a circle. I entered the information for Units 6 and 7 in the same way as Unit 5. (The only difference is the units of measure used for the quantity of each of the feedstock types.)

So let's move to the final data entry section, CEMS Monitoring Location (CML) Summary table. Here you should add information which is required by Subpart C, Tier 4 method, including annual emissions. Click on the blue hyperlink as shown on this screen to "ADD a CEMS Monitoring Location."

This section is only required if your facility monitors some or all subpart G emissions using a CEMS.

Subpart G: Add CML GHG Emissions



G-Facility 1
Subpart G: Ammonia Manufacturing (2013)
Subpart G Overview | Add/Edit CEMS Monitoring Location

CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) MONITORING LOCATION (CML) INFORMATION
Use this page to uniquely identify each CEMS Monitoring Location (CML) Summary and provide the annual GHG emissions and other information described below. Use the "ADD/REMOVE a Process Unit" link at the bottom of the page to identify the process unit(s) monitored by this CEMS Monitoring Location (CML) Summary. **Reminder/Note:** Total Emissions from a slip stream per 98.33(a)(4)(viii)(D) should be added to the field called "Total annual CO₂ mass emissions (biogenic and non-biogenic) measured by the CEMS." Emissions from a slip stream should not be reported with either quarterly CO₂ emissions or with total annual non-biogenic CO₂ mass emissions. For additional information about the data collected on this page, please use the e-GGRT Help link(s) provided.

Summary:
Total CO₂ from CEMS (or applicable Part 75 methodology) (metric tons): 25000.0
Total Biogenic CO₂ (metric tons): 0.0
Total Non-biogenic CO₂ (metric tons): 0.0

-CONFIGURATION-
CEMS Monitoring Location * Location 1 (40 characters maximum)
Name/ID
Description (optional)
Configuration Type * Multiple processes/process units share common stack
Types of fuel combusted in the unit(s) monitored by the CEMS (applicable only to configuration type of "Process/stationary combustion units share common stack") (200 characters maximum)

-TIER 4 METHODOLOGY INFORMATION-
Calculation Methodology * 01/01/2013 Start Date
Calculation Methodology * 12/31/2013 End Date

-QUARTERLY CO₂ EMISSIONS-
Quarter 1: 5000 (metric tons)
Quarter 2: 5000 (metric tons)
Quarter 3: 5000 (metric tons)
Quarter 4: 10000 (metric tons)

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You will now be on the "CEMS Monitoring Location" page.

You will need to complete this longer form by entering all of the information as appropriate for your CEMS unit. This form reflects the reporting requirements for using the Tier 4 method required by Subpart C. As you proceed entering information on this page, dropdown menus and automated calendars are provided for convenience.

The first step is naming the CEMS monitoring location. The next steps, as shown by the circle, are to identify the type of CEMS configuration and the types of fuel combusted in the unit(s) monitored by the CEMS, if applicable.

For configuration, you have three choices:

- 1) Is the CEMS unit monitoring a single process unit?
- 2) Is the CEMS unit monitoring multiple units sharing a common stack?
- 3) Is the CEMS unit monitoring a combination of process and combustion emissions?

In this example, we have a CEMS that is monitoring emissions from multiple units, so we made the appropriate selection from the drop down list.

Then enter the fuels combusted, if applicable. Keep in mind that your answer is limited to 200 characters and spaces. The types of fuels combusted is only required for CEMS Monitoring Locations that monitor combustion emissions. If your CML configuration type is "Multiple processes/process units share common stack" or "Single process/process unit exhausts to dedicated stack," this entry is not required and cannot be entered (as shown by the grey field inside the circle above).

Here on the top half of the form you are asked to enter the start and end dates associated with this CEMS location and then CO₂ emissions for each quarter. Do not cumulate emissions data between

Subpart G: Add CML GHG Emissions (2)



ANNUAL CO₂ EMISSIONS

Total annual CO₂ mass emissions (biogenic and non-biogenic) measured by the CEMS (metric tons)

Note: Total Emissions from a slip stream per 98.33(a)(4)(viii)(G) should be added to the field called "Total annual CO₂ mass emissions (biogenic and non-biogenic) measured by the CEMS". Emissions from a slip stream should not be reported with either quarterly CO₂ emissions, or with total annual non-biogenic CO₂ mass emissions.

Check this box to indicate that the total annual emissions reported above for the CEMS include emissions calculated according to 98.33(a)(4)(viii) for a slipstream that bypassed the CEMS

Total annual biogenic CO₂ mass emissions for the CML (metric tons)

Total annual non-biogenic CO₂ mass emissions (includes fossil fuel, sorbent, and process CO₂ emissions) for the CML (metric tons)

EQUATION C-10 SUMMARY AND RESULTS (APPLICABLE ONLY TO CONFIGURATION TYPE OF "PROCESS/STATIONARY COMBUSTION")

$CH_4 \text{ or } N_2O = 0.001 \times (H)_x \times EF$

Hover over an element in the equation above to reveal a definition of that element.

Enter CH₄ and N₂O emissions from only combustion of Table C-2 Fuels directly below. If there are no combustion emissions from Table C-2 Fuels in this CEMS Monitoring Location, please enter 0.

Total CH₄ emissions (metric tons)
Use Equation C-10 spreadsheet to calculate

Total N₂O emissions (metric tons)
Use Equation C-10 spreadsheet to calculate

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Enter all required data. The section labeled Annual CO₂ Emissions, as shown by the circle, includes a check box. If the emissions reported for this CEMS include emissions calculated according to 98.33(a)(4)(viii) for a slipstream that bypassed the CEMS, click the box. Otherwise, leave it unchecked

Next, divide your annual CO₂ emissions into total annual biogenic CO₂ emissions (metric tons) and total non-biogenic CO₂ emissions (metric tons).

After that you will see additional data entry cells for CH₄ and N₂O emissions from combustion, calculated according to Equation C-10 of Subpart C.

The amount of CH₄ and N₂O emissions from combustion is only required for CEMS Monitoring Locations that monitor combustion emissions. If your CML configuration type is "Multiple processes/process units share common stack " or "Single process/process unit exhausts to dedicated stack," this entry is not required and cannot be entered (as shown by the grey fields on the web form).

If your CML includes combustion emissions, you can download the optional calculation worksheets using the links provided. These spreadsheets are not collected by e-GGRT. Once the CH₄ and N₂O emissions are calculated, enter results from your worksheets into the red cells as shown.

Subpart G: Linking CML to Unit



ADDITIONAL EMISSIONS INFORMATION

Total number of source operating hours in the reporting year (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for CO₂ concentration (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for stack gas flow rate (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for stack gas moisture content (if moisture correction is required and a continuous moisture monitor is used) (hours)

CEMS MONITORING LOCATION PROCESS UNITS

Process Unit Name/Identifier

There are no process units monitored by CEMS available for selection.

[+ ADD/REMOVE a process unit that exhausts to this CEMS Monitoring Location](#)



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Next is the “Additional Emissions Information” section which includes operating hours in the reporting year and the number of operating hours during which missing data procedures were used.

The final step at the bottom of this form (shown by the arrow) is to LINK the emissions monitored by this CML to the appropriate CEMS unit or units.

Click the “Add/Remove a process unit that exhausts to this CEMS monitoring location” hyperlink.

Subpart G: Linking CML to Unit (2)



G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

Subpart G Overview » Location 1 » Add/Edit Process Units

IDENTIFY PROCESS UNIT(S)

Use this page to select each process unit that is monitored by the CML. For additional information about this page, please use the e-GGRT Help link(s) provided. * denotes a required field

PROCESS UNIT: UNIT 5

Is this process unit monitored by the CEMS Monitoring Location? (check if true)

PROCESS UNIT: UNIT 6

Is this process unit monitored by the CEMS Monitoring Location? (check if true)

PROCESS UNIT: UNIT 7

Is this process unit monitored by the CEMS Monitoring Location? (check if true)

CANCEL

SAVE

← SAVE

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Clicking on the hyperlink will open this simple form.

Click the checkboxes to link the CEMS monitoring location we just entered (Location 1) to these three units.

Be sure again to hit the green "SAVE" button to return to the CEMS MONITORING LOCATION page.

Subpart G: Linking CML to Unit (3)



ADDITIONAL EMISSIONS INFORMATION

Total number of source operating hours in the reporting year (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for CO₂ concentration (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for stack gas flow rate (hours)

The total operating hours in which a substitute data value was used in the emissions calculations for stack gas moisture content (if moisture correction is required and a continuous moisture monitor is used) (hours)

CEMS MONITORING LOCATION PROCESS UNITS

Process Unit Name/Identifier
Unit 5
Unit 6
Unit 7

ADD/REMOVE a process unit that exhausts to this CEMS Monitoring Location

1 CHECK →

← SAVE


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When you return to the CEMS MONITORING LOCATION PAGE – Scroll down to the bottom of the page and you should see Units 5, 6 and 7 now linked to this CML in the table.

This means that the emissions from all three units are vented to the stack that is monitored by this CEMS location.

Once you have confirmed that your CEMS location is linked to the appropriate units and all other data entry on this page is complete, hit the green “SAVE” button to return to the Subpart G Overview page.

Subpart G: Subpart Overview




Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
 Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81250, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

 [Subpart G: View Validation](#)

← REVIEW

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

[OPEN](#)

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
Unit 1	Gaseous	5	Complete	OPEN ✖
Unit 2	Liquid	15,000	Complete	OPEN ✖
Unit 3	Solid	10,000	Complete	OPEN ✖

➤ [ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
Unit 5	Gaseous	Complete	OPEN ✖
Unit 6	Liquid	Complete	OPEN ✖
Unit 7	Solid	Complete	OPEN ✖

➤ [ADD a Unit Monitored by CEMS](#)

CEMS MONITORING LOCATION SUMMARY

CML Name/Identifier	CML Configuration	Monitored Unit(s)	Total CO ₂ Emissions (metric tons)	Status	Delete
Location 1	Multiple processes/process units share common stack	Unit 5 Unit 6 Unit 7	100,000	Complete	✖

➤ [ADD a CEMS Monitoring Location](#)

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Once you return to the Subpart G overview page, if you have completed data entry for the CML, you should see that the status column indicates that data entry is complete as shown on this screen with the circle. You can also see the total CO₂ emissions monitored by the CEMS Monitoring Location.

Since we have entered most of the necessary information and our tables indicate that data entry is complete, it is a good time to check the Validation Box (as shown by the arrow). The Validation Box indicates whether we have validation errors.

When the validation box is red and shows an exclamation mark, we have validation errors that require review. An validation error can mean that a required field was left blank, the data appears higher/lower than expected, or some other type of data quality error. So let's check the validation report page by clicking on the blue hyperlinked text "View Validation."

Subpart G: View Validation Messages



SUBPART VALIDATION REPORT
This report contains a complete set of validation messages for all data required by this Subpart. For additional information about Validation Reports, please use the e-GGRT Help link(s) provided. [Print-friendly version](#)

FACILITY-LEVEL VALIDATION MESSAGES

Validation Type ¹	ID ²	Message ³
Data Completeness	G001	Annual urea production. This data element is required.
Data Completeness	G006	Quantity of CO2 used to produce urea from the steam reforming of a hydrocarbon or the gasification of solid and liquid raw material. This data element is required. You may enter zero if your facility does not produce urea.

CML-LEVEL VALIDATION MESSAGES

Validation Type ¹	ID ²	CML Name	Message ³
Data Quality	CML-050	Location 1	CEMS Monitoring Location (CML) process units. You have specified the Configuration Type for this CEMS Monitoring Location (CML) to be "Multiple processes/process units share common stack", however, you have identified only one process unit that exhausts to this CML. You should either correct the Configuration Type, or only select more than one process unit that exhausts to this CML.

UNIT-LEVEL VALIDATION MESSAGES

Validation Type ¹	ID ²	Unit Name	Message ³
Data Completeness	G137	unit the second	Method used to determine the gaseous feedStock quantity. This data element is required.
Data Completeness	G140	unit the second	Gaseous feedStock quantity. This data element is required.
Data Completeness	G111	unit	Basis for the gaseous feedstock carbon content for January. This data element is required.

[Subpart Overview](#)

Critical Validation Error: Messages that appear with the stop sign icon will prevent you from generating and submitting your annual report. You should first address the errors described. If you feel you have received one of these messages in error, or there's a reason why your report should be submitted despite the message, please [submit a request to the e-GGRT Help Desk](#).

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You will now be on the Subpart G Validation Report page.

There are many types of validation messages that could be generated based on the data you have entered for Subpart G. As you can see from reviewing this page, the messages are grouped into three overall categories:

1. Facility-level messages
2. CML-level messages (CML is short for CEMS Monitoring Location)
3. Unit-level validation messages.

Currently, we have 2 data completeness messages associated with facility-level information; 1 data quality message associated with CML-level information; and 3 data completeness messages associated with unit-level information.

Notice that, for your convenience, each message text is a hyperlink to the e-GGRT page where the warning was generated.

You may also receive a data quality message that indicates that particular values you entered fall outside of an EPA estimate range. In those cases, you should check the data for any errors or typos, but, if you believe the data to be correct, then you should still submit that data.

Note that one of the data completeness errors is marked with a Stop Sign. These types of errors are "Critical Validation Errors" and prevent you from generating and submitting your annual report unless they are addressed. Please address these errors before generating your annual report.

We are seeing the first 2 messages because we have not completely entered facility level information in the first summary table on the Subpart G Overview page. If you recall we identified this as the final step for completing the Subpart G reporting process.

The other messages can be corrected by clicking the hyperlinks.

Subpart G: Complete Facility Summary



Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81250, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

[Subpart G: View Validation](#)

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)

[OPEN](#) ← Final Step

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
Unit 1	Gaseous	5	Complete	OPEN
Unit 2	Liquid	15,000	Complete	OPEN
Unit 3	Solid	10,000	Complete	OPEN

[ADD a Unit](#)

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
Unit 5	Gaseous	Complete	OPEN
Unit 6	Liquid	Complete	OPEN
Unit 7	Solid	Complete	OPEN

[ADD a Unit Monitored by CEMS](#)

CEMS MONITORING LOCATION SUMMARY

CML Name/Identifier	CML Configuration	Monitored Unit(s)	Total CO ₂ emissions (metric tons)	Status	Delete
Location 1	Multiple processes/process units share common stack	Unit 5 Unit 6 Unit 7	100,000	Complete	

[ADD a CEMS Monitoring Location](#)

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To finish entering remaining information identified on the Validation Report page, click on the blue “OPEN” button in the subpart G Summary Information for this facility section as shown by the arrow marked “final step.”

G-C-P-nonCEMS Ammonia (2010)

Subpart G: Ammonia Manufacturing

[Subpart Overview](#) » [Subpart G Summary Information](#)

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Subpart G requires a facility to report the facility information described below. For additional information about the facility information required by Subpart G, please use the e-GGRT Help link(s) provided.

Annual urea production (metric tons)

Method used to determine urea production

Quantity of CO₂ used to produce urea from the steam reforming of a hydrocarbon or the gasification of solid and liquid raw material (metric tons)

Method used to determine the quantity of CO₂ used to produce urea

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You are now on the Subpart G Summary Information form.

This form is used to enter facility level information for the ammonia facility. This information includes the amount of urea production and the quantity of CO₂ used to produce urea (both in metric tons) and the methods used to determine these quantities.

As shown by the drop down, you have a choice of three methods to determine urea production and three methods to determine the quantity of CO₂ used to produce urea.

As with other forms, confirm your entries by clicking save to return to the Subpart G Overview page.

Subpart G: Complete Forms



Subpart G: Ammonia Manufacturing

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
 Subpart G requires affected facilities to report carbon dioxide (CO₂) process emissions from each ammonia manufacturing process unit. First, use this page to identify each ammonia manufacturing process unit and then enter Greenhouse gas (GHG) data required by Subpart G for each ammonia manufacturing process unit and for your facility. For additional information about Subpart G reporting, please use the e-GGRT Help link(s) provided.

EPA has proposed to defer collection of 2010 data elements used as inputs to emission equations for direct reporters. (See 75 FR 81300, published Dec. 27, 2010.) E-GGRT currently reflects this proposal, and EPA will make any adjustments necessary to reflect the final rule.

Subpart G: No Validation Messages

SUBPART G SUMMARY INFORMATION FOR THIS FACILITY

Annual Urea Prod. (metric tons)	Quantity of CO ₂ used to produce urea (metric tons)
60,000	500

UNIT SUMMARY

Unit Name/Identifier	Feedstock	CO ₂ (metric tons)	Status ¹	Delete
Unit 1	Gaseous	5	Complete	OPEN ✕
Unit 2	Liquid	15,000	Complete	OPEN ✕
Unit 3	Solid	10,000	Complete	OPEN ✕

ADD a Unit

UNIT SUMMARY (Units monitored by CEMS)

Unit Name/Identifier	Feedstock	Status ¹	Delete
Unit 5	Gaseous	Complete	OPEN ✕
Unit 6	Liquid	Complete	OPEN ✕
Unit 7	Solid	Complete	OPEN ✕

ADD a Unit Monitored by CEMS

CEMS MONITORING LOCATION SUMMARY

CEM Name/Identifier	CEM Configuration	Monitored Unit(s)	Total CO ₂ emissions (metric tons)	Status	Delete
Location 1	Multiple processes/process units share common stack	Unit 5 Unit 6 Unit 7	100,000	Complete	✕

ADD a CEMS Monitoring Location

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Now when you return to the Subpart G overview page, you will see no validation messages, as shown by the green circle.

You have now completed all data entry for Subpart G and can scroll down to the bottom of the page. Click "Facility Overview" to return to the Facility Overview page to finish data entry for the other subparts.

Opening Subpart V



G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Data Reporting
Select Facility • [Facility](#) or [Supplier Overview](#)

FACILITY OR SUPPLIER OVERVIEW
This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.
After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).
Facility's GHG Reporting Method: Data entry via e-GGRT web-forms (Change)

REPORT DATA
2010 Reporting Source or Supplier Category Validation Messages? Subpart Reporting

Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO2)	None	OPEN

CO2 equivalent emissions (including biogenic CO2 emissions) (metric tons) **125.525**

Biogenic CO2 emissions from source categories (metric tons) **0**

CO2 equivalent quantity from supplier categories (metric tons) **0**

[VIEW GHG DETAILS](#)

ADD or REMOVE Subparts
If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report

SUBMIT ANNUAL REPORT

Report	Uploaded File Name	Status	Submitted Date	Certification Date
GENERATE / RE-SUBMIT				

FACILITIES NOT SUBMITTING AN ANNUAL REPORT
If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.
This facility is NOT required to submit a report

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We are now ready to complete the Subpart V form, but first let's check the emissions generated from our Subpart G form completion.

On the Facility Overview page you should now see the total CO2 equivalent emissions in metric tons from Subpart G Ammonia Manufacturing, as shown by the circle. We did not report any biogenic emissions for Subpart G so those are not shown here.

To begin reporting data for subpart V, let's open the reporting module by clicking the BLUE "OPEN" button as shown by the arrow.

Subpart V: Reporting Instructions (1)



The screenshot shows a web interface for reporting instructions. On the left, a blue sidebar contains a question mark icon and the text "e-GGRT Help". Below this, a link "Using e-GGRT for Subpart V reporting" is highlighted with an orange circle. The main content area is titled "G-Facility 1" and "Subpart V: Nitric Acid Production (2013)". Underneath, there is a "Subpart Overview" section with the heading "OVERVIEW OF SUBPART REPORTING REQUIREMENTS". The text in this section explains that Subpart V requires reporting annual nitrous oxide process emissions from each nitric acid production train. It provides instructions on how to download forms, complete them, and upload them for validation. At the bottom of the main content area, there is a heading "SUBPART V SUMMARY INFORMATION FOR THIS FACILITY".

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On the next page, you will see a question mark in the left hand corner of the screen, as shown by the orange circle. By clicking below the question mark, you can get additional Reporting Instructions for Subpart V.

Subpart V: Reporting Instructions (2)



7 Pages / Home / GHG Reporting Instructions / Preparing Your Annual GHG Reporting

Reporting Form Instructions

Starting February 7, 2014, you must use the reporting forms listed below. Older versions of these forms will be obsolete in many cases. The "Current Release" column in the table below shows the version numbers for the forms that will be accepted by e-GGRT. If you are re-submitting a form for a prior reporting year you must use the reporting form version listed below. Reporting forms for subparts F, U, Z, EE, GO, and H have been retired. For these subparts, reporters must now use the e-GGRT web form interface for both RY2013 and for prior year resubmissions. If you have any questions, please contact the GHGRP Help Desk.

For each applicable subpart listed below, users must report their facility's GHG data using an Excel-based Reporting Form which may be downloaded as described below:

- Subpart E - Adipic Acid Production
- Subpart F - Electronics Manufacturing
- Subpart O - HCFC-22 Production and HFC-23 Destruction
- Subpart R - Lead Production
- Subpart S - Lime Manufacturing (CEMS users only)
- Subpart V - Nitric Acid Production
- Subpart W - Petroleum and Natural Gas Systems
- Subpart BB - Silicon Carbide Production
- Subpart CC - Soda Ash Manufacturing
- Subpart OO - Use of Electric Transmission and Distribution Equipment
- Subpart FF - Underground Coal Mines
- Subpart LL - Supplies of Coal-based Liquid Fuels
- Subpart MM - Suppliers of Petroleum Products
- Subpart OO - Suppliers of Industrial Greenhouse Gases
- Subpart OO - Importers and Exporters of Fluorinated Greenhouse Gases Contained in Pre-Charged Equipment or Closed-Cell Foams
- Subpart SS - Manufacture of Electric Transmission and Distribution Equipment

Step 1. Download a Reporting Form

To download the reporting form(s) for a subpart:

1. Find the subpart in the table below.
2. Click the linked filename(s) in the second column.
3. Save the file(s) to your computer in a location of your choosing.
4. If your facility uses CEMS to calculate emissions under this subpart, you must also download a separate CEMS Reporting Form by clicking the CEMS Reporting Form link at the bottom of the table.
5. Repeat 1-4 for each applicable subpart (note that multiple Reporting Forms may be required for Subparts O and OO).

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Certain subparts of the GHG Reporting Program use a streamlined interface. For these subparts there are NO page-by-page e-GGRT web-forms. There is a single page within e-GGRT.

For these select subparts (which includes subpart V), you will download and complete a Reporting Form. The Reporting form will collect required data elements for the subpart.

Please do not confuse the Reporting Form with the Optional Calculation Worksheets.

The Reporting Forms are required to satisfy GHG reporting for certain subparts (including Subpart V) and must be uploaded into e-GGRT.

The Optional Calculation worksheets are not collected by e-GGRT.

This slide is what the Reporting Instructions screen looks like for all subparts with Simplified Reporting, including Subpart V. There are additional instructions as you scroll down the page, including how to download the Reporting Form.

Subpart V: Reporting Form (1)



G-Facility 1
Subpart V: Nitric Acid Production (2013)
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart V requires affected facilities to report annual nitrous oxide process emissions from each nitric acid production train. If you are subject to other subparts (e.g. Subpart C) you should return to the Facility Overview page, select the appropriate subpart(s), and complete the data reporting requirements of each subpart. To satisfy the Subpart V reporting requirements you will first download the Subpart V reporting form(s). Use the link provided to access the form(s) and find instructions for completing those forms. Next, you will upload the completed form and e-GGRT will validate the data contained within it. Use the "View Validation" link to review any issues found in your reporting form. If necessary, make any revisions necessary to your reporting form and upload the revised reporting form. For additional information about Subpart V reporting, please see the e-GGRT Help link(s) provided.

SUBPART V SUMMARY INFORMATION FOR THIS FACILITY

- 1) DOWNLOAD FORM
a) Subpart V GHG Reporting
- 2) UPLOAD COMPLETED FORM
EPA has finalized a rule that defers the deadline for reporting certain data elements used as inputs to emission equations for direct emitters until March 31, 2015. See 76 FR 53057 (published August 25, 2011). In accordance with the rule, e-GGRT is not currently collecting this subset of inputs to emission equations. If you choose to report these inputs to EPA by including them in a file uploaded to this page, please note that the inputs may be subject to public release.
Browse... E-FILE DATA
Uploaded File Name Attached By Date Delete
No files found.
- 3) GHG DATA
Annual N₂O mass emissions (metric tons):

Facility Overview

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As indicated by arrow 1, the first step is to download the Subpart V reporting form.

Once you have downloaded the reporting form and entered the required data, use e-GGRT to upload the completed form in the area marked by arrow 2.

Once the reporting form is uploaded into e-GGRT, the Annual N₂O mass emissions for the subpart will be calculated by the system and entered into the field marked by arrow 3.

Let's start with the reporting form. The next slides show what the reporting form looks like.

Subpart V: Reporting Form (2)



Subpart V - Nitric Acid Production

1. Facility Details

Worksheet instructions:
It is intended for the user to complete all the sheets in this workbook. Facility-level data are required in sections 1a and 1b of this worksheet. Train-level data are required on the second worksheet for each Nitric Acid Train at your facility. Be careful to check units when entering data.

Version:
R 02 Updated 12/16/13

External Links:
Subpart V Resources Page: <http://www.epa.gov/climatechange/emissions/subpartv.html>
Reporting Form Help Content: <http://www.ccdsupport.com/confluence/display/help/Reporting+Form+Instructions>
Optional Calculation Spreadsheet: <http://www.ccdsupport.com/confluence/display/help/Optional+Calculation+Spreadsheet+Instructions>

Workbook Navigation:
1. Facility Details
2. Nitric Acid Train Information

a.) Fill out the following table with general information about this facility

A1	A2
Facility Name:	
GHGRP ID:	
Reporting Period:	
Comments: (optional)	

b.) Fill out the following table with the required facility details

B1	B2
Total Number of Nitric Acid Trains at the Facility [\$98.226(f)]	Total Annual Nitric Acid Production for the Facility [\$98.226(e)] (short tons)

c.) Proceed to worksheet "2. Nitric Acid Train Info" and enter the required information for each Nitric Acid Train at your facility.

1. Facility Details 2. Nitric Acid Train Info

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First tab of the subpart V Reporting Form referencing facility-level details.

Ensure that the GHGRP ID entered into the form matches your facility.

The reporting elements have rule references identified on the form for your convenience.

Subpart V: Reporting Form (3)



Subpart V - Nitric Acid Production
2. Nitric Acid Train Information

Worksheet Instructions:
 It is intended for the user to complete all the sheets in this workbook. Train-level data are required for each Nitric Acid Train at your facility in section 2a. Space is provided for up to 10 trains. Be careful to check units when entering data.

Version:
 04/02

External Links:
 Subpart V Resources Page: <http://www.epa.gov/climatechange/emissions/subpartv.html>
 Reporting Form Help Content: <http://www.ccdsupport.com/confluence/display/help/Reporting+Form+Instructions>
 Optional Calculation Spreadsheet: <http://www.ccdsupport.com/confluence/display/help/Optional+Calculation+Spreadsheet+Instructions>

Workbook Navigation:
 1. Facility Details
 2. Nitric Acid Train Information

2a.) Fill out the following table with required information about each Nitric Acid Train at your facility.

A1	A2	A3	A4
Nitric Acid Train ID [§98.226(a)]	Description of the Nitric Acid Train (Optional)	Number of Months that a Missing Data Procedure Was Used to Determine a Monthly Quantity of Nitric Acid Production [§98.226(f)]	Type of Nitric Acid Process Used by the Train [§98.226(k)]

1. Facility Details | 2. Nitric Acid Train Info

This is the second tab of the Subpart V Reporting Form. The responses relate to train-level information.

There are multiple slides because the reporting form is wide. On this first slide, you must enter the Nitric Acid Train ID, the number of months that a missing data procedure was used, and the type of nitric acid process employed by the train. You can also enter a description of the train but it is not required.

Complete all applicable fields.

Subpart V: Reporting Form (4)



Subpart V - Nitric Acid Production
2. Nitric Acid Train Information

Worksheet Instructions:
 It is intended for the user to complete all the provided for up to ten Nitric Acid Trains. Be careful to check units when entering values.

Version:
 R. 02

External Links:
 Subpart V Resources Page
 Reporting Form Help Content
 Optional Calculation Spreadsheet

Workbook Navigation:
[1. Facility Details](#)
[2. Nitric Acid Train Information](#)

2a.) Fill out the following table with required information.

A1	A5	A6	A7	A8
Nitric Acid Train ID [§98.226(a)]	Are N ₂ O Emissions Estimated Using an Administrator-Approved Alternative Method? [§98.226]	If yes, enter the name of the Alternative Method [§98.226(n)(1)]	If yes, provide a description of the Alternative Method [§98.226(n)(2)]	If yes, enter the request date [§98.226(n)(3)] (mm/dd/yyyy)
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

1 | 1. Facility Details | 2. Nitric Acid Train Info

52

The reporting form is wide so is shown on multiple slides, but the spreadsheet is formatted so that the Nitric Acid Train ID is always shown.

This screen asks you to answer whether the emissions were estimated using an Administrator Approved Alternative Method. If not, non-applicable fields will be blacked out. If you used an alternative method, continue by adding the name of the method, a description of the method, and the request and approval dates.

Complete all applicable fields.

Subpart V: Reporting Form (5)



Subpart V - Nitric Acid Production
2. Nitric Acid Train Information

Worksheet Instructions:
 It is intended for the user to complete all the Trains. Be careful to check units when entering data.

Version:
 R.02

External Links:
[Subpart V Resources Page](#)
[Reporting Form Help Content](#)
[Optional Calculation Spreadsheet](#)

Workbook Navigation:
[1. Facility Details](#)
[2. Nitric Acid Train Information](#)

2a.) Fill out the following table with required information.

A1	A9	A10	A11	A12
Nitric Acid Train ID [§98.226(a)]	If yes, enter the approval date [§98.226(n)(4)] (mm/dd/yyyy)	Number of Times in the Reporting Year that a Performance Test had to be Repeated [§98.226(m)(7)]	Performance Test (1 of 3): ID/Description [§98.226(m)]	Performance Test (1 of 3): Test Method Used [§98.226(m)(2)]
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

1 | 1. Facility Details | 2. Nitric Acid Train Info

53

This is the second tab of the Subpart V Reporting Form. The responses relate to train-level information.

The next columns are about the performance test. If you indicated that you used an alternative method, these fields will be blacked out.

Subpart V: Reporting Form (6)



Subpart V - Nitric Acid Production

2. Nitric Acid Train Information

Worksheet Instructions:
It is intended for the user to complete all the Trains. Be careful to check units when entering values.

Version:
R 02

External Links:
Subpart V Resources Page
Reporting Form Help Content
Optional Calculation Spreadsheet

Workbook Navigation:
[1. Facility Details](#)
[2. Nitric Acid Train Information](#)

2a.) Fill out the following table with required information.

A1	A13	A14	A15	A16
Nitric Acid Train ID [§98.226(a)]	Performance Test (2 of 3): ID/Description (if applicable) [§98.226(m)]	Performance Test (2 of 3): Test Method Used (if applicable) [§98.226(m)(2)]	Performance Test (3 of 3): ID/Description (if applicable) [§98.226(m)]	Performance Test (3 of 3): Test Method Used (if applicable) [§98.226(m)(2)]
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

54

This is the second tab of the Subpart V Reporting Form. The responses relate to train-level information.

These columns relate to whether or not you repeated a performance test. If you used an alternative method, these fields will be blacked out.

Complete all applicable fields.

Subpart V: Reporting Form (8)



Subpart V - Nitric Acid Production
2. Nitric Acid Train Information

Worksheet Instructions:
It is intended for the user to complete all the Trains. Be careful to check units when entering data.

Version:
4.02

External Links:
Subpart V Resources Page:
Reporting Form Help Content:
Optional Calculation Spreadsheet.

Workbook Navigation:
[1. Facility Details](#)
[2. Nitric Acid Train Information](#)

2a.) Fill out the following table with required information.

A1	A21
Nitric Acid Train ID [§98.226(a)]	Annual N ₂ O Emissions for the Nitric Acid Train [§98.226(b)] (metric tons)
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

1. Facility Details 2. Nitric Acid Train Info

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This is the second tab of the Subpart V Reporting Form. The responses relate to train-level information.

The final column is the annual amount of N₂O emissions emitted from each of the nitric acid trains.

Subpart V: Overview Page



OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart V requires affected facilities to report annual nitrous oxide process emissions from each nitric acid production train. If you are subject to other subparts (e.g. Subpart C) you should return to the Facility Overview page, select the appropriate subpart(s), and complete the data reporting requirements of each subpart. To satisfy the Subpart V reporting requirements you will first download the Subpart V reporting form(s). Use the link provided to access the form(s) and find instructions for completing those forms. Next, you will upload the completed form and e-GGRT will validate the data contained within it. Use the "View Validation" link to review any issues found in your reporting form. If necessary, make any revisions necessary to your reporting form and upload the revised reporting form. For additional information about Subpart V reporting, please use the e-GGRT Help link(s) provided.

SUBPART V SUMMARY INFORMATION FOR THIS FACILITY

1.) DOWNLOAD FORM
[Subpart V GHG Reporting](#)

UPLOAD COMPLETED FORM

EPA has finalized a rule that defers the deadline for reporting certain data elements used as inputs to emission equations for direct emitters until March 31, 2015. See 76 FR 53057 (published August 25, 2011). In accordance with the rule, e-GGRT is not currently collecting this subset of inputs to emission equations. If you choose to report these inputs to EPA by including them in a file uploaded to this page, please note that the inputs may be subject to public release.

Uploaded File Name	Attached By	Date	Delete
Subpart+V+Reporting+Form_v2.xls	Melissa Icenhour	February 18, 2014	<input type="button" value="X"/>

GHG DATA
Annual N₂O mass emissions (metric tons): 13,500,000

[Facility Overview](#)

13,500,000
Annual mass of N₂O (metric tons)

Subpart V: View Validation



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After completing the Reporting Form, upload to the e-GGRT system as shown by the circle and arrow 1. It is probably best to add your facility name to the file. This is especially important if you are reporting for multiple facilities.

Click View Validation as shown by arrow 2.

Subpart V: View Validation Messages



FACILITY-LEVEL VALIDATION MESSAGE			
Validation Type ¹	ID ²	Message ³	
No facility-level validation messages found.			
FILE-LEVEL VALIDATION MESSAGE			
Validation Type ¹	ID ²	Details	Message ³
Data Quality	V0015	Object Type: 1: Facility Details - FacilityData Value Entered: 2000000 File Name: SubpartV+Reporting+Form_v2.xls	Total Annual Nitric Acid Production for the Facility. The value you have provided is outside the EPA estimated range for this data element. Please double check this value and revise, if necessary. If you believe it to be correct, please submit the value as is.
Data Completeness	V0019	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 3 File Name: SubpartV+Reporting+Form_v2.xls	Type of Nitric Acid Process Used by the Train. This data element is required.
Data Quality	V0024	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 3 Value Entered: Tue Feb 00 00:00:00 EST 2013 File Name: SubpartV+Reporting+Form_v2.xls	The request date. The value you have provided is outside the EPA estimated range for this data element.
Data Quality	V0026	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 3 Value Entered: Sun Dec 01 00:00:00 EST 2013 File Name: SubpartV+Reporting+Form_v2.xls	The approval date. The value you have provided is outside the EPA estimated range for this data element. Please double check this value and revise, if necessary. If you believe it to be correct, please submit the value as is.
Data Completeness	V0027	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 1 File Name: SubpartV+Reporting+Form_v2.xls	Number of Times in the Reporting Year that a Performance Test had to be Repeated. This data element is required.
Data Completeness	V0029	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 2 File Name: SubpartV+Reporting+Form_v2.xls	Performance Test (1 of 3): ID/Description. This data element is required.
Data Completeness	V0035	Object Type: 2: Nitric Acid Train Info - NitricAcidTrainTableData Nitric Acid Train ID: 2 File Name: SubpartV+Reporting+Form_v2.xls	Annual H2O Emissions for the Nitric Acid Train. This data element is required.

[Subpart Overview](#)

Critical Validation Error: Messages that appear with the stop sign icon will prevent you from generating and submitting your annual report. You should first address the errors described. If you feel you have received one of these messages in error, or there's a reason why your report should be submitted despite the message, please submit a request to the e-GORT Help Desk.

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You will now be on the Subpart V Validation Report page.

There are many types of validation messages that could be generated based on the data you have uploaded for Subpart V. As you can see from reviewing this page, the messages are grouped into two overall categories:

1. Facility-level messages
2. File-level validation messages.

Currently, we have 4 data completeness messages associated with file level information; and 3 data quality message associated with file level information.

Notice that, due to the upload of a reporting form for this subpart, the hyperlinks return to the Subpart Overview Page.

Note that two of the data completeness errors are marked with a Stop Sign. These are “Critical Validation Errors” and prevent you from generating and submitting your annual report unless they are addressed. Please address these errors immediately.

In order to correct these errors, you must return to your reporting form.

Correct the stopper checks, so that no mandatory fields are left blank.

For the remaining errors, check your data for any mistakes or typos. If you believe the data

Subpart V: Overview Page



OVERVIEW OF SUBPART REPORTING REQUIREMENTS
Subpart V requires affected facilities to report annual nitrous oxide process emissions from each nitric acid production train. If you are subject to other subparts (e.g. Subpart C) you should return to the Facility Overview page, select the appropriate subpart(s), and complete the data reporting requirements of each subpart. To satisfy the Subpart V reporting requirements you will first download the Subpart V reporting form(s). Use the link provided to access the form(s) and find instructions for completing those forms. Next, you will upload the completed form and e-GGRT will validate the data contained within it. Use the "View Validation" link to review any issues found in your reporting form. If necessary, make any revisions necessary to your reporting form and upload the revised reporting form. For additional information about Subpart V reporting, please use the e-GGRT Help link(s) provided.

Annual mass of NO_x (metric tons): 13,500,000

Subpart V: No Validation Messages

SUBPART V SUMMARY INFORMATION FOR THIS FACILITY

1.) DOWNLOAD FORM
Subpart V GHG Reporting

2.) UPLOAD COMPLETED FORM

EPA has finalized a rule that defers the deadline for reporting certain data elements used as inputs to emission equations for direct emitters until March 31, 2015. See 76 FR 53057 (published August 25, 2011). In accordance with the rule, e-GGRT is not currently collecting this subset of inputs to emission equations. If you choose to report these inputs to EPA by including them in a file uploaded to this page, please note that the inputs may be subject to public release.

Uploaded File Name	Attached By	Date	Delete
Subpart+V+Reporting+Form_v2.xls	Melissa Icenhour	April 11, 2014	

GHG DATA
Annual NO_x mass emissions (metric tons): 13,500,000

Facility Overview



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After changing the Reporting Form, upload to the e-GGRT system as shown by arrow 1. It is probably best to add your facility name to the file. This is especially important if you are reporting for multiple facilities.

As shown by the green circle, all errors have been corrected.

Click Facility Overview as shown by arrow 2.

Subpart PP



G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Data Reporting
Select Facility » [Facility](#) or [Supplier Overview](#)

FACILITY OR SUPPLIER OVERVIEW
This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.
After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).
Facility's GHG Reporting Method: Data entry via e-GGRT web-forms ([Change](#))

REPORT DATA
2010 Reporting Source or Supplier Category Validation Messages? Subpart Reporting

Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO2)	None	OPEN

[ADD or REMOVE Subparts](#)
If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report.

SUBMIT ANNUAL REPORT

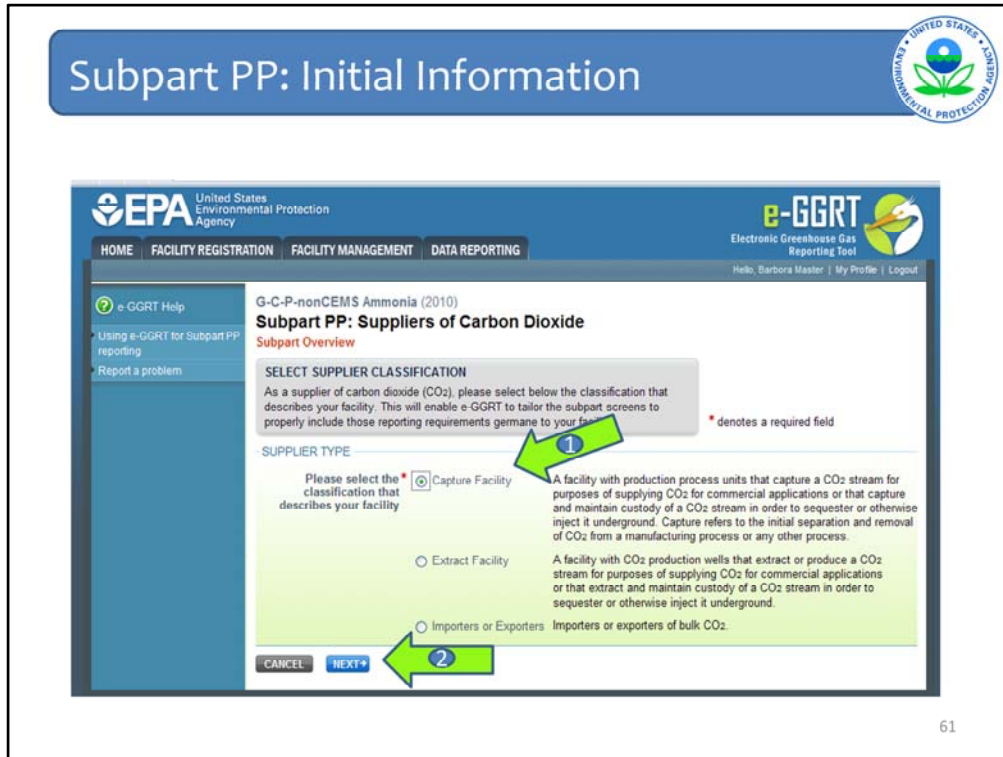
Report	Uploaded File Name	Status	Submitted Date	Certification Date	
					GENERATE / RE-SUBMIT

FACILITIES NOT SUBMITTING AN ANNUAL REPORT
If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.
This facility is NOT required to submit a report

Now let's move on to Subpart PP: Suppliers of Carbon Dioxide.

On the Facility Overview page you should see Subpart PP listed in the Report Data table. See it listed in the fifth row.

To begin reporting data under subpart PP, let's open the reporting module by clicking the BLUE "OPEN" button to the right of Subpart PP, as shown by the arrow.



Before e-GGRT can direct you to the appropriate Subpart Overview page – also known as the subpart PP home page – you must enter some initial information on two forms.

First, on this form, there are three supplier types. When you arrive at this form for the first time, the three radio buttons will be blank. You must select one in order to advance to the next form, so select the one that applies to you.

This training walks through the “Capture Facility” and “Importers or Exporters” reporting configurations. We will not go over the “Extract Facility” because it is very similar to the “Capture Facility” configuration.

Let’s start as a “Capture Facility”. Let’s begin by clicking on the radio button next to “Capture Facility” as indicated by the first arrow. To accept your selection and continue to the next page, hit the blue “NEXT” button as indicated by the second arrow.

Subpart PP: Initial Information

Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

SELECT CALCULATION METHODOLOGY
As a supplier of CO₂, please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Calculation Methodology will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Calculation Methodology change.

* denotes a required field

CALCULATION METHODOLOGY

Please select the calculation methodology you will use to estimate quantities of CO₂ *

<input checked="" type="radio"/> Flow Meters with no segregation	Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3a.)
<input type="radio"/> Flow Meters with segregation	Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3b.)
<input type="radio"/> Streams that deliver CO ₂ to containers	Use equation PP-1 or PP-2 for each stream (e-GGRT aggregating at the facility level using equation PP-3a. CO ₂ concentration measurement required.)
<input type="radio"/> Flow Meters with no segregation and Streams that deliver CO ₂ to containers	Use equation PP-1 or PP-2 for each meter and stream (e-GGRT aggregating at the facility level using equation PP-3a.)

CANCEL NEXT+

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After selecting “capture facility” as your supplier type, you will be directed to the second initial form. On this page, you must select your calculation methodology. You have four choices.

For this first example, let’s select “Flow meters with no segregation”. To accept your selection and continue to the next form, hit the blue “NEXT” button at the bottom of the form.

The screenshot shows the EPA e-GRT Subpart PP Overview page for Suppliers of Carbon Dioxide. The page is titled "Subpart PP: Suppliers of Carbon Dioxide" and includes a navigation menu with options like HOME, FACILITY REGISTRATION, FACILITY MANAGEMENT, and DATA REPORTING. The main content area is divided into several sections:

- OVERVIEW OF SUBPART REPORTING REQUIREMENTS:** This section provides a detailed description of the subpart, stating that it consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground.
- MISCELLANEOUS INFORMATION:** This section contains a table with two columns: "Total Annual CO₂ Transferred to End-Use Applications (metric tons)" and "Types of Equipment Used to Measure CO₂". The value for the first column is currently 0.
- FLOW METERS:** This section contains a table with columns for "Flow Meter Name/ID", "CO₂ (metric tons)", "Status", and "Delete". A blue hyperlink "ADD a Flow Meter" is highlighted with a green circle and a "Step 1" arrow.

Additional elements on the page include a "Supplier Type" dropdown set to "Capture" with a "CHANGE" button, and a "Calculation Methodology" dropdown set to "Flow Meters with no segregation". A "Step 2" arrow points to the "Total Annual CO₂ Transferred to End-Use Applications" field.

Once you select “save” you will be directed to the subpart PP Overview Page. This is the subpart PP home page.

This page has 2 main sections where you will need to enter data.

The first section is “MISCELLANEOUS INFORMATION”. This table will include supplier-level information so it is best to complete this section after entering unit-specific information in the second section.

The second section is the “FLOW METERS” table. Here you will enter information required for each flow meter. This will be the first step as noted on the screen. Let’s start there.

To enter information required for each flow meter, let’s begin by clicking on the blue hyperlink “ADD a Flow Meter” as shown by the step 1 arrow and the green circle.

Subpart PP: Flow Meter Information



UNIT INFORMATION

Name or ID* Flow Meter 1 (40 characters maximum)

Description (optional)

Type CO2 Flow Meter

Measurement Type* Mass basis
 Volumetric basis (concentration in weight percentage)
 Volumetric basis (concentration in volume percentage)

Percentage of the CO₂ stream metered by the flow meter that is biomass-based

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You will be directed to the “Add/Edit Flow Meter” form. On this form, the red star denotes data that you must enter in order to advance to the next form. This form has 4 sections where you will need to enter data. The form is too long for one screen shot, so let’s go over this form in two slides.

In the first section - “UNIT INFORMATION” – enter the unit name or ID, the description (optional), the measurement type, and the percentage of the CO₂ stream metered by the flow meter that is biomass based.

If you choose Volumetric basis (concentration in weight percentage), you will need to enter the quarterly density in metric tons per standard cubic meters on the equation page. If you choose Volumetric basis (concentration in volume percentage), the quarterly density of CO₂ required by the rule will be automatically displayed on the equation page.

For this example, let’s enter a unit name of “Flow Meter 1” and let’s select “mass basis” for measurement type to reflect that the flow meter is a mass flow meter.

Subpart PP: Flow Meter Information

2 → **DEHYDRATION EQUIPMENT**
 Is any dehydration equipment located downstream of the flow meter? Yes No
 Is any dehydration equipment located upstream of the flow meter? Yes No

3 → **COMPRESSION EQUIPMENT**
 Is any compression equipment located downstream of the flow meter? Yes No
 Is any compression equipment located upstream of the flow meter? Yes No

4 → **OTHER PROCESSING EQUIPMENT**
 Is any other processing equipment located downstream of the flow meter? Yes No
 Is any other processing equipment located upstream of the flow meter? Yes No
 Describe what other processing equipment is present
 CANCEL SAVE

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This slide shows the bottom half of the “Add/Edit Flow Meter” form from the previous slide.

In the second, third, and fourth sections, enter information about the location of the flow meter.

In the second section, enter whether you have dehydration equipment located upstream of the flow meter or downstream of the flow meter. You can enter “no” to both questions, “yes” to both questions, or “yes” to one and “no” to the other. Enter whatever information reflects your site configuration.

In the third section, do the same for compression equipment.

In the fourth section, do the same for any other processing equipment. If you select “yes” to one or both of the “other processing equipment” questions, you must enter a description in the text box of the “other processing equipment” as indicated by the green circle.

Once you have entered all the relevant information hit the green “SAVE” button to continue.

Subpart PP: Suppliers of Carbon Dioxide

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture **CHANGE**

Calculation Methodology: Flow Meters with no segregation

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	

FLOW METERS

Flow Meter Name/ID	CO ₂ (metric tons)	Status	Deliv
Flow Meter 1		Incomplete	OPEN
Flow Meter 2		Incomplete	OPEN

ADD a Flow Meter

Facility Overview

*A status of "incomplete" for a given flow meter means that one or more data elements that are inputs to one of this subpart's equations are incomplete. As a result, e-GGRT is unable to perform the necessary calculations. For details, refer to the Equation Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

You will be redirected back to the Subpart PP Overview page, where the FLOW METERS table (shown by arrow 1) will contain the name of the flow meter you have entered. I added Flow Meter 2 in the same manner as Flow Meter 1, except I selected “volumetric basis (concentration in volume percentage)” as the measurement type. We will see how the difference in measurement type impacts some subsequent forms later.

As you read across the rows, you can see that the “Status” fields are still “incomplete” for the flow meters because we still need to enter CO₂ supply information.

We will begin by entering the additional information for Flow Meter 1. Click the blue “OPEN” button for “Flow Meter 1” as shown by arrow 2.

Subpart PP: Flow Meter 1



Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview » Flow Meter 1 » Eq. PP-1

ANNUAL MASS OF CO₂ CALCULATION
For each mass flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the mass flow by the composition data using Equation PP-1.

Equation Summary (PP-1)
Q: Quarterly mass flow rate measurement
C: Quarterly CO₂ concentration measurement in flow

SUMMARY

Equation PP-1
$$CO_{2,U} = \sum_{p=1}^4 Q_{p,U} * C_{CO_2,p,U}$$

Hover over an element in the equation above to reveal a definition of that element.

Period	Q (metric tons)	C (wt. %CO ₂)	Result
Quarter 1			
Quarter 2			
Quarter 3			
Quarter 4			

Incomplete — View Validation

What result do you want to report to EPA?
 Use the calculated result rounded
 Enter my own result (value will be rounded)

Buttons: FINISHED, NEXT

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Since we selected “mass basis” as the measure type for Flow Meter 1 in the previous form, this form is tailored to prompt you for information on a mass flow meter, per equation PP-1.

For the question “What result do you want to report to EPA?”, the default answer is “use the calculated result rounded” as indicated by arrow 1. Alternatively, you may choose the second option, to override the calculated result, by entering your own result. If you decide to use this alternative, I suggest that you wait until later in the process to do so. Whether you use the calculated result or enter your own result, you must enter the required quarterly information on quantity and CO₂ concentration. So, it is most sensible to enter that information first and see the calculated result before deciding whether to enter your own result. You will be navigated back to this screen and can enter your own result at that time.

To advance to the next screen, click the blue NEXT button (arrow 2).

Subpart PP: Flow Meter 1



e-GGRT Help
Using e-GGRT for Subpart PP reporting

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview » Flow Meter 1 » Eq. PP-1

ANNUAL MASS OF CO₂ CALCULATION
For each mass flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the mass flow by the composition data using Equation PP-1. Please enter a value of "0" for any quarter in which your facility did not supply CO₂.

Equation Summary (PP-1)
Q: Quarterly mass flow rate measurement
C: Quarterly CO₂ concentration measurement in flow

Mass of CO₂ stream, Quarter 1 (metric tons)
Mass of CO₂ stream, Quarter 2 (metric tons)
Mass of CO₂ stream, Quarter 3 (metric tons)
Mass of CO₂ stream, Quarter 4 (metric tons)

[←BACK](#) [NEXT→](#)

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After selecting "NEXT" you will be directed to the quarterly mass measurement form. Enter a number in metric tons for each quarter and then click "NEXT".

Enter a value of zero for any quarter in which you did not supply CO₂.

Subpart PP: Suppliers of Carbon Dioxide
 Subpart Overview - Flow Meter 1 - Eq. PP-1

ANNUAL MASS OF CO₂ CALCULATION
 For each mass flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the mass flow by the composition data using Equation PP-1. Please enter a value of "0" for any quarter in which your facility did not supply CO₂.

Equation Summary (PP-1)
 Q: Quarterly mass flow rate measurement
C: Quarterly CO₂ concentration measurement in flow

Concentration of CO ₂ stream, Quarter 1	<input type="text" value="99"/>	(wt. %CO ₂ expressed as fraction)
Concentration of CO ₂ stream, Quarter 2	<input type="text" value="98"/>	(wt. %CO ₂ expressed as fraction)
Concentration of CO ₂ stream, Quarter 3	<input type="text" value="98"/>	(wt. %CO ₂ expressed as fraction)
Concentration of CO ₂ stream, Quarter 4	<input type="text" value="99"/>	(wt. %CO ₂ expressed as fraction)

Standard used to measure CO₂ concentration:

+BACK SUMMARY+

Then, you will be directed to the quarterly CO₂ concentration measurement form. Enter a number for each quarter that is equal to or greater than 0 and equal to or less than 1. In other words, you must express the concentration as a decimal fraction (i.e., 0.99) rather than as a percentage (like 99 for 99%). Enter a value of zero for any quarter in which you did not supply CO₂.

Enter the standard you used to measure CO₂ concentration, then click on the blue "SUMMARY" button.

Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview - Flow Meter 1 - Eq. PP-1

ANNUAL MASS OF CO₂ CALCULATION
For each mass flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the mass flow by the composition data using Equation PP-1.

Equation Summary (PP-1)
 Q: Quarterly mass flow rate measurement
 C: Quarterly CO₂ concentration measurement in flow

SUMMARY

$$\text{Equation PP-1 } \text{CO}_{2,u} = \sum_{p=1}^4 Q_{p,u} \times C_{\text{CO}_{2,p,u}}$$

Hover over an element in the equation above to reveal a definition of that element.

Period	Q (metric tons)	C (wt. %CO ₂)	Result
Quarter 1	10,000	0.99	9,900.00
Quarter 2	10,000	0.98	9,800.00
Quarter 3	12,000	0.98	11,760.00
Quarter 4	11,000	0.99	10,890.00
			42,350.00

What result do you want to report to EPA?
 Use the calculated result rounded (42.350 metric tons)
 Enter my own result (value will be rounded)

Buttons: FINISHED, NEXT

After selecting “SUMMARY” you will be redirected to the summary form for Flow Meter 1.

You can see that the information you entered has been used to calculate a result according to Equation PP-1. That number now also appears in the Equation PP-1 blue box in the upper right hand corner.

Now that you see the calculated result, you can decide whether to override that result and enter your own result. If you choose this alternative, you must change the response to the question “What result do you want to report to EPA?” by clicking on the radio button named “Enter my own result” as indicated by arrow 1. Then click on the blue “NEXT” button as indicated by arrow 2. If you choose to keep the calculate result, you will just click on the blue “FINISHED” button instead.

For this example, let’s click on the radio button named “Enter my own result” and click on the blue “NEXT” button.

Subpart PP: Flow Meter 1



EPA United States Environmental Protection Agency

HOME FACILITY REGISTRATION FACILITY MANAGEMENT DATA REPORTING

e-GGRT Help
Using e-GGRT for Subpart PP reporting
Report a problem

G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview » Flow Meter 1 » Eq. PP-1

ANNUAL MASS OF CO₂ CALCULATION
For each mass flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the mass flow by the composition data using Equation PP-1.

Equation Summary (PP-1)
Q: Quarterly mass flow rate measurement
C: Quarterly CO₂ concentration measurement in flow

Eq. PP-1: Annual mass of CO₂, metric tons
42,350

Eq. PP-1: No Validation Messages

SUMMARY

Equation PP-1 $CO_{2,u} = \sum_{p=1}^4 Q_{p,u} \times C_{CO_2,p,u}$

Hover over an element in the equation above to reveal a definition of that element.

Period	Q (metric tons)	C (wt. %CO ₂)	Result
Quarter 1	10,000	0.99	9,900.00
Quarter 2	10,000	0.98	9,800.00
Quarter 3	12,000	0.98	11,760.00
Quarter 4	11,000	0.99	10,890.00
			42,350.00

What result do you want to report to EPA?
 Use the calculated result rounded (42,350 metric tons)
 Enter my own result (value will be rounded)

Report this value: (Metric tons of CO₂)

FINISHED **NEXT**

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After selecting “NEXT” you will be prompted with a text box to enter a value. You may enter a number in the box and click on the blue “NEXT” button.

For this example, let’s reselect the “use the calculated result” radio button and click on the blue “FINISHED” button so that we retain the calculated result.

Subpart PP: Suppliers of Carbon Dioxide

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture **CHANGE**

Calculation Methodology: Flow Meters with no segregation

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	

FLOW METERS

Flow Meter Name/ID	CO ₂ (metric tons)	Status	Actions
Flow Meter 1	42,350	Complete	OPEN
Flow Meter 2		Incomplete	OPEN

Equation PP-3a
Annual mass of CO₂ (metric tons) supplied from all facilities' flow meters.

Subpart PP: View Validation

¹A status of "Incomplete" for a given flow meter means that one or more data elements that are inputs to one of this subpart's equations are incomplete. As a result, e-GGRT is unable to perform the necessary calculation(s). For details, refer to the Equation Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

When you return to the Subpart PP Overview page, the FLOW METERS table now shows the CO₂ supply for Flow Meter 1 (as indicated by arrow 1) and shows the “Status” as Complete (as indicated by arrow 2).

As you read across the rows, however, you can see that the “Status” field is still “incomplete” for Flow Meter 2 because we still need to enter supply information for that flow meter. Also, you can see that the Equation PP-3 blue box in the upper right hand corner is still empty. This is because you have added two flow meters but have only entered CO₂ supply information for one. Therefore, the total CO₂ supply can not yet be calculated using Equation PP-3.

To complete the information for Flow Meter 2, click the blue “OPEN” button as shown by arrow 3.

Subpart PP: Flow Meter 2



United States Environmental Protection Agency

e-GGRT Electronic Greenhouse Gas Reporting Tool

HOME FACILITY REGISTRATION FACILITY MANAGEMENT DATA REPORTING

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G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview - Flow Meter 2 - Eq. PP-2

ANNUAL MASS OF CO₂ CALCULATION
For each volumetric flow meter, calculate quarterly the mass of CO₂ in a CO₂ stream in metric tons by multiplying the volumetric flow by the concentration and density data using Equation PP-2.

Equation Summary (PP-2)

- Q: Quarterly volume of the CO₂ stream
- D: Density of CO₂
- C: Quarterly concentration of the CO₂ stream

SUMMARY

Equation PP-2 $CO_{2,u} = \sum_{j=1}^4 Q_j \times D_j \times C_{CO_2}$

Hover over an element in the equation above to reveal a definition of that element.

Period	Q (scm)	D (metric tons CO ₂ /scm)	C (volume %CO ₂)	Result
Quarter 1		0.001868		
Quarter 2		0.001868		
Quarter 3		0.001868		
Quarter 4		0.001868		

Incomplete — View Validation

What result do you want to report to EPA?
 Use the calculated result rounded.
 Enter my own result (value will be rounded)

FINISHED NEXT

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The form for Flow Meter 2 is similar to the form we saw for Flow Meter 1 – but uses Equation PP-2 because we selected “volumetric basis” as the measurement type for Flow Meter 2, since this second flow meter is a volumetric flow meter.

Also, you can see in the big green circle that the density of CO₂ has already been populated. This is because we specified in the measurement type section on the previous form that we will account for CO₂ concentration in volume percentage rather than weight percentage. If we had selected weight percentage, the density fields here would be blank, and we would have to enter a measured value of the density of the CO₂ stream for each quarter in metric tons per standard cubic meter.

You will navigate from this page just as you did for Flow Meter 1, by clicking the blue “NEXT” button, entering information into the blank data fields, and clicking the blue “FINISHED” button when you are done. Just as with Flow Meter 1, you may choose to enter your own result for Flow Meter 2 CO₂ supply rather than use the calculated result.

Subpart PP: Subpart Overview



Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture [CHANGE](#)
Calculation Methodology: Flow Meters with no segregation

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	

[OPEN](#)

FLOW METERS

Flow Meter Name/ID	CO ₂ (metric tons)	Status	Actions
Flow Meter 1	42,350	Complete	OPEN X
Flow Meter 2	350,250	Complete	OPEN X

[ADD a Flow Meter](#)

[Facility Overview](#)

Equation PP-3
(Eq. PP-3a) Annual mass of CO₂ (metric tons), sum for all facility PP-3 Meters: **392,600**
[VIEW SUMMARY](#)

Subpart PP: View Validation

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When you finish entering information for Flow Meter 2, you will be redirected back to the Subpart PP Overview page. Now, the FLOW METERS table shows the CO₂ supply for Flow Meter 1 and Flow Meter 2 and shows the “Status” as Complete for both.

Also, you can see that the Equation PP-3 blue box in the upper right hand corner is no longer empty. Now it contains the sum of CO₂ supply from both flow meters. To see how Equation PP-3 calculated the sum, click on the blue “VIEW SUMMARY” button as indicated by the arrow.

Subpart PP: View Summary

EPA United States Environmental Protection Agency

e-GGRT Electronic Greenhouse Gas Reporting Tool

HOME FACILITY REGISTRATION FACILITY MANAGEMENT DATA REPORTING

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e-GGRT Help
Using e-GGRT for Subpart PP reporting
Report a problem

G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview » Eq. PP-3a

ANNUAL MASS OF CO₂ EMISSIONS AGGREGATION
e-GGRT uses equation PP-3a to arrive at a facility level value for CO₂ emission. This value, reported to EPA, is a simple summation of all CO₂ emissions from individual flow meters or CO₂ streams.

392,600
(Eq. PP-3a) Annual mass of CO₂ (metric tons), sum for all facility flow meters.

SUMMARY

Equation PP-3a $CO_2 = \sum CO_{2,u}$

Hover over an element in the equation above to reveal a definition of that element.

Flow Meter Name/ID	CO ₂ (metric tons)	Status
Flow Meter 1	42,350	Complete
Flow Meter 2	350,250	Complete
Total	392,600	

[BACK](#)

As you can see, it's just a simple addition using Equation PP-3a.

Subpart PP: Subpart Overview



EPA United States Environmental Protection Agency

e-GGRT Electronic Greenhouse Gas Reporting Tool

HOME FACILITY REGISTRATION FACILITY MANAGEMENT DATA REPORTING

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e-GGRT Help
Using e-GGRT for Subpart PP reporting
Report a problem

G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

392.600
(Eq. PP-3a) Annual mass of CO₂ (metric tons), sum for all facility Flow Meters
VIEW SUMMARY

Subpart PP: View Validation

Supplier Type: Capture CHANGE
Calculation Methodology: Flow Meters with no segregation

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂	
0		OPEN

FLOW METERS

Flow Meter Name/ID	CO ₂ (metric tons)	Status	OPEN	Delete
Flow Meter 1	42,350	Complete	OPEN	X
Flow Meter 2	350,250	Complete	OPEN	X

ADD a Flow Meter

Facility Overview

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Now that we have finished entering information at the unit level, let's enter the rest of the required information, which is at the supplier level.

Let's proceed by clicking on the blue "OPEN" button in the MISCELLANEOUS INFORMATION table, as indicated by the arrow.

After selecting the “OPEN” button you will be directed to the “Miscellaneous Information” form. This form has 3 sections where you will need to enter data.

The first section is for entering the type(s) of equipment.

The second section is for entering the end-use(s) of the CO2 supply.

The third section is for entering the number of days for which substitute data were used.

Let’s start with the first section on equipment type. We’ll click on the blue hyperlink “ADD a Type of Equipment” as show by the arrow 1.

Subpart PP: Equipment Type



The screenshot shows the EPA e-GGRT interface. At the top, there are navigation tabs: HOME, FACILITY REGISTRATION, FACILITY MANAGEMENT, and DATA REPORTING. The user is logged in as "Barbara Master". The main content area is titled "Subpart PP: Suppliers of Carbon Dioxide" under the heading "G-C-P-nonCEMS Ammonia (2010)". Below this, there is a breadcrumb trail: "Subpart Overview - Miscellaneous Information - CO₂ Equipment Type". The form section is titled "TYPES OF EQUIPMENT USED TO MEASURE CO₂" and asks the user to "Specify a type of equipment used to measure the total flow of the CO₂ stream". There are two input fields: "Equipment Type" with a dropdown menu showing "Mass flow meter" (highlighted with a green circle) and "Standard used to operate and calibrate the equipment" with a text input field containing "standard ABCD". At the bottom of the form are "CANCEL" and "SAVE" buttons.

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On the “CO₂ Equipment Type” form, we see a drop down menu for Equipment Type. Since Flow Meter 1 is a mass flow meter, I selected “Mass flow meter” from the drop down menu. I also entered the standard used to operate and calibrate the equipment.

Next, we click on the green “SAVE” button to return to the “MISCELLANEOUS INFORMATION” form.

Subpart PP: Equipment Type



The screenshot shows the EPA e-GGRT interface for Subpart PP: Suppliers of Carbon Dioxide. The page title is "G-C-P-nonCEMS Ammonia (2010) Subpart PP: Suppliers of Carbon Dioxide". The main heading is "MISCELLANEOUS INFORMATION FOR SUPPLIERS OF CARBON DIOXIDE". Below this, there are instructions and a table of equipment types. A green arrow points to the "ADD a Type of Equipment" link.

MISCELLANEOUS INFORMATION FOR SUPPLIERS OF CARBON DIOXIDE

- Each type of equipment used to measure the total flow of the CO₂ stream
- The number of days for which substitute data procedures were used to determine the mass or volume, concentration and density
- The annual quantity of CO₂ transferred to one or more end use application

TYPES OF EQUIPMENT USED TO MEASURE THE TOTAL FLOW OF THE CO₂ STREAM

Id	Equipment Type	Delete
1	Mass flow meter	<input type="button" value="OPEN"/> <input type="button" value="X"/>

[ADD a Type of Equipment](#)

Please provide the aggregated annual quantity of CO₂ your facility transferred to each of the following end-use categories:

Food and beverage	<input type="text"/>	(metric tons)
Industrial and municipal water/wastewater treatment	<input type="text"/>	(metric tons)
Metal fabrication, including welding and cutting	<input type="text"/>	(metric tons)
Greenhouse uses for plant growth	<input type="text"/>	(metric tons)
Fumigants (e.g., grain storage) and herbicides	<input type="text"/>	(metric tons)
Pulp and paper	<input type="text"/>	(metric tons)
Cleaning and solvent use	<input type="text"/>	(metric tons)
Fire fighting	<input type="text"/>	(metric tons)

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When we return to the “MISCELLANEOUS INFORMATION” form, we see “Mass flow meter” displayed as the equipment type.

We are not yet finished with this section, however. Since Flow Meter 2 is a volumetric flow meter, we need to add that as an additional equipment type by clicking again on the blue hyperlink “ADD a Type of Equipment” as indicated by the arrow.

Subpart PP: End-use and Substitute data



TYPES OF EQUIPMENT USED TO MEASURE THE TOTAL FLOW OF THE CO₂ STREAM

id	Equipment Type	OPEN	Delete
1	Mass flow meter	OPEN	X
2	Volumetric flow meter	OPEN	X

ADD a Type of Equipment


2 Please provide the aggregated annual quantity of CO₂ your facility transferred to each of the following end-use categories. Enter a value of "0" for any end-use category for which your facility did not transfer CO₂.

Food and beverage	<input type="text"/>	(metric tons)
Industrial and municipal water/wastewater treatment	<input type="text"/>	(metric tons)
Metal fabrication, including welding and cutting	<input type="text"/>	(metric tons)
Greenhouse uses for plant growth	<input type="text"/>	(metric tons)
Fumigants (e.g., grain storage) and herbicides	<input type="text"/>	(metric tons)
Pulp and paper	<input type="text"/>	(metric tons)
Cleaning and solvent use	<input type="text"/>	(metric tons)
Fire fighting	<input type="text"/>	(metric tons)
Transportation and storage of explosives	<input type="text"/>	(metric tons)
Injection of CO ₂ for enhanced oil and natural gas recovery that is covered by 40 CFR Part 98, Subpart UU	<input type="text"/>	(metric tons)
Geologic sequestration of carbon dioxide that is covered by 40 CFR Part 98, Subpart RR	<input type="text"/>	(metric tons)
Research and Development	<input type="text"/>	(metric tons)
Other	<input type="text"/>	(metric tons)
If other please provide a short description of the use	<input type="text"/>	
Unknown	<input type="text"/>	(metric tons)

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As you can see in the green circle, I added volumetric flow meter in the same manner as mass flow meter. Now, our Equipment Type Section is complete.

Let's move on to the second section of the "Miscellaneous Information" form as indicated by arrow 2, the end-use section. Here, you will enter the quantity of CO₂ that is supplied to each of these end-uses. Note that you must enter a number in each data field even if that number is zero. If you supply CO₂ to an end-use that is not listed, enter the amount supplied and enter a description of the "Other" end-use (optional). If you do not know the end use of your CO₂ supply, enter your total CO₂ supply in the "Unknown" box at the bottom of the section.



Subpart PP: End-use and Substitute data

Please provide the aggregated annual quantity of CO₂ your facility transferred to each of the following end-use categories. Enter a value of "0" for any end-use category for which your facility did not transfer CO₂.

Food and beverage	<input type="text" value="0"/>	(metric tons)
Industrial and municipal water/wastewater treatment	<input type="text" value="0"/>	(metric tons)
Metal fabrication, including welding and cutting	<input type="text" value="0"/>	(metric tons)
Greenhouse uses for plant growth	<input type="text" value="0"/>	(metric tons)
Fumigants (e.g., grain storage) and herbicides	<input type="text" value="0"/>	(metric tons)
Pulp and paper	<input type="text" value="0"/>	(metric tons)
Cleaning and solvent use	<input type="text" value="392600"/>	(metric tons)
Fire fighting	<input type="text" value="0"/>	(metric tons)
Transportation and storage of explosives	<input type="text" value="0"/>	(metric tons)
Injection of CO ₂ for enhanced oil and natural gas recovery that is covered by 40 CFR Part 98, Subpart III	<input type="text" value="0"/>	(metric tons)
Geologic sequestration of carbon dioxide that is covered by 40 CFR Part 98, Subpart RR	<input type="text" value="0"/>	(metric tons)
Research and Development	<input type="text" value="0"/>	(metric tons)
Other	<input type="text" value="0"/>	(metric tons)
If other please provide a short description of the use		
Unknown	<input type="text" value="0"/>	(metric tons)

Please provide the number of days for which substitute data procedures were used to measure the the following:

CO ₂ mass or volume	<input type="text" value="1"/>	(days)
CO ₂ concentration	<input type="text" value="90"/>	(days)
CO ₂ stream density	<input type="text" value="0"/>	(days)

To demonstrate, let's assume that all of our CO₂ supply – from both flow meters – is piped to a cleaning and solvent factory. We put a zero in every data field except for the “cleaning and solvent use” data field, where we enter “392600”. As you may remember, this number equals the total CO₂ supply result that was calculated by the system using equation PP-3 and displayed on the Subpart PP overview screen.

If, on the other hand, half of the CO₂ supply is piped to a cleaning and solvent factory while the other half is delivered to a food and beverage manufacturer, then you should enter “196300” for the “cleaning and solvent use” data field and “196300” for the “food and beverage” data field. In most cases we would anticipate that the numbers add up to the total CO₂ supply displayed on the subpart PP Overview screen.

Finally, let's complete section 3 of the “Miscellaneous Information” form as indicated by arrow 3. Here, you must provide the number of days for which substitute data procedures were used to the measure CO₂ quantity, CO₂ concentration, and density. Again, you must enter a number in each data field, even if that number is zero.

When you are done, click the green “SAVE” button.

The screenshot displays the EPA e-GGRT interface for Subpart PP: Suppliers of Carbon Dioxide. The page includes a navigation menu (HOME, FACILITY REGISTRATION, FACILITY MANAGEMENT, DATA REPORTING) and a user profile (Helen Barbara Mosler). The main content area is titled "Subpart PP: Suppliers of Carbon Dioxide" and provides an overview of reporting requirements. A green circle highlights the value "392,600" in the "Total Annual CO₂ Transferred to End Use Applications" field. Another green circle highlights the value "392,600" in the "Total Annual CO₂ Supplied by Flow Meters" field. A green arrow points to a green checkmark and the text "Subpart PP: No Validation Messages". A table of flow meters is also visible, showing two meters with complete status.

Flow Meter Name/ID	CO ₂ (metric tons)	Status	Actions
Flow Meter 1	42,340	Complete	OPEN
Flow Meter 2	350,250	Complete	OPEN

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When you click the green “SAVE” button, you are redirected back to the Subpart PP Overview screen.

As you can see by the green circles, the total quantity supplied to end-uses is equal to the total quantity supplied as calculated by Equation PP-3, which means that we did our math right in this case.

Also, as the green arrow points out, all of your data entry is complete and accurate and there are no validation messages. If there were any validation errors, the validation box would be red and show an exclamation mark as in the previous subpart G example.

At this point we have successfully completed data entry for subpart PP. Let’s click on the blue “FACILITY OVERVIEW” button to see the summary for all of the subparts at the facility.

The screenshot displays the EPA e-GGRT Facility Overview page for G-C-P-nonCEMS Ammonia (2010). The page is titled "Facility Overview" and includes the EPA logo and the e-GGRT Electronic Greenhouse Gas Reporting Tool logo. The main content area is titled "e-GGRT Greenhouse Gas Data Reporting" and "Select Facility - Facility or Supplier Overview".

The "FACILITY OR SUPPLIER OVERVIEW" section provides instructions on how to add source and/or supplier categories and how to submit an annual report. It also states that the annual report has already been prepared and that any changes made to the data will not be reflected in that version.

The "REPORT DATA" table shows the following information:

2010 Reporting Source or Supplier Category	Validation Messages?	Subpart Reporting
Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO2)	None	OPEN

Summary statistics shown on the right side of the page:

- CO₂ equivalent emissions (excluding biogenic) from subparts G-V (metric tons): 46,635,525
- Biogenic CO₂ emissions from subparts G-V (metric tons): 0
- CO₂ equivalent quantities from supplier categories (metric tons): 392,600

A green arrow points to the "View Details" button, which is used to view the underlying details of the emissions and supplies.

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When you return to the facility overview page, you will see that the total CO₂ equivalent emissions include the emissions from subparts G, and V and the total CO₂ quantity from supplier categories includes the CO₂ supply from subpart PP.

You can view the details of your emissions and supplies using the “VIEW GHG DETAILS” button, as shown by the arrow.

This is where the “rollup” is presented, which provides your total CO₂ equivalent emissions (excluding biogenic), biogenic CO₂ emissions, and CO₂ equivalent quantities from the supplier categories.

If you click on “view GHG details” you can see the underlying details on the metric tons of GHGs, by gas and by subpart, along with the GWPs that go into the calculations.

View Facility GHG Details



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e-GGRT Help Report a problem

G-C-P-nonCEMS Ammonia (2010)

e-GGRT Greenhouse Gas Data Reporting

Select Facility • Facility or Supplier Overview • **GHG Quantity Details**

FACILITY GHG QUANTITY DETAIL

Below are the current roll-up GHG values for this facility.

46,635,525

2010 CO₂ equivalent emissions (excluding biogenic) from subparts C - M4 (metric tons)

0

2010 biogenic CO₂ emissions from subparts C - M4 (metric tons)

392,600

2010 CO₂ equivalent quantity from supplier categories (metric tons)

[VIEW DETAILED ROLL-UP VALUES](#)

GHG DETAILS (source categories: subparts C - M4)

Subpart	Greenhouse Gas	Amount (metric tons)	GWP
Subpart G	CO ₂ (biogenic)	0	1
Subpart G	CO ₂ (excluding biogenic)	125,005	1
Subpart G	CH ₄	10	21
Subpart G	N ₂ O	1	310
Subpart V	N ₂ O	150,000	310
Subpart Z	CO ₂ (excluding biogenic)	10,000	1

GHG DETAILS (supplier categories: subparts M1 - P1)

Subpart	Greenhouse Gas	Amount (metric tons)	GWP
Subpart P1	CO ₂ (excluding biogenic)	392,600	1

[Facility Overview](#)

We will not repeat these steps but just wanted to highlight that the GHG Details page will help you review information you entered and can be useful to check totals.

Subpart PP: Flow Meters with segregation



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e-GGRT Help

Using e-GGRT for Subpart PP reporting

Report a problem

G-C-P-nonCEMS Ammonia (2010)

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview

SELECT SUPPLIER CLASSIFICATION

As a supplier of carbon dioxide (CO₂), please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Supplier Type will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Supplier Type change.

* denotes a required field

SUPPLIER TYPE

Please select the * classification that describes your facility

Capture Facility
A facility with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground. Capture refers to the initial separation and removal of CO₂ from a manufacturing process or any other process.

Extract Facility
A facility with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground.

Importers or Exporters
Importers or exporters of bulk CO₂.

CANCEL NEXT

85

Before we move on to discussing how to submit a GHG report, let's run through a few more configuration options for subpart PP.

Let's start again at the first subpart PP screen and enter some new initial information. First, let's stick with "capture facility" as the supplier type and click the blue "NEXT" button to proceed.

Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

SELECT CALCULATION METHODOLOGY
As a supplier of CO₂, please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Calculation Methodology will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Calculation Methodology change.

* denotes a required field

CALCULATION METHODOLOGY

Please select the calculation methodology you will use to estimate quantities of CO₂

- Flow Meters with no segregation
Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3a.)
- Flow Meters with segregation
Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3b.)
- Streams that deliver CO₂ to containers
Use equation PP-1 or PP-2 for each stream (e-GGRT aggregating at the facility level using equation PP-3a. CO₂ concentration measurement required.)
- Flow Meters with no segregation and Streams that deliver CO₂ to containers
Use equation PP-1 or PP-2 for each meter and stream (e-GGRT aggregating at the facility level using equation PP-3a.)

CANCEL NEXT >

Here, let's select "Flow Meters with segregation" as the calculation methodology. You can choose this calculation methodology if you segregate, or separate, a portion of your captured CO₂ and do not supply it for commercial applications, sequester, or otherwise inject it underground.

Then, click the blue "NEXT" button.

Subpart PP: Flow Meters with segregation



Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture **Incomplete**
Calculation Methodology: **Flow Meters with segregation**

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	OPEN

FLOW METERS

Flow Meter Name/ID	Meter Location	CO ₂ (metric tons)	Status ¹	Delete
ADD a Flow Meter				

[Factory Overview](#)

¹A status of "incomplete" for a given flow meter means that one or more data elements that are inputs to one of this subpart's equations are incomplete. As a result, e-GGRT is unable to perform the necessary calculation(s). For details, refer to the Equation Completeness validation messages in your Validation Report by clicking the "View Validation" link above (Note: if there are no validation messages for this subpart you will not see this link).

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As you can see, the Subpart PP Overview screen looks almost identical to the Subpart PP Overview screen for Flow Meters with no segregation. The only difference is the calculation methodology summarized in the green circle.

However, as indicated by the arrows, there are two forms in this calculation methodology that look a little different. Let's start with arrow 1 and click on the blue hyperlink "ADD a Flow Meter".

Subpart PP: Flow Meters with segregation



The screenshot shows the EPA e-GGRT interface for adding or editing a flow meter. The form is titled "Subpart PP: Suppliers of Carbon Dioxide" and "ADD OR EDIT FLOW METER". It includes a "UNIT INFORMATION" section with fields for "Name or ID" (40 characters maximum) and "Description (optional)". The "Type" is set to "CO2 Flow Meter". Under "Measurement Type", there are three radio buttons: "Mass basis", "Volumetric basis (concentration in weight percentage)", and "Volumetric basis (concentration in volume percentage)". A question asks "Where is the flow meter in relation to the point of segregation?" with two radio buttons: "Downstream" (circled in green) and "Upstream". At the bottom, there is a field for "Percentage of the CO2 stream metered by the flow meter that is biomass-based" with a percentage sign.

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As you can see by the text in the green circle, the one difference on this “Add/Edit Flow Meter” form is the addition of a new question. If you choose to use the “Flow meter with segregation” calculation methodology, you must identify whether the flow meter is upstream of the point of segregation or downstream of the point of segregation. In other words, the flow meter that is downstream of the point of segregation measures the quantity being segregated for onsite use or emissions; the flow meter that is upstream of the point of segregation measures the total quantity before anything is segregated. Note that if you capture CO₂ and supply a portion of it in containers, you can choose the calculation methodology “streams that deliver CO₂ to containers”. We’ll go over this in a few slides.

This form is too long to show on one screen shot, but you should note that the other three sections of this form about flow meter location with respect to compression, dehydration, and other processing equipment are here as well.

Just as with the other forms, you should fill in all of the data fields and then click the green “SAVE” button.

Subpart PP: Flow Meters with segregation



Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture [CHANGE](#)
Calculation Methodology: Flow Meters with segregation

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	OPEN

FLOW METERS

Flow Meter Name/ID	Meter Location	CO ₂ (metric tons)	Status	Delete
Flow Meter A	Upstream	200,000	Complete	OPEN X
Flow Meter B	Downstream	80,000	Complete	OPEN X

[ADD a Flow Meter](#)

[Facility Overview](#)

120,000
(Eq. PP-3b) Annual mass of CO₂ (metric tons), sum for all facility Reporting Units
[VIEW SUMMARY](#)

Subpart PP: View Validation

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For the sake of demonstration, I added two flow meters, one upstream and one downstream as indicated by the green circle, and entered CO₂ supply data for both. Now, as you look across the row for each flow meter, you can see that the “Status” is complete.

You may notice that the total quantity supply in the upper right hand corner of the screen does not equal the sum of the two flow meter supplies as it did in the other configuration example. That is because a different summary equation is used to calculate the total – Equation PP-3b. Let’s click on the blue “VIEW SUMMARY” button as indicated by the green arrow to view Equation PP-3b in more detail.

Subpart PP: Flow Meters with segregation



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G-C-P-nonCEMS Ammonia (2010)

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview » Eq. PP-3b

ANNUAL MASS OF CO₂ EMISSIONS AGGREGATION

e-GGRT uses equation PP-3b to arrive at a facility level value for CO₂ emission. This value, reported to EPA, is the result of all CO₂ emissions from upstream flow meters minus all CO₂ emissions from downstream flow meters.

120,000

(Eq. PP-3b) Annual mass of CO₂ (metric tons), sum for all facility flow meters.

SUMMARY

Equation PP-3b $CO_2 = \sum CO_{2,u} - \sum CO_{2,d}$

Hover over an element in the equation above to reveal a definition of that element.

Flow Meter Name/ID	Upstream or Downstream	CO ₂ (metric tons)	Status
Flow Meter A	Upstream	200,000	Complete
Total		200,000	

Flow Meter Name/ID	Upstream or Downstream	CO ₂ (metric tons)	Status
Flow Meter B	Downstream	80,000	Complete
Total		80,000	

[BACK](#)

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As you can see, Equation PP-3b subtracts the downstream flow meter quantity(ies) from the upstream flow meter quantity(ies). In this case, 200,000 – 80,000 = 120,000.

Let's move on to a third configuration.

Subpart PP: Streams that deliver CO₂ to containers



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G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

SELECT SUPPLIER CLASSIFICATION
As a supplier of carbon dioxide (CO₂), please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Supplier Type will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Supplier Type change.

* denotes a required field

SUPPLIER TYPE

Please select the* classification that describes your facility

Capture Facility
A facility with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground. Capture refers to the initial separation and removal of CO₂ from a manufacturing process or any other process.


Extract Facility
A facility with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground.

Importers or Exporters
Importers or exporters of bulk CO₂.

CANCEL NEXT

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Back at the first subpart PP screen, let's again stick with "capture facility" as the supplier type and click the blue "NEXT" button to proceed.



Subpart PP: Streams that deliver CO₂ to containers

e-GGRT Help

Using e-GGRT for Subpart PP reporting

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview

SELECT CALCULATION METHODOLOGY

As a supplier of CO₂, please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Calculation Methodology will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Calculation Methodology change.

* denotes a required field

CALCULATION METHODOLOGY

Please select the calculation methodology you will use to estimate quantities of CO₂.

<input type="radio"/> Flow Meters with no segregation	Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3a.)
<input type="radio"/> Flow Meters with segregation	Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3b.)
<input checked="" type="radio"/> Streams that deliver CO ₂ to containers	Use equation PP-1 or PP-2 for each stream (e-GGRT aggregating at the facility level using equation PP-3a. CO ₂ concentration measurement required.)
<input type="radio"/> Flow Meters with no segregation and Streams that deliver CO ₂ to	Use equation PP-1 or PP-2 for each meter and stream (e-GGRT aggregating at the facility level using equation PP-3a.)

CANCEL
NEXT >

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Here, let's select "Streams that deliver CO₂ to containers" as the calculation methodology. You can choose this calculation methodology if you transfer CO₂ offsite in containers, such as tanks or trucks.

Then click on the blue "NEXT" button to proceed.

Subpart PP: Streams that deliver CO₂ to containers



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e-GGRT Help
Using e-GGRT for Subpart PP reporting
Report a problem

G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide
Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Capture [CHANGE](#)

Calculation Methodology: Streams that deliver CO₂ to containers

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications (metric tons)	Types of Equipment Used to Measure CO ₂
0	OPEN

CO₂ STREAMS

CO ₂ Stream Name/ID	CO ₂ (metric tons)	Status	Delete
ADD a CO₂ Stream			

[Facility Overview](#)

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Again, this Subpart PP Overview screen is very similar to the previous Subpart PP Overview screens. The two differences, indicated in green circles, are that the Calculation Methodology reflects “Streams that deliver CO₂ to containers” and that the table tracks CO₂ streams rather than Flow Meters.

Let’s click on the blue hyperlink “ADD a CO₂ Stream” as indicated by the green arrow.

Subpart PP: Streams that deliver CO₂ to containers




The screenshot shows the EPA e-GGRT interface for adding or editing a CO₂ stream. The form is titled "Subpart PP: Suppliers of Carbon Dioxide" and includes a "Subpart Overview" link and an "Add/Edit CO₂ Stream" link. The "ADD OR EDIT CO₂ STREAM" button is highlighted with a green circle. Below this, the "UNIT INFORMATION" section contains the following fields:

- Name or ID* (40 characters maximum)
- Description (optional)
- Type: CO₂ Stream
- Measurement Type* (radio buttons):
 - Mass basis
 - Volumetric basis (concentration in weight percentage)
 - Volumetric basis (concentration in volume percentage)
- Percentage of the CO₂ stream metered by the flow meter that is biomass based (input field with % sign)

At the bottom of the form are "CANCEL" and "SAVE" buttons. A green circle highlights the "SAVE" button.

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On this form, we can see the other difference between this calculation methodology and the previous methodologies. As indicated by the empty green circle, there are no questions about location with respect to dehydration, compression, or other processing equipment because there is no flow meter here. So, to complete this form, just fill out the UNIT INFORMATION section and click the green "SAVE" button.



Subpart PP: Flow Meters with no segregation and Streams that deliver CO₂ to containers

e-GGRT Help

Using e-GGRT for Subpart PP reporting

SubIRY2013_Test_BadData5

Subpart PP: Suppliers of Carbon Dioxide (2013)

Subpart Overview

SELECT CALCULATION METHODOLOGY

As a supplier of CO₂, please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Calculation Methodology will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Calculation Methodology change.

* denotes a required field

CALCULATION METHODOLOGY

<p>Please select the calculation methodology you will use to estimate quantities of CO₂ *</p>	<p><input type="radio"/> Flow Meters with no segregation</p> <p><input type="radio"/> Flow Meters with segregation</p> <p><input type="radio"/> Streams that deliver CO₂ to containers</p> <p><input checked="" type="radio"/> Flow Meters with no segregation and Streams that deliver CO₂ to containers</p>	<p>Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3a.)</p> <p>Use equation PP-1 or PP-2 for each meter (e-GGRT aggregating at the facility level using equation PP-3b.)</p> <p>Use equation PP-1 or PP-2 for each stream (e-GGRT aggregating at the facility level using equation PP-3a. CO₂ concentration measurement required.)</p> <p>Use equation PP-1 or PP-2 for each meter and stream (e-GGRT aggregating at the facility level using equation PP-3a.)</p>
--	---	--

CANCEL
NEXT >

95

Let's go back to the calculation methodology selection screen for a moment. I want to highlight the last calculation methodology option, which is basically a combination of the first and third options. "Flow Meters with no segregation and Streams that deliver CO₂ to containers" allows reporters to report information for a facility that uses both flow meters and containers to measure CO₂ supply. Data entry is essentially the same as the first and third methodology combined: that is, a reporter is prompted to enter information for both flow meters and containers, as previously presented.



The last configuration I'd like to walk through today is for importers and exporters.

An important note is that imports and exports are reported at the corporate level, while CO2 supply from capture is reported at the facility level.

We have received several questions from facilities and suppliers about how reporting of these numbers together should be handled. Accordingly, we have issued guidance that imports and exports from supplier subparts must be reported separately from facility-level activity. So, for example, an ammonia manufacturing facility can report CO2 supply captured along with its subpart G emissions in one annual report, as we've demonstrated today so far. However, another ammonia manufacturing facility that exports its CO2 may not submit these numbers together in one report. Exports must be part of a separate annual report.

So, let's run through an example of an importer/exporter configuration here, but note that if you have this configuration, your CO2 imports and/or exports must be reported at the corporate level in a separate annual report. On this initial screen, let's selected "importers and exporters" as the supplier type.

Subpart PP: Importers/Exporters with Containers



e-GGRT Help

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview

SELECT SUPPLIER SUB-CLASSIFICATION
As an importer or exporter of CO₂, please select below the sub-classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility. * denotes a required field

IMPORTER OR EXPORTER TYPE

Please select the classification that describes your facility *

- Importer of bulk CO₂
- Exporter of bulk CO₂
- Importer and Exporter of bulk CO₂

CANCEL NEXT+

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On the next screen, you must select if your facility is an importer, exporter, or both an import and exporter of bulk CO₂.

For this example, let's assume an importer and exporter of bulk CO₂.

Subpart PP: Importers/Exporters with Containers



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G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview

SELECT CALCULATION METHODOLOGY
As a supplier of CO₂, please select below the classification that describes your facility. This will enable e-GGRT to tailor the subpart screens to properly include those reporting requirements germane to your facility.

Warning: Changing your Calculation Methodology will require deleting any data you've already entered as part of Subpart PP. You will not be able to retrieve any deleted data after proceeding with a Calculation Methodology change.

* denotes a required field

CALCULATION METHODOLOGY

Please select the calculation methodology you will use to estimate quantities of CO₂.

Flow Meters with no system aggregation Use equation PP-1 or PP-2 for each meter (Enter supply data at the corporate level.)

Containers Enter supply results at the corporate level using equation PP-4. (Assumes CO₂ concentration is 100%)

CANCEL NEXT

98

Here we'll select "Containers" as the calculation methodology then click on the blue "NEXT" button.

Subpart PP: Importers/Exporters with Containers



99

This navigates us to the familiar Subpart PP Overview screen. Let me point out a few differences.

First, the MISCELLANEOUS INFORMATION table has one column for imports end use and a second column for exports end use as indicated by the green circle.

Second, there is no summary overview in the upper right hand corner, as indicated by the big empty green box. This is because the PP-3 summary equations do not apply to imports or exporters in containers. As a result, you will have to calculate and enter total imports and total exports yourself.

Third, there is no blue hyperlink to add CO₂ streams, as indicated by the smaller empty green box. For imports and exports in containers, the only numbers you report are the aggregated annual totals. To do so, click on the blue "OPEN" button as indicated by the green arrow.

Subpart PP: Importers/Exporters with Containers



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e-GGRT Help

- Using e-GGRT for Subpart PP reporting
- Report a problem

G-C-P-nonCEMS Ammonia (2010)

Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview » Eq. PP-4

ANNUAL MASS OF CO₂ CALCULATION
Enter the total mass of CO₂ in all containers imported and exported during the reporting year, using Equation PP-4. If you exported only, enter the number "0" for mass of CO₂ imported. If you imported only, enter the number "0" for mass of CO₂ exported.

Equation Summary and Result (PP-4)

SUMMARY AND RESULT

$$\text{Equation PP-4 } \text{CO}_2 = \sum_{ps=1}^i Q$$

Hover over an element in the equation above to reveal a definition of that element.

Annual mass of CO ₂ in all containers imported	<input type="text" value="50000"/>	(metric tons)
Annual mass of CO ₂ in all containers exported	<input type="text" value="25000"/>	(metric tons)

100

Here, you will be prompted to enter total annual imports and total annual exports in the red boxes. If you only imported, then enter a zero in the exports box, and vice versa.

Click on the green "SAVE" button when you're done.

Subpart PP: Importers/Exporters with Containers



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G-C-P-nonCEMS Ammonia (2010)
Subpart PP: Suppliers of Carbon Dioxide

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS
This subpart consists of facilities with production process units that capture a CO₂ stream for purposes of supplying CO₂ for commercial applications or that capture and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground, facilities with CO₂ production wells that extract or produce a CO₂ stream for purposes of supplying CO₂ for commercial applications or that extract and maintain custody of a CO₂ stream in order to sequester or otherwise inject it underground and importers or exporters of bulk CO₂.

Supplier Type: Import/Export **CHANGE**

Calculation Methodology: Containers

MISCELLANEOUS INFORMATION

Total Annual CO ₂ Transferred to End-Use Applications from Imports (metric tons)	Total Annual CO ₂ Transferred to End-Use Applications from Exports (metric tons)	Types of Equipment Used to Measure CO ₂
0	0	OPEN

ALL CONTAINERS

Imported CO ₂ (metric tons)	Exported CO ₂ (metric tons)
50,000	25,000

Facility Overview

Subpart PP: View Validation

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Now we're back on the Subpart PP Overview page with the total annual imports and exports displayed. Under this configuration, you just need to fill out the MISCELLANEOUS INFORMATION and then you'll be finished. Let's click on the blue "OPEN" button on the MISCELLANEOUS INFORMATION table as indicated by the green arrow so that I can show you one final difference in the form.

Subpart PP: Importers/Exporters with Containers



ADD a Type of Equipment

Please provide the aggregated annual quantity of CO₂ your facility transferred to each of the following end-use categories from imports. Enter a value of "0" for any end-use category for which your facility did not transfer CO₂.

Food and beverage	<input type="text"/>	(metric tons)
Industrial and municipal water/wastewater treatment	<input type="text"/>	(metric tons)
Metal fabrication, including welding and cutting	<input type="text"/>	(metric tons)
Greenhouse uses for plant growth	<input type="text"/>	(metric tons)
Fumigants (e.g., grain storage) and herbicides	<input type="text"/>	(metric tons)
Pulp and paper	<input type="text"/>	(metric tons)
Cleaning and solvent use	<input type="text"/>	(metric tons)
Fire fighting	<input type="text"/>	(metric tons)
Transportation and storage of explosives	<input type="text"/>	(metric tons)
Injection of CO ₂ for enhanced oil and natural gas recovery that is covered by 49 CFR Part 98, Subpart UU	<input type="text"/>	(metric tons)
Geologic sequestration of carbon dioxide that is covered by 49 CFR Part 98, Subpart RR	<input type="text"/>	(metric tons)
Research and Development	<input type="text"/>	(metric tons)
Other	<input type="text"/>	(metric tons)
If other please provide a short description of the use	<input type="text"/>	
Unknown	<input type="text"/>	(metric tons)


Please provide the aggregated annual quantity of CO₂ your facility transferred to each of the following end-use categories from exports. Enter a value of "0" for any end-use category for which your facility did not transfer CO₂.

Food and beverage	<input type="text"/>	(metric tons)
Industrial and municipal water/wastewater treatment	<input type="text"/>	(metric tons)
Metal fabrication, including welding and cutting	<input type="text"/>	(metric tons)
Greenhouse uses for plant growth	<input type="text"/>	(metric tons)

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The Miscellaneous Information form is too long to show on one page, so this is cropped. The difference I want to point out is visible, though. There is one end-use section for imports and a second end-use section for exports, as indicated by the green circles. For any data field that does not apply, you should enter a zero.

Submitting GHG Report



FACILITY OR SUPPLIER OVERVIEW

This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.

After data reporting is complete, you can initiate the annual report review and submission process from this page by using the SUBMIT button (or RESUBMIT for subsequent submissions if needed).

Facility's GHG Reporting Method: Data entry via e-GGRT web-forms (Change)

The Annual Report has already been prepared. Any changes you make to report data will not be reflected in that version. After making changes to report data you must choose GENERATE/RESUBMIT below, then click GENERATE REPORT for these changes to be included in an updated version of the Annual Report.

REPORT DATA

2019 Reporting Source or Supplier Category	Validation Messages?	Subpart Reporting
Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO2)	None	OPEN

[ADD or REMOVE Subparts](#)

If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report

SUBMIT ANNUAL REPORT

Report	Uploaded File Name	Status	Submitted Date	Certification Date	
					GENERATE / RESUBMIT

FACILITIES NOT SUBMITTING AN ANNUAL REPORT

If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.

This facility is NOT required to submit a report

46,635,525

CO2 equivalent emissions (excluding Biogenic from subparts C - HH (metric tons)


0

Biogenic CO2 emissions from subparts C - HH (metric tons)

392,600

CO2 equivalent quantity from supplier categories (metric tons)

[VIEW GHG DETAILS](#)



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For the next step of discussing report generation, let's use the first subpart PP example where we supplied 392,600 metric tons of CO2 as a capture facility.

You have entered all the information for your facility and will now submit your report.

Near the bottom of the page, click "GENERATE/RESUBMIT" (as shown by the green arrow).

Submitting GHG Report: Generate Report



Progress bar: **Generate and Review** (active), Certify and Send, Confirmation

G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Annual Report Submission
Select Facility » Facility Overview » **Generate and Review**

PRE-CERTIFICATION PREPARATION
Preparation includes generating then reviewing the Annual Report. When complete, you will be able to proceed to certify and submit the Annual Report.

Report	Status	Last Generated
2010 Annual Report v1	Not generated	

GENERATE REPORT

Generating the report may take from 1 to 10 minutes depending upon the volume of data.

Once your facility has generated a report, it is still possible to return to the data reporting screens to make changes. **Those changes, however, will not be reflected in your Annual Report until you generate it again.**

GENERATE REPORT (highlighted with a green arrow)

BACK

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On the next screen, click “GENERATE REPORT”

Submitting GHG Report: In Progress



Generate and Review Certify and Send Confirmation

G-C-P-nonCEMS Ammonia (2010)

e-GGRT Greenhouse Gas Annual Report Submission

Select Facility » Facility Overview » **Generate and Review**

PRE-CERTIFICATION PREPARATION
Preparation includes generating then reviewing the Annual Report. When complete, you will be able to proceed to certify and submit the Annual Report.

Report	Status	Last Generated	Refresh
2010 Annual Report v1	In Progress		Refresh

GENERATE REPORT
Generating the report may take from 1 to 10 minutes depending upon the volume of data.
Once your facility has generated a report, it is still possible to return to the data reporting screens to make changes. **Those changes, however, will not be reflected in your Annual Report until you generate it again.**

REPORT IS GENERATING
Please wait while the report is generating.
↳ You may leave, then return later to complete the remaining steps, or
↳ You may wait on this page; clicking [Refresh Current Status](#) will show if the Annual Report has generated.

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As shown above, report generation is in progress. The report may take from 1 to 10 minutes, depending on the volume of data.

Submitting GHG Report: Ready for Review



Generate and Review Certify and Send Confirmation

G-C-P-nonCEMS Ammonia (2010)

e-GGRT Greenhouse Gas Annual Report Submission

Select Facility • Facility Overview • **Generate and Review**

PRE-CERTIFICATION PREPARATION
Preparation includes generating then reviewing the Annual Report. When complete, you will be able to proceed to certify and submit the Annual Report.

Report	Status	Last Generated
2010 Annual Report v1	Ready for review	05/24/2011 11:40:14 AM

GENERATE REPORT
Generating the report may take from 1 to 10 minutes depending upon the volume of data.
Once your facility has generated a report, it is still possible to return to the data reporting screens to make changes. Those changes, however, will not be reflected in your Annual Report until you generate it again.

GENERATE REPORT

REVIEW REPORT
Prior to the submission and certification of your report to EPA, you may review it by using either the VIEW REPORT or VIEW XML buttons.

VIEW REPORT **VIEW XML**

SUBMIT and CERTIFY REPORT
If you have reviewed and are satisfied with your Annual Report you may proceed to submit then certify. The certification process includes applying your electronic signature (entering your password and answering a challenge question).

SUBMIT/CERTIFY

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When your report has been generated, you will see the message, “Ready for review” under Status. As indicated by arrow 1, you can click on the blue “VIEW REPORT” button to see an HTML version of your full report or on the blue “VIEW XML” button to see an XML version.

You will also have the option to preview the data from your report that will be made available to the public (not shown).

Once you are satisfied with your report, click on “SUBMIT/CERTIFY” to proceed.

Submitting GHG Report: Certify Report



G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Annual Report Submission
Select Facility » Facility Overview » Certify and Send

CERTIFY AND SUBMIT
Your electronic signature is required to submit the facility or suppliers annual report to EPA. Please review the information below, enter your password, then answer when prompted your challenge questions.

FACILITY INFORMATION

Facility Name	G-C-P-nonCEMS Ammonia
Address	1313 Mockingbird Lane Transylvania TN 37891
Owners and Operators	Lily Munster
Reporting Year	2010

CERTIFICATION STATEMENT
I am authorized to make this submission on behalf of the owners and operators of the facility or supplier, as applicable, for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

NOTE TO AGENTS
The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

ELECTRONIC SIGNATURE

Password * I'm agreeing to the above

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Next you will see information about the facility for which you are sending the report (circle). This is helpful if you are reporting for multiple facilities.

After reading the "CERTIFICATION STATEMENT" (arrow 1) and "NOTE TO AGENTS," (arrow 2) type your account password and click "SUBMIT" (arrow 3).

Then you will be prompted to answer a secret question (the specific question may vary) and again click "SUBMIT".

Submitting GHG Report: Confirmation



Generate and Review Certify and Send Confirmation

G-C-P-nonCEMS Ammonia (2010)

e-GGRT Greenhouse Gas Annual Report Submission

Select Facility » Facility Overview » Confirmation

SUCCESS!
Your facility's annual GHG report has been successfully submitted to EPA and certified. The facility's representatives and agents will receive an email confirmation.

[Print-friendly version](#)

ANNUAL REPORT SUBMISSION

Facility Name	G-C-P-nonCEMS Ammonia
Address	1313 Mockingbird Lane Transylvania TN 37891
Reporting Year	2010
Submitted Date	Tue May 24 11:40:43 EDT 2011
Certification Date	Tue May 24 11:41:34 EDT 2011
Submitted By	Palmer, Marcus
Confirmation Number	661-621

[HOME](#)

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When you have successfully submitted your CO₂ emissions into the e-GGRT system, you will see this confirmation screen.

Submitting GHG Report: Facility Overview



G-C-P-nonCEMS Ammonia (2010)
e-GGRT Greenhouse Gas Data Reporting
Select Facility • [Facility](#) or [Supplier Overview](#)

FACILITY OR SUPPLIER OVERVIEW
This page allows you to add the source and/or supplier categories for which your facility or supplier will be reporting, then to access those data reporting screens using the OPEN buttons.
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Facility's GHG Reporting Method: Data entry via e-GGRT web-forms (Change)

! The Annual Report has already been prepared. Any changes you make to report data will not be reflected in that version. After making changes to report data you must choose GENERATE/RESUBMIT below, then click GENERATE REPORT for those changes to be included in an updated version of the Annual Report.

REPORT DATA

2010 Reporting Source or Supplier Category	Validation Messages?	Subpart Reporting
Subpart A—General Information	None	OPEN
Subpart G—Ammonia Manufacturing	None	OPEN
Subpart V—Nitric Acid Production	None	OPEN
Subpart Z—Phosphoric Acid Production	None	OPEN
Subpart PP—Suppliers of Carbon Dioxide (CO ₂)	None	OPEN

[ADD](#) or [REMOVE](#) Subparts

If all subparts are completed and Validation Messages addressed to your satisfaction, you are ready to prepare and submit an Annual Report.

SUBMIT ANNUAL REPORT

Report	Uploaded File Name	Status	Submitted Date	Certification Date	
2010 Annual Report v1		Complete, certified and sent	05/24/2011 11:40 AM	05/24/2011 11:41 AM	HTML XML Receipt

[GENERATE/RESUBMIT](#)

FACILITIES NOT SUBMITTING AN ANNUAL REPORT
If this facility is not submitting an annual report this reporting year, please check the box below. For more information regarding legitimate reasons for not submitting a report to EPA, please use the e-GGRT Help links to the left.

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This is the Facility Overview screen. Under “SUBMIT ANNUAL REPORT” (shown by the green circle) you can see when your report was signed and submitted. You can view your report in HTML format and you can review your Receipt.

If you need to change data that you have already submitted and the final submittal date has not passed, go through the entry screens and change the necessary information. After completing your changes, click “GENERATE/RESUBMIT” to generate your report with the new information. You can then re-certify and resubmit your report.

Help Resources



- e-GGRT Information & Help
 - <http://www.ccdsupport.com>
 - Email: GHGreporting@epa.gov
- GHG Reporting Rule Information & Help
 - <http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>
 - Email: GHGReporting@epa.gov
- Read more about XML Upload Option
 - http://www.epa.gov/climatechange/emissions/e-ggrrt_xml.html

More Resources



- Other Subpart G resources
 - <http://www.epa.gov/ghgreporting/reporters/subpart/g.html>
- Other Subpart V resources
 - <http://www.epa.gov/ghgreporting/reporters/subpart/v.html>
- Other Subpart PP resources
 - <http://www.epa.gov/ghgreporting/reporters/subpart/pp.html>

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Here are some additional subpart specific links.

This concludes our training session. We hope this overview has provided you greater familiarity with navigating and entering information using the e-GGRT reporting tool.