

Subpart X Entering MASS BALANCE Equation Inputs Using IVT

Facilities access the Inputs Verifier Tool (IVT) module from the "x-process-unit data" page. Below the Equation X-4 graphic, you will find a data entry cell labeled "Annual CO₂ mass emissions from process operations and process off-gas combustion." Immediately below this data entry cell you will see a block labeled "Use Inputs Verifier to calculate" and a green "Go" box. Click "Go" to open the IVT module for Subpart X.

If you have previously entered these inputs and saved your inputs file locally you should import your locally saved inputs file. If you are having trouble locating your inputs file or would like to "Reset" and recreate your inputs file, please review our help content reviewing these processes at [Saving and Reloading a Inputs Verifier File](#) or [Resetting your Facility To Create a New Inputs Verifier File](#).

>> [Click this link to expand](#)

The screenshot displays the EPA e-GGRT (Greenhouse Gas Reporting Tool) interface for Subpart X: Petrochemical Production (2014). The page is titled "Subpart X: Petrochemical Production (2014)" and includes a navigation bar with "HOME", "FACILITY REGISTRATION", "FACILITY MANAGEMENT", and "GGG REPORTING".

On the left sidebar, there is a "Help" link and a "Using e-GGRT for Subpart X Reporting" link. The main content area is divided into several sections:

- GHG DATA AND ASSOCIATED INFORMATION:** A section for entering GHG data, with a note that users should use the e-GGRT help link for additional information.
- FACILITY'S INPUTS VERIFIER FILE:** A section showing the status of the inputs verifier file. It indicates that the file is "Inputs Data Loaded" and provides details about the last saved file (51708-DP_Enterprises_-_TEST-2014.xml) and the user who saved it (Richard Richards).
- Process Unit:** A dropdown menu showing "Unit 1 Mass".
- EQUATION X-4 SUMMARY AND RESULT:** A section displaying the chemical equation for CO₂ mass emissions:
$$CO_2 = G \cdot BOH \cdot X \cdot \frac{88}{12} \cdot 4 \cdot (C_H + C_G + C_V)$$
 Below the equation, there is a text box for "Annual CO₂ mass emissions from process operations and process off-gas combustion" and a green "Go" button labeled "Use Inputs Verifier to calculate".
- CARBON-CONTAINING FEEDSTOCKS:** A table with columns for "Name", "Type", and "Status". It includes a link to "ADD a Feedstock".
- CARBON-CONTAINING PRODUCTS:** A table with columns for "Name", "Type", and "Status". It includes a link to "ADD a Product".

At the bottom of the page, there are "CANCEL" and "GO" buttons. The footer contains the text "EPA e-GGRT 4/12/14 v1.0" and "© 2014 EPA".

e-GGRT Help

Using e-GGRT for Subpart X reporting

DR Enterprises - TEST

Subpart X: Petrochemical Production (2014)

[Subpart Overview](#) » [Process Unit GHG Info](#)

GHG DATA AND ASSOCIATED INFORMATION

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

Annual CO₂ mass emissions from process operations and process off-gas combustion (metric tons)

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)

✓ **Inputs Data Loaded**

Last Saved File: 511706-DR_Enterprises_-_TEST-2014.xml

[Save Inputs Data Locally](#)

Saved By (Date): Richard Richards (September 17, 2014 9:57 AM)

Process Unit Unit 1 Mass

EQUATION X-4 SUMMARY AND RESULT

$$\text{CO}_2 = 0.001 \times \frac{44}{12} \times (C_g + C_l + C_s)$$

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

Annual CO₂ mass emissions from process operations and process off-gas combustion (metric tons)

Use Inputs Verifier to calculate **GO**

CARBON-CONTAINING FEEDSTOCKS

Name	State	Delete
+ ADD a Feedstock		

CARBON-CONTAINING PRODUCTS

Name	State	Delete
+ ADD a Product		

CANCEL **SAVE**

Once you enter the IVT module you will note that these screens are formatted with a grey background and an Inputs Verifier Tool header. Here you are asked to provide emissions inputs to allow the IVT to calculate emissions.

The IVT uses the inputs to Equations X-1, X-2 and X-3 for gaseous, liquid and solid feedstocks and products, respectively to calculate CO₂ emissions using Equation X-4.

>> [Click this link to expand](#)



Anglo

Subpart X: Petrochemical Production (2017)

Subpart Overview » Process Unit GHG Info » Equation X-1 Feedback Inputs

EQUATION X-1 FEEDBACK INPUTS

Use this page to enter the inputs to Equation X-1. The inputs to equations will be used for verification purposes only and will not be stored by EPA. The results of the verification against the verification summary, available from the "Subpart Overview" page, will be stored by EPA.

FEEDSTOCK/PRODUCT INPUTS (1 OF 1)

Process Unit: EDC

Feedback on Product: ☒ Feedback: Natural Gas Liquids (gasoline)

Feedback entering inputs

Indicate whether the gasoline feedback is measured as mass or volume: ☐ Measured as mass or volume ☐ Measured as volume

EQUATION X-1

$$C_{eq} = \sum_{i=1}^{12} \left(\sum_{j=1}^{12} \left(\left(\frac{P_{ghg,i}}{C_{ghg,i}} \right) \cdot \left(\frac{C_{ghg,i}}{C_{ghg,i}} \right) \cdot \left(\frac{P_{ghg,i}}{C_{ghg,i}} \right) \cdot \left(\frac{C_{ghg,i}}{C_{ghg,i}} \right) \right) \right)$$

Values entered in this table will not be stored by EPA.

Month	Mass of gasoline feedback (measured in month)	Average gasoline feedback (measured in month)
January	<input type="text"/>	<input type="text"/>
February	<input type="text"/>	<input type="text"/>
March	<input type="text"/>	<input type="text"/>
April	<input type="text"/>	<input type="text"/>
May	<input type="text"/>	<input type="text"/>
June	<input type="text"/>	<input type="text"/>
July	<input type="text"/>	<input type="text"/>
August	<input type="text"/>	<input type="text"/>
September	<input type="text"/>	<input type="text"/>
October	<input type="text"/>	<input type="text"/>
November	<input type="text"/>	<input type="text"/>
December	<input type="text"/>	<input type="text"/>

Save Cancel

If this process unit was not operational for the entirety of a given month, or if the feedback product was not used for the entirety of a given month please uncheck the box for that month and a GHG will not be stored input to be entered.

Angkor

Subpart X: Petrochemical Production (2017)

[Subpart Overview](#) »
 [Process Unit GHG Info](#) »
 Equation X-1 Feedstock Inputs

EQUATION X-1 FEEDSTOCK INPUTS

Use this page to enter the inputs to equation X-1. The inputs to equations will be used for verification purposes only, and will not be stored by EPA. The results of the verification checks (the verification summary, viewable from the "Subpart Overview" page) will be stored by EPA.

FEEDSTOCK/PRODUCT INPUTS (1 OF 1)

Process Unit	EDC
Feedstock or Product Name (state)	Feedstock: Natural Gas Liquids (gaseous)

Finished entering inputs

Indicate whether the gaseous feedstock is measured as mass or volume

☐ Measured as mass
☐ Measured as volume

EQUATION X-1

$$C_g = \sum_{n=1}^{12} \left[\sum_{i=1}^{j \text{ or } k} \left[(F_{gf})_{i,n} \times (CC_{gf})_{i,n} \times \frac{(MW_f)_i}{MVC} - (P_{gp})_{i,n} \times (CC_{gp})_{i,n} \times \frac{(MW_p)_i}{MVC} \right] \right]$$

IVT Inputs entered in this table will not be stored by EPA

Month ¹	Mass of gaseous feedstock introduced in month (kg)		Average carbon content of the gaseous feedstock for month (kg C per kg of feedstock)	
<input checked="" type="checkbox"/> January	(F _{gf}) _{i,n}	<input type="text" value="Make all months same"/>	(CC _{gf}) _{i,n}	<input type="text" value="Make all months same"/>
<input checked="" type="checkbox"/> February	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> March	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> April	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> May	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> June	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> July	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> August	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> September	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> October	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> November	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>
<input checked="" type="checkbox"/> December	(F _{gf}) _{i,n}	<input type="text"/>	(CC _{gf}) _{i,n}	<input type="text"/>

¹ If the process unit was non-operational for the entirety of a given month, or, if the feedstock/product was not used for the entirety of a given month please uncheck the box for that month and e-GGRT will not expect inputs to be entered.

Inputs for Equations X-1, X-2 and X-3 vary by the state (gaseous, liquid or solid) of the feedstock or product and are summarized in the table below. If the equation inputs do not vary by month you may click "Make all months same" to copy these values to all months of the year. You will need to populate a screen like the one shown above for each feedstock and product for the process unit. When you have completed entering the data for the first feedstock or product, click SAVE. Move to the next feedstock or product by clicking on the NEXT button or the appropriate feedstock or product listed under "Feedstock or Product Name" "State" in the FEEDSTOCK/PRODUCT INPUTS section of the IVT page.

Feedstock/Product State	Measurement Method	Quantity Units	Carbon Content Units	Molecular Weight
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Gaseous (Equation X-1)	Mass	kg	kg C per kg feedstock	-
	Volume	scf	kg C per kg feedstock	kg/kg-mole
Liquid (Equation X-2)	Mass	kg	kg C per kg feedstock	-
	Volume	gal	kg C per gal feedstock	-
Solid (Equation X-3)	Mass	kg	kg C per kg feedstock	-

When you have completed entering and saving the data for all feedstocks and products used or produces by the process unit, click on the "Finished entering inputs" button to return to the "x-process-unit-data" page. The result of the IVT calculation using Equations X-1, X-2, X-3 and X-4 will be displayed in the data entry cell labeled "Annual CO2 mass emissions from process operations and process off-gas combustion." Check the "Enter/Report Alternate Result" box if you wish to report a result that differs from the one calculated by the IVT (note that this will generate a validation message).

Saving and Reloading Your Inputs Verifier File

Once in the IVT, the user will be able to enter inputs to equations data. An example of an inputs to equations field is outlined with red in the screen shot below. Please note that every field for inputs to equations states that the data "will not be stored by EPA". Unless these data are saved locally by the user, the user will need to manually re-enter this data during future data entry sessions.

As you enter data into the Inputs Verifier Tool (IVT), the system creates and "inputs file" that contains all the data that you entered into IVT. You must save your inputs file to your computer or other location that you designate. On each subsequent log in, you will be prompted to temporarily upload the latest version of the inputs file to e-GGRT. **e-GGRT will not save data entered into the IVT. Users are responsible for saving their facility's inputs file.** This page shows how the IVT assists users with this task.

The following example demonstrates how the inputs to equations are 1) entered, 2) saved locally, 3) temporarily loaded at a later session, 4) the screen errors you may receive, and 5) error messages you may receive if you attempt to open an inputs file that is not the most recent one saved for your facility.



If you are having trouble locating your inputs file or would like to "Reset" and recreate your inputs file, please review our help content reviewing these processes at [Reloading Your Inputs Verifier File](#) or [Resetting your Facility To Create a New Inputs Verifier file](#).

To access the inputs verifier tool, users would log in to e-GGRT with their username and password, select their facility, and navigate to the "Data Reporting" section of e-GGRT.

>> [Click this link to expand](#)

The screenshot shows the e-GGRT interface for 'Subject 5: Lime Manufacturing (2014)'. The 'FACILITY'S INPUTS VERIFIER FILE' section indicates that the 'Inputs Data' is loaded and provides a 'Save Inputs Data Locally' button. Below this, the 'EQUATION 5-4 SUMMARY AND RESULT' section displays a mathematical formula for CO2 emissions. A red box highlights the 'Use Inputs Verifier to calculate' button. The page also includes 'ADDITIONAL EMISSIONS DATA' and a 'Was CO2 used on site?' section.

e-GGRT Help

Using e-GGRT for Subpart S reporting

Siem Reap

Subpart S: Lime Manufacturing (2014)

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

EQ. S-4: FACILITY-LEVEL CO₂ PROCESS EMISSIONS AND ADDITIONAL EMISSIONS INFORMATION

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

86,161.6
(Eq. S-4) Annual CO₂ process emissions from lime production from all kilns (metric tons/year).

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)

Inputs Data Loaded

Last Exported File: 515869-Siem_Reap-2014.xml

Save Inputs Data Locally

Exported By (Date): Sokha Chea (July 28, 2014 3:42:28 PM)

EQUATION S-4 SUMMARY AND RESULT

$$E_{CO_2} = \sum_{i=1}^t \sum_{n=1}^{12} (EF_{lime,i,n} \times M_{lime,i,n}) + \sum_{i=1}^b \sum_{n=1}^{12} (EF_{lkd,i,n} \times M_{lkd,i,n}) + \sum_{i=1}^z E_{waste,i}$$

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

Annual CO₂ process emissions from lime production from all kilns **86161.6327** (metric tons)

Use Inputs Verifier to calculate **GO**

Enter/Report Alternate Result ☐

ADDITIONAL EMISSIONS DATA

Annual lime production capacity for the entire facility (short tons)

Was CO₂ used on site? ☐ Yes ☒ No

CANCEL

SAVE

On the Data Reporting tab for the selected subpart, immediately below a reported emissions value, the user will find a button labeled "Use Inputs Verifier to calculate| GO". Clicking **GO** will open the inputs verifier tool for that reported emissions value. Please note that screens in the inputs verifier tool are clearly marked with a unique header indicating that you are using the IVT (shown below with red outline).

[illegible]

Siem Reap

Subpart S: Lime Manufacturing (2014)

[Subpart Overview](#) » [Subpart S Summary Information](#) » [Equation S-1 Inputs](#)

EQUATION S-1 PRODUCT INPUTS

Use this page to enter the inputs to equation S-1. The inputs to equations will be used for verification purposes only, and will not be stored by EPA. The results of the verification checks (the verification summary, viewable from the "Subpart Overview" page) will be stored by EPA.

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)

Inputs Data Not Saved

A file has not yet been saved for this facility. Be sure to use the "Save Inputs Data Locally" link to save a copy of your equation inputs data before you log off as e-GGRT will not save or store equation inputs data!

 [Save Inputs Data Locally](#)

EQUATION INPUTS (1 OF 2)

Product or By-Product Name (type)  **Product 1 (product)**  all inputs entered
 By Product A (by-product sold)  all inputs entered

[Equation S-4 Summary](#)

[←PREV](#)

[NEXT→](#)

$$\text{Equation S-1: } EF_{\text{LIME},i,n} = \left[(SR_{\text{CaO}} \times \text{CaO}_{i,n}) + (SR_{\text{MgO}} \times \text{MgO}_{i,n}) \right] \times \frac{2000}{2205}$$

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

JANUARY

Calcium oxide content, determined according to §98.194(c)	<input type="text" value="0.66"/>	(metric ton CaO/metric ton lime)	Make all months same
will not be stored by EPA			
Magnesium oxide content, determined according to §98.194(c)	<input type="text" value="0.4"/>	(metric ton MgO/metric ton lime)	Make all months same
will not be stored by EPA			
Emission factor for lime type (calculated input to Equation S-4)	0.8659	(metric tons CO2/ton lime)	
Weight or mass of lime type produced (input to Equation S-4)	<input type="text" value="520"/>	(tons)	Make all months same
will not be stored by EPA			

DECEMBER

Calcium oxide content, determined according to §98.194(c)	<input type="text" value="0.66"/>	(metric ton CaO/metric ton lime)	
will not be stored by EPA			
Magnesium oxide content, determined according to §98.194(c)	<input type="text" value="0.4"/>	(metric ton MgO/metric ton lime)	
will not be stored by EPA			
Emission factor for lime type (calculated input to Equation S-4)	0.8659	(metric tons CO2/ton lime)	
Weight or mass of lime type produced (input to Equation S-4)	<input type="text" value="520"/>	(tons)	
will not be stored by EPA			

[CANCEL](#)

[SAVE](#)

Entering Data Using the IVT

Once in the IVT, the user will be able to enter inputs to equations data. An example of an inputs to equations field is outlined with red in the screen shot below. Please note that every field for inputs to equations states that the data "will not be stored by EPA". Unless you save you input files, you will need to manually re-enter this data during future data entry sessions.



The screenshot below is from Subpart S and is displayed as an example. The screen for other subparts may differ slightly.

>> [Click this link to expand](#)

The screenshot displays the EPA e-GGRT Inputs Verification Tool interface. At the top, the EPA logo and 'e-GGRT Inputs Verification Tool' are visible. The main section is titled 'Data Entry' and contains a 'Data Entry' button and a 'Data Entry' field. The 'Data Entry' field is outlined with a red border. Below the 'Data Entry' field is a 'Data Entry' table with columns for 'Data Entry' and 'Data Entry'. The table contains several rows of data, including 'Data Entry' and 'Data Entry'. The interface also includes a 'Data Entry' section with a 'Data Entry' button and a 'Data Entry' field. The 'Data Entry' field is outlined with a red border. Below the 'Data Entry' field is a 'Data Entry' table with columns for 'Data Entry' and 'Data Entry'. The table contains several rows of data, including 'Data Entry' and 'Data Entry'.

Siem Reap

Subpart S: Lime Manufacturing (2014)

[Subpart Overview](#) » [Subpart S Summary Information](#) » [Equation S-1 Inputs](#)

EQUATION S-1 PRODUCT INPUTS

Use this page to enter the inputs to equation S-1. The inputs to equations will be used for verification purposes only, and will not be stored by EPA. The results of the verification checks (the verification summary, viewable from the "Subpart Overview" page) will be stored by EPA.

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)

Inputs Data Not Saved

A file has not yet been saved for this facility. Be sure to use the "Save Inputs Data Locally" link to save a copy of your equation inputs data before you log off as e-GGRT will not save or store equation inputs data!

 [Save Inputs Data Locally](#)

EQUATION INPUTS (1 OF 2)

Product or By-Product Name (type)  **Product 1 (product)**  all inputs entered
 **By Product A (by-product sold)**  all inputs entered

[Equation S-4 Summary](#)

[←PREV](#)

[NEXT→](#)

$$\text{Equation S-1: } EF_{\text{LIME},i,n} = \left[\left(SR_{\text{CaO}} \times \text{CaO}_{i,n} \right) + \left(SR_{\text{MgO}} \times \text{MgO}_{i,n} \right) \right] \times \frac{2000}{2205}$$

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

JANUARY

Calcium oxide content, determined according to §98.194(c)	<div>0.66</div> <div>will not be stored by EPA</div>	(metric ton CaO/metric ton lime)	Make all months same
Magnesium oxide content, determined according to §98.194(c)	<div>0.4</div> <div>will not be stored by EPA</div>	(metric ton MgO/metric ton lime)	Make all months same
Emission factor for lime type (calculated input to Equation S-4)	0.8659	(metric tons CO2/ton lime)	
Weight or mass of lime type produced (input to Equation S-4)	<div>520</div> <div>will not be stored by EPA</div>	(tons)	Make all months same

DECEMBER

Calcium oxide content, determined according to §98.194(c)	<div>0.66</div> <div>will not be stored by EPA</div>	(metric ton CaO/metric ton lime)	
Magnesium oxide content, determined according to §98.194(c)	<div>0.4</div> <div>will not be stored by EPA</div>	(metric ton MgO/metric ton lime)	
Emission factor for lime type (calculated input to Equation S-4)	0.8659	(metric tons CO2/ton lime)	
Weight or mass of lime type produced (input to Equation S-4)	<div>520</div> <div>will not be stored by EPA</div>	(tons)	

[CANCEL](#)

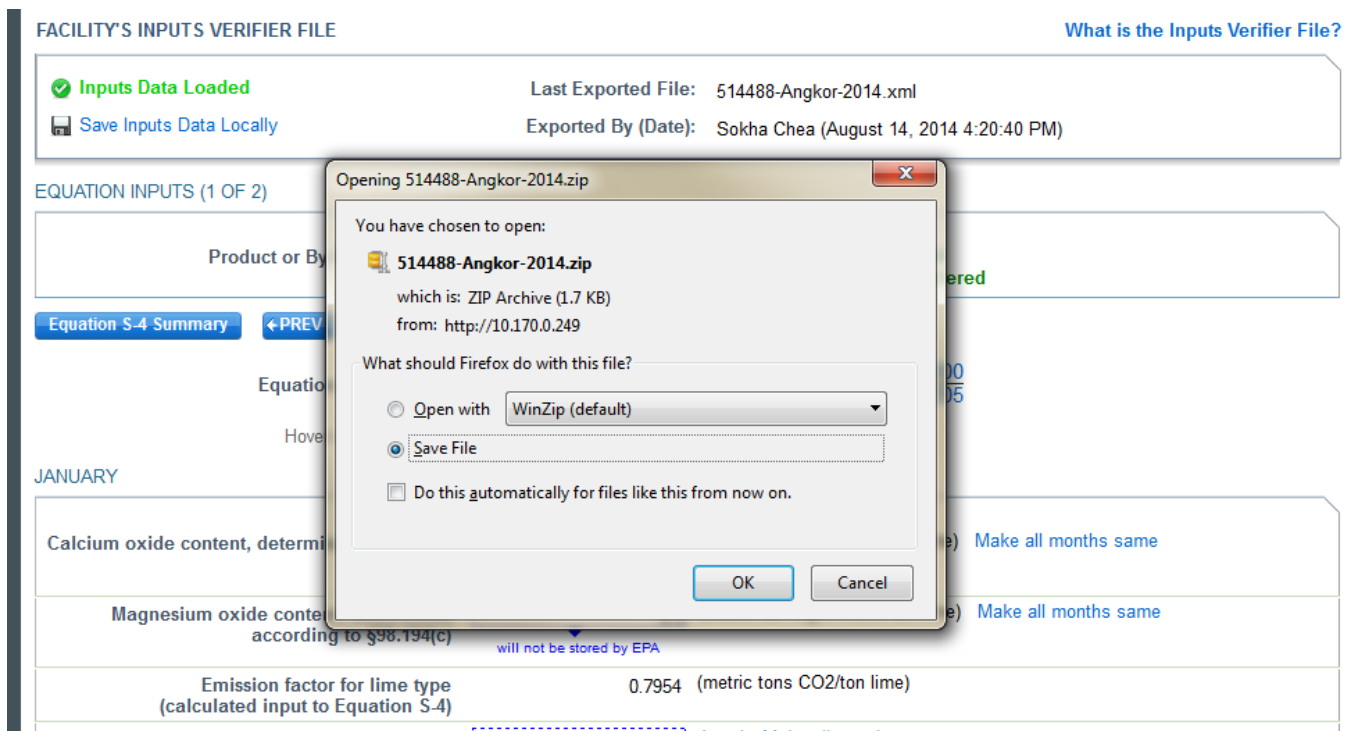
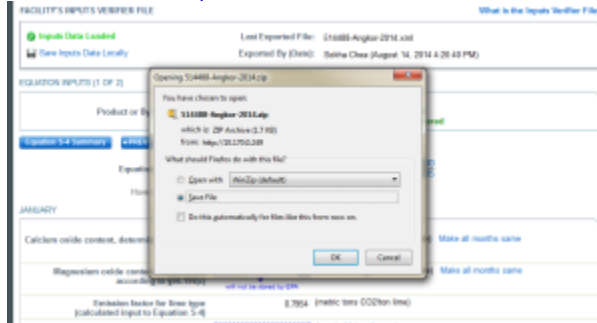
[SAVE](#)

Saving Data Entered in the IVT

Data entered into the inputs verifier module are **NOT** saved in e-GGRT. Only the output values from the inputs verifier module are saved in e-GGRT. **Therefore, each user/facility will have to save their inputs verifier file to their local hard drive and keep track of the file for future use.** On the top of each IVT screen, immediately below the grey box, IVT will present the save status of your FACILITY'S INPUTS VERIFIER FILE (File History), which contains the data entered into the inputs verifier module. To use e-GGRT in the future for your facility, you must save this file in a place where you can access it. This status box is also available on the Facility Overview page. Prior to saving your inputs verifier file, this section of the screen will state **"Inputs Data Not Saved"** in red letters and will provide the "Last Saved File" field. Click **"Save Inputs Data"** to save the inputs verifier file to your computer. This status box appears on many pages throughout e-GGRT and IVT so that it is easy for you to save inputs. However, you only need to save inputs at the completion of each data entry session.

After clicking **"Save Inputs Data"**, you will be able to save the inputs verifier file to your computer. Please note that different browsers may allow the user to set file-saving preferences and default locations. The example shown below uses the Firefox browser. Each user's save dialog box and defaults may appear differently, depending on the browser used. For information on browser-specific behaviors please refer to [Browser-specific issues and behaviors](#).

>> [Click this link to expand](#)



Once you have saved the file, the inputs verifier file status box will display **"Inputs Data Saved"** in green text and the "Saved By (Date):" field that shows the name of the user who most recently saved an inputs verifier file and the date and time." Each time you click "Save Inputs Data Locally", the IVT will record that you have saved your inputs verifier file. The IVT does not record where you save your inputs verifier file or whether you elect to cancel this action.

Reloading an Inputs Verifier File

When you come back to e-GGRT in a later session, you will return to the FACILITY or SUPPLIER OVERVIEW web form. Here you will see the box for the FACILITY'S INPUTS VERIFIER FILE (File History), with the message that **"Inputs Data Not Loaded"** in red text. To load an inputs verifier file that has been previously saved, click the link labeled **"Temporarily Load Inputs Data"**. Then browse to and select the inputs verifier file saved locally (to your local computer or local network drive). The IVT will accept the ZIP file or XML file previously downloaded by the user or a copy of that file (note: this file may be renamed but its contents must be identical). Finally, click the **IMPORT** button to load the file to the inputs verifier tool.

>> [Click this link to expand](#)

Temporarily load Inputs Verifier data

Last Saved File: 515408-Subpart_C-2015-v4.0.5

Saved By (Date): Vincent Vega (February 17, 2016 10:52 AM)

To proceed, locate the Last Saved File above with the Browse (or Choose File) field below and click LOAD.

Choose File

No file chosen

LOAD

CANCEL

If you are unable to locate the Last Saved File above, or know it to be lost:

1. You may load an older version of your inputs file. Doing so will require the system to re-calculate and re-validate all equations based on the inputs contained in that inputs file version.

2. You may "reset" your facility. The reset process will enable you to enter this subpart; but, the reset process will remove ALL previously calculated Inputs Verifier Tool results and will require you to re-enter ALL Inputs Verifier Tool equation inputs data for ALL of this facility's subparts.

RESET FACILITY

Temporarily load Inputs Verifier data

Last Saved File: 515408-Subpart_C-2015-v4.0.5

Saved By (Date): Vincent Vega (February 17, 2016 10:52 AM)

To proceed, locate the Last Saved File above with the Browse (or Choose File) field below and click LOAD.

Choose File

No file chosen

LOAD

CANCEL

If you are unable to locate the Last Saved File above, or know it to be lost:

1. You may load an older version of your inputs file. Doing so will require the system to re-calculate and re-validate all equations based on the inputs contained in that inputs file version.

2. You may "reset" your facility. The reset process will enable you to enter this subpart; but, the reset process will remove ALL previously calculated Inputs Verifier Tool results and will require you to re-enter ALL Inputs Verifier Tool equation inputs data for ALL of this facility's subparts.

RESET FACILITY

If the user attempts to reload an inputs verifier file that is not the one most recently saved for the facility, the user will receive the following warning message. The system prevents the user from accidentally loading an outdated file and thus losing the most recent data. Note that you may elect to choose "I Would Like to Upload this File" and the system will attempt to reconcile all validation messages and IVT calculations (which are based on the most recently-saved file) based on the inputs contained in the old file that you are electing to load. **If you elect to proceed to upload an old file, it is highly recommended that you review all equation inputs and calculations to ensure your annual report is complete and accurate.**

>> [Click this link to expand](#)

The Inputs Verifier File you are attempting to load is not the last saved file. It is strongly recommended that you locate the last saved file in order to ensure that you do not lose any previously completed work. You may refer to the following help content if you are having trouble locating your most recent file: [Finding Last Input Files](#). If you would like to try again with a different file, please click CANCEL. If you would like to load this file, the system will re-calculate and re-validate all equations based on the inputs contained in this file and you will be prompted to re-save a local copy of this inputs file. If you proceed with this option, you should review all equation inputs and calculations to ensure your annual report is complete and accurate.

CANCEL

I WOULD LIKE TO UPLOAD THIS FILE

The Inputs Verifier File you are attempting to load is not the last saved file. It is strongly recommended that you locate the last saved file in order to ensure that you do not lose any previously completed work. You may refer to the following help content if you are having trouble locating your most recent file: Finding Lost Input Files. If you would like to try again with a different file, please click CANCEL. If you would like to load this file, the system will re-calculate and re-validate all equations based on the inputs contained in this file and you will be prompted to re-save a local copy of this inputs file. If you proceed with this option, you should review all equation inputs and calculations to ensure your annual report is complete and accurate.

CANCEL

I WOULD LIKE TO UPLOAD THIS FILE

Screen Errors You May Receive

When attempting to save inputs data during the IVT data entry process, the user may receive screen errors that indicate the user has not completely entered required data to the Inputs Verifier Tool. Screen errors must be corrected before you will be permitted to complete a save action. Once you have corrected these errors, IVT will be able to calculate the equation result and you will be able to save your inputs verifier file locally.

>> [Click this link to expand](#)

The screenshot displays the EPA e-GGRT Inputs Verifier Tool interface. At the top, the EPA logo and "e-GGRT Inputs Verifier Tool" are visible. The user is logged in as "Admin". The main heading is "Subpart 5: Lime Manufacturing (2014)". Below this, there are tabs for "Equation Overview", "Subpart 5: Screening Information", and "Equation 5-1 Inputs". The "Equation 5-1 PRODUCT INPUTS" section is active, showing instructions for entering inputs for Equation 5-1. A message states: "Inputs Data Not Saved" and "A file has not yet been saved for this facility. Be sure to use the 'Save Inputs Data Locally' link to save a copy of your equation inputs data before you log off as e-GGRT will not save or store equation inputs data." Below this, there is a "Save Inputs Data Locally" link. The "EQUATION INPUTS (OF 2)" section shows "Product or By-Product Name (type)" with a dropdown menu set to "Product 1 (product)" and a status "all inputs entered". Below this, there are tabs for "Equation 5-1 Summary", "Inputs", and "Results". The "SCREEN ERRORS" section is highlighted in yellow and contains a message: "Calcium oxide content for July, determined according to §98.104(c). This data element is required. Please enter the required data or click CANCEL." Below this, the equation for Equation 5-1 is shown:
$$EF_{CaO} = \left[\left(\frac{WR_{CaO}}{CaO} \right) + \left(\frac{WR_{MgO}}{MgO} \right) \right] \times \frac{2000}{2200}$$
 A note below the equation says: "Hover over an element in the equation above to reveal a definition of that element." The "PARAMETER" section shows input fields for "Calcium oxide content, determined according to §98.104(c)" and "Magnesium oxide content, determined according to §98.104(c)". Both fields have a dropdown menu set to "all not to exceed 0%". The "Emission factor for lime type (calculation input to Equation 5-4)" is set to "1.7921 (Metric tons CO2/ton lime)".

Angkor

Subpart S: Lime Manufacturing (2014)

[Subpart Overview](#) » [Subpart S Summary Information](#) » [Equation S-1 Inputs](#)

EQUATION S-1 PRODUCT INPUTS

Use this page to enter the inputs to equation S-1. The inputs to equations will be used for verification purposes only, and will not be stored by EPA. The results of the verification checks (the verification summary, viewable from the "Subpart Overview" page) will be stored by EPA.

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)

Inputs Data Not Saved

A file has not yet been saved for this facility. Be sure to use the "Save Inputs Data Locally" link to save a copy of your equation inputs data before you log off as e-GGRT will not save or store equation inputs data!

 [Save Inputs Data Locally](#)

EQUATION INPUTS (1 OF 2)

Product or By-Product Name (type)  **Product 1 (product)**  all inputs entered
 **By Product (by-product sold)**  all inputs entered

[Equation S-4 Summary](#)

[← PREV](#)

[NEXT →](#)

SCREEN ERRORS

 Calcium oxide content for July, determined according to §98.194(c). This data element is required. Please enter the required data or click CANCEL.

$$\text{Equation S-1: } EF_{\text{LIME},i,n} = \left[\left(SR_{\text{CaO}} \times CaO_{i,n} \right) + \left(SR_{\text{MgO}} \times MgO_{i,n} \right) \right] \times \frac{2000}{2205}$$

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

JANUARY

Calcium oxide content, determined according to §98.194(c) (metric ton CaO/metric ton lime) [Make all months same](#)
will not be stored by EPA

Magnesium oxide content, determined according to §98.194(c) (metric ton MgO/metric ton lime) [Make all months same](#)
will not be stored by EPA

Emission factor for lime type 1.7021 (metric tons CO2/ton lime)
(calculated input to Equation S-4)

If the user inputs and saves data in IVT, then adds, deletes, or updates one or more inputs to an equation in IVT without saving the inputs file locally and subsequently attempts to log out of e-GGRT, the following warning message will be displayed.

>> [Click this link to expand](#)

WARNING! You have not saved data entered into the Inputs Verifier Tool.

If you wish to save this data before logging out, click SAVE INPUTS to return to e-GGRT. If you proceed to logout this data will be discarded as it is not saved by e-GGRT.

[SAVE INPUTS AND LOGOUT](#)

[LOGOUT - DISCARD EQUATION INPUTS DATA](#)

[CANCEL](#)

WARNING! You have not saved data entered into the Inputs Verifier Tool.

If you wish to save this data before logging out, click SAVE INPUTS to return to e-GGRT. If you proceed to logout this data will be discarded as it is not saved by e-GGRT.

[SAVE INPUTS AND LOGOUT](#)

[LOGOUT - DISCARD EQUATION INPUTS DATA](#)

[CANCEL](#)

The user has three options:

- **SAVE INPUTS AND LOGOUT** - after clicking this button, the user is prompted to save the inputs file locally. Once the file has been saved, the user is logged out of e-GGRT.
- **LOGOUT - DISCARD EQUATION INPUTS DATA** - the most recent changes to the inputs data are discarded and the user is automatically logged out of e-GGRT. The inputs file is NOT saved.
- **CANCEL** - the user is returned to e-GGRT. The inputs file is NOT saved. Note that if the user clicks CANCEL and does not save the inputs file locally and later attempts to logout, the warning message will be displayed again).

If the user clicked the **LOGOUT - DISCARD EQUATION INPUTS DATA** button in a previous session, the following message will be displayed the next time the user logs in.

>> [Click this link to expand](#)

Notice: Reconciling Discarded Inputs

In a previous session you added, deleted, or updated one or more inputs to an equation within the Inputs Verifier Tool (IVT) resulting in changes to your e-GGRT annual report data and/or validation messages, but you did not save those changes to a local Inputs Verifier file. When uploading your last saved Inputs Verifier File for this facility, the system will re-calculate and re-validate all equations based on the inputs contained in this file.

IVT data not saved to a local file can be lost if:

- your e-GGRT session ends after 30 minutes of inactivity (you will receive a warning after 25 minutes of inactivity)
- you close your browser without first saving your inputs file (or your system/browser crashes), or
- you log off of e-GGRT and voluntarily elect to 'discard' inputs.

The e-GGRT system is capable of detecting when IVT data has been discarded and will re-calculate and revalidate all IVT equations based on the last-saved file in this scenario. To prevent this from happening in the future, be sure to save IVT data updates to a local file regularly.

CLOSE

Notice: Reconciling Discarded Inputs

In a previous session you added, deleted, or updated one or more inputs to an equation within the Inputs Verifier Tool (IVT) resulting in changes to your e-GGRT annual report data and/or validation messages, but you did not save those changes to a local Inputs Verifier file. When uploading your last saved Inputs Verifier File for this facility, the system will re-calculate and re-validate all equations based on the inputs contained in this file.

IVT data not saved to a local file can be lost if:

- your e-GGRT session ends after 30 minutes of inactivity (you will receive a warning after 25 minutes of inactivity)
- you close your browser without first saving your inputs file (or your system/browser crashes), or
- you log off of e-GGRT and voluntarily elect to 'discard' inputs.


The e-GGRT system is capable of detecting when IVT data has been discarded and will re-calculate and revalidate all IVT equations based on the last-saved file in this scenario. To prevent this from happening in the future, be sure to save IVT data updates to a local file regularly.


CLOSE

To load an inputs verifier file that has been previously saved (as would occur if you logged off and came back to e-GGRT in a later session), the user would click the link labeled **"Temporarily Load Inputs Data"**. The user would browse to and select the inputs verifier file saved locally (to their local computer or local network drive). The IVT will accept the ZIP file or XML file previously downloaded by the user or a copy of that file (note: this file may be renamed but its contents must be identical) . The user would then click the **IMPORT** button to load the file to the inputs verifier tool.

FACILITY'S INPUTS VERIFIER FILE

[What is the Inputs Verifier File?](#)


Inputs Data Not Loaded


[Temporarily Load Inputs Data](#)

Last Saved File: 516069-MLH__Resources-2014.xml

Saved By (Date): M Huppert (October 20, 2014 11:28 AM)

If you attempt to reload an inputs verifier file that is not the one most recently saved for the facility, the user will receive the following warning message. The system prevents the user from accidentally loading an outdated file and thus losing the most recent data. Note that you may elect to choose "I Would Like to Upload this File" and the system will attempt to reconcile all validation messages and IVT calculations (which are based on the most recently-saved file) based on the inputs contained in the old file that you are electing to load. **If you elect to proceed to upload an old file, it is highly recommended that you review all equation inputs and calculations to ensure your annual report is complete and accurate.**

The Inputs Verifier File you are attempting to load is not the last saved file. It is strongly recommended that you locate the last saved file in order to ensure that you do not lose any previously completed work. You may refer to the following help content if you are having trouble locating your most recent file: [Finding Lost Input Files](#). If you would like to try again with a different file, please click CANCEL. If you would like to load this file, the system will re-calculate and re-validate all equations based on the inputs contained in this file and you will be prompted to re-save a local copy of this inputs file. If you proceed with this option, you should review all equation inputs and calculations to ensure your annual report is complete and accurate.

CANCEL

I WOULD LIKE TO UPLOAD THIS FILE

[Return to Subpart X MASS BALANCE Option Reporting for RY2014 and Later](#)