

# Using e-GGRT to Prepare Your Subpart O Report

So, for RY2018 and later, when using Equation O-5

This page provides an overview of Subpart O reporting through e-GGRT. More detailed information regarding e-GGRT reporting can be found throughout [this help resource](#) and on the [Training and Testing Opportunities for GHG Reporting](#) page.

Once you have added Subpart O to the list of subparts you will report and have clicked on the "Open" link next to Subpart O, you will see the following screen:

## Subpart O Facility Information

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

The screenshot shows the e-GGRT interface for Subpart O: HCFC-22 Production and HFC-23 Destruction (2018). The form is titled "Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)" and includes a "Summary Information" link. The "FACILITY SUMMARY INFORMATION" section instructs users to identify activities relevant to the facility. The "SUBPART O FACILITY INFORMATION" section contains three questions, each with "Yes" and "No" radio button options:

- Indicate whether your facility produces HCFC-22 \* ☒ Yes ☐ No
- Indicate whether your facility sends any HFC-23 \* offsite for destruction ☒ Yes ☐ No
- Indicate whether your facility destroys HFC-23 \* onsite ☒ Yes ☐ No

At the bottom of the form are "SAVE" and "CANCEL" buttons. The footer includes "Paperwork Reduction Act Burden Statement | Contact Us" and "e-GGRT RY2018.R26-J402 | O-setup".

This is a duplicate of the screenshot above, showing the e-GGRT interface for Subpart O: HCFC-22 Production and HFC-23 Destruction (2018). The form is titled "Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)" and includes a "Summary Information" link. The "FACILITY SUMMARY INFORMATION" section instructs users to identify activities relevant to the facility. The "SUBPART O FACILITY INFORMATION" section contains three questions, each with "Yes" and "No" radio button options:

- Indicate whether your facility produces HCFC-22 \* ☒ Yes ☐ No
- Indicate whether your facility sends any HFC-23 \* offsite for destruction ☒ Yes ☐ No
- Indicate whether your facility destroys HFC-23 \* onsite ☒ Yes ☐ No

At the bottom of the form are "SAVE" and "CANCEL" buttons. The footer includes "Paperwork Reduction Act Burden Statement | Contact Us" and "e-GGRT RY2018.R26-J402 | O-setup".

Under the SUBPART O FACILITY INFORMATION section, users are required to answer "Yes" or "No" for the following:

- Indicate whether your facility produces HCFC-22
- Indicate whether your facility sends any HFC-23 offsite for destruction
- Indicate whether your facility destroys HFC-23 onsite

Click "SAVE." This will take you to the Subpart Overview page.

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**Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)**

Subpart Overview

OVERVIEW OF SUBPART REPORTING REQUIREMENTS

Subpart O requires affected facilities to report HCFC-22 emissions from HCFC-22 production processes and HFC-23 destruction processes. Use this page to identify each production process, off-site destruction facility, and on-site destruction process, as appropriate. For additional information about Subpart O reporting, please use the e-GGRT Help link(s) provided.

Annual mass of HFC-23 (metric tons)

0

Subpart O: View Validation

SUBPART O FACILITY INFORMATION (change)

The facility produces HCFC-22 Yes

The facility sends HFC-23 offsite for destruction Yes

The facility destroys HFC-23 onsite Yes

HCFC-22 PRODUCTION PROCESS INFORMATION

Unique Name/Identifier	Mass of HCFC-22 produced (metric tons)	HFC-23 emissions (metric tons)	Status <sup>1</sup>	Delete
test1		0	Incomplete	OPEN
test2		0	Incomplete	OPEN

ADD HCFC-22 Production Process

OFF-SITE HFC-23 DESTRUCTION FACILITY INFORMATION

Unique Name/Identifier	Quantity of HFC-23 sent (metric tons)	Status <sup>1</sup>	Delete
No off-site destruction facilities have been added			

ADD an Off-Site Destruction Facility

ON-SITE HFC-23 DESTRUCTION PROCESS INFORMATION

(Only destruction devices that are not directly connected to HCFC-22 production equipment.)

Unique Name/Identifier	Mass of HFC-23 emitted (metric tons)	Status <sup>1</sup>	Delete
O/S		Incomplete	

ADD an On-Site Destruction Process

Facility Overview

<sup>1</sup>A status of "Incomplete" means that one or more elements of required GHG INFO is incomplete. See the Data Completeness validation messages for details 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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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)

### Subpart Overview

#### OVERVIEW OF SUBPART REPORTING REQUIREMENTS

Subpart O requires affected facilities to report HFC-23 emissions from HCFC-22 production processes and HFC-23 destruction processes. Use this page to identify each production process, off-site destruction facility, and on-site destruction process, as appropriate. For additional information about Subpart O reporting, please use the e-GGRT Help link(s) provided.

Annual mass of HFC-23 (metric tons)

**Subpart O: View Validation**

#### SUBPART O FACILITY INFORMATION [\(change\)](#)

The facility produces HCFC-22 **Yes**

The facility sends HFC-23 offsite for destruction **Yes**

The facility destroys HFC-23 onsite **Yes**

#### HCFC-22 PRODUCTION PROCESS INFORMATION

Unique Name/Identifier	Mass of HCFC-22 produced (metric tons)	HFC-23 emissions (metric tons)	Status <sup>1</sup>		Delete
test1		0	Incomplete	<a href="#">OPEN</a>	
test2		0	Incomplete	<a href="#">OPEN</a>	

[+ ADD HCFC-22 Production Process](#)

#### OFF-SITE HFC-23 DESTRUCTION FACILITY INFORMATION

Unique Name/Identifier	Quantity of HFC-23 sent (metric tons)	Status <sup>1</sup>	Delete
No off-site destruction facilities have been added			

[+ ADD an Off-Site Destruction Facility](#)

#### ON-SITE HFC-23 DESTRUCTION PROCESS INFORMATION

(Only destruction devices that are not directly connected to HCFC-22 production equipment.)

Unique Name/Identifier	Mass of HFC-23 emitted (metric tons)	Status <sup>1</sup>	Delete
O/8		Incomplete	

[+ ADD an On-Site Destruction Process](#)

[← Facility Overview](#)

<sup>1</sup>A status of "Incomplete" means that one or more elements of required GHG INFO is incomplete. See the Data Completeness validation messages for details 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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If the report is being completed for RY2013 or prior years, please skip to the set of instructions in the, "[RY2013 and Prior Years](#)" section.

## HCFC-22 PRODUCTION PROCESS INFORMATION

Under the HCFC-22 PRODUCTION PROCESS INFORMATION section, if you selected "Yes," the facility produces HCFC-22, e-GGRT will require you to provide the process name and identify the appropriate subpart O equation used to calculate production process emissions.

For RY2017 and later years, you must add each HCFC-22 production process at the facility. Click "+ADD HCFC-22 Production Process" under the "HCFC-22 Production Process Information" table to add all processes. You must enter:

- A unique name/identifier
- The equation used to calculate production process emissions:
  - Equation O-4 must be selected if the production process does not use a destruction device or does not have a destruction device directly connected to the HCFC-22 production equipment.
  - Equation O-5 must be selected if the production process uses a destruction device connected to the HCFC-22 production equipment.

After selecting the appropriate equation, click "SAVE." e-GGRT will populate the HCFC-22 Production Process Information table with each unique process.

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

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**e-GGRT** Electronic Greenhouse Gas Reporting Tool

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**Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)**

[Subpart Overview](#) » [HCFC-22 Production Process Configuration](#)

**HCFC-22 PRODUCTION PROCESS CONFIGURATION**

Use this page to describe each HCFC-22 production process at your facility. \* denotes a required field

HCFC-22 PRODUCTION PROCESS CONFIGURATION

Unique Production Process Name/ID \*

For this HCFC-22 production process, how do you estimate your HFC-23 emissions?

☐ Equation O-4: The production process does not use a destruction device or does not have a destruction device directly connected to the HCFC-22 production equipment

☐ Equation O-5: The production process uses a destruction device connected to the HCFC-22 production equipment  
Destruction devices directly connected to this production process should be entered by clicking the OPEN button on the Subpart Overview for this process.

**SAVE** **CANCEL**

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**Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)**

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**HCFC-22 PRODUCTION PROCESS CONFIGURATION**

Use this page to describe each HCFC-22 production process at your facility. \* denotes a required field

HCFC-22 PRODUCTION PROCESS CONFIGURATION

Unique Production Process Name/ID \*

For this HCFC-22 production process, how do you estimate your HFC-23 emissions?

☐ Equation O-4: The production process does not use a destruction device or does not have a destruction device directly connected to the HCFC-22 production equipment

☐ Equation O-5: The production process uses a destruction device connected to the HCFC-22 production equipment  
Destruction devices directly connected to this production process should be entered by clicking the OPEN button on the Subpart Overview for this process.

**SAVE** **CANCEL**

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e-GGRT RY2018.R23-j379 | O-setup-hcfc22-production

For each production process in the table, click the "OPEN" button to provide information on the process. e-GGRT will require you to use the IVT to calculate Equation O-4 or O-5 results when making entries in the HCFC-22 Production Process Information section. See [Subpart O Entering Equation Inputs Using IVT for RY2014 and Later](#) for information on using IVT.

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

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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)

[Subpart Overview](#) » [HCFC-22 Production Process Information](#)

### HCFC-22 PRODUCTION

Use this page to report information about the facility's on-site HCFC-22 production process.

HFC-23 emissions (metric tons)  
0

FACILITY'S INPUTS VERIFIER FILE ([File History](#))

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

Inputs Data Loaded

Last Saved File: 515789-Angkor-2018-v0.2.4

[Save Inputs Data](#)

Saved By (Date): M Huppert (February 05, 2019 2:44 PM)

### PROCESS IDENTIFIER

Unique Product Process Name/ID Destruction Offsites

### SUBPART O PROCESS INFORMATION

Annual mass of HCFC-22 produced by the Process (Calculated Using Equation O-3)

(metric tons)

Use Inputs Verifier to calculate [GO](#)

### Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
<a href="#">ADD a Reactant</a>		

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process

(metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 for the process is based on a missing data procedure

☐ Yes

☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23

(hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events


### HFC-23 EMISSIONS (Output of Equation O-4)

Annual HFC-23 Emissions from the Process (Calculated Using Equation O-4)


(metric tons)

Use Inputs Verifier to calculate [GO](#)

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### Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)

Subpart Overview » **HCFC-22 Production Process Information**

**HCFC-22 PRODUCTION**  
Use this page to report information about the facility's on-site HCFC-22 production process.

HFC-23 emissions (metric tons)

FACILITY'S INPUTS VERIFIER FILE (File History)
What is the Inputs Verifier File?

☒ **Inputs Data Loaded**

Last Saved File: 515789-Angkor-2018-v0.2.4  
Saved By (Date): M Huppert (February 05, 2019 2:44 PM)

PROCESS IDENTIFIER

Unique Product Process Name/ID
Destruction Offsites

SUBPART O PROCESS INFORMATION

Annual mass of HCFC-22 produced by the Process (Calculated Using Equation O-3)
 (metric tons)

Use Inputs Verifier to calculate
GO

Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
+ ADD a Reactant		

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process
 (metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 for the process is based on a missing data procedure

☐ Yes  
☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23
 (hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events

HFC-23 EMISSIONS (Output of Equation O-4)

Annual HFC-23 Emissions from the Process (Calculated Using Equation O-4)
 (metric tons)

Use Inputs Verifier to calculate
GO


SAVE
CANCEL

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e-GGRT RY2018.R22-j378 | O-hcfcproduction

For RY2014 through RY2016, the procedure is similar, but HCFC-22 production information is entered at the facility level. On the "HCFC-22 Production Process Information" table, you will select "OPEN" to provide information on the HCFC-22 Production web page. e-GGRT will require you to use the IVT to calculate Equation O-4 or O-5 results when making entries into the HCFC-22 Production section. See [Subpart O Entering Equation Inputs Using IVT for RY2014 and Later](#) for information on using IVT.

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



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**Subpart O: HCFC-22 Production and HFC-23 Destruction (2015)**

[Subpart Overview](#) | [e-HCFC-22 Production Process Information](#)

HCFC-22 PRODUCTION

Use this page to report information about the facility's on-site HCFC-22 production process.

01/01/2015

01/01/2015

HCFC-22 emissions (metric tons)


SUBPART O FACILITY INFORMATION

Annual mass of HCFC-22 produced Calculated Using Equation O-3

(metric tons)

Use Inputs Verifier to calculate [GO](#)

Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
<div><div><div><div><div></div><div>ADD a Reactant</div></div></div><div><div>The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process</div><div><div></div><div>(metric tons)</div></div><div>Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 at the facility is based on a missing data procedure</div><div><div><input type="radio"/> Yes</div><div><input type="radio"/> No</div></div><div>Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23</div><div><div></div><div>(hours)</div></div><div>Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events</div><div><div></div></div></div></div></div>		

HFC-23 EMISSIONS (Output of Equation O-4)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-4

(metric tons)

Use Inputs Verifier to calculate [GO](#)

EQUIPMENT LEAKS, EL (part of Equation O-5)

Annual mass of HFC-23 emitted from all equipment leaks at the facility

(metric tons)

Was the annual mass of HFC-23 emitted from all equipment leaks at the facility based on a missing data procedure?

☐ Yes

☐ No

PROCESS VENTS, EPV (part of Equation O-5)

Annual mass of HFC-23 emitted from all process vents at the facility

(metric tons)

Was the annual mass of HFC-23 emitted from all process vents at the facility based on a missing data procedure?

☐ Yes

☐ No

HFC-23 EMISSIONS (Output of Equation O-5)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-5

(metric tons)

[SAVE](#)

[CANCEL](#)

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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2015)

[Subpart Overview](#) » [HCFC-22 Production Process Information](#)

### HCFC-22 PRODUCTION

Use this page to report information about the facility's on-site HCFC-22 production process.

   
HFC-23 emissions (metric tons)

### SUBPART O FACILITY INFORMATION

Annual mass of HCFC-22 produced Calculated Using Equation O-3  (metric tons)

Use Inputs Verifier to calculate [GO](#)

### Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
----------	--	--------

[+ ADD a Reactant](#)

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process  (metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 at the facility is based on a missing data procedure ☐ Yes ☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23  (hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events

### HFC-23 EMISSIONS (Output of Equation O-4)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-4  (metric tons)

Use Inputs Verifier to calculate [GO](#)

### EQUIPMENT LEAKS, EL (part of Equation O-5)

Annual mass of HFC-23 emitted from all equipment leaks at the facility  (metric tons)

Was the annual mass of HFC-23 emitted from all equipment leaks at the facility based on a missing data procedure? ☐ Yes ☐ No

### PROCESS VENTS, EPV (part of Equation O-5)

Annual mass of HFC-23 emitted from all process vents at the facility  (metric tons)

Was the annual mass of HFC-23 emitted from all process vents at the facility based on a missing data procedure? ☐ Yes ☐ No

### HFC-23 EMISSIONS (Output of Equation O-5)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-5  (metric tons)

[SAVE](#) [CANCEL](#)



For all reporting years, in the "Reacts Fed Into the Process" table, add each reactant to the table by clicking the "+ADD a Reactant" button. Indicate the reactant fed, the annual mass fed, and details regarding any use of the missing data. Click "SAVE" to complete the entry. Complete an entry for each reactant.

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

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Subpart C Alt Part 75

**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**

Subpart Overview » HCFC-22 Production Process Information » **Reactant**

**REACTANT FED INTO THE PROCESS**

Please complete the form below. \* denotes a required field

REACTANT

Reactant fed into the process \*

Annual mass of reactant fed into the process  (metric tons)

Indicate whether the annual mass of the reactant fed into the process is based on a missing data procedure

☐ Yes ☐ No

**SAVE** **CANCEL**

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Subpart C Alt Part 75

**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**

Subpart Overview » HCFC-22 Production Process Information » **Reactant**

**REACTANT FED INTO THE PROCESS**

Please complete the form below. \* denotes a required field

REACTANT

Reactant fed into the process \*

Annual mass of reactant fed into the process  (metric tons)

Indicate whether the annual mass of the reactant fed into the process is based on a missing data procedure

☐ Yes ☐ No

**SAVE** **CANCEL**

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e-GGRT RY2017.R27-j130r35508 | O-reactant

After returning to the main HCFC-22 Production Process Information webpage, provide the information for the combined mass of all materials other than HCFC-22 and HFC-23, any use of missing data, and the tracking information for startups, shutdowns, and malfunctions.

For RY2018 and later years, one significant change to the reporting is that facilities using Equation O-5 will add the associated Destruction Device directly to the HCFC-22 Production webpage, so that the Destruction Device is linked with the process as highlighted below. So, for RY2018 and later, when using Equation O-5 (that is, when the facility has on-site HFC-23 destruction processes that are directly connected to an on-site HCFC-22 production process), add each destruction process by clicking "+ADD an On-Site Destruction Process" under "Destruction Devices, ED (input to Equation O-5)." You will be asked to provide a destruction process identifier and description, outlet concentration information, and any missing data information for each destruction process that is directly connected to an on-site HCFC-22 production process. e-GGRT will also require you to use the IVT to calculate Equation O-8 and O-9 results when making entries on this webpage.

You will be asked to provide the HFC-23 feed, destruction efficiency, and the information on how the destruction efficiency is determined. See [Subpart O Entering Equations Using IVT for RY2014 and Later](#) for information on using IVT.

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

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**Subpart O: HCFC-22 Production and HFC-23 Destruction (2019)**

[Subpart Overview](#) » [HCFC-22 Production Process Information](#)

**HCFC-22 PRODUCTION**

Use this page to report information about the facility's on-site HCFC-22 production process.

HFC-23 emissions (metric tons)

**PROCESS IDENTIFIER**

Unique Product Process Name/ID

**SUBPART O PROCESS INFORMATION**

Annual mass of HCFC-22 produced by the Process (Calculated Using Equation O-3)

(metric tons)

[Use Inputs Verifier to calculate](#) [Go](#)

**Reactants Fed into the Process**

Reactant	Annual mass fed into the process (metric tons)	Delete
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[+ADD a Reactant](#)

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process

(metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 for the process is based on a missing data procedure

☐ Yes

☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23

(hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events

**EQUIPMENT LEAKS, EL (part of Equation O-5)**

Annual mass of HFC-23 emitted from all equipment leaks from the process

(metric tons)

Indicate whether the annual mass of HFC-23 emitted from all equipment leaks from the process is based on a missing data procedure

☐ Yes

☐ No

**PROCESS VENTS, EPV (part of Equation O-5)**

Annual mass of HFC-23 emitted from all process vents for the process

(metric tons)

Indicate whether the annual mass of HFC-23 emitted from all process vents for the process is based on a missing data procedure

☐ Yes

☐ No

**DESTRUCTION DEVICES ED (input to Equation O-5)**

Annual mass of HFC-23 emitted from all destruction processes (devices)

(metric tons)

Unique Name/Identifier	Mass of HFC-23 emitted (metric tons)	Status <sup>1</sup>	Delete
------------------------	--------------------------------------	---------------------	--------

[+ADD an On-Site Destruction Process](#)

**HFC-23 EMISSIONS (Output of Equation O-5)**

$$E_{23} = E_L + E_{PV} + E_D$$

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

Annual HFC-23 Emissions from the Process (Calculated Using Equation O-5)

(metric tons)

[SAVE](#) [CANCEL](#)


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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2019)

Subpart Overview » **HCFC-22 Production Process Information**

### HCFC-22 PRODUCTION

Use this page to report information about the facility's on-site HCFC-22 production process.

   
HFC-23 emissions (metric tons)

### PROCESS IDENTIFIER

Unique Product Process Name/ID test2

### SUBPART O PROCESS INFORMATION

Annual mass of HCFC-22 produced by the Process (Calculated Using Equation O-3)  (metric tons)

Use Inputs Verifier to calculate **GO**

### Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
----------	--	--------

 ADD a Reactant

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process  (metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 for the process is based on a missing data procedure ☐ Yes ☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23  (hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events

### EQUIPMENT LEAKS, EL (part of Equation O-5)

Annual mass of HFC-23 emitted from all equipment leaks from the process  (metric tons)

Indicate whether the annual mass of HFC-23 emitted from all equipment leaks from the process is based on a missing data procedure ☐ Yes ☐ No

### PROCESS VENTS, EPV (part of Equation O-5)

Annual mass of HFC-23 emitted from all process vents for the process  (metric tons)

Indicate whether the annual mass of HFC-23 emitted from all process vents for the process is based on a missing data procedure ☐ Yes ☐ No

### DESTRUCTION DEVICES ED (input to Equation O-5)

Annual mass of HFC-23 emitted from all destruction processes (devices)  (metric tons)

Unique Name/Identifier	Mass of HFC-23 emitted (metric tons)	Status <sup>1</sup>	Delete
------------------------	--------------------------------------	---------------------	--------

 ADD an On-Site Destruction Process

### HFC-23 EMISSIONS (Output of Equation O-5)

$$E_{23} = E_L + E_{PV} + E_D$$

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

Annual HFC-23 Emissions from the Process  (metric tons)





**Subpart O: HCFC-22 Production and HFC-23 Destruction (2018)**  
 Subpart Overview » On-Site Destruction Process

**ON-SITE DESTRUCTION FACILITY INFORMATION**  
 Use this page to report information about each on-site HFC-23 destruction process. This screen is only for destruction processes not directly connected to an on-site HCFC-22 production process. Destruction Devices connected to an on-site production process should be entered by clicking the OPEN button on the Subpart Overview for that process.

**DESTRUCTION PROCESS**  
 Unique Name/Identifier \*  
 Description of Destruction Process  
 Was the HFC-23 fed into the on-site destruction process originally generated by an on-site HCFC-22 production process? \*  
☐ Yes  
☐ No

**HFC-23 FED INTO THE DESTRUCTION DEVICE**  
 Is the annual mass of HFC-23 fed into the destruction device at the facility based on a missing data procedure?  
☐ Yes  
☐ No

**HFC-23 EMITTED FROM THE DESTRUCTION DEVICE**  
 Is the annual mass of HFC-23 emitted from the destruction device at the facility based on a missing data procedure?  
☐ Yes  
☐ No

**HFC-23 CONCENTRATION**  
 Concentration of HFC-23 measured at the outlet of the destruction device during the facility's annual HFC-23 concentration measurements at the outlet of the device  
 Is the concentration below the detection limit?  
☐ Yes  
☐ No  
 Was the HFC-23 concentration measured pursuant to §36.154(i) greater than that measured during the performance test that was the basis for the destruction efficiency?  
☐ Yes  
☐ No

**HFC-23 OTHER**  
 Have you made changes that affect the HFC-23 destruction efficiency or the methods used to record the quantity destroyed?  
☐ Yes  
☐ No

**HFC-23 EMISSIONS (Output Equation O-8)**  
 Annual mass of HFC-23 emitted from the destruction process (device)  
 Use Inputs Verifier to calculate GO

**EQUATION O-9**  
 Mass of HFC-23 destroyed annually  
 Use Inputs Verifier to calculate GO  
 The Equation O-9 result calculated by IVT is not an annual reporting requirement and will not be included in your annual report. This calculated result will be used in determining your facility's total annual HFC-23 process emissions emitted from the destruction process (Equation O-8).

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For RY2014 and later, e-GGRT will require you to use the IVT to calculate Equation O-8 and O-9 results when making entries on this web page. You will be asked to provide the HFC-23 feed, destruction efficiency, and information on how the destruction efficiency is determined. See [Subpart O Entering Equation Inputs Using IVT for RY2014 and Later](#) for information on using IVT.

Click "SAVE." This will return you to the SUBPART OVERVIEW page.

## RY2013 and Prior Years

### HCFC-22 Production Process Information

You will provide a single process name and identify the appropriate subpart O equation for process emissions. You must enter

- A unique name/identifier
- The equation used to calculate production process emissions:
  - Equation O-4 must be selected if the production process does not use a destruction device or does not have a destruction device directly connected to the HCFC-22 production equipment.
  - Equation O-5 must be selected if the production process uses a destruction device connected to the HCFC-22 production equipment.

After selecting the appropriate equation, click "SAVE."

In the HCFC-22 Production Process Information table, click the "OPEN" button to provide information on the process.

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





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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2013)

[Subpart Overview](#) [HCFC-22 Production Process Information](#)

**HCFC-22 PRODUCTION**  
Use this page to report information about the facility's on-site HCFC-22 production process.

HFC-23 emissions (metric tons)

Waiting...

### SUBPART O FACILITY INFORMATION

Annual mass of HCFC-22 produced  (metric tons)

### Reactants Fed into the Process

Reactant	Annual mass fed into the process (metric tons)	Delete
+ ADD a Reactant		

The combined mass of all materials other than HCFC-22 and HFC-23 (i.e., unreacted reactants, HCl and other by-products) that occur in more than trace concentrations and that are permanently removed from the process  (metric tons)

Indicate whether the annual mass of combined mass of all materials other than HCFC-22 and HFC-23 at the facility is based on a missing data procedure ☐ Yes ☐ No

Number of hours that a missing data procedure was used to determine the annual mass of combined mass of all materials other than HCFC-22 and HFC-23  (hours)

Method for tracking startups, shutdowns, and malfunctions and HFC-23 generation/emissions during these events

### HFC-23 EMISSIONS (Output of Equation O-4)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-4  (metric tons)

### EQUIPMENT LEAKS, EL (part of Equation O-5)

Annual mass of HFC-23 emitted from all equipment leaks at the facility  (metric tons)

Was the annual mass of HFC-23 emitted from all equipment leaks at the facility based on a missing data procedure? ☒ Yes ☐ No

Number of hours a missing data procedure was used to determine the annual mass of HFC-23 emitted from all equipment leaks  (hours)

### PROCESS VENTS, EPV (part of Equation O-5)

Annual mass of HFC-23 emitted from all process vents at the facility  (metric tons)

Was the annual mass of HFC-23 emitted from all process vents at the facility based on a missing data procedure? ☒ Yes ☐ No

Number of hours a missing data procedure was used to determine the annual mass of HFC-23 emitted from all process vents  (hours)

### HFC-23 EMISSIONS (Output of Equation O-5)

Annual HFC-23 Emissions from the Facility Calculated Using Equation O-5  (metric tons)

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Next to the question "Annual mass of HCFC-22 produced," enter the quantity of HCFC-22 production.

In the "Reactants Fed Into the Process" table, add each reactant to the table by clicking the "+ADD a Reactant" button. Indicate the reactant fed, the annual mass fed, and details regarding any use of missing data. Click "SAVE" to complete the entry. Complete an entry for each reactant.

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

Subpart C Alt Part 75  
**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**  
 Subpart Overview » HCFC-22 Production Process Information » **Reactant**

**REACTANT FED INTO THE PROCESS**  
 Please complete the form below. \* denotes a required field

REACTANT

Reactant fed into the process \*

Annual mass of reactant fed into the process  (metric tons)

Indicate whether the annual mass of the reactant fed into the process is based on a missing data procedure  
☐ Yes  
☐ No

**SAVE** **CANCEL**

Subpart C Alt Part 75  
**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**  
 Subpart Overview » HCFC-22 Production Process Information » **Reactant**

**REACTANT FED INTO THE PROCESS**  
 Please complete the form below. \* denotes a required field

REACTANT

Reactant fed into the process \*

Annual mass of reactant fed into the process  (metric tons)

Indicate whether the annual mass of the reactant fed into the process is based on a missing data procedure  
☐ Yes  
☐ No

**SAVE** **CANCEL**

Provide the information for the combined mass of all materials other than HCFC-22 and HFC-23, and any missing data, and tracking information for startups, shutdowns, and malfunctions.

## Entering HFC-23 Emissions:

- If the facility selected use of Equation O-4, then a box for Equation O-4 entry will be shown under the HFC-23 EMISSIONS (Output of Equation O-4) section. Provide the Annual HFC-23 Emissions from the facility calculated using Equation O-4. Click "SAVE."
- If the facility selected use of Equation O-5, then Equation O-5 and the associated variables will be shown. Provide the equipment leak emissions and the process vent emissions, along with details regarding any use of missing data for each. For the "Annual HFC-23 emissions from the facility" calculated using Equation O-5, provide the annual HFC-23 emissions result for Equation O-5, including equipment leak emissions, process vent emissions, and the destruction device emissions.

Click "SAVE."

## Off-Site HFC-23 Destruction Facility Information

If you select "Yes," the facility sends HFC-23 offsite for destruction, e-GGRT will require you to add an off-site destruction facility that received the HFC-23. Click "+ADD an Off-Site Destruction Facility." Under the "OFF-SITE DESTRUCTION FACILITY" web page, you are required to enter the following information:

- Facility Information
- Quantity of HFC-23 sent to this facility
- If the quantity of HFC-23 sent to the facility is based on a missing data procedure, you are required to provide the number of hours a missing data procedure was used.  
 >> *Click this link to expand*

**EPA** Environmental Protection Agency

**e-GGRT** Electronic Greenhouse Gas Reporting Tool

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**Subpart C All Part 75**  
**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**  
 Subpart Overview » Off-Site Destruction Facility

**OFF-SITE DESTRUCTION FACILITY INFORMATION**  
 Use this page to report information about each off-site facility that receives HFC-23 from your facility. \* denotes a required field

**OFF-SITE DESTRUCTION FACILITY**

Facility Name\*

Street Address\*

City\*

State\*

Zip/Postal Code\*

Quantity of HFC-23 sent to this facility  (metric tons)

Is the quantity of HFC-23 sent to this facility based on a missing data procedure? ☐ Yes ☐ No

**SAVE** **CANCEL**

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**EPA** Environmental Protection Agency

**e-GGRT** Electronic Greenhouse Gas Reporting Tool

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**Subpart C All Part 75**  
**Subpart O: HCFC-22 Production and HFC-23 Destruction (2017)**  
 Subpart Overview » Off-Site Destruction Facility

**OFF-SITE DESTRUCTION FACILITY INFORMATION**  
 Use this page to report information about each off-site facility that receives HFC-23 from your facility. \* denotes a required field

**OFF-SITE DESTRUCTION FACILITY**

Facility Name\*

Street Address\*

City\*

State\*

Zip/Postal Code\*

Quantity of HFC-23 sent to this facility  (metric tons)

Is the quantity of HFC-23 sent to this facility based on a missing data procedure? ☐ Yes ☐ No

**SAVE** **CANCEL**

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When the form has been completed, click "SAVE." This will return you to the SUBPART OVERVIEW page.

## On-Site HFC-23 Destruction Process Information

If you select "Yes" the facility destroys HFC-23 onsite, e-GGRT will require you add an on-site destruction process. Under the "ON-SITE HFC-23 Destruction Process." A webpage for "ON-SITE DESTRUCTION FACILITY INFORMATION" will open. You are required to enter the following information:

- Unique Name/Identifier (description of destruction process)
- In the HFC-23 FED INTO THE DESTRUCTION DEVICE section and in the HFC-23 EMITTED FROM THE DESTRUCTION DEVICE section, indicate whether a missing data procedure was used to calculate the amounts fed to the device or emitted from the device using the "Yes" or "No" radio buttons (if you provide information for a missing data procedure that was used to calculate the amounts fed to the device, you do not need to repeat the same information for the amounts emitted from the device). If you select "Yes," report the number of hours a missing data procedure was used.
- HFC-23 concentration measured at the outlet of the device and whether the concentration is below the detection limit
- Whether the HFC-23 concentration measured under §98.154(l) is greater than the concentration measured during the performance test that is the basis for the destruction efficiency.

- Changes that have been made which affect destruction efficiency or recording destroyed quantities. If you selected “Yes,” provide information on the methods used to determine the destruction efficiency, methods used to record the mass destroyed, and other relevant regulations that apply to the destruction process.
- In the HFC-23 Emissions section for Equation O-8, provide the emissions calculated using Equation O-8.

>> *Click this link to expand*

**Subpart O: HCFC-22 Production and HFC-23 Destruction (2012)**  
 Subpart Overview » On-Site Destruction Process

**ON-SITE DESTRUCTION FACILITY INFORMATION**  
 Use this page to report information about your on-site HFC-23 destruction process.

**DESTRUCTION PROCESS**  
 Destruction Process:   
 Description of Destruction Process:

**HFC-22 FED INTO THE DESTRUCTION DEVICE**  
 Is the annual mass of HFC-22 fed into the destruction device at the facility based on a weighing scale provided? ☐ Yes ☐ No  
 Number of hours a weighing scale provided was used to determine the mass of HFC-22 fed into the destruction device:  (hours)

**HFC-22 EMITTED FROM THE DESTRUCTION DEVICE**  
 Is the annual mass of HFC-22 emitted from the destruction device at the facility based on a weighing scale provided? ☐ Yes ☐ No  
 Number of hours a weighing scale provided was used to determine the mass of HFC-22 emitted from the destruction device:  (hours)

**HFC-23 CONCENTRATION**  
 Concentration of HFC-23 measured at the outlet of the destruction device during the facility's annual HFC-23 monitoring campaign:  (parts per 1000)  
 Was the HFC-23 concentration measured pursuant to EPA HAPs under their test measured during the performance test that was the basis for the destruction efficiency? ☐ Yes ☐ No

**HFC-23 OTHER**  
 Have any other changes that affect the HFC-23 destruction efficiency or the methods used to record the results occurred? ☐ Yes ☐ No  
 Methods used to determine destruction efficiency:   
 Methods used to record the mass of HFC-23 destroyed:   
 Name of other relevant federal or state regulations that may apply to the destruction process:

**HFC-23 EMISSIONS (Output Equation O-8)**  
 Annual mass of HFC-23 emitted from the destruction process (tons):  (PARTS 1000)

**SAVE** **CANCEL**

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## Subpart O: HCFC-22 Production and HFC-23 Destruction (2012)


[Subpart Overview](#) » [On-Site Destruction Process](#)

### ON-SITE DESTRUCTION FACILITY INFORMATION

Use this page to report information about each on-site HFC-23 destruction process.

   
Annual mass of HFC-23 emitted from the  
destruction process (metric tons)

\* denotes a required field

Waiting... 

### DESTRUCTION PROCESS

Unique Name/Identifier \*

Description of Destruction  
Process

### HFC-23 FED INTO THE DESTRUCTION DEVICE

Is the annual mass of HFC-23 fed into the  
destruction device at the facility based on a  
missing data procedure? ☒ Yes  
☐ No

Number of hours a missing data procedure was  
used to determine the annual mass of HFC-23  
fed into the destruction device  (hours)

### HFC-23 EMITTED FROM THE DESTRUCTION DEVICE

Is the annual mass of HFC-23 emitted from the  
destruction device at the facility based on a  
missing data procedure? ☒ Yes  
☐ No

Number of hours a missing data procedure was  
used to determine the annual mass of HFC-23  
emitted from the destruction device  (hours)

### HFC-23 CONCENTRATION

Concentration of HFC-23 measured at the outlet  
of the destruction device during the facility's  
annual HFC-23 concentration measurements at  
the outlet of the device  (mass fraction)

Was the HFC-23 concentration measured  
pursuant to §98.154(l) greater than that  
measured during the performance test that was  
the basis for the destruction efficiency? ☒ Yes  
☐ No

### HFC-23 OTHER

Have you made changes that affect the HFC-23  
destruction efficiency or the methods used to  
record the quantity destroyed? ☒ Yes  
☐ No

Methods used to determine destruction  
efficiency

Methods used to record the mass of HFC-23  
destroyed

Name of other relevant federal or state  
regulations that may apply to the destruction  
process

### HFC-23 EMISSIONS (Output Equation O-8)

Annual mass of HFC-23 emitted from the  
destruction process (device)  (metric tons)

SAVE

CANCEL

Click "SAVE." This will return you to the SUBPART OVERVIEW page.