## Subpart OO - Only for Facilities that Produce F-GHGs and/or N<sub>2</sub>C

Worksheet Instructions:		
Please identify the processes that produce or transform f-GHGs or Nitrous Oxide at the identification picklists presented on the Products and Onsite Transformation pages. Ple		
Version:		
R.04		
External Links:		
Subpart OO Resources Page:	http://www2.epa.gov/ghgreporting/subpart-oo-su	
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display/h	
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display/h	
Workbook Navigation:		
Part 1- Facility Information		
Part 2 - Production & Transformation Process Information		
Part 2a - Production Process Information		
Part 2b - Transformation Process Information		

## Part 1 - Facility Information

Instructions: Complete the following facility information.

Facility Name:	
GHGRP ID:	
Reporting Period:	

## Part 2 - Production/Transformation Process Information

Instructions: Identify and describe each production/transformation process at the again on the Products tab when you enter product information.

I INX AINIAII I	Unique Identifier [98.416(a)]	Is the unique identifier associated with a production process, a transformation process or both?
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#### Updated: 01/25/2017

facility in Part 2 of this page. Process Identifiers entered in Column B will be ase do not skip rows.

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<u>elp/Reporting+Form+Instructions</u>

<u>elp/Optional+Calculation+Spreadsheet+Instructions</u>

Part 3 - On-Site Destruction Information

Part 4 - Off-Site Transformation Information

Part 5 - Off-Site Destruction Information

production facility. Each identifier entered in Column B must be uniqu

Description Does the process produce F-GHGs (optional) and/or N<sub>2</sub>O?

[98.416(a)] [98.416(a)(1)]

used as the basis for the process	
	_

### ue. These identifiers will be referenced

Does the process transform a F-GHG and/or N<sub>2</sub>O produced at an off-site location?

[98.416(a)(2)]

# **Subpart OO - Only for Facilities that Produce F-GHGs and/or**

Worksheet Instructions:		
Please identify the f-GHGs and N20 produced by processes at the facility. For each is presented in Col C. If the product in question is not present in Column C then sel f-GHGs page.		
Version:		
R.04		
External Links:		
Subpart OO Resources Page:	http://www2.epa.gov/ghgreporting/subpart-oo-s	
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display	
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display	
Workbook Navigation:		
Part 1- Facility Information		
Part 2 - Production & Transformation Process Information		
Part 2a - Production Process Information		
Part 2b - Transformation Process In	<u>iformation</u>	

### Part 2a - Production Process Information

Instructions: Identify each F-GHG and N2O produced by the process. Report t applicable).

		F-G
		If not listed, solvet "Search Extended List"
		If not listed, select "Search Extended List" F-GHG not listed" and enter the information
		more F-GHGs simultaneously, and their c
	Unique Production Process Identifier [98.416(a)]	the individual F-GHG constituents of the
	(defitifier [00:410(d)]	
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Updated: 01/25/2017
product identify process in Column B and the name of the product i ect "Search Extended List" and find the product in Column D. A con

suppliers-industrial-greenhouse-gases
/help/Reporting+Form+Instructions
/help/Optional+Calculation+Spreadsheet+Instructions

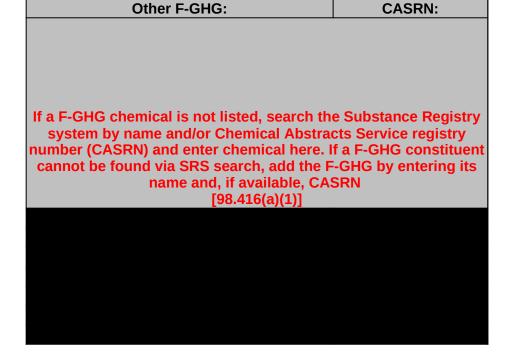
Part 3 - On-Site Destruction Information
Part 4 - Off-Site Transformation Information

Part 5 - Off-Site Destruction Information

he production of blend components, but not the production of bl

HG	CASRN:
Produced F-GHG	
to activate column 'D' for a comprehensiven required in columns 'G' and 'H'. If the proconcentrations in the product exceed 0.1 per product in order of declining concentratio [98.416(a)(1)]	ess produces two or rcent by weight, list

ends (unless the "blend" consists of F-GHG components that are s

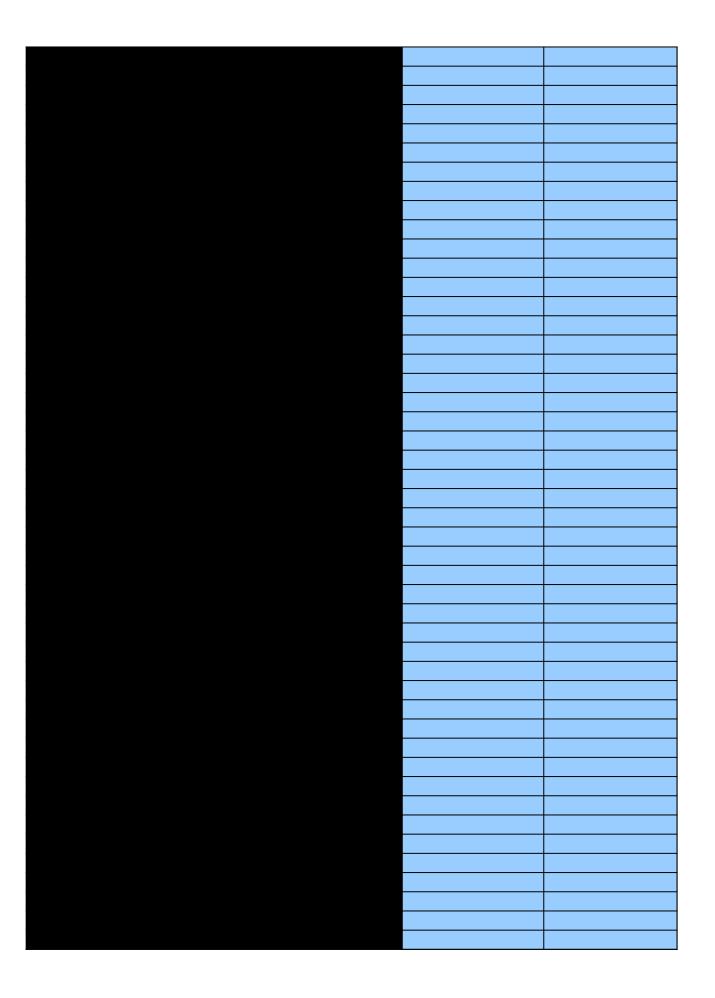


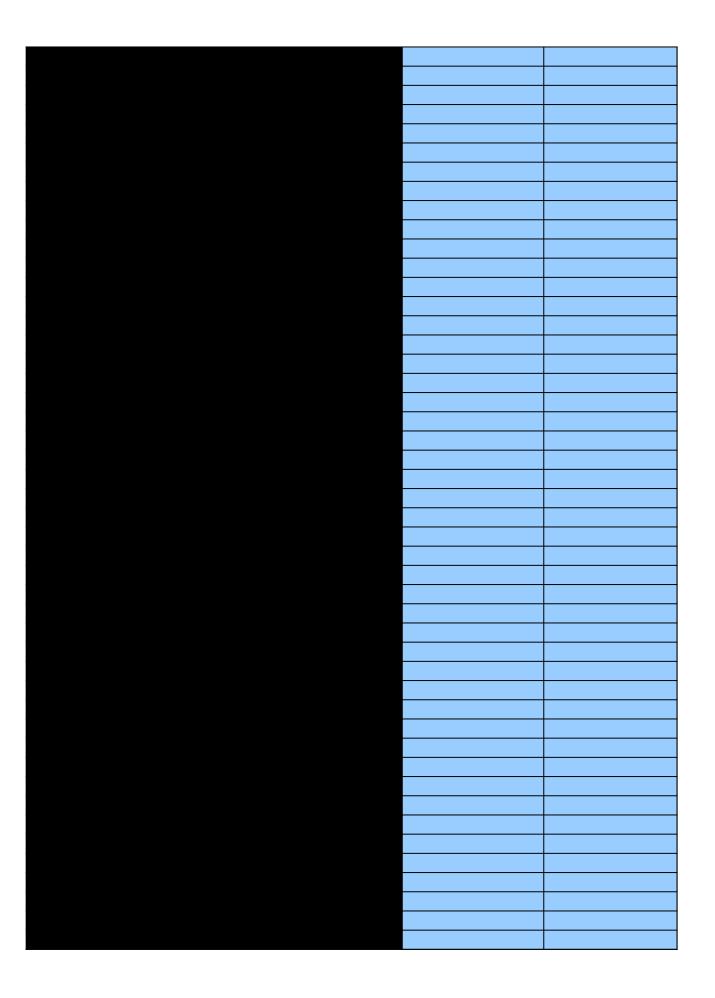


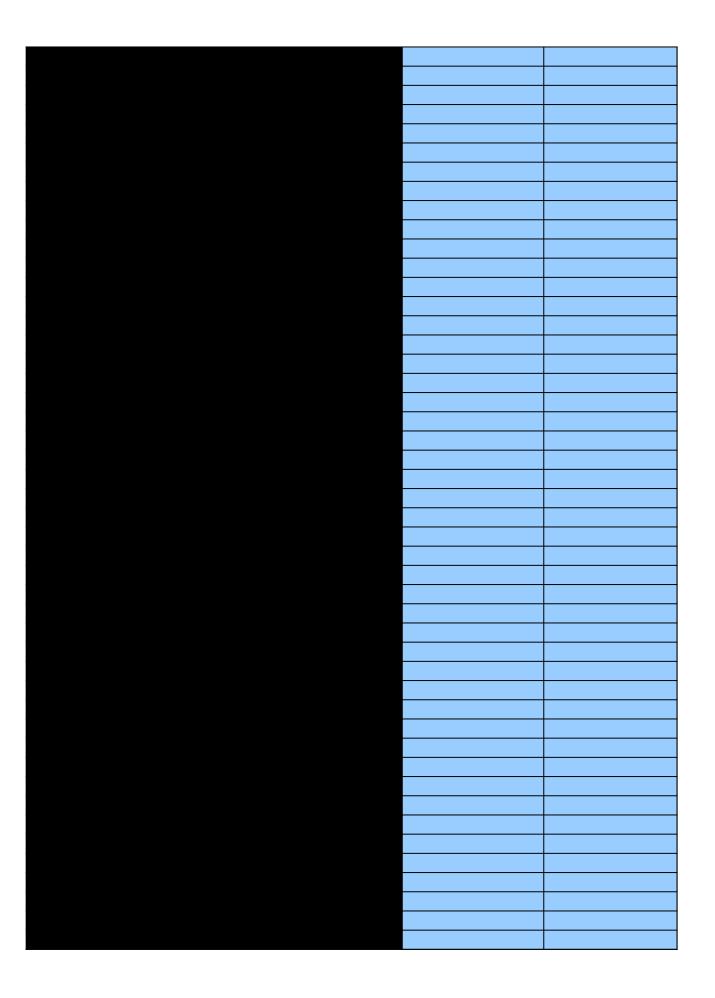




simultaneously produced by the same process). Do n	ot include isolated in	termediates that ar
Specify f-GHG Category for Purposes of Estimating GWP (if necessary) [98.3(c)(5)(ii)]	Mass measured coming out of the production process (metric tons) [98.416(a)(12)]	Was the mass determined using a missing data procedure? [98.416(a)(16)]







e produced and transformed at the same facility. Report all significant figures (ir

Mass determined using the missing data procedure	Number of hours that a missing data procedure was used to measure the mass coming out of the	Reason a missing data procedure	Method used to
(metric tons)	production process [98.416(a)(16)]	was used [98.416(a)(16)]	estimate the missing data [98.416(a)(16)]
		E (-)(-)]	F (-)(-)





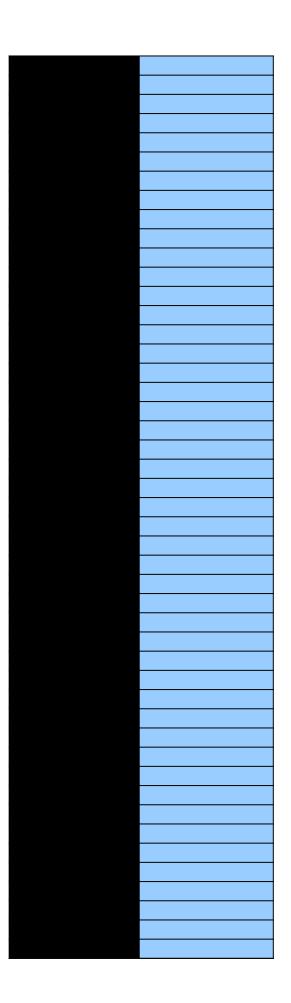


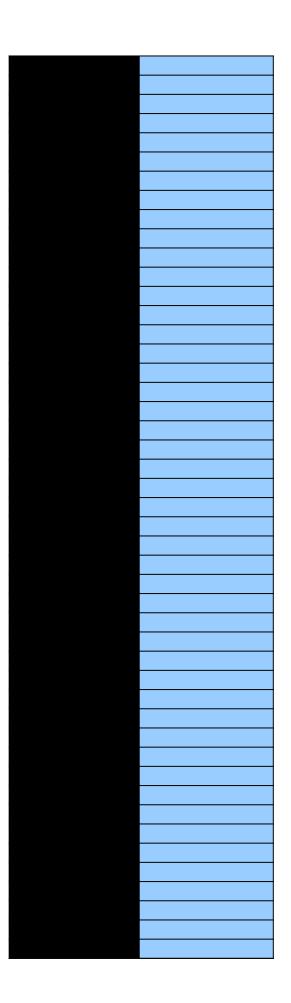
ncluding fractions of a metric ton, if

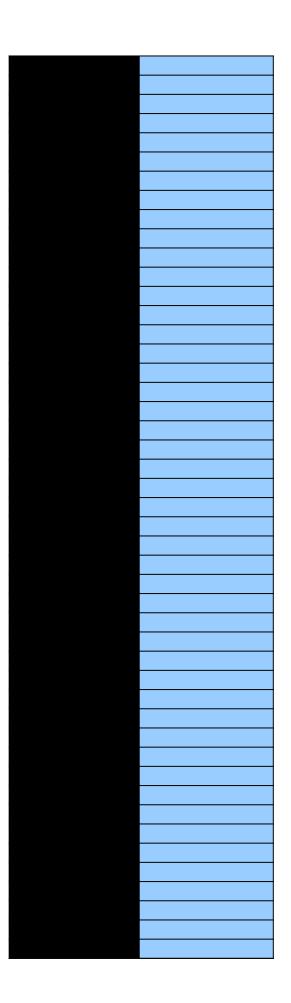
Specify the
"Other"
measurement
method used to
determine mass
(if applicable)

[98.416(a)(16)]

[98.416(a)(13)]







# Subpart OO - Only for Facilities that Produce F-GHGs and/or ${\rm N_2O}$

Worksheet Instructions:		
Please identify the f-GHGs and N20 transformed at the facility. For each f-GHG or N20 GHGs is presented in Col C. If the product in question is not present in Column C then s GHGs page.		
Version:		
R.04		
External Links:		
GHG_EZForm	http://www2.epa.gov/ghgreporting/subpart-oo-s	
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display.	
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display.	
Workbook Navigation:		
Part 1- Facility Information		
Part 2 - Production & Transformation Process Information		
Part 2a - Production Process Information		
Part 2b - Transformation Process Info	rmation	

# **Part 2b - Transformation Process Information**

Instructions: Identify each F-GHG and N2O transformed by the process. Do not inc

	F-G
Unique Transformation Process Identifier [98.416(a)]	(if not listed, select "Search Extended Li GHG not listed" and en

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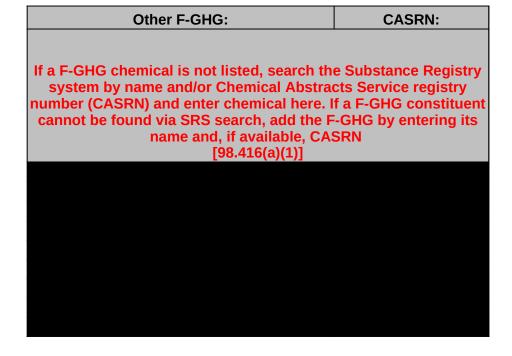
Updated: 01/25/2017
transformed identify process in Column B and the name of the f-GHG or N2O elect "Search Extended List" and find the product in Column D. A complete li
suppliers-industrial-greenhouse-gases
/help/Reporting+Form+Instructions
/help/Optional+Calculation+Spreadsheet+Instructions
Part 3 - On-Site Destruction Information
Part 4 - Off-Site Transformation Information
Part 5 - Off-Site Destruction Information

lude isolated intermediates that are produced and transformed at the sa

HG	CASRN:
Included F-GHG or N <sub>2</sub> O	
atilita activista calcina IDI for a communicación	ive liet or coloct IIOther F
st" to activate column 'D' for a comprehens ter the information required in columns 'G'	
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[98.416(a)(2))]	

in Columns C and D. A list of common f- st of products can be found on the Listed f-

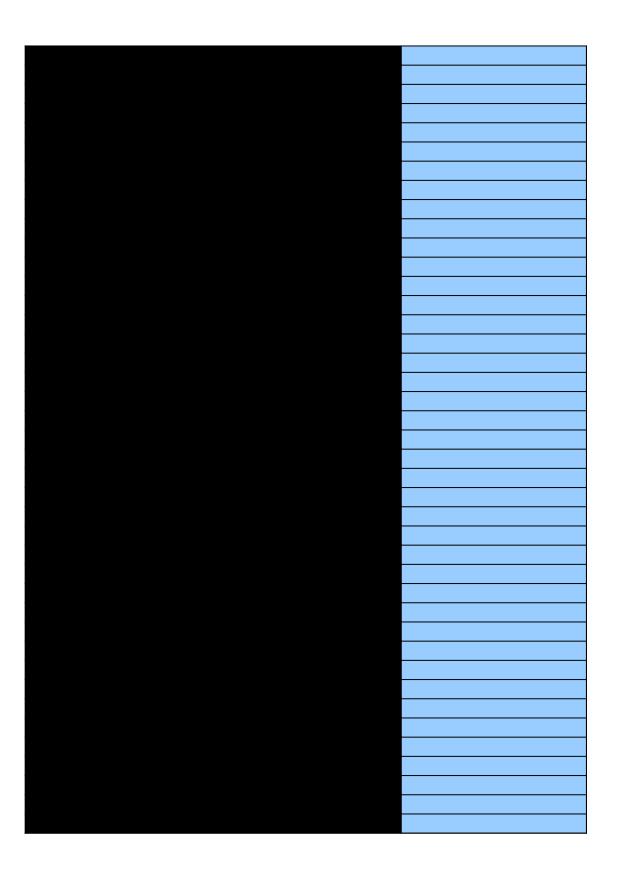
ıme facility. Report all significant figures (including fractions of a





metric ton, if applicable).

Specify f-GHG Category for Purposes of Estimating GWP (if necessary)	Mass transformed at facility (metric tons)
[98.3(c)(5)(ii)]	[98.416(a)(2)]



Mass fed into the transformation process	Was any of the mass that was fed into the transformation process determined using a	Mass determined using the missing data procedure
(metric tons) [98.416(a)(10)]	missing data procedure? [98.416(a)(16)]	(metric tons) [98.416(a)(16)]
[90.410(8)(10)]	[30.410(a)(10)]	[90.410(a)(10)]

Number of hours that a missing data procedure was used to measure the mass fed into the transformation process

[98.416(a)(16)]

[98.416(a)(16)]

[98.416(a)(16)]

[98.416(a)(16)]

[98.416(a)(16)]



Specify the "Other" measurement method used to determine mass (if applicable)

[98.416(a)(16)]



### **Subpart OO - Only for Facilities th**

# Worksheet Instructions: Please identify each F-GHG that was previous facility for destruction and quantities that are re Version: R.04 External Links: Subpart OO Resources Page: Reporting Form Help Content: Optional Calculation Spreadsheet: Workbook Navigation: Part 1- Facility Information Part 2 - Production & Transformation Process Part 2a - Production Process Information Part 2b - Transformation Process Information

### Part 3 - On-Site Destruction Inform

Instructions: Identify each F-GHG that was quantities that are shipped to your facility k contaminated. Report all significant figures

Does your facility destroy F-GHGs? [98.416

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# at Produce F-GHGs and/or ${\rm N_2O}$

	as destroyed at your facility. For example, n but are found to be irretrievably contamin
http://www2.epa.gov/ghgreporting/su	ubpart-oo-suppliers-industrial-greenhouse-
http://www.ccdsupport.com/confluen	ce/display/help/Reporting+Form+Instruction
http://www.ccdsupport.com/confluen	ce/display/help/Optional+Calculation+Spr
	Part 3 - On-Site Destruction Info
<u>Information</u>	Part 4 - Off-Site Transformation
	Part 5 - Off-Site Destruction Info

# nation

previously produced (as defined at 98.410(b), at any facility) and that was by another facility for destruction and quantities that are returned to your s (including fractions of a metric ton, if applicable).

5(a)(3)]	

HG	CASRN	
uced F-GHG that was destroyed at the facili	ity	
" to activate column 'C' for a comprehensive list or select "Other F-GHG r the information required in columns 'F' and 'G')		
[98.416(a)(3)]		

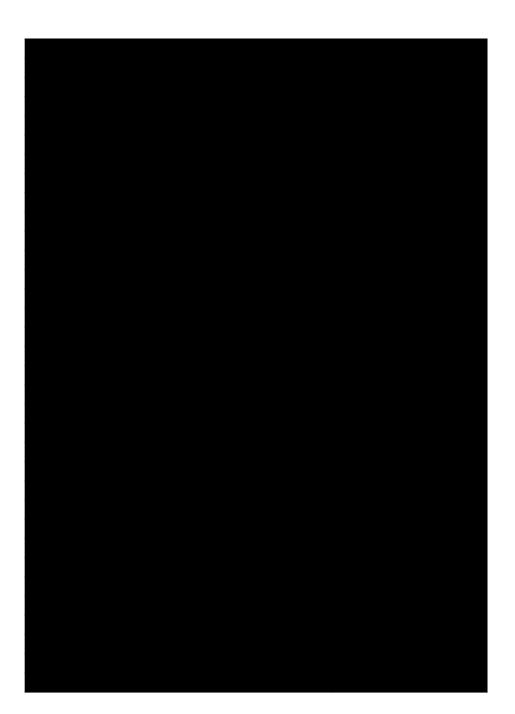
Updated: 01/25/2017
this may include quantities that are shipped to your facility by another nated.
gases
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destroyed at your facility. For example, this may include facility for reclamation but are found to be irretrievably

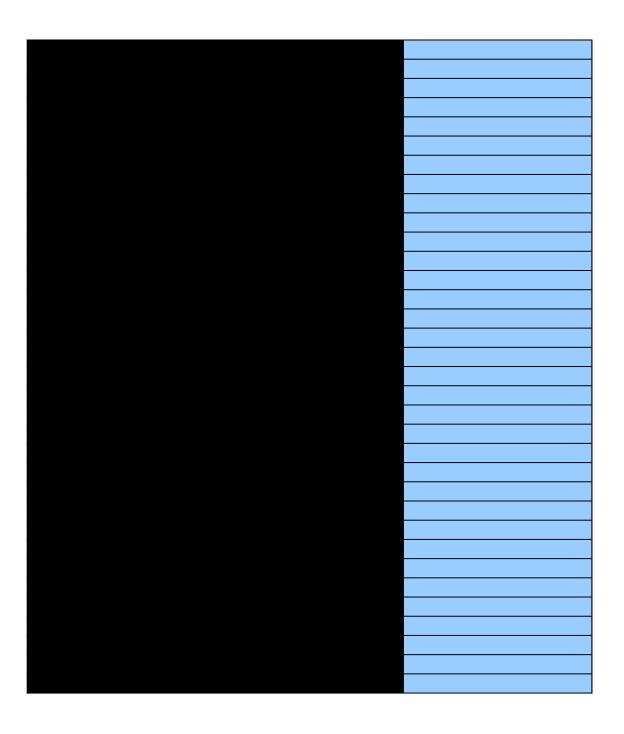
Other F-GHG:

If a F-GHG chemical is not listed, search the Substance Registry system by name and/or Chemical Abstracts Service registry number (CASRN) and enter chemical here. If a F-GHG constituent cannot be found via SRS search, add the F-GHG by entering its name and, if available, CASRN

[98.416(a)(1)]



Specify f-GHG Category for Purposes of Estimating GWP (if necessary)	Mass of the F-GHG destroyed at the facility (metric tons)
[98.3(c)(5)(ii)]	[98.416(a)(3)]



Mass fed into the destruction device (metric tons)	Was the F-GHG mass determined using a missing data procedure? [98.416(a)(16)]	Mass determined using the missing data procedure (metric tons) [ 98.416(a)(16)]

Number of hours that a missing data procedure was used to measure the mass fed into the destruction device

[98.416(a)(16)]

Reason a missing data procedure was used

[98.416(a)(16)]

[98.416(a)(16)]

[98.416(a)(16)]



Specify the "Other" measurement method used to determine mass (if applicable)

[98.416(a)(16)]



# Subpart OO - Only for Facilities that Produce F-GHGs and/or N<sub>2</sub>

Worksheet Instructions:		
Please identify the name and address of the offsite transformation facility to which f-GF sent to each transformation facility in Part 4b.		
Version:		
R.04		
External Links:		
Subpart OO Resources Page:	http://www2.epa.gov/ghgreporting/subpart-oo-s	
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display	
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display	
Workbook Navigation:		
Part 1- Facility Information		
Part 2 - Production & Transformation Process Information		
Part 2a - Production Process Information		
Part 2b - Transformation Process Information		

# **Part 4a - Off-Site Transformation Facility Information**

Instructions: Provide the following information for each facility to which any of tl

	Facility Name	Is the Facility US based?
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Part 4b - Off-Site Transformation Facility Shipment Information Instructions: Provide the following information for  $\rm N_2O$  or each F-GHG produce figures (including fractions of a r

		F-G
		Previously produced F-G
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	Facility Name	(if not listed, select "Search Extended List" not listed" and ente
	[98.416(a)(14)]	
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Updated: 01/25/2	opaatea:	01/25/201	1
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Part 3 - On-Site Destruction Information

Part 4 - Off-Site Transformation Information

Part 5 - Off-Site Destruction Information

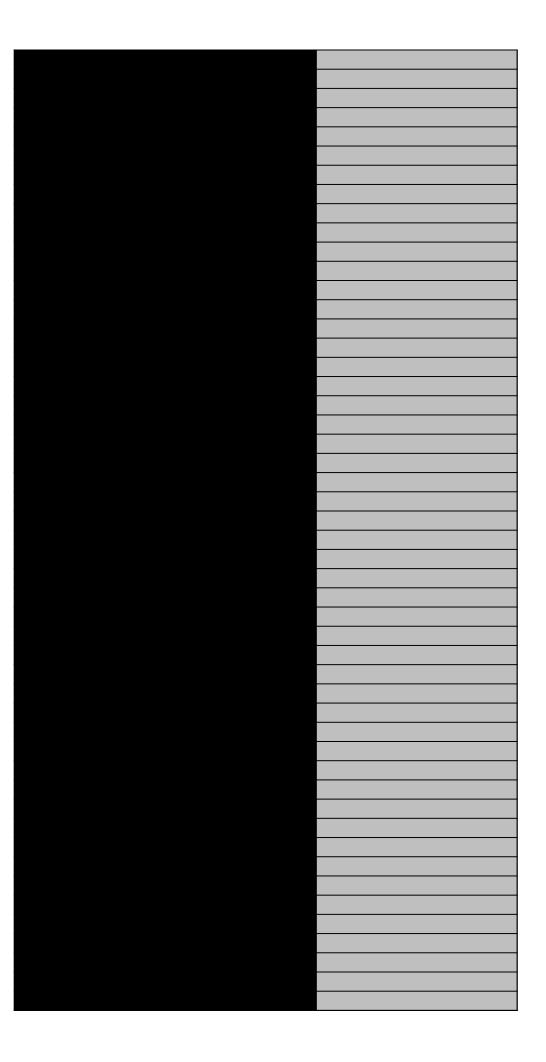
he produced  $\rm N_2O$  or F-GHGs were sent for transformation per 98.416(a)(1

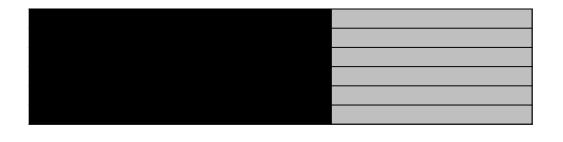
US Street Address	US City

·

d that was sent to the facility for transformation. Report all significant netric ton, if applicable).

HG that was sent to another facility for transformation		
" to activate column 'D' for a comprehensive list or select "Other F-GHG r the information required in columns 'G' and 'H')		





.4):

US State	US 5-Digit Zip Code

Other F-GHG:	CASRN:
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If a F-GHG chemical is not listed, search the Substance Registry system by name and/or Chemical Abstracts Service registry number (CASRN) and enter chemical here. If a F-GHG constituent cannot be found via SRS search, add the F-GHG by entering its name and, if available, CASRN

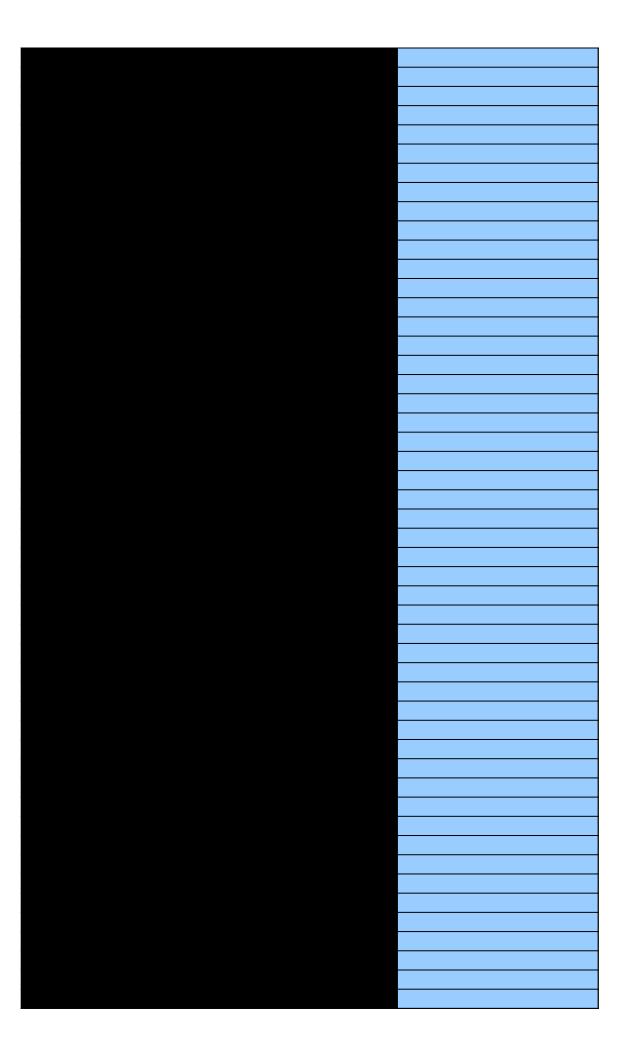
[98.416(a)(1)]



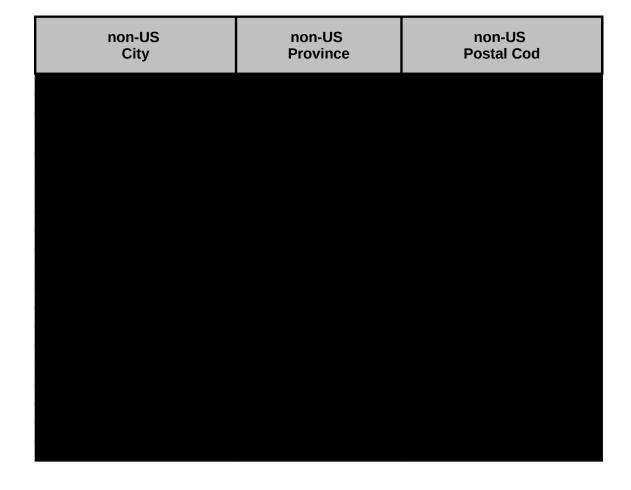


Country	non-US Street Address

Specify f-GHG Category for Purposes of Estimating GWP (if necessary)	Mass of the F-GHG or N <sub>2</sub> O sent to another facility for transformation (metric tons)
[98.3(c)(5)(ii)]	[98.416(a)(14)]

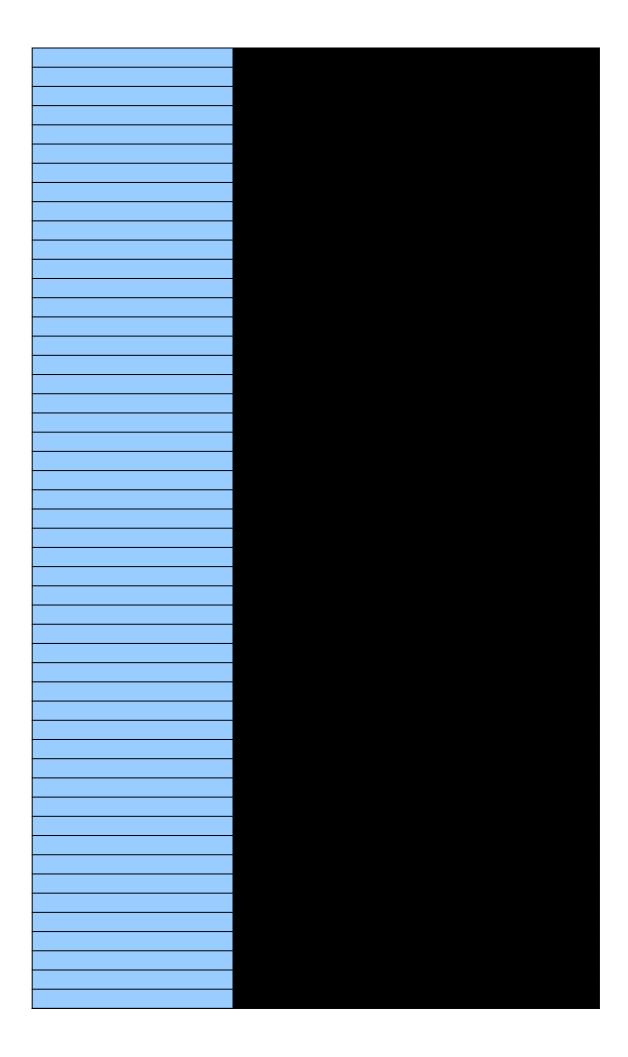




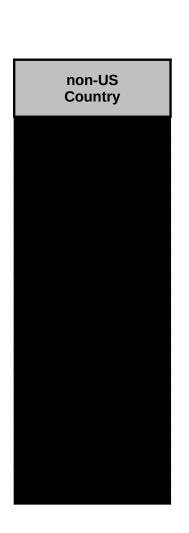


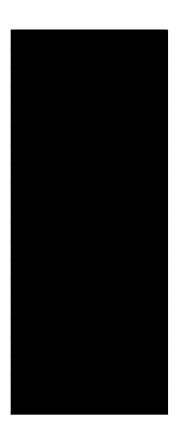


Was the mass determined using a missing data procedure?	Mass determined using the missing data procedure (metric tons)	Number of hours that a missing data procedure was used to measure the mass fed into the transformation device
[98.416(a)(16)]	[98.416(a)(16)]	[98.416(a)(16)]









		Specify the "Other" measurement method
Reason a missing	Method used to	used to determine
data procedure was used	estimate the missing data	mass (if applicable)
useu	uata	(ii applicable)
[98.416(a)(16)]	[98.416(a)(16)]	[98.416(a)(16)]





## Subpart OO - Only for Facilities that Produce F-GHGs and/or N

Worksheet Instructions:		
Please identify the name and address of the offsite destruction facility to which f-		
Version:		
R.04		
External Links:		
Subpart OO Resources Page:	http://www2.epa.gov/ghgreporting/subpart-oo-s	
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display.	
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display	
Part 1- Facility Information		
Part 2 - Production & Transformation Process Information		
Part 2a - Production Process Information		
Part 2b - Transformation Process Information		

## **Part 5a - Off-Site Destruction Facility Information**

Instructions: Provide the following information for each facility to which any F-C

	Facility Name	Is the Facility US based?
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Part 5b - Off-Site Destruction Facility Shipment Information
Instructions: Provide the following information for N<sub>2</sub>O or each F-GHG produced (including fractions of a me

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		F-G
		F-GHG that is sent to another facility
		(if not listed, select "Search Extended Lis
	Facility Name	not listed" and ent
	[00 416(a)(1E)]	
	[98.416(a)(15)]	
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GHG or N20 is sent in Part 5a. Then identify the specific f-GHG or N20 that are

suppliers-industrial-greenhouse-gases

/help/Reporting+Form+Instructions

/help/Optional+Calculation+Spreadsheet+Instructions

## **Workbook Navigation:**

Part 3 - On-Site Destruction Information

Part 4 - Off-Site Transformation Information

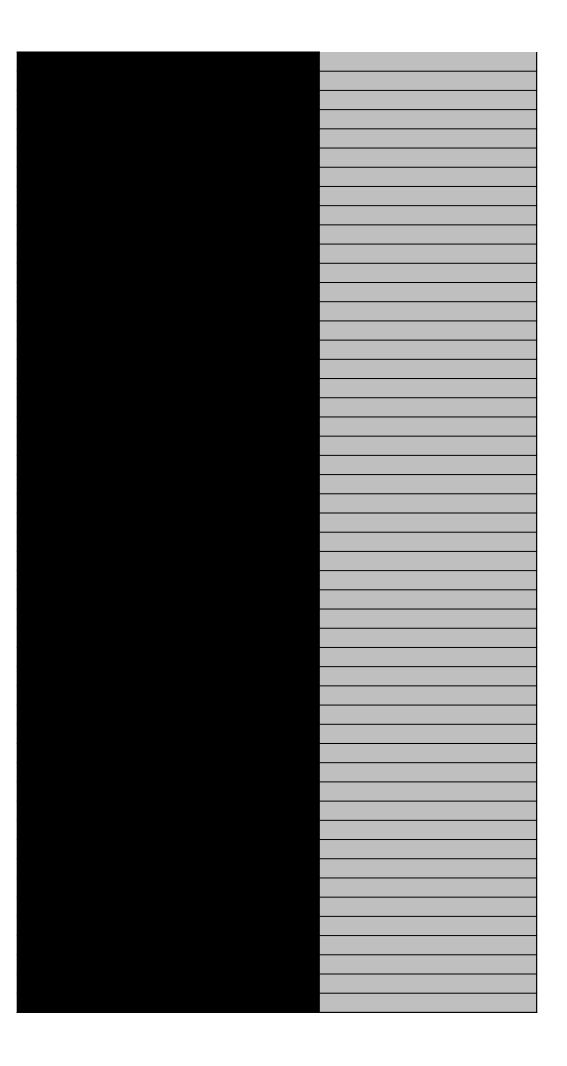
Part 5 - Off-Site Destruction Information

## **3HGs** were sent for destruction per 98.416(a)(15):

US Street Address	US City

d that was sent to the facility for destruction. Report all significant figures stric ton, if applicable).

HG	CASRN	
for destruction, except those removed as by-products or other waste		
er the information required in columns 'G' and 'H')		
[98.416(a)(3)]		





US State	US 5-Digit Zip Code

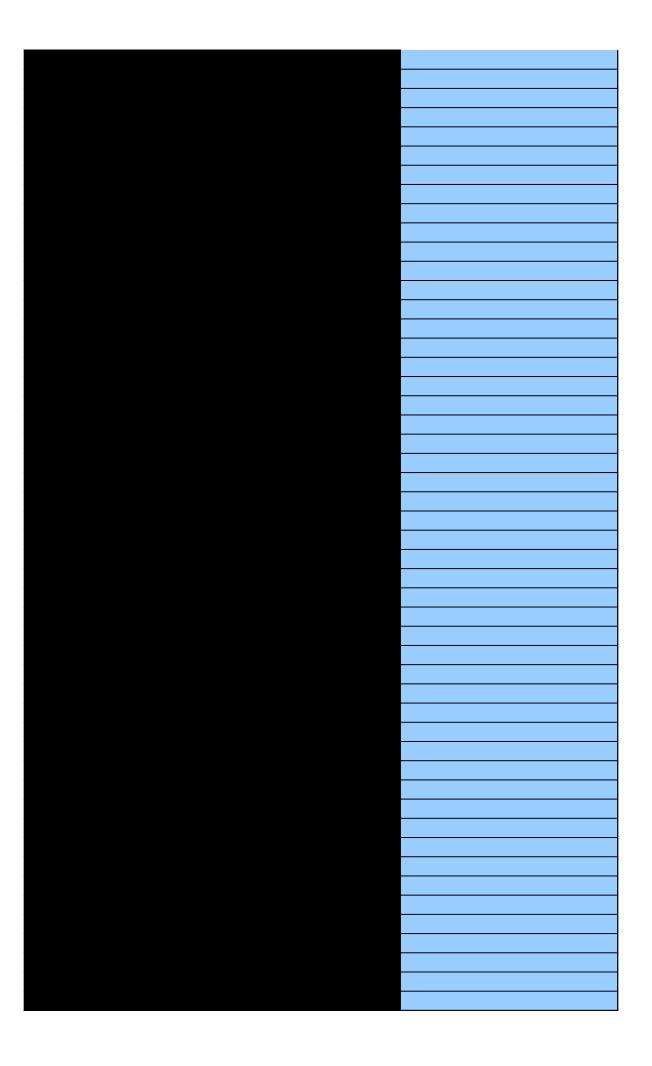
Other F-GHG:	CASRN:
If a F-GHG chemical is not listed, search th	
system by name and/or Chemical Abstra- number (CASRN) and enter chemical here. I	
cannot be found via SRS search, add the F	
name and, if available, CAS	SRN
[98.416(a)(1)]	



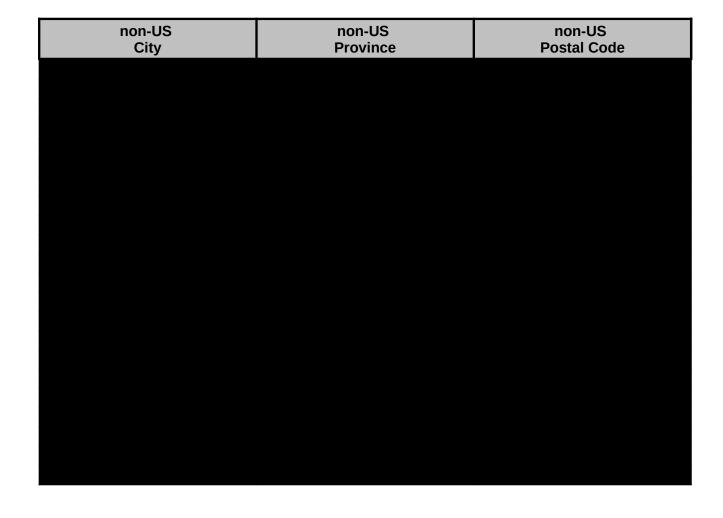


Country	non-US Street Address

Specify f-GHG Category for Purposes of Estimating GWP (if necessary)	Quantity of the F-GHG sent to that facility for destruction, except those removed as byproducts or other waste (metric tons)
[98.3(c)(5)(ii)]	[98.416(a)(15)]

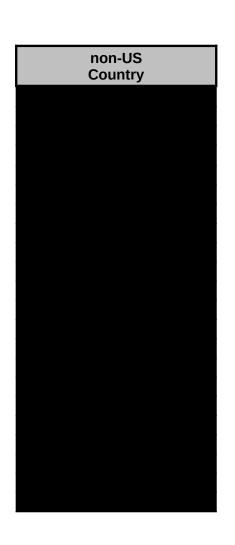






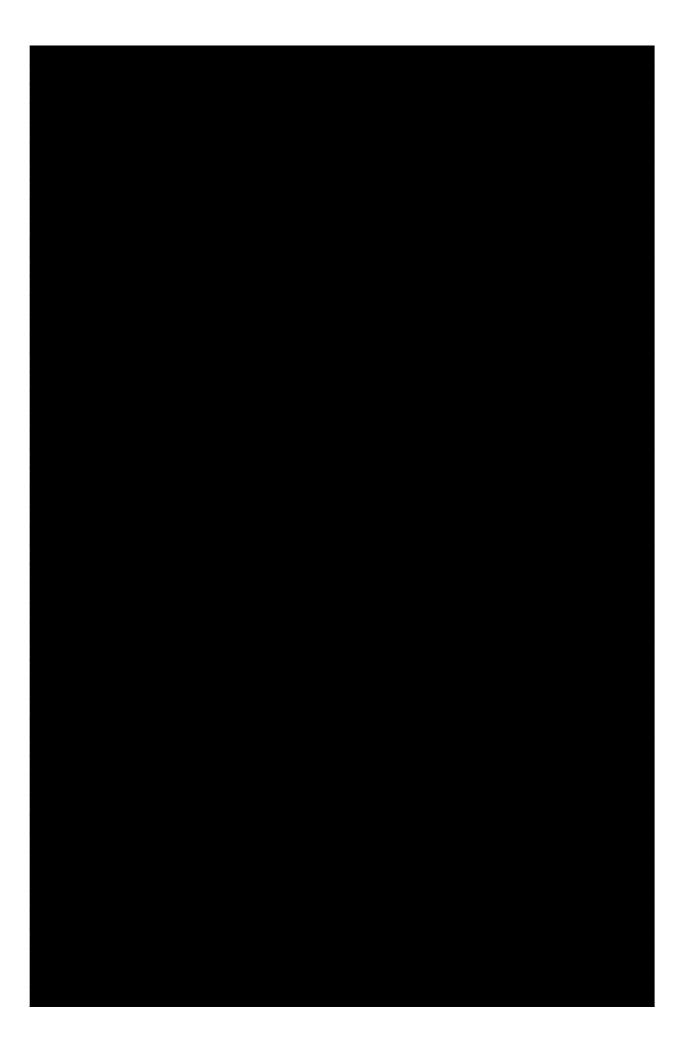


Was the mass determined using a missing data procedure?	Mass determined using the missing data procedure (metric tons) [98.416(a)(16)]
[501120(4)(20)]	[661120(4)(26)]
	Was the mass determined using a missing data procedure?





Number of hours that a missing data procedure was used to measure the mass fed into the destruction device	Reason a missing data procedure was used	Method used to estimate the missing data	Specify the "Other" measurement method used to determine mass (if applicable)
[98.416(a)(16)]	[98.416(a)(16)]	[98.416(a)(16)]	[98.416(a)(16)]





## Listing of f-GHGs for Use in Subpart OO Producers Form

The following f-GHGs are listed only by name in the f-GHG pick lists on the preceding tabs. The f-GHGs below are presented in the same order as in the pick lists. **Use Ctrl+F to search this list by name or CASRN**. Once you have identified the f-GHG please note the f-GHG name used in this Inputs Form and its location within the pick list so that you can more easily locate it in the pick lists.

## **Chemical Name**

**Nitrous Oxide** 

Sulfur hexafluoride

Trifluoromethyl sulphur pentafluoride

Nitrogen trifluoride

PFC-14 (Perfluoromethane)

PFC-116 (Perfluoroethane)

PFC-218 (Perfluoropropane)

Perfluorocyclopropane

PFC-3-1-10 (Perfluorobutane)

Perfluorocyclobutane

PFC-4-1-12 (Perfluoropentane)

PFC-5-1-14 (Perfluorohexane, FC 72)

PFC-6-1-12

PFC-7-1-18

PFC-9-1-18

PFPMIE (HT-70)

Perfluorodecalin (cis)

Perfluorodecalin (trans)

Octafluorotetrahydrofuran

FC-3283/FC-8270 (Perfluorotripropylamine)

FC-3284 (Perfluoromethylmorpholine)

FC-40/FC-43 (Perfluorotributylamine (PTBA))

FC-770 (Perfluoroisopropylmorpholine)

HT-55

HT-90

HT-110

HT-135

HFC-23

HFC-32

HFC-41

HFC-125

HFC-134

HFC-134a

HFC-143

HFC-143a

HFC-152

HFC-152a

HFC-161

HFC-227ca

HFC-227ea

```
HFC-236cb
HFC-236ea
HFC-236fa
HFC-245ca
HFC-245cb
HFC-245ea
HFC-245eb
HFC-245fa
HFC-263fb
HFC-272ca
HFC-329p
HFC-365mfc
HFC-43-10mee
1,1,1,2,2,3,3-Heptafluoro-3-(1,2,2,2-tetrafluoroethoxy)-propane
1,1,2,2-Tetrafluoro-1-(fluoromethoxy)ethane
1,1,2,2-Tetrafluoro-3-methoxy-propane; Methyl 2,2,3,3-tetrafluoropropyl ether
1,1,2-Trifluoro-2-(trifluoromethoxy)-ethane
1,1,3,3,4,4,6,6,7,7,9,9,10,10,12,12,13,13,15,15-eicosafluoro-2,5,8,11,14-Pentaoxapentadecane
1-Ethoxy-1,1,2,2,3,3,3-heptafluoropropane
1-Ethoxy-1,1,2,3,3,3-hexafluoropropane
2-Chloro-1,1,2-trifluoro-1-methoxyethane
2-Ethoxy-3,3,4,4,5-pentafluorotetrahydro-2,5-bis[1,2,2,2-tetrafluoro-1-(trifluoromethyl)ethyl]-furan
Difluoro(fluoromethoxy)methane
Difluoro(methoxy)methane
Fluoro(fluoromethoxy)methane
Fluoro(methoxy)methane
HCFE-235ca2 (Enflurane)
Isoflurane (HCFE-235da2)
HFE-125
HFE-134
HFE-143a
HFE-227ea
HFE-236ca
HFE-236ca12 (HG-10)
Desflurane (HFE-236ea2)
HFE-236fa
HFE-245cb2
HFE-245fa1
HFE-245fa2
HFE-254cb2
HFE-263fb2
HFE-263m1; R-E-143a
HFE-329mcc2
HFE-329me3
HFE-338mcf2
HFE-338mmz1
HFE-338pcc13 (HG-01)
```

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HFE-347mcc3
```

HFE-347mcf2

HFE-347mmy1

Sevoflurane

HFE-347pcf2

HFE-356mec3

HFE-356mff2

HFE-356mmz1

HFE-356pcc3

HFE-356pcf2

HFE-356pcf3

HFE-365mcf2

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HFE-365mcf3

HFE-374pc2

HFE-43-10pccc (H-Galden 1040x)

HFE-449sl, (HFE-7100) Isomer blend

HFE-569sf2, (HFE-7200) Isomer blend

HG'-01

HG'-02

HG-02

HG'-03

HG-03

HG-20

HG-21

HG-30

Trifluoro(fluoromethoxy)methane

HFE-7300 (1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethyl-pentane)

HFE-7500 (3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-trifluoromethyl-hexane)

Trifluoromethyl formate

Perfluoroethyl formate

1,2,2,2-Tetrafluoroethyl formate

Perfluorobutyl formate

Perfluoropropyl formate

1,1,1,3,3,3-Hexafluoropropan-2-yl formate

2,2,2-Trifluoroethyl formate

3,3,3-Trifluoropropyl formate

Methyl 2,2,2-trifluoroacetate

1,1-Difluoroethyl 2,2,2-trifluoroacetate

Difluoromethyl 2,2,2-trifluoroacetate

2,2,2-Trifluoroethyl 2,2,2-trifluoroacetate

Methyl 2,2-difluoroacetate

Perfluoroethyl acetate

Trifluoromethyl acetate

Perfluoropropyl acetate

Perfluorobutyl acetate

Ethyl 2,2,2-trifluoroacetate

Methyl carbonofluoridate

1,1-Difluoroethyl carbonofluoridate

Bis(trifluoromethyl)-methanol

(Octafluorotetramethy-lene)hydroxymethyl group

2,2,3,3,3-pentafluoropropanol

2,2,3,3,4,4,4-Heptafluorobutan-1-ol

2,2,2-Trifluoroethanol

2,2,3,4,4,4-Hexafluoro-1-butanol

2,2,3,3-Tetrafluoro-1-propanol

2,2-Difluoroethanol

2-Fluoroethanol

4,4,4-Trifluorobutan-1-ol

PFC-1114; TFE

PFC-1216; Dyneon HFP

PFC C-1418

Perfluorobut-2-ene

Perfluorobut-1-ene

Perfluorobuta-1,3-diene

HFC-1132a; VF2

HFC-1141; VF

(E)-HFC-1225ye

(Z)-HFC-1225ye

HCFC-1233zd(E)

HFC-1234yf; HFO-1234yf

HFC-1234ze(E)

HFC-1234ze(Z)

HFC-1243zf; TFP

(Z)-HFC-1336

HFC-1345zfc

Capstone 42-U

Capstone 62-U

Capstone 82-U

PMVE; HFE-216

Fluoroxene

3,3,3-Trifluoro-propanal

Novec 649/1230, FK 5-1-12, perfluoro(2-methyl-3-pentanone)

3,3,4,4,5,5,6,6,7,7,7-Undecafluoroheptan-1-ol

3,3,3-Trifluoropropan-1-ol

3,3,4,4,5,5,6,6,7,7,8,8,9,9,9-Pentadecafluorononan-1-ol

3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,11,11,11-Nonadecafluoroundecan-1-ol

Trifluoroiodomethane

Dibromodifluoromethane (Halon 1202)

2-Bromo-2-chloro-1,1,1-trifluoroethane (Halon-2311 / Halothane)

Perfluoroethyl vinyl ether

Galden ZT-85

Galden ZT-130

Galden ZT-150

Perfluorosolve PFS-2

DET

HT-80

D05

Perfluoropropyl vinyl ether

2H-perfluoro(5-methyl-3,6-dioxanonane)

Trifluoromethanesulfonyl fluoride

Carbonic difluoride

Trifluoroacetyl fluoride

Perfluorodiethyl ether

Perfluorobutanesulfonyl fluoride

Perfluoropropionyl fluoride

Perfluorobutyliodide

Hexafluorooxetane

Hexafluoropropylene oxide

Propanoic Acid, 3-[1-[Difluoro [ (Trifluoroethenyl oxy] Methyl]-1,2,2,2-Tetrafluoroethoxy] -2,2,3,3-Tetrafluoro-, Me Pentafluoro(trifluoromethoxy)-ethane

1,1,1,3,3,5,5,7,7,9,9,11,11-tridecafluoro-2,4,6,8,10-pentaoxadodecan-12-oyl fluoride

2,3,3,3-Tetrafluoro-2-(heptafluoropropoxy)propanoyl fluoride

C5F13N

Perfluorocyclohexane

HEPTAFLUOROPROPYL TRIFLUOROMETHYL ETHER

Perfluoro-2-(2-Fluorosulfonylethoxy) Propyl Vinyl Ether

Perfluoro(methylcyclopropane)

Other F-GHG chemical not listed

	Position	Indicators
CASRN	Extended List	Short List
10024-97-2	1 of 205	1 of 35
2551-62-4	2 of 205	2 of 35
373-80-8	3 of 205	
7783-54-2	4 of 205	3 of 35
75-73-0	5 of 205	4 of 35
76-16-4	6 of 205	5 of 35
76-19-7	7 of 205	6 of 35
931-91-9	8 of 205	
355-25-9	9 of 205	
115-25-3	10 of 205	7 of 35
678-26-2	11 of 205	8 of 35
355-42-0	12 of 205	9 of 35
335-57-9	13 of 205	10 of 35
307-34-6	14 of 205	
306-94-5	15 of 205	11 of 35
69991-67-9 (b)	16 of 205	12 of 35
60433-11-6	17 of 205	
60433-12-7	18 of 205	
773-14-8	19 of 205	
338-83-0	20 of 205	
382-28-5	21 of 205	
1064698-37-8	22 of 205	
1093615-61-2	23 of 205	
69991-67-9 (a)	24 of 205	
69991-67-9 (c)	25 of 205	
69991-67-9 (d)	26 of 205	
69991-67-9 (e)	27 of 205	
75-46-7	28 of 205	13 of 35
75-10-5	29 of 205	14 of 35
593-53-3	30 of 205	15 of 35
354-33-6	31 of 205	16 of 35
359-35-3	32 of 205	
811-97-2	33 of 205	17 of 35
430-66-0	34 of 205	
420-46-2	35 of 205	18 of 35
624-72-6	36 of 205	
75-37-6	37 of 205	19 of 35
353-36-6	38 of 205	
2252-84-8	39 of 205	
431-89-0	40 of 205	20 of 35
	<b></b>	======

677-56-5	41 of 205	
431-63-0	42 of 205	
690-39-1	43 of 205	
679-86-7	44 of 205	
1814-88-6	45 of 205	
24270-66-4	46 of 205	
431-31-2	47 of 205	
460-73-1	48 of 205	21 of 35
421-07-8	49 of 205	210105
420-45-1	50 of 205	
375-17-7	51 of 205	
406-58-6	52 of 205	
138495-42-8	53 of 205	
	54 of 205	
37031-31-5	55 of 205	
60598-17-6	56 of 205	
84011-06-3	57 of 205	
173350-38-4	58 of 205	
22052-86-4	59 of 205	
380-34-7	60 of 205	
425-87-6	61 of 205	
920979-28-8	62 of 205	
461-63-2	63 of 205	
359-15-9	64 of 205	
462-51-1	65 of 205	
460-22-0	66 of 205	
13838-16-9	67 of 205	
26675-46-7	68 of 205	22 of 35
3822-68-2	69 of 205	
1691-17-4	70 of 205	
421-14-7	71 of 205	
2356-62-9	72 of 205	
32778-11-3	73 of 205	
78522-47-1	74 of 205	
57041-67-5	75 of 205	23 of 35
20193-67-3	76 of 205	
22410-44-2	77 of 205	
84011-15-4	78 of 205	
1885-48-9	79 of 205	
425-88-7	80 of 205	
460-43-5	81 of 205	
690-22-2	82 of 205	
134769-21-4	83 of 205	
428454-68-6	84 of 205	
156053-88-2	85 of 205	
26103-08-2	86 of 205	
188690-78-0	87 of 205	
100070 70 0	07 01 203	

375-03-1	88 of 205	24 of 35
171182-95-9	89 of 205	
22052-84-2	90 of 205	
28523-86-6	91 of 205	25 of 35
406-78-0	92 of 205	
382-34-3	93 of 205	
333-36-8	94 of 205	
13171-18-1	95 of 205	
160620-20-2	96 of 205	
50807-77-7	97 of 205	
35042-99-0	98 of 205	
22052-81-9	99 of 205	
378-16-5	100 of 205	
512-51-6	101 of 205	
E1730133	102 of 205	
163702-07-6, 163702-08-7	103 of 205	26 of 35
163702-05-4, 163702-06-5	104 of 205	27 of 35
73287-23-7	105 of 205	
485399-46-0	106 of 205	
205367-61-9	107 of 205	
485399-48-2	108 of 205	
173350-37-3	109 of 205	
249932-25-0	110 of 205	
249932-26-1	111 of 205	
188690-77-9	112 of 205	
2261-01-0	113 of 205	
132182-92-4	114 of 205	
297730-93-9	115 of 205	
85358-65-2	116 of 205	
313064-40-3	117 of 205	
481631-19-0	118 of 205	
197218-56-7	119 of 205	
271257-42-2	120 of 205	
856766-70-6	121 of 205	
32042-38-9	122 of 205	
1344118-09-7	123 of 205	
431-47-0	124 of 205	
1344118-13-3	125 of 205	
2024-86-4	126 of 205	
407-38-5	127 of 205	
433-53-4	128 of 205	
343269-97-6	129 of 205	
74123-20-9	130 of 205	
1344118-10-0	131 of 205	
209597-28-4	132 of 205	
383-63-1	133 of 205	
1538-06-3	134 of 205	

1344118-11-1	135 of 205	
920-66-1	136 of 205	
NA	137 of 205	
422-05-9	138 of 205	
375-01-9	139 of 205	
75-89-8	140 of 205	
382-31-0	141 of 205	
76-37-9	142 of 205	
359-13-7	143 of 205	
371-62-0	144 of 205	
461-18-7	145 of 205	
116-14-3	146 of 205	28 of 35
116-15-4	147 of 205	
559-40-0	148 of 205	29 of 35
360-89-4	149 of 205	
357-26-6	150 of 205	
685-63-2	151 of 205	30 of 35
75-38-7	152 of 205	00 01 03
75-02-5	153 of 205	31 of 35
5595-10-8	154 of 205	01 01 03
5528-43-8	155 of 205	
102687-65-0	156 of 205	32 of 35
754-12-1	157 of 205	32 01 33
1645-83-6	158 of 205	33 of 35
29118-25-0	159 of 205	33 01 33
677-21-4	160 of 205	34 of 35
692-49-9	161 of 205	34 01 33
374-27-6	161 of 205 162 of 205	
19430-93-4	162 of 205 163 of 205	
	163 of 203 164 of 205	
25291-17-2 21652-58-4	164 of 205	
		0E af 0E
1187-93-5	166 of 205	35 of 35
406-90-6	167 of 205	
460-40-2	168 of 205	
756-13-8	169 of 205	
185689-57-0	170 of 205	
2240-88-2	171 of 205	
755-02-2	172 of 205	
87017-97-8	173 of 205	
2314-97-8	174 of 205	
75-61-6	175 of 205	
151-67-7	176 of 205	
10493-43-3	177 of 205	
161075-02-01 (a)	178 of 205	
161075-02-01 (b)	179 of 205	
161075-02-01 (c)	180 of 205	
161075-02-1 (q)	181 of 205	

161075-02-1 (r)	182 of 205
161075-02-1 (s)	183 of 205
161075-02-1 (t)	184 of 205
1623-05-8	185 of 205
3330-14-1	186 of 205
335-05-7	187 of 205
353-50-4	188 of 205
354-34-7	189 of 205
358-21-4	190 of 205
375-72-4	191 of 205
422-61-7	192 of 205
423-39-2	193 of 205
425-82-1	194 of 205
428-59-1	195 of 205
63863-43-4	196 of 205
665-16-7	197 of 205
21703-49-1	198 of 205
2062-98-8	199 of 205
678-29-5	200 of 205
355-68-0	201 of 205
59426-77-6	202 of 205
16090-14-5	203 of 205
379-16-8	204 of 205
	205 of 205