Subpart FF - Underground Coal Mines

A printer-friendly version (pdf) (14 pp, 1.84MB) of GHG reporting instructions for this subpart

This page provides an overview of Subpart FF reporting through e-GGRT. More detailed information regarding Subpart FF reporting can be found in the Subpart FF Webinar

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

Click image to expand

Subpart FF Reporting Form

Please see Reporting Form Instructions instructions on downloading the blank reporting form and uploading the completed reporting form.

- Introduction
- Degas Collection
- Well and Shaft
- Ventilation Quarterly
- Degas Quarterly
- Degas Weekly
- Destruction or Offsite
- Destruction or Offsite Quarterly
- Destruction or Offsite Weekly
- Emission Summary
- Inputs Whose Reporting Deadline Was Deferred Until 2013

Some Subpart FF reporters may be required to report under Subpart C (General Stationary Fuel Combustion Sources) and/or Subpart W (Petroleum and Natural Gas Systems). You may use EPA's Applicability Tool to determine the subparts that apply to your facility.

Completed Subpart FF Reporting Form

After you have successfully uploaded your completed Subpart FF reporting form, the page will be updated to reflect the file you have uploaded. During the upload, e-GGRT will generate a validation report which will list potential deficiencies or issues with your reporting form.

Click image to expand

If you attempt to upload a file but your file is not accepted by e-GGRT, it is generally because your files has a fatal flaw or is missing essential data. The reason why the file was not acceptable is displayed as a screen error on the upload page. For an example of a screen error message, see below.

Click image to expand

Click on the Subpart FF: View Validation link to review your validation report. An explanation of the validation report and the process for correcting validation issues prior to submission is presented in Reporting Form Validation.

Once you have addressed the validation issues to the extent you believe necessary, and once you have completed any other applicable subparts, you must generate, review, certify, and submit your annual report as described in How to Submit an Annual Report.

Subpart FF - Introduction

Introduction

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

The introductory block on the Subpart FF reporting form includes:

- Worksheet instructions as follows: It is intended for the user to complete all the sheets in this workbook, as applicable. If certain sheets

are not applicable, for example if a facility has no degasification wells, then the user should not complete those sheets. Calculation support is provided for Equations FF-2, FF-4, FF-6, and FF-7 in this workbook. Calculation support for other equations is not provided because not all equation inputs are collected.

- Version Number
- External links to help content and guidance on EPA's web page and at www.ccdsupport.com
- Workbook navigation links which all you to quick move to each page withing the workbook.

Subpart FF - Underground Coal Mines

1. Introduction

Worksheet Instructions:	
It is intended for the user to complete all the sheets in this workbook, as applicable. If certain sheets are not applicable, for example if a facility has no degasification wells, then the user should not complete those sheets. Calculation support is provided for Equations FF-2, FF-4, FF-6, and FF-7 in this workbook. Calculation support for other equations is not provided because not all equation inputs are collected.	
Version:	
R.02	
External Links:	
Subpart FF Resources Page:	http://www.epa.gov/climatechange/emissions/subpart/ff.html
Reporting Form Help Content:	http://www.ccdsupport.com/confluence/display/help/Reporting+Form+Instructions
Optional Calculation Spreadsheet:	http://www.ccdsupport.com/confluence/display/help/Optional+Calculation+Spreadsheet+Instructions
Workbook Navigation:	
1. Introduction	6. Degas Weekly
2. Degas Collection	7. Destruction or Offsite
3. Well and Shaft	8. Destruction of Offsite Quarterly
4. Ventilation Quarterly	9. Destruction of Offsite Weekly
5. Degas Quarterly	10. Emissions Summary

The general information table includes:

- Facility Name
- GHGRP ID is required. *(the GHGRP ID on the reporting form must match the facility ID in e-GGRT)*
- Reporting Year is required. *(while this defaults to a blank it must a reporting year must be selected and e-GGRT will check to ensure that the reporting year indicated is consistent with the year foe which that form is submitted.)* **Many date validations use the reporting year to establish allowable ranges so the reporting year should be selected before you move to other tabs within the workbook.**
- Comments (optional)

1a.) Fill out the following table with general information about this facility:

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

2011
2012
2013
2014
2015
2016
2017
2018

Table 1b includes:

- Quarter (column not editable)
- Quarterly CO2 emissions from onsite destruction of coal mine gas CH4, where the gas is not a fuel input for energy generation or use (e.g., flaring) (these data are created and edited on Tab 10 and copied to this summary page)
- Quarterly CO2 emissions from onsite destruction of coal mine gas CH4, where the gas is not a fuel input for energy generation or use (e.g., flaring)

1b.) Fill out the following table for facility total emissions by quarter. No data entry required in column B2. Column B2 is autopopulated (according to Eq. FF-7) by the calculations performed on tab "10. Emissions Summary". NOTE: zero ("0") values are only valid in the case of no emissions. If emissions data are missing, missing data procedures must be followed to estimate emissions.

	B1	B2	B3
	Quarter	Quarterly CH_4 emissions (net) from all ventilation and degasification systems (facility total) (MT CH_4, unrounded) [§98.326(d)]	Quarterly CO_2 emissions from onsite destruction of coal mine gas CH_4, where the gas is not a fuel input for energy generation or use (e.g., flaring) (MT CO_2, unrounded) [§98.326(e)]
1	Quarter 1 (Jan-Mar)	0	
2	Quarter 2 (Apr-Jun)	0	
3	Quarter 3 (Jul-Sep)	0	
4	Quarter 4 (Oct-Dec)	0	

Subpart FF - Degas Collection

Degas Collection

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for Degasification Gas Collection Systems. Be sure to enter only unique units names/IDs and to fill out the table from top to bottom without skipping rows. The table below includes space for 50 rows. If more are needed, contact the GHG Help Desk.

- Name for each gas collection system
- Manufacturer
- Capacity
- Unit of Measure for Capacity *select from pick list*
- Number of wells associated with the system
- The surface area of the system
- The operating hours

2.) Fill out the following table for Degasification Gas Collection Systems. Be sure to enter only unique units names/IDs and to fill out the table from top to bottom without skipping rows.

	A1	A2	A3	A4	A5	A6	A7
	Degasification Gas Collection System Unit ID or Name [§98.326(q)]	Manufacturer [§98.326(q)]	Capacity [§98.326(q)]	Unit of Measure for Capacity, scfm or acfm [§98.326(q)]	Number of Wells [§98.326(q)]	Surface Area, m^2 [§98.326(q)]	Annual Operating Hours [§98.326(q)]
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

Subpart FF - Well and Shaft

Well and Shaft

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for wells and shafts. Be sure to enter only unique units names/IDs and to fill out the table from top to bottom without skipping rows. The table below contains space for 400 rows. If more are needed, please contact the GHG Help Desk.

- Well and Shaft ID or Name
- Identify each well and shaft *select from the pick list*
- Degasification Gas Collection System Unit ID or Name *Note: If a well or shaft is not associated with gas collection system, select "Not Applicable (well/shaft not associated with gas collection system)" from the pick list*
    - If a well, Description of the well or shaft *select from the pick list*
        - If 'Other specify' selected provide Additional information for description
- Indicate whether the well or shaft is monitored individually, or as part of centralized monitoring point
    - If 'monitored as part of a centralized monitoring point', identify the Centralized monitoring point

Click image to expand

3.) Fill out the following table for wells and shafts. Be sure to enter only unique units names/IDs and to fill out the table from top to bottom without skipping rows. The table below contains space for 400 rows. If more are needed, please contact the GHG Help Desk.

	A1	A2	A3	A4	A5	A6	A7
	Well and Shaft ID or Name [§98.326(r)]	Identify if this is a well or a shaft [§98.326(r)]	Degasification Gas Collection System Unit ID or Name *NOTE: If a well is not associated with a degasification gas collection system, select "Not Applicable (well not associated with degasification gas collection system)" from the pick list* [§98.326(q)]	Description [§98.326(r)]	Additional Information for Description [§98.326(r)]	Indicate whether the well or shaft is monitored individually, or as part of a centralized monitoring point [§98.326(r)]	Identify the Centralized Monitoring Point [§98.326(s)]
1	Well 1	Well	FF System Unit 1	surface gob drainage well		monitored individually	
2	Well 2	Well	FF System Unit 1	in-mine gob drainage well or system		monitored individually	
3	Well 3	Well	FF System Unit 2	in-mine cross-measure borehole well or s		monitored as part of a centraliz	Point A
4	Well 4	Well	FF System Unit 1	in-mine cross-measure borehole well or s		monitored individually	
5	Shaft 1	Shaft		exhaust vent shaft		monitored individually	
6	Shaft 2	Shaft		intake air shaft		monitored as part of a centraliz	Point A
7	Shaft 3	Shaft		Bleeder shaft		monitored individually	
8	Well 5	Well	FF System Unit 3	in-mine pre-mine drainage well or system		monitored as part of a centraliz	Point B
9	Well 6	Well	FF System Unit 1	surface gob drainage well		monitored as part of a centraliz	Point C
10	Shaft4	Shaft		Other (specify)	emergency intake shaft	monitored as part of a centraliz	Point A

Subpart FF - Ventilation Quarterly

Ventilation Quarterly

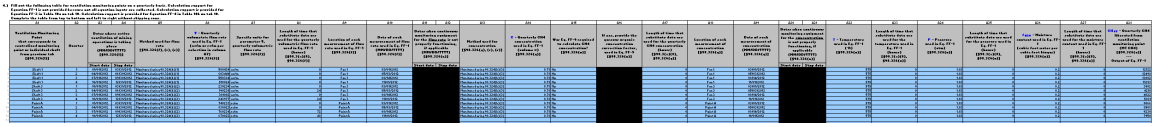
Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the table for ventilation monitoring points on a quarterly basis; fill out four rows (quarters) for each monitoring point. Calculation support for Equation FF-1 is not provided because not all equation inputs are collected. Calculation support is provided for Equation FF-2 in Table 10a on tab 10. Calculation support is provided for Equation FF-4 in Table 10b on tab 10.

The table below includes space for 600 rows. If more are needed, contact the GHG Help Desk.

Complete the table from top to bottom and left to right without skipping rows. The pick list in the first column links to a previous sheet, to restrict entry to previously entered ventilation monitoring points.

For perspective the entire table width, 26 columns, is presented below. Enlarged views of this table presented below the perspective view.



The following example shows the first 8 columns:

- Ventilation Monitoring Point that corresponds to centralized monitoring point or individual shaft from previous tab *select from the pick list*
- Quarter *select from the pick list*
- Dates where active ventilation of mining operations is taking place (start date and stop date). If there was continuous venting during the quarter, insert the first date of the quarter in the column labeled "Start date" and insert the last date of the quarter in the column labeled "Stop date". If there were interruptions, include as many rows as needed for the ventilation monitoring point/quarter combination.
- Method used for flow rate *select from the pick list*
- Quarterly volumetric flow rate used in Eq. FF-1
- units for parameter V, quarterly volumetric flow rate *select from the pick list*
- Length of time that substitute data are used for the quarterly volumetric flow rate used in Eq. FF-1

Click image to expand

A1	A2	A3	A4	A5	A6	A7	A8
Ventilation Monitoring Point that corresponds to centralized monitoring point or individual shaft from previous tab [§98.326(l)]	Quarter	Dates where active ventilation of mining operations is taking place (MM/DD/YYYY) [§98.326(l)]		Method used for flow rate [§98.326(f), (r), (s)]	V - Quarterly volumetric flow rate used in Eq. FF-1 (acfm or scfm per selection in column A7) [§98.326(f)]	Specify units for parameter V, quarterly volumetric flow rate [§98.326(f)]	Length of time that substitute data are used for the quarterly volumetric flow rate used in Eq. FF-1 (hours) [§98.3(c)(8), §98.326(f)]
		Start date	Stop date				
Shaft 1	1	01/01/2012	03/31/2012	Monitored using 98.324(b)(1)	500434	acfm	0
Shaft 1	2	04/01/2012	06/30/2012	Monitored using 98.324(b)(1)	603444	acfm	0
Shaft 1	3	07/01/2012	09/30/2012	Monitored using 98.324(b)(1)	550384	acfm	0
Shaft 1	4	10/01/2012	12/31/2012	Monitored using 98.324(b)(1)	510024	acfm	0
Shaft 3	1	01/01/2012	03/31/2012	Monitored using 98.324(b)(2)	239234	acfm	0
Shaft 3	2	04/01/2012	06/30/2012	Monitored using 98.324(b)(2)	190234	acfm	24
Shaft 3	3	07/01/2012	09/30/2012	Monitored using 98.324(b)(2)	301002	acfm	0
Shaft 3	4	10/01/2012	12/31/2012	Monitored using 98.324(b)(2)	248977	acfm	24
Point A	1	01/01/2012	03/31/2012	Monitored using 98.324(b)(2)	740233	scfm	0
Point A	2	04/01/2012	06/30/2012	Monitored using 98.324(b)(2)	830023	scfm	0
Point A	3	07/01/2012	09/30/2012	Monitored using 98.324(b)(2)	760234	scfm	72
Point A	4	10/01/2012	12/31/2012	Monitored using 98.324(b)(2)	670023	scfm	48

The next example shows the next 8 columns:

- Location of each measurement of flow rate used in Eq. FF-1
- Date of each measurement of flow rate used in Eq. FF-1. For CEMS measurements, only include the first date of the quarter.
    - If Method 3 is selected provide the dates when continuous monitoring equipment for the flow rate is not properly functioning, if applicable (start date and stop date). Insert the first date of the episode in the column labeled "Start date" and insert the last date of the episode in the column labeled "Stop date"; include as many rows as needed for the quarter. If CEMS was not used during the quarter, or if CEMS was functioning properly during the quarter, do not enter any information in these columns.
- Method used for concentration *select from the pick list*
- Quarterly CH4 concentration used in Eq. FF-1
- Was Eq. FF-9 required to calculate CH4 concentration *select from the pick list*
    - If yes, provide the gaseous organic concentration correction factor, used in Eq. FF-9

Click image to expand

A9	A10	A11	A12	A13	A14	A15	A16
Location of each measurement of flow rate used in Eq. FF-1 [§98.326(f)]	Date of each measurement of flow rate used in Eq. FF-1 (MM/DD/YYYY) [§98.326(f)]	Dates when continuous monitoring equipment for the flow rate is not properly functioning, if applicable (MM/DD/YYYY) [§98.326(n)]		Method used for concentration [§98.326(g), (r), (s)]	C - Quarterly CH4 concentration used in Eq. FF-1 (volume %) [§98.326(g)]	Was Eq. FF-9 required to calculate CH4 concentration? [§98.326(o)]	If yes, provide the gaseous organic concentration correction factor, used in Eq. FF-9 [§98.326(o)]
		Start date	Stop date				
Fan 1	03/01/2012	[redacted]		Monitored using 98.324(b)(3)	0.78	No	[redacted]
Fan 1	05/03/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 1	08/14/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 1	11/01/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 3	03/01/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 3	05/03/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 3	08/14/2012			Monitored using 98.324(b)(3)	0.78	No	
Fan 3	11/01/2012			Monitored using 98.324(b)(3)	0.78	No	
Point A	03/01/2012			Monitored using 98.324(b)(3)	0.78	No	
Point A	05/03/2012			Monitored using 98.324(b)(3)	0.78	No	
Point A	08/14/2012			Monitored using 98.324(b)(3)	0.78	No	
Point A	11/01/2012			Monitored using 98.324(b)(3)	0.78	No	

The next example shows the next 6 columns:

- Length of time that substitute data are used for the quarterly CH4 concentration
- Location of each measurement of concentration
- Date of each measurement of concentration
    - If Method 3 is selected provide the dates when continuous monitoring equipment for the concentration is not properly functioning, if applicable (start date and stop date). Insert the first date of the episode in the column labeled "Start date" and insert the last date of the episode in the column labeled "Stop date"; include as many rows as needed for the quarter. If CEMS was not used during the quarter, or if CEMS was functioning properly during the quarter, do not enter any information in these columns.
- Temperature used in Eq. FF-1

Click image to expand

A17	A18	A19	A20	A21	A22
Length of time that substitute data are used for the quarterly CH4 concentration (hours) [§98.3(c)(8), §98.326(g)]	Location of each measurement of concentration [§98.326(g)]	Date of each measurement of concentration (MM/DD/YYYY) [§98.326(g)]	Dates when continuous monitoring equipment for the concentration is not properly functioning, if applicable (MM/DD/YYYY) [§98.326(n)]		T - Temperature used in Eq. FF-1 (°R) [§98.326(o)]
			Start date	Stop date	
0	Fan 1	03/01/2012	[redacted]		575
0	Fan 1	05/03/2012			575
0	Fan 1	08/14/2012			575
0	Fan 1	11/01/2012			575
0	Fan 3	03/01/2012			575
0	Fan 3	05/03/2012			575
0	Fan 3	08/14/2012			575
0	Fan 3	11/01/2012			575
0	Point A	03/01/2012			575
0	Point A	05/03/2012			575
0	Point A	08/14/2012			575
0	Point A	11/01/2012			575

The final example shows the last 6 columns:

- Length of time that substitute data are used for the temperature used in Eq. FF-1
- Pressure used in Eq. FF-1
- Length of time that substitute data are used for the pressure used in Eq. FF-1
- Moisture content used in Eq. FF-1
- Length of time that substitute data are used for the moisture content used in Eq. FF-1
- Quarterly CH4 liberated from ventilation monitoring point

Click image to expand

A23	A24	A25	A26	A27	A28
Length of time that substitute data are used for the temperature used in Eq. FF-1 (hours) [§98.3(c)(8), §98.326(o)]	P - Pressure used in Eq. FF-1 (atm) [§98.326(o)]	Length of time that substitute data are used for the pressure used in Eq. FF-1 (hours) [§98.3(c)(8), §98.326(o)]	f_{H2O} - Moisture content used in Eq. FF-1 (cubic feet water per cubic feet biogas) [§98.326(o)]	Length of time that substitute data are used for the moisture content used in Eq. FF-1 (hours) [§98.3(c)(8), §98.326(o)]	CH_{4V} - Quarterly CH4 liberated from ventilation monitoring point (MT CH4) [§98.326(a)] --- Output of Eq. FF-1
0	1.03	0	0.2	0	12122
0	1.03	0	0.2	0	12498
0	1.03	0	0.2	0	13002
0	1.03	0	0.2	0	11293
0	1.03	0	0.2	0	3902
0	1.03	0	0.2	0	4210
0	1.03	0	0.2	0	4022
0	1.03	0	0.2	0	5031
0	1.03	0	0.2	0	9066
0	1.03	0	0.2	0	8508
0	1.03	0	0.2	0	9230
0	1.03	0	0.2	0	7950

Subpart FF - Degas Quarterly

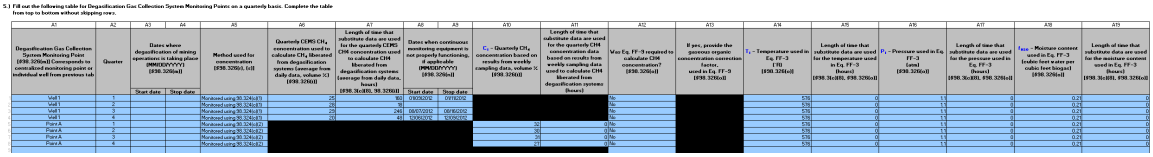
Degas Quarterly

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for Degasification Gas Collection System Monitoring Points on a quarterly basis. Complete the table from top to bottom without skipping rows. Complete four rows (quarters) for each monitoring point. The table below includes space for 160 rows. If more are needed, contact the GHG Help Desk.

The pick list in the first column links to a previous sheet, to restrict entry to previously entered well or monitoring points.

For perspective the entire table width, 19 columns, is presented below. Enlarged views of this table presented below the perspective view.



The following example shows the first 9 columns:

- Degasification Gas Collection System Monitoring Point - Corresponds to centralized monitoring point or individual well from previous tab *select from the pick list*
- Quarter *select from the pick list*
- Dates where degasification of mining operations is taking place (start date and stop date). If there was continuous degasification during the quarter, insert the first date of the quarter in the column labeled "Start date" and insert the last date of the quarter in the column labeled "Stop date". If there were interruptions, include as many rows as needed for the well monitoring point/ quarter combination.
- Method used for concentration *select from the pick list*
  - If Method 1 is selected provide the quarterly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems
  - If Method 1 is selected provide the length of time that substitute data are used for the quarterly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems
  - If Method 1 is selected provide the dates when continuous monitoring equipment is not properly functioning, if applicable (start date and stop date). Insert the first date of the episode in the column labeled "Start date" and insert the last date of the episode in the column labeled "Stop date"; include as many rows as needed for the quarter. If CEMS was not used during the quarter, or if CEMS was functioning properly during the quarter, do not enter any information in these columns.

Click image to expand

A1	A2	A3	A4	A5	A6	A7	A8	A9
Degasification Gas Collection System Monitoring Point [§98.326(m)] Corresponds to centralized monitoring point or individual well from previous tab	Quarter	Dates where degasification of mining operations is taking place (MM/DD/YYYY) [§98.326(m)]		Method used for concentration [§98.326(r), (s)]	Quarterly CEMS CH_4 concentration used to calculate CH_4 liberated from degasification systems (average from daily data, volume %) [§98.326(i)]	Length of time that substitute data are used for the quarterly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems (average from daily data, hours) [§98.3(c)(8), 98.326(i)]	Dates when continuous monitoring equipment is not properly functioning, if applicable (MM/DD/YYYY) [§98.326(n)]	
		Start date	Stop date				Start date	Stop date
Well 1	1			Monitored using 98.324(e)(1)	25	160	01/03/2012	01/11/2012
Well 1	2			Monitored using 98.324(e)(1)	28	18		
Well 1	3			Monitored using 98.324(e)(1)	29	246	08/07/2012	08/16/2012
Well 1	4			Monitored using 98.324(e)(1)	20	48	12/06/2012	12/09/2012
Point A	1			Monitored using 98.324(e)(2)				
Point A	2			Monitored using 98.324(e)(2)				
Point A	3			Monitored using 98.324(e)(2)				
Point A	4			Monitored using 98.324(e)(2)				

The next example shows the next 6 columns:

- If Method 2 is selected provide the quarterly CH4 concentration based on results from weekly sampling data
- If Method 2 is selected provide the length of time that substitute data are used for the quarterly CH4 concentration data based on results from weekly sampling data used to calculate CH4 liberated from degasification systems
- Was Eq. FF-9 required to calculate CH4 concentration? *select from the pick list*
    - If yes, provide the gaseous organic concentration correction factor, used in Eq. FF-9 *select from the pick list*
- Temperature used in Eq. FF-3
- Length of time that substitute data are used for the temperature used in Eq. FF-3

Click image to expand

A10	A11	A12	A13	A14	A15
C_I – Quarterly CH_4 concentration based on results from weekly sampling data, volume % [§98.326(i)]	Length of time that substitute data are used for the quarterly CH4 concentration data based on results from weekly sampling data used to calculate CH4 liberated from degasification systems (hours)	Was Eq. FF-9 required to calculate CH4 concentration? [§98.326(o)]	If yes, provide the gaseous organic concentration correction factor, used in Eq. FF-9 [§98.326(o)]	T_I – Temperature used in Eq. FF-3 (°R) [§98.326(o)]	Length of time that substitute data are used for the temperature used in Eq. FF-3 (hours) [§98.3(c)(8), §98.326(o)]
		No		576	0
		No		576	0
		No		576	0
		No		576	0
32	0	No		576	0
30	0	No		576	0
31	0	No		576	0
27	0	No		576	0

The final example shows the last 4 columns:

- Pressure used in Eq. FF-3
- Length of time that substitute data are used for the pressure used in Eq. FF-3
- Moisture content used in Eq. FF-3
- Length of time that substitute data are used for the moisture content used in Eq. FF-3

Click image to expand

A16	A17	A18	A19
P_I – Pressure used in Eq. FF-3 (atm) [§98.326(o)]	Length of time that substitute data are used for the pressure used in Eq. FF-3 (hours) [§98.3(c)(8), §98.326(o)]	f_{H2O} – Moisture content used in Eq. FF-3 (cubic feet water per cubic feet biogas) [§98.326(o)]	Length of time that substitute data are used for the moisture content used in Eq. FF-3 (hours) [§98.3(c)(8), §98.326(o)]
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0
1.1	0	0.21	0

Subpart FF - Degas Weekly

Degas Weekly

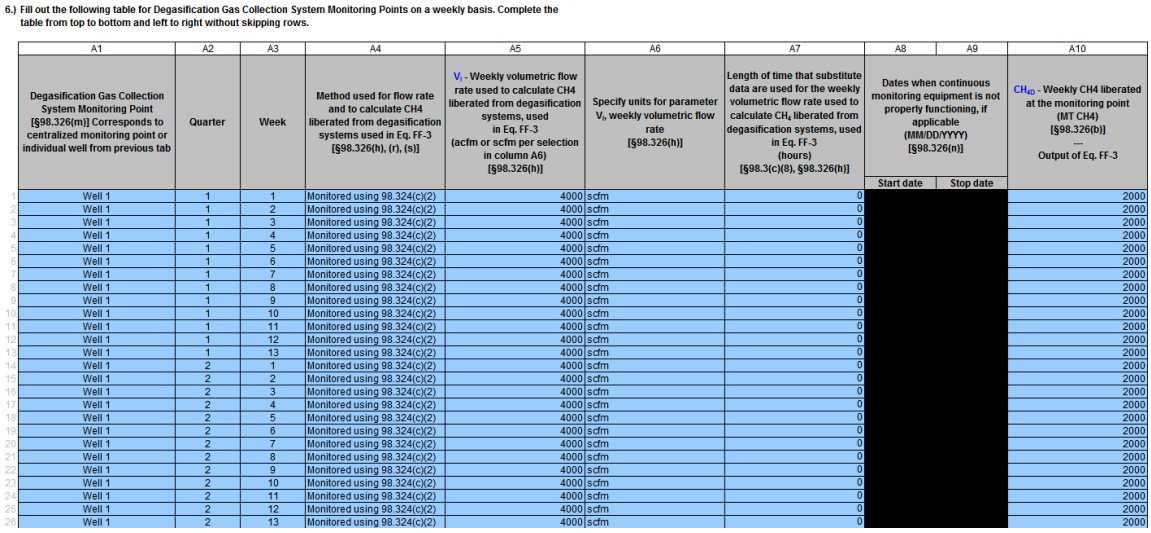
Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for Degasification Gas Collection System Monitoring Points on a weekly basis. Complete the table from top to bottom and left to right without skipping rows. The pick list in the first column of each table below links to a previous sheet, to restrict entry to previously entered well or monitoring points.

Information is reported on a weekly basis. The user will fill out four rows (quarters) for each monitoring point and multiple weeks for each quarter (e.g., 14 weeks per quarter may include partial weeks at the start or end of the quarter). Table 6 below includes space for 2080 rows. If more are needed, contact the GHG Help Desk

- Degasification Gas Collection System Monitoring Point - Corresponds to centralized monitoring point or individual well from previous tab
- Quarter in which the monitoring occurred
- Week in which the monitoring occurred
- Method used for flow rate and to calculate CH4 liberated from degasification systems used in Eq. FF-3 *select from the picklist*
- Weekly volumetric flow rate used to calculate CH4 liberated from degasification systems, used in Eq. FF-3
- Specify units for weekly volumetric flow rate *select from the picklist*
- Length of time that substitute data are used for the weekly volumetric flow rate used to calculate CH4 liberated from degasification systems, used in Eq. FF-3
- Dates when continuous monitoring equipment is not properly functioning, if applicable (start date and stop date). Insert the first date of the episode in the column labeled "Start date" and insert the last date of the episode in the column labeled "Stop date"; include as many rows as needed for the quarter and week. If CEMS was not used during the week, or if CEMS was functioning properly during the week, do not enter any information in columns A8 and A9.
- Weekly CH4 liberated at the monitoring point

Click image to expand



6.) Fill out the following table for Degasification Gas Collection System Monitoring Points on a weekly basis. Complete the table from top to bottom and left to right without skipping rows.

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
	Degasification Gas Collection System Monitoring Point [§98.326(m)] Corresponds to centralized monitoring point or individual well from previous tab	Quarter	Week	Method used for flow rate and to calculate CH4 liberated from degasification systems used in Eq. FF-3 [§98.326(h), (r), (s)]	V_l - Weekly volumetric flow rate used to calculate CH4 liberated from degasification systems, used in Eq. FF-3 (acfm or scfm per selection in column A6) [§98.326(h)]	Specify units for parameter V_l, weekly volumetric flow rate [§98.326(h)]	Length of time that substitute data are used for the weekly volumetric flow rate used to calculate CH_4 liberated from degasification systems, used in Eq. FF-3 (hours) [§98.3(c)(8), §98.326(h)]	Dates when continuous monitoring equipment is not properly functioning, if applicable (MM/DD/YYYY) [§98.326(n)]		CH_{4D} - Weekly CH4 liberated at the monitoring point (MT CH4) [§98.326(b)] --- Output of Eq. FF-3
								Start date	Stop date	
1	Well 1	1	1	Monitored using 98.324(c)(2)	4000	scfm	0			2000
2	Well 1	1	2	Monitored using 98.324(c)(2)	4000	scfm	0			2000
3	Well 1	1	3	Monitored using 98.324(c)(2)	4000	scfm	0			2000
4	Well 1	1	4	Monitored using 98.324(c)(2)	4000	scfm	0			2000
5	Well 1	1	5	Monitored using 98.324(c)(2)	4000	scfm	0			2000
6	Well 1	1	6	Monitored using 98.324(c)(2)	4000	scfm	0			2000
7	Well 1	1	7	Monitored using 98.324(c)(2)	4000	scfm	0			2000
8	Well 1	1	8	Monitored using 98.324(c)(2)	4000	scfm	0			2000
9	Well 1	1	9	Monitored using 98.324(c)(2)	4000	scfm	0			2000
10	Well 1	1	10	Monitored using 98.324(c)(2)	4000	scfm	0			2000
11	Well 1	1	11	Monitored using 98.324(c)(2)	4000	scfm	0			2000
12	Well 1	1	12	Monitored using 98.324(c)(2)	4000	scfm	0			2000
13	Well 1	1	13	Monitored using 98.324(c)(2)	4000	scfm	0			2000
14	Well 1	2	1	Monitored using 98.324(c)(2)	4000	scfm	0			2000
15	Well 1	2	2	Monitored using 98.324(c)(2)	4000	scfm	0			2000
16	Well 1	2	3	Monitored using 98.324(c)(2)	4000	scfm	0			2000
17	Well 1	2	4	Monitored using 98.324(c)(2)	4000	scfm	0			2000
18	Well 1	2	5	Monitored using 98.324(c)(2)	4000	scfm	0			2000
19	Well 1	2	6	Monitored using 98.324(c)(2)	4000	scfm	0			2000
20	Well 1	2	7	Monitored using 98.324(c)(2)	4000	scfm	0			2000
21	Well 1	2	8	Monitored using 98.324(c)(2)	4000	scfm	0			2000
22	Well 1	2	9	Monitored using 98.324(c)(2)	4000	scfm	0			2000
23	Well 1	2	10	Monitored using 98.324(c)(2)	4000	scfm	0			2000
24	Well 1	2	11	Monitored using 98.324(c)(2)	4000	scfm	0			2000
25	Well 1	2	12	Monitored using 98.324(c)(2)	4000	scfm	0			2000
26	Well 1	2	13	Monitored using 98.324(c)(2)	4000	scfm	0			2000

Subpart FF - Destruction or Offsite

Destruction or Offsite

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

This worksheet requires data related to methane destroyed onsite, or how much is transported offsite. Data is required for each ventilation and degasification system destruction device at your facility, or point of offsite transport. Fill out the destruction or offsite table for ventilation and degasification system destruction devices or points of offsite transport. For each destruction device or point of offsite transport, use columns A13 through A22 to identify which individual wells, shafts, and centralized monitoring points are associated with the offsite transport or destruction device.

Space is provided for up to 10 wells, shafts, and centralized monitoring points per destruction device or point of offsite transport. If more space is needed, contact the Help Desk. Complete the table from top to bottom and left to right without skipping rows.

The pick list in the first column links to a previous sheet, to restrict entry to previously entered well or monitoring points.

For perspective the entire table width, 22 columns, is presented below. Enlarged views of this table presented below the perspective view.

The following example shows the first 5 columns:

- Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name *select from the pick list*
- Is gas destroyed at the mine or transported offsite? *select from the pick list*
- Description of the Device *select from the pick list*
  - If other (specify) provide additional information for description
- Indicate if a back-up destruction device (or devices) is present at the mine *select from the pick list*

Click image to expand

A1	A2	A3	A4	A5	A6	A7
Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name [§98.326(p)]	**Is gas destroyed at the mine or transported offsite? [§98.326(p)]**	**Description of the Device [§98.326(p)]**	**Additional Information for Description [§98.326(p)]**	**Indicate if a back-up destruction device (or devices) is present at the mine [§98.326(p)]**	**Annual operating hours of primary destruction device (hours) [§98.326(p)]**	**DE - Destruction efficiency assumed for primary destruction device and used in Eq. FF-5 (%) [§98.326(p)]**
Main Generator	Destruction occurs at the coal mine	Engine		Yes	5800	97
Remote Well CoGen Line	Gas is transported off-site					

The next view shows the next 5 columns:

- Annual operating hours of primary destruction device
- Destruction efficiency assumed for primary destruction device and used in Eq. FF-5
- Annual operating hours of back-up destruction device Number 2
- Destruction efficiency assumed for back-up destruction device Number 2 and used in Eq. FF-5
- If gas is transported offsite, is the gas destroyed offsite? *select from the pick list*

Click image to expand

A8	A9	A10	A11	A12
Annual operating hours of back-up destruction device Number 1 [§98.326(p)]	**DE - Destruction efficiency assumed for back-up destruction device Number 1 and used in Eq. FF-5 (%) [§98.326(p)]**	**Annual operating hours of back-up destruction device Number 2 [§98.326(p)]**	**DE - Destruction efficiency assumed for back-up destruction device Number 2 and used in Eq. FF-5 (%) [§98.326(p)]**	**If gas is transported offsite, is the gas destroyed offsite? [§98.326(p)]**
75	90			
				Yes, gas is destroyed offsite

The last 10 columns allow the user to associate up to 10 wells, shafts or centralized monitoring points with the destruction device on that row:

- Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (1 of 10)
- Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (1 of 10)
- Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (... of 10)
- Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (10 of 10)

Click image to expand

A13	A14	A15	A16	A17	A18	A19	A20
Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (1 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (2 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (3 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (4 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (5 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (6 of 10) [§98.326(p)]	Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device, if applicable (7 of 10) [§98.326(p)]	Individual well, shaft centralized monitoring associated with the o transport or destruc device, if applicab (8 of 10) [§98.326(p)]
Point A	Well 2	Well 1	Shaft 1	Shaft 3	Well 4		
Point B							

Subpart FF - Destruction or Offsite Weekly

Destruction or Offsite Weekly

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for ventilation and degasification system destruction devices or points of offsite transport on a weekly basis. Complete the table from top to bottom without skipping rows. All ventilation or degasification systems reported on Tab 7 should be included in the table below. The pick list in the first column of each table below links to a previous sheet, to restrict entry to previously entered destruction devices and points of offsite transport. The user will fill out four rows (quarters) for each device or point, and multiple weeks for each quarter (e.g., 14 weeks per quarter may include partial weeks at the start or end of the quarter). The table below includes space for 600 rows. If more are needed, contact the GHG Help Desk.

- Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name *selecct from the pick list*
- Quarter during which destruction or offsite transport took place
- Week during which destruction or offsite transport took place
- Weekly volumetric flow rate used to calculate CH4 destruction
- Specify units for weekly volumetric flow rate
- Length of time that substitute data are used for the weekly volumetric flow rate used to calculate CH4 destruction
- Weekly CH4 concentration used to calculate CH4 flow
- Length of time that substitute data are used for the weekly CH4 concentration used to calculate CH4 flow

9.) Fill out the following table for ventilation and degasification system destruction devices or points of offsite transport on a weekly basis. Complete the table from top to bottom without skipping rows. All ventilation or degasification systems reported on Tab 7 should be included in the table

	A1	A2	A3	A4	A5	A6	A7	A8
	Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name [§98.326(p)]	Quarter	Week	Weekly volumetric flow rate used to calculate CH4 destruction (acfm or scfm per selection in column A5) [§98.326(j)]	Specify units for weekly volumetric flow rate [§98.326(j)]	Length of time that substitute data are used for the weekly volumetric flow rate used to calculate CH4 destruction (hours) [§98.3(c)(8), §98.326(j)]	Weekly CH4 concentration used to calculate CH4 flow (volume %) [§98.326(k)]	Length of time that substitute data are used for the weekly CH4 concentration used to calculate CH4 flow (hours) [§98.3(c)(8), §98.326(k)]
1	Main Generator	1	1	564	acfm	18	32	18
2	Main Generator	1	2	578	acfm	19	32	19
3	Main Generator	1	3	592	acfm	20	32	20
4	Main Generator	1	4	606	acfm	21	32	21
5	Main Generator	1	5	620	acfm	22	32	22
6	Main Generator	1	6	634	acfm	22	32	22
7	Main Generator	1	7	648	acfm	23	32	23
8	Main Generator	1	8	662	acfm	24	32	24
9	Main Generator	1	9	676	acfm	25	32	25
10	Main Generator	1	10	690	acfm	26	32	26
11	Main Generator	1	11	679	acfm	27	32	27
12	Main Generator	1	12	668	acfm	27	32	27
13	Main Generator	1	13	657	acfm	28	32	28
14	Main Generator	2	1	646	acfm	29	32	29
15	Main Generator	2	2	635	acfm	30	32	30
16	Main Generator	2	3	668	acfm	31	32	31
91	Remote Well CoGen Line	3	13	360	scfm	20	28	20
92	Remote Well CoGen Line	4	1	349	scfm	20	28	20
93	Remote Well CoGen Line	4	2	338	scfm	21	28	21
94	Remote Well CoGen Line	4	3	327	scfm	21	28	21
95	Remote Well CoGen Line	4	4	448	scfm	22	28	22
96	Remote Well CoGen Line	4	5	437	scfm	22	28	22
97	Remote Well CoGen Line	4	6	426	scfm	22	28	22
98	Remote Well CoGen Line	4	7	415	scfm	23	28	23
99	Remote Well CoGen Line	4	8	404	scfm	23	28	23
100	Remote Well CoGen Line	4	9	393	scfm	23	28	23
101	Remote Well CoGen Line	4	10	382	scfm	24	28	24
102	Remote Well CoGen Line	4	11	371	scfm	24	28	24
103	Remote Well CoGen Line	4	12	360	scfm	24	28	24
104	Remote Well CoGen Line	4	13	349	scfm	25	28	25

Subpart FF - Inputs Whose Reporting Deadline Was Deferred Until 2013

In August 2011, EPA deferred the reporting deadline for inputs to equations until either March 31, 2013 or March 31, 20151 to allow time to fully evaluate the potential impact from the release of this data. EPA has evaluated the 2013 inputs following the process that was outlined in the final

inputs deferral rule. EPA does not plan to take further action regarding the 2013 inputs. Therefore, inputs to equations whose reporting was deferred until 2013 must be reported to EPA by April 1, 2013, for reporting years 2010, 2011, and 2012 as applicable. For Subpart FF, the defrred data elements which will now be collected includes:

Citation	Data Element
98.326(a)	Quarterly CH4 liberated from each ventilation monitoring point (CH4Vm)(metric tons CH4)
98.326(b)	Weekly CH4 liberated from each degasification system monitoring point (metric tons CH4)
98.326(c)	Quarterly CH4 destruction at each ventilation and degasification system destruction device or point of offsite transport (CH2Destroyed) (metric tons CH4)
98.326(f)	Quarterly volumetric flow rate (scfm) or each ventilation monitoring point
98.326(g)	Quarterly CH4 concentration from each ventilation monitoring device
98.326(h)	Weekly volumetric flow used to calculate CH4 liberated from degasification systems
98.326(j)	Weekly volumetric flow used to calculate CH4 destruction for each destruction device and each point of offsite transport (scf).
98.326(k)	Weekly CH4 concentration (%) used to calculate CH4 flow to each destruction device or point of offsite transport (C).
98.326(o)	Temperature (deg R) at which each sample is collected
98.326(o)	Pressure (atm) at which each sample is collected
98.326(o)	Moisture content during the measurement period. Added by Tech Corrections final rule (76 FR 73886) and added to Table A-7 as a 2013 deferred input (see 77 FR 48072, August 13, 2012.)
98.326(o)	Gaseous organic concentration correction factor if Eq FF-9 is required. Added by Tech Corrections final rule (76 FR 73886) and identified as a 2013 deferred input in 1/10/12 CBI proposal (77 FR 1450)
98.326(p)	Assumed destruction efficiency for the primary destruction device
98.326(p)	Assumed destruction efficiency for the backup destruction device

Summary of changes in e-GGRT (deployed in February 2013) to accommodate the above data elements

98.326(a):
For each ventilation monitoring point and each quarter, e-GGRT will require the facility to report the quarterly CH4 liberated (CH4Vm) in units of metric tons.

- Collected on the Ventilation Quarterly tab of the Subpart FF Reporting Form

98.326(b):
For each degasification gas collection system monitoring point and each quarter and each week, e-GGRT will require the facility to report the weekly CH4 liberated in units of metric tons.

- Collected on the Degas Quarterly tab of the Subpart FF Reporting Form and
- Collected on the Degas Weekly tab of the Subpart FF Reporting Form

98.326(c):
For each ventilation and degasification system destruction device or point of offsite transport and each quarter, e-GGRT will require the facility to report the quarterly CH4 destroyed onsite and the amount of CH4 transported offsite in units of metric tons.

- Collected on the Destruction or Offsite Quarterly tab of the Subpart FF Reporting Form

98.326(f):
For each ventilation monitoring point and each quarter, e-GGRT will require the facility to report the quarterly volumetric flow rate used in Equation FF-1 in units of acfm or scfm.

- Collected on the Ventilation Quarterly tab of the Subpart FF Reporting Form

98.326(g):
For each ventilation monitoring point and each quarter, e-GGRT will require the facility to report the quarterly CH4 concentration in units of volume percentage.

- Collected on the Ventilation Quarterly tab of the Subpart FF Reporting Form

98.326(h):
For each degasification gas collection system monitoring point and each quarter and each week, e-GGRT will require the facility to report the weekly volumetric flow rate used to calculate CH4 liberated from degasification systems, used in Equation FF–3. This data will be in units of acfm or scfm.

- Collected on the Degas Weekly tab of the Subpart FF Reporting Form

98.326(j):
For each ventilation and degasification system destruction device or point of offsite transport and each quarter and each week, e-GGRT will require the facility to report the weekly volumetric flow rate used to calculate CH4 destruction in units of acfm or scfm.

- Collected on the Destruction or Offsite Weekly tab of the Subpart FF Reporting Form

98.326(k):
For each ventilation and degasification system destruction device or point of offsite transport and each quarter and each week, e-GGRT will require the facility to report the weekly CH4 concentration used to calculate CH4 flow in units of volume percentage.

- Collected on the Destruction or Offsite Weekly tab of the Subpart FF Reporting Form

98.326(o):
For each ventilation monitoring point and each quarter, e-GGRT will require the facility to report:

- The temperature used in Equation FF-1 in units of degrees R (°R);
- The pressure used in Equation FF-1 in units of atmospheres (atm);
- The moisture content used in Equation FF-1 in units of cubic feet of water per cubic feet of emitted gas;
- The gaseous organic concentration correction factor, if Equation FF–9 was required (unitless).

For each degasification gas collection system monitoring point and each quarter, e-GGRT will require the facility to report:

- The temperature used in Equation FF-3 in units of degrees R (°R);
- The pressure used in Equation FF-3 in units of atmospheres (atm);
- The moisture content used in Equation FF-3 in units of cubic feet of water per cubic feet of emitted gas;
- The gaseous organic concentration correction factor, if Equation FF–9 was required (unitless).

- Collected on the Ventilation Quarterly tab of the Subpart FF Reporting Form and
- Collected on the Degas Quarterly tab of the Subpart FF Reporting Form

98.326(p):
For each ventilation and degasification system destruction device or point of offsite transport, e-GGRT will require the facility to identify if it is reporting destruction in a destruction device or offsite transport. A radio button indicates if the "destruction occurs at the coal mine" or if "gas is transported offsite". If the option "destruction occurs at the coal mine" is selected, the facility must:

- Report the destruction efficiency assumed for the primary destruction device as a percentage;
- Report the destruction efficiency assumed for each back-up destruction device as a percentage.

- Collected on the Degas Quarterly tab of the Subpart FF Reporting Form

Subpart FF - Destruction or Offsite Quarterly

Destruction or Offsite Quarterly

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

Fill out the following table for ventilation and degasification system destruction devices or points of offsite transport on a quarterly basis. Complete the table from top to bottom and left to right without skipping rows. All ventilation or degasification systems reported on Tab 7 should be included in the table below. The pick list in the first column of each table below links to a previous sheet, to restrict entry to previously entered destruction devices and points of offsite transport. The table below includes space for 600 rows. If more are needed, contact the GHG Help Desk.

- Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name
- Quarter when the gas destruction took place
- Quarterly CH4 destroyed onsite
- Quarterly CH4 transported offsite

8.) Fill out the following table for ventilation and degasification system destruction devices or points of offsite transport on a quarterly basis. Complete the table from top to bottom and left to right without skipping rows. All ventilation or degasification systems reported on Tab 7 should be included in the table below.

	A1	A2	A3	A4
	Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name [§98.326(p)]	**Quarter**	**$CH_{4Destroyed A}$ - Quarterly CH4 destroyed onsite (MT CH4) [§98.326(c)]**	**$CH_{4Destroyed B}$ - Quarterly CH4 transported offsite (MT CH4) [§98.326(c)]**
1	Main Generator	1	2011	
2	Main Generator	2	4022	
3	Main Generator	3	6458	
4	Main Generator	4	9367	
5	Remote Well CoGen Line	1		4445
6	Remote Well CoGen Line	2		4717
7	Remote Well CoGen Line	3		3764
8	Remote Well CoGen Line	4		4688

Subpart FF - Emission Summary

Emission Summary

Please see Reporting Form Instructions on downloading the blank reporting form and uploading the completed reporting form.

The following table calculates facility total quarterly CH4 liberated from ventilation systems according to Eq. FF-2. This worksheet calculates total subpart FF emissions for this facility using data entered in previous tabs. Data entry is only required on this worksheet if you wish to override a calculated result. Subpart-total emissions are calculated per Eq. FF-7 as the sum of results from Equations FF-2 and FF-4 less the result of Equation FF-6.

- Table 10a calculates facility total quarterly CH4 liberated from ventilation systems according to Eq. FF-2,
- Table 10b calculates facility total quarterly CH4 liberated from all degasification monitoring points according to Eq. FF-4,
- Table 10c calculates facility total quarterly CH4 destroyed at the mine and transported offsite according to Eq. FF-6, and
- Table 10d calculates facility total quarterly net CH4 emissions to the atmosphere from the mine according to Eq. FF-7.

To override a calculated result and report an alternative value, select "Enter my own result (value will be rounded)" in columns A3, B3 or C3 and enter the alternative value in the adjacent column (B4, C4, or D4 respectively).

10a.) The following table calculates facility total quarterly CH4 liberated from ventilation systems according to Eq. FF-2. To override a calculated result and report an alternative value, use columns A3 and A4 in the table.

$$CH_{4VTotal} = \sum_{i=1}^{m} (CH_{4V})_i \quad \text{(Eq. FF-2)}$$

	A1	A2	A3	A4	A5
	Quarter	**$CH_{4VTotal}$ - Facility total quarterly CH4 liberated from ventilation systems according to Eq. FF-2 (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- Calculated Result**	**What result do you want to report to EPA? (Calculated result initially selected by default)**	**$CH_{4VTotal}$ - Facility total quarterly CH4 liberated from ventilation systems (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- User Override Value**	**$CH_{4VTotal}$ - Facility total quarterly CH4 liberated from ventilation systems (MT CH4, rounded) [§98.3(c)(4)(iii)] --- Reported Value**
1	Quarter 1 (Jan-Mar)	25090	Use the calculated result rounded		25090
2	Quarter 2 (Apr-Jun)	25216	Use the calculated result rounded		25216
3	Quarter 3 (Jul-Sep)	26254	Use the calculated result rounded		26254
4	Quarter 4 (Oct-Dec)	24274	Use the calculated result rounded		24274

10b.) The following table calculates facility total quarterly CH4 liberated from all degasification monitoring points according to Eq. FF-4 . To override a calculated result and report an alternative value, use columns B3 and B4 in the table.

$$CH_{4DTotal} = \sum_{i=1}^{m} \sum_{j=1}^{w} (CH_{4D})_{i,j} \quad \text{(Eq. FF-4)}$$

	B1	B2	B3	B4	B5
	Quarter	**$CH_{4DTotal}$ - Facility total quarterly CH4 liberated from all degasification monitoring points according to Eq. FF-4 (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- Calculated Result**	**What result do you want to report to EPA? (Calculated result initially selected by default)**	**$CH_{4DTotal}$ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- User Override Value**	**$CH_{4DTotal}$ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, rounded) [§98.3(c)(4)(iii)] --- Reported Value**
1	Quarter 1 (Jan-Mar)	26000	Use the calculated result rounded		26000
2	Quarter 2 (Apr-Jun)	26000	Use the calculated result rounded		26000
3	Quarter 3 (Jul-Sep)	26000	Use the calculated result rounded		26000
4	Quarter 4 (Oct-Dec)	26000	Use the calculated result rounded		26000

10c.) The following table calculates facility total quarterly CH4 destroyed at the mine and transported offsite according to Eq. FF-6. To override a calculated result and report an alternative value, use columns C3 and C4 in the table.

$$CH_{4DestroyedTotal} = \sum_{i=1}^{d} (CH_{4Destroyed})_d \quad \text{(Eq. FF-6)}$$

	C1	C2	C3	C4	C5
	Quarter	**$CH_{4DestroyedTotal}$ - Facility total quarterly CH4 destroyed at the mine and transported offsite according to Eq. FF-6 (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- Calculated Result**	**What result do you want to report to EPA? (Calculated result initially selected by default)**	**$CH_{4DestroyedTotal}$ - Facility total quarterly CH4 destroyed at the mine and transported offsite (MT CH4, unrounded) [§98.3(c)(4)(iii)] --- User Override Value**	**$CH_{4DestroyedTotal}$ - Facility total quarterly CH4 destroyed at the mine and transported offsite (MT CH4, rounded) [§98.3(c)(4)(iii)] --- Reported Value**
1	Quarter 1 (Jan-Mar)	6456	Use the calculated result rounded		6456
2	Quarter 2 (Apr-Jun)	8739	Use the calculated result rounded		8739
3	Quarter 3 (Jul-Sep)	10222	Use the calculated result rounded		10222
4	Quarter 4 (Oct-Dec)	14055	Use the calculated result rounded		14055

10d.) The following table calculates facility total quarterly net CH4 emissions to the atmosphere from the mine according to Eq. FF-7.

$$CH_4 \text{ emitted (net)} = CH_{4VTotal} + CH_{4DTotal} - CH_{4DestroyedTotal} \quad \text{(Eq. FF-7)}$$

	D1	D2	D3	D4	D5
	Quarter	**$CH_{4VTotal}$ - Facility total quarterly CH4 liberated from ventilation systems (MT CH4, rounded) [§98.3(c)(4)(iii)] --- [D2=(A2 or A4)]**	**$CH_{4DTotal}$ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, rounded) [§98.3(c)(4)(iii)] --- [D3=(B2 or B4)]**	**$CH_{4DestroyedTotal}$ - Facility total quarterly CH4 destroyed at the mine and transported offsite (MT CH4, rounded) [§98.3(c)(4)(iii)] --- [D4=(C2 or C4)]**	**$CH_{4emitted(net)}$ - Facility total quarterly net CH4 emissions to the atmosphere from the mine according to Eq. FF-7 (MT CH4, rounded) [§98.3(c)(4)(iii)] --- [D5=D2+D3-D4]**
1	Quarter 1 (Jan-Mar)	25090	26000	6456	44634
2	Quarter 2 (Apr-Jun)	25216	26000	8739	42477
3	Quarter 3 (Jul-Sep)	26254	26000	10222	42032
4	Quarter 4 (Oct-Dec)	24274	26000	14055	36219