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Hello and welcome to today's webinar on changes to the reporting form for Subpart FF (underground coal mines) for reporting year 2012 under US EPA's Greenhouse Gas Reporting Program. As you did last year, this year you will submit reports to EPA using e-GGRT, EPA's electronic Greenhouse Gas Reporting Tool.

A few notes on how we'll run today's webinar:

• We will take as many questions as time allows at the end of this session. Submit your questions using the Webinar's control panel where there's a QUESTIONS BOX feature. You are welcome to submit questions at any time during today's presentation.

• If we are not able to answer your question during this session, please submit it in writing to GHGREPORTING@epa.gov. We will answer your questions as soon as we can.

• For additional information on the Greenhouse Gas Reporting Program and e-GGRT, please refer to the contact information provided at the end of this presentation.

• Please note that we are also posting commonly asked questions to the FAQs section of the Reporting Program website on a regular basis.

• Finally, we will be showing you a number of screenshots from our data system during this webinar.

• In some cases the screenshots you see today may differ slightly in appearance from your e-GGRT account.



The purpose of today's webinar is to familiarize you with the changes to Subpart FF Reporting under the Greenhouse Gas Reporting Program. These changes affect this year's report, due by April 1, 2013, as well as last year's report, which must be resubmitted by April 1, 2013.



Subpart FF facilities began reporting last year (RY2011). That report addressed underground coal mine operations during calendar year 2011 and was due to EPA on September 28, 2012.

For RY2011 EPA received reports from 175 facilities. This data is available at ghgdata.epa.gov, where you can review reported GHG data in a variety of ways, including by facility, industry, location, or gas. This map of Subpart FF reporters is from this website.



This slide is a reminder about the reporting threshold for Subpart FF facilities. Underground coal mines are not subject to the GHGRP if they have never liberated more than 36,500,000 actual cubic feet (acf) of methane (CH4) in a calendar year, and are not subject to any other subpart included in 40 CFR Part 98.

Last year, we received several emissions reports from mines that were below the reporting threshold. If you were never subject to Part 98 but registered in e-GGRT and submitted a report for 2011, you are encouraged to notify EPA of this status by selecting the appropriate radio button on the 2012 Facility Overview webpage in e-GGRT. Once you make this notification, you will be excluded from future EPA emails intended for active e-GGRT facilities. Your status will remain as "not subject" until and unless you change it in the future.

However, if you did liberate more than 36,500,00 actual cubic feet in RY2011 or RY2012 and your facility continued to operate in RY2012, you need to report in RY2012 and this button is not applicable to you . If you have applicability questions, were urge you submit them to the GHGRP Help Desk (ghgreporting@epa.gov).



This slide gives some background regarding the new information that EPA is collecting from subpart FF facilities this year – the reason why the subpart FF reporting form has been changed.

| For Subp | ion of Equation Inputs (cont) |
|---------------|--|
| collec | ted include: |
| Rule Citation | Data Element |
| 98.326(a) | Quarterly CH4 liberated from each ventilation monitoring point |
| 98.326(b) | Weekly CH4 liberated from each degasification system monitoring point |
| 98.326(c) | Quarterly CH4 destruction at each ventilation and degasification system destruction device or point of offsite transport |
| 98.326(f) | Quarterly volumetric flow rate for each ventilation monitoring point |
| 98.326(g) | Quarterly CH4 concentration for each ventilation monitoring point |
| 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 |
| 98.326(k) | Weekly CH4 concentration used to calculate CH4 flow to each destruction device or point of offsite transport |
| 98.326(o) | Temperature at which each sample is collected |
| 98.326(o) | Pressure at which each sample is collected |
| 98.326(o) | Moisture content of the CH4 emitted during the measurement period |
| 98.326(o) | Gaseous organic concentration correction factor, if Eq FF-9 is required |
| 98.326(p) | Assumed destruction efficiency for the primary destruction device |
| 98.326(p) | Assumed destruction efficiency for the backup destruction device |
| | 7 |

This slide lists the fourteen specific equation inputs that are no longer deferred, and which must be reported by April 1, 2013, for both the 2012 and 2011 reporting years.

In summary, for ventilation monitoring points you must now report quarterly flow rates, CH4 concentrations, pressures, moisture content, temperatures, and CH4 liberated; for degasification systems you must report weekly flow rates and CH4 liberated, and for each destruction device or point of offsite transport you must now report weekly flow rates, CH4 concentration, quarterly CH4 destruction as well as the destruction efficiency of associated destruction devices.

The reporting form we will review today addresses each of these new requirements. You must use this new reporting form to report your Reporting Year 2012 GHG data. In addition, the new form must be used to resubmit your RY2011 GHG reporting if you were required to report last year. Both your RY2012 report and your revised RY2011 report are due on April 1, 2013.

These are not new data. The rule required you to collect these last year as your basis for the reporting. The data collection requirements for this program have not changed - only the extent of the data that must be reported to EPA.

| Old FF Reporting Form | N | ew FF Reporting Form |
|---|---|---|
| Tab 1. Introduction Tab 2. Degas Collection Tab 3. Well and Shaft Tab 4. Ventilation Quarterly Tab 5. Ventilation Quarterly Dates | Minor changes No change No change | Tab 1. Introduction Tab 2. Degas Collection Tab 3. Well and Shaft |
| Tab 6. Ventilation Monitoring Point Flow Tab 7. Ventilation Monitoring Point Concentration | _ Consolidated; New data | Tab 4. Ventilation Quarterly |
| Tab 8. Degas Quarterly Tab 9. Degas Quarterly Dates | _ Consolidated; New data | Tab 5. Degas Quarterly |
| Tab10. Degas Weekly | Simplified; New data | Tab 6. Degas Weekly |
| Tab 11. Destruction or Offsite | Simplified; New data | Tab 7. Destruction or Offsite |
| | New Tab | Tab 8. Destr. or Offsite Quarterly |
| Tab 12. Destr. or Offsite Weekly | New data | Tab 9. Destr. or Offsite Weekly |
| | New Tab | Tab 10. Emissions Summary 8 |

To accommodate these new data elements, EPA has added to and reorganized the reporting form from last year. Lets look and the new for in comparison to the old form.

- •Tab 1. Introduction, has only minor changes
- •Tab 2. Degas Collection is unchanged

•Tab 3. Well and Shaft is unchanged

•The old Tab 4. Ventilation Quarterly; Tab 5. Ventilation Quarterly Dates; Tab 6. Ventilation Monitoring; and Tab 7. Ventilation Monitoring Point Concentration are consolidated with new data elements into a single new Tab 4. Ventilation Quarterly

•The old Tab 8. Degas Quarterly; and Tab 9. Degas Quarterly Dates are consolidated with new data elements into a single new Tab 5. Degas Quarterly

•The old Tab 10. Degas Weekly, is new Tab 6, which simplifies the reporting format and incorporates new data elements

•The old Tab 11. Destruction or Offsite, is new Tab 7, which simplifies the reporting format and incorporates new data elements

•We have inserted a new Tab 8. to address quarterly data collected on methane destruction and offsite transport

•The old Tab 12. Destruction or Offsite Weekly, is new Tab 9, and has been expanded to include new data elements

•We have inserted a new Tab 10 to aggregate and summarize emissions numbers from earlier tabs

Now let take a look at the new reporting form.

| ab 1 – Intr | odu | ction | | E-GGRT Electronic Greenhouse Gas Reporting Tool |
|---|---------------------|---|---|---|
| Subpart FF - Underground Coal Mines 1. Introduction | Old | Reporting Form | | |
| Worksheet Instructions: | | | | |
| It is intended for the user to complete all the should not complete those sheets. | ne sheets in this v | vorkbook, as applicable. If certain sheets are not | applicable, for example if a facility has no degasification wells, then the use | er |
| Version: | | | | |
| e-GGRT RY2011.R.01 External Links: | | | Updated 8/15/20 | 012 |
| | http://www.epa.c | ov/climatechange/emissions/subpart/ff.html | | - |
| Reporting Form Help Content: | http://www.ccds | upport.com/confluence/display/help/Reporting+Fo | | |
| Optional Calculation Spreadsheet: Workbook Navigation: | http://www.ccds | upport.com/confluence/display/help/Optional+Calc | culation+Spreadsheet+Instructions | _ |
| 1. Introduction | | | | - |
| 2. Degas Collection | | | | |
| 3. Well and Shaft 4. Ventilation Quarterly | | | | |
| 5. Ventilation Quarterly Dates | | Subpart FF - Underground Coal Mines | New Days days Free | |
| 6. Ventilation Monitoring Point Flow | | 1. Introduction | New Reporting For | rm |
| 7. Ventilation Monitoring Point Concentrati | | | | |
| 8. Degas Quarterly 9. Degas Quarterly Dates | | Worksheet Instructions: | | |
| 10. Degas Weekly | | | all the sheets in this workbook, as applicable. If certain shee | |
| 11. Destruction or Offsite | | should not complete those sheets. Cal because not all equation inputs are co | culation support is provided for Equations FF-2, FF-4, FF-6, a | and FF-7 in this workbo |
| 12. Destruction of Offsite Weekly | | Version: | liected. | |
| | | R.02 | | |
| | | External Links: | | |
| | | Subpart FF Resources Page: | http://www.epa.gov/climatechange/emissions/subpart/ff | f.html |
| | | Reporting Form Help Content: | http://www.ccdsupport.com/confluence/display/help/Rei | |
| | | Optional Calculation Spreadsheet: | http://www.ccdsupport.com/confluence/display/help/Op | |
| | | Workbook Navigation: | | |
| | | 1. Introduction | 6. Degas Weekly | |
| | | 2. Degas Collection | 7. Destruction or Of | fsite |
| | | 3. Well and Shaft | 8. Destruction of Of | fsite Quarterly |
| | | 4. Ventilation Quarterly | 9. Destruction of Of | fsite Weekly |
| | | n na an | 10. Emissions Summ | |
| | | 5. Degas Quarterly | To. Emissiona Summ | iidi y |

Here is the first tab - Let's look at the top portion of Tab 1. Introduction first.

Just a few changes in the navigation links given the form's reorganization. As you can see, we now a have a total of 10 tabs.

| | iction (cont) | | Electronic Greenhouse Gas Reporting Tool |
|---|--|--|---|
| Fill out the following table wi | th general information about this facility | y: 2 | |
| Facility Name: | | - | |
| GHGRP ID: | | | |
| Reporting Period: | | | 2 |
| Comments: (optional) | 2011 | | |
| | 2013 2014 2015 2016 2017 2018 | | Multiyear Form |
| | calculations performed on tab "10. Emi ssions data are missing, missing data p | |) values are only valid in the |
| | ssions data are missing, missing data p | ssions Summary". NOTE: zero ("0" |) values are only valid in the |
| case of no emissions. If emi | ssions data are missing, missing data p | ssions Summary". NOTE: zero ("0" procedures must be followed to e B3 Quarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) (MT CO ₂ , unrounded) |) values are only valid in the |
| case of no emissions. If emi B1 Quarter | ssions data are missing, missing data p B2 Quarterly CH ₄ emissions (net) from all ventilation and degasification systems (facility total) (MT CH ₄ , unrounded) | ssions Summary". NOTE: zero ("0" procedures must be followed to e 83 Duarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) |) values are only valid in the |
| case of no emissions. If emi B1 Quarter Quarter 1 (Jan-Mar) | ssions data are missing, missing data p B2 Quarterly CH ₄ emissions (net) from all ventilation and degasification systems (facility total) (MT CH ₄ , unrounded) [§98.326(d)] | ssions Summary". NOTE: zero ("0" procedures must be followed to e B3 Quarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) (MT CO ₂ , unrounded) |) values are only valid in the |
| Case of no emissions. If emi B1 Quarter Quarter 1 (Jan-Mar) Quarter 2 (Apr-Jun) | ssions data are missing, missing data p B2 Quarterly CH4 emissions (net) from all ventilation and degasification systems (facility total) (MT CH4, unrounded) [§98.326(d)] 0 | ssions Summary". NOTE: zero ("0" procedures must be followed to e B3 Quarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) (MT CO ₂ , unrounded) |) values are only valid in the |
| Case of no emissions. If emi B1 Quarter Quarter 1 (Jan-Mar) Quarter 2 (Apr-Jun) Quarter 3 (Jul-Sep) | ssions data are missing, missing data p 52 Quarterly CH ₄ emissions (net) from all ventilation and degasification systems (facility total) (MT CH ₄ , unrounded) [§98.326(d)] 0 0 | ssions Summary". NOTE: zero ("0" procedures must be followed to e B3 Quarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) (MT CO ₂ , unrounded) |) values are only valid in the |
| Case of no emissions. If emi B1 Quarter Quarter 1 (Jan-Mar) Quarter 2 (Apr-Jun) | ssions data are missing, missing data p B2 Quarterly CH4 emissions (net) from all ventilation and degasification systems (facility total) (MT CH4, unrounded) [§38.326(d)] 0 0 | ssions Summary". NOTE: zero ("0" procedures must be followed to e B3 Quarterly CO ₂ emissions from onsite destruction of coal mine gas CH ₄ , where the gas is not a fuel input for energy eneration or use (e.g., flaring) (MT CO ₂ , unrounded) |) values are only valid in the |

On the bottom half of the Introduction tab there are a couple of important changes:

- 1) The form has been reformatted as a multi year form. Using the reporting year selection box you will use the same form version to submit your RY2012 report as well as to resubmit your RY2011 report. We intend to use this same reporting form next year. As a result, for RY2013, you will be able to start from your RY2012 form rather than starting from a blank page.
- 2) The new form includes calculation support for equation inputs. As a result the form calculates your emissions where that is possible. It also aggregates your CH4 emissions and summarize them here on Tab 1, pulling emissions information entered in Tab 10 (Emissions Summary), which we will review in a few minutes. You will notice that here on Tab 1, this information is presented in gray background cells. In e-GGRT, only the blue background cells allow data entry. You will continue to enter your quarterly CO2 emissions from onsite destruction on this page in Column B3

| • Tab Unc | hanged | | | | | |
|---|---|--------------------------------|--|---------------------------------------|--|---|
| | sification Gas Collection Systems. Be s | | | | - | |
| A1 Degasification Gas Collection System Unit ID or Name [§98.326(q)] | A2 Manufacturer [§98.326(q)] | A3 Capacity [§98.326(q)] | A4 Unit of Measure for Capacity, scfm or acfm [§98.326(q)] | A5 Number of Wells [§98.326(q)] | A6 Surface Area, m ² [§98.326(q)] | A7 Annual Operating Hours [§98.326(q)] |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Tab 2 – Degas Collection remains unchanged. On this tab you, will identify any degasification collection systems. The systems you enter in column A1 will be the basis for pick list selections on later tabs. There seven columns here, but all are self-explanatory.

We should note that - for all e-GGRT reporting forms - you should not skip rows. We have designed the data parsing code to stop reading tables when we encounter a blank row. If you do leave a row blank and enter data below it you WILL get an error message.

| Tab Unchangeo | d | | |
|---|--|--|--|
| A1 | A2 | | 3 |
| Well and Shaft ID or Name [§98.326(r)] | Identify if this is a well or a shaft [§98.326(r)] | Degasification <u>Gas Collect</u> NOTE: If a well is not associated w system, select "Not Applicable (wel gas collection syster [§98.3 | on System Unit ID or Name ith a degasification gas collection I not associated with degasification m)" from the pick list |
| | | | Unit ID Enter the unique identifier or name for the gas collection system from the previous tab. If a well is not associated with gas collection system, select "Not Applicable (well not associated |
| 9 0 1 | | | with gas collection system)" from the pick list. |

Tab 3, the Well and Shaft Tab, is unchanged too. This is a very important tab and the data entered here has a great impact on what you see on this and on later tabs. Much of the data entered here will become the basis for pick lists on later tabs. Lets look at the columns a little closer, and while we do we will review some of the common features and conventions used throughout e-GGRT reporting forms:

Column A1 – you will enter the names of wells and shafts. At a minimum, it is essential that all degasification wells and ventilation shafts are listed here

Column A2 – you will characterize the names in A1 as either wells or shafts – this column is a pick list so there are only two choices

Column A3 – If the row is for a well you will need to identify the degasification system that the well is associated with. This pick list is based on the systems you enter on Tab 2. If the well is not associated with a degas system you can choose "Not applicable". This column will be disabled (turned to black) for shafts. As you can see the column, and many others has a "tip" associated – these provide some help or basic instructions. Now a tip from me: if these help tips get in your way, and they will sometimes, you can simply click and drag them to the edge of the page.



Column A4 – here you describe the well or shaft – this is also a pick list – it's a filtered pick list, so you will see one set of choices for wells, and a different set for shafts. If none of the pre-formed descriptions work you can select "Other (specify)" and enter a free form description in Column A5. Another convention – if you enter data in a disabled field, and you can a couple ways, it will appear bold and red so you can't miss it. Just go back and delete these data.

Column A6 – you will identify which of these well and shafts is monitored as part of a centralized monitoring point.

Column A7 – if the well or shaft is monitored as part of a centralized monitoring point, this role in Column A7 will be enabled and you will identify or name the central monitoring point. These are important because these will be part of key pick lists on later tabs.

| 1.) Table 4. Fill out the following Ventilation Monitoring Poi (§98.326(f)) Corresponds t centralized monitoring poin individual shaft from previo tab | nt to tor Qua | arter Me | | rterly basis: Length of time that substitute data are used for the quarterly volumetrix flow rate used in Equation FF-1, hours [§98.3(c)(8), 98.326(1)] | Method used concentrati [§98.326(g), (r) | on | Length of time that substitute data are use for the quarterly CH4 concentration, hours [§98.3(c)(8), 98.326(g) | ed sul | ngth of time that bstitute data are used for the operature used in ation FF-1, hours .3(c)(8), 98.326(o)] | Length of ti substitute o used for the used in Equa hours (§98 98.326 | ata are pressure tion FF-1, 3(c)(8), | Length of tir substitute d used for the r content us Equation FF-1 [§98.3(c)(8), 9 | ata are noisture ed in I, hours |
|--|---------------------|---|---|---|---|--|--|--|--|--|---|---|--|
| 3 | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | |
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| 17 | | | | | | | | | | | | | |
| | | _ | | | | | | - | | | | | |
| able 5a. Fill out the following tab | ele for vent | ilation moni | itoring points | 2.) Table 5b. Fill out the | following table for ve | ntilation m | onitoring points | 3.) | Table 5c. Fill out th | e following tal | ble for ver | tilation monitor | ing points |
| able 5a. Fill out the following tab | ele for vent | ilation moni | itoring points place: | 2.) Table 5b. Fill out the where continuous r functioning: | | | onitoring points w rate is not property | 3.) | Table 5c. Fill out th where continuous properly functioni | monitoring en | | | |
| vhere active ventilation of mining Ventilation Monitoring Point [§98.326(1)] Corresponds to | g operation | ns is taking Dates where of mining op (MN) | itoring points place: e active ventilation place place to toDoryryy 98.326(1) | where continuous r | ring Point uponds to ing point or Quarter | Dates monitoria flow ra function | | 3.) | where continuous | i monitoring ei ng: itoring Point esponds to oring point or | | Dates when monitoring equ concentration functioning, (MM/DI | |
| Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MN) | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | Dates monitoria flow ra function | w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | Dates when monitoring equ concentration functioning, (MM/DI | continuous aipment for the is not properly if applicable |
| Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MM [§! | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | for the <u>flo</u> Dates monitorin flow r functio (| w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | for the <u>concent</u> Dates when monitoring equ concentration functioning, (MM/DI [§98.3 | continuous ipment for the is not properly if applicable OYYYY) 26(n)] |
| Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MM [§! | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | for the <u>flo</u> Dates monitorin flow r functio (| w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | for the <u>concent</u> Dates when monitoring equ concentration functioning, (MM/DI [§98.3 | continuous ipment for the is not properly if applicable OYYYY) 26(n)] |
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| Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MM [§! | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | for the <u>flo</u> Dates monitorin flow r functio (| w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) 1 2 3 3 4 5 5 6 7 7 7 7 9 9 9 9 9 10 | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | for the <u>concent</u> Dates when monitoring equ concentration functioning, (MM/DI [§98.3 | continuous ipment for the is not properly if applicable oryyyy 26(n)] |
| Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MM [§! | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | for the <u>flo</u> Dates monitorin flow r functio (| w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) 1 2 2 3 3 4 4 5 6 6 7 7 8 9 9 9 0 101 11 12 2 12 13 14 4 14 5 14 4 14 5 14 4 14 5 14 14 14 14 14 14 14 14 14 14 14 14 14 1 | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | for the <u>concent</u> Dates when monitoring equ concentration functioning, (MM/DI [§98.3 | continuous ipment for the is not properly if applicable oryyyy 26(n)] |
| where active ventilation of mining Ventilation Monitoring Point [§98.226(II) Corresponds to sentralized monitoring point or individual shaft from previous | g operation | ns is taking Dates where of mining op (MM [§! | place: Place Place PDDYYYY) 98.326(1)] | where continuous r functioning: Ventilation Monito [§98.326(I)] Corre centralized monitor individual shaft fro | ring Point uponds to ing point or Quarter | for the <u>flo</u> Dates monitorin flow r functio (| w rate is not properly when continuous g equipment for the ate is not properly pning, if applicable MM/DD/YYYY) [§98.326(n)] | 3.) 1 2 3 3 4 5 5 6 6 7 7 8 9 9 100 101 11 122 121 121 121 121 121 121 | where continuous properly functioni Ventilation Mon [§98.326(I)] Corr centralized monit individual shaft fr | i monitoring ei ng: itoring Point esponds to oring point or | uipment | for the <u>concent</u> Dates when monitoring equ concentration functioning, (MM/DI [§98.3 | continuous ipment for the is not properly if applicable oryyyy 26(n)] |

As we mentioned earlier, the old Tab 4. Ventilation Quarterly; Tab 5. Ventilation Quarterly Dates; Tab 6. Ventilation Monitoring Points; and Tab 7. Ventilation Monitoring Point Concentration, have all been consolidated into a single wide table in the new Tab 4. This new table also collects several equations inputs that were previously deferred – we'll review the new Tab 4 in a moment.

Lets quickly look at the old form for these for Tabs to refresh your memory on the data collected here:

Tab 4. Ventilation Quarterly collected the ventilation monitoring points and flow information (without equation inputs of course);

Tab 5. Ventilation Quarterly Dates, collected data in 3 tables for active ventilation of mining operations, dates when flow rate monitors were not functioning properly, and dates when continuous monitoring equipment was not functioning properly;

| Table 6. Fill out the following table Ventilation Monitoring Point [§98.326(II) Corresponds to centralized monitoring point or individual shaft from previous tab | for ventilatio Quarter | L measi | oring points measuring ocation of each urement of flow rate Id in Equation FF-1 [§98.326(1)] | flow rate on a Date of a measuremeu rate used in FF-1 (MM/DD/ [§98.32 | each nt of flow Equation | sis: | | |
|---|---------------------------|------------|--|---|--------------------------------|---|---|--------------|
| 2 2 3 4 5 | | | | | | | | |
| 3 | | | | | le for ventilati | on monitoring points m | easuring <u>concentration</u> o | on a quarter |
| | | | Ventilation Moni [§98.326(I)] Corr centralized monity individual shaft fr tab | responds to oring point or | Quarter | Location of each measurement of concentration [§98.326(g)] | Date of each measurement of concentration (MM/DD/YYYY) [§98.326(g)] | |
| 5 | | | 1 2 3 4 | | | | | |
| | | | 5 6 7 8 | | | | | |
| | | | 9 10 11 12 | | | | | |
| | | | 13 | | | | | |

Tab 6. Ventilation Monitoring Points collected the date and location of flow monitoring measurements; and

Tab 7. Ventilation Monitoring Point Concentration collected the date and location of concentration monitoring measurements.

| Tab 4 - | Nev | v Ver | ntilatio | on Qı | uarter | ly Tal | b | | e GGRT c Greenhouse Gas Reporting Tool | |
|--|---|---|--|---|--|-------------------------------------|---|--|---|--|
| A1 | | A2 | A3 | A4 | A5 | | | A6 | A7 | |
| that corresponds to cer monitoring point or individ | Ventilation Monitoring Point hat corresponds to centralized nnitoring point or individual shaft Quarte from previous tab [§98.326(I)] | | pla (MM/DI | ctive ventilation ations is taking ace DYYYYY) 326(I)] Stop date | | | V - Quarterly volumetric flow rate used in Eq. FF-1 (acfm or selection in column A7) [§98.326(1)] | | Specify units for parameter V, quarterly volumetric flow rate [§98.326(f)] | |
| | | | Start uate | Stop date | | | | | | |
| A8 | | A9 | A10 | At | A12 | At | 3 | A14 | A15 | |
| Length of time that substitute data are used for the quarterig volumetric flow rate used in Eq. FF-1 [hours] [§98.3(c)(8), §98.326(f)] | measurer rate user | on of each nent of flow 1 in Eq. FF-1 .326(f)] | Date of eac measurement o rate used in Eq (MM/DD/YY [\$98.326(f) | h monit f flow for th . FF-1 (Y) (M] [| when continuous oring equipment e flow rate is not rly functioning, if applicable M/DD/YYYY) §98.326(n)] | Method u concent [\$98.326(g) | ration | C - Quarterly CH concentration used in Eq. FF-1 (volume %) [\$98.326(g)] | Vas Eq. FF-9 required | |
| | | | | Start | late Stop date | | | | | |
| | | | | | | | | 1 | | |
| | | | | | | | | | 16 | |

Here's the new Tab 4. Ventilation Quarterly. This tab collects all of the information previously collected on the four ventilation tabs as well as new information (columns highlighted in yellow) on equation inputs, including flow rates, concentrations, temperatures and pressures.

First I want to show that this scope of data requires a very wide table – 28 columns. This table directs uses to "Fill out the following table for ventilation monitoring points on a quarterly basis."

Lets look at the first 7 columns:

Column A1 – use the pick list to identify monitoring points or shafts from those identified on Tab 3
 Column A2 thu A5: Quarter, Active dates and Flow Rate Method. For Method if you choose Monitored using 98.324(b)(3) – Continuous Monitoring you will be required to complete "not functioning" dates later in this tab

•Column A6 and A7: Quarterly flow rates and units – these are shown with yellow highlighting as they are new data elements

Next block of 8 columns:

•Column A8 - Length of Time Substitute Data was used for volumetric flow data

•Column A9 -- Length of time that substitute data are used for the quarterly volumetric flow rate used in Eq. FF-1

•Column A10 -- Date of each measurement of flow rate used in Eq. FF-1

•Column A11 – A12 Dates when continuous monitoring equipment for the flow rate is not properly functioning, if applicable (if you selected Method 3)

And 3 new data elements:

•Column A13 – Method used for concentration

•Column A14 - Quarterly CH4 concentration used in Eq. FF-1

•Column A15 - Was Eq. FF-9 required to calculate CH4 concentration?

| | A16 If ges, provide the gaseous organic concentration correction factor, used in Eq. FF-9 | A17 Length of time that substitute data are used for the quarterly CH4 concentration (hours) | Al8 Location of each measurement of concentration [\$98.326(g)] | A19 Date of each measurement of concentration (MM/DD/YYYY) | A20 A21 Dates when continuous monitoring equipment for the <u>concentration</u> is not properly functioning, if applicable (MM/DD/YYYY) | |
|--|--|---|---|--|---|----------------------------------|
| | | [\$98.3[c][8], \$98.326(g)] | [300.020[3]] | [\$98.326(g)] | [\$98.326(n)] Start date Stop date | |
| A22 | A23 | A24 | A25 | A26 | A27 | A28 |
| - Temperature Ised in Eq. FF-1 ('B) [\$98.326(o)] | Length of time that substitute data are used for the temperature used in Eq. FF-1 (hours) [\$98.3(c)(8), \$98.326(o)] | used in Eq. FF-1 (atm) [§98.326(o)] | Length of time that substitute data are used the pressure used in Eq. 1 (hours) [§98.3(o)(8), §98.326(o) | FF- (cubic feet water p cubic feet biogas | for the moisture | point (MT CH4) [§98.326(a) |

•Column A16 -- If you entered yes in Column A15, Provide the gaseous organic concentration correction factor, used in Eq. FF-9

•Column A17 -- Length of time that substitute data are used for the quarterly CH4 concentration

•Column A18 -- Location of each measurement of concentration

•Column A19 -- Date of each measurement of concentration

•Column A20 – A21 Dates when continuous monitoring equipment for the concentration is not properly functioning, if applicable

And the final 7 columns:

•Column A22 -- Temperature used in Eq. FF-1 (each of the inputs to Eq FF-1 are new data elements as the output of FF-1 in Column A28

•Column A23 -- Length of time that substitute data are used for the temperature used in Eq. FF-1

•Column A24 -- P - Pressure used in Eq. FF-1

•Column A25 -- Length of time that substitute data are used for the pressure used in Eq. FF-1

•Column A26 -- Moisture content used in Eq. FF-1

•Column A27 -- Length of time that substitute data are used for the moisture content used in Eq. FF-1

•Column A28 -- Quarterly CH4 liberated from ventilation monitoring point

| ystem Monitoring Points on a g Degasification Gas Collection System Monitoring Point (§98.326(m)) Corresponds to centralized monitoring point or idividual well from previous tab | Quarter | Method | used for ntration 6(r), (s)] | Quarterly CH ₄ concentration based or results from weekly sampling data, volume % [§98.326(i)] | Length of time that substitute data are used for the quarterly CH4 ocncentration data based on results from weekly sampling data used to calculate CH4 liberated from degasification systems, hours [§98.3(c)(8), 98.326(i)] | for the tempe in Equation F | a are used ature used F-3, hours | Length of time tha substitute data are used for the pressure used in Equation FF-3, hours [§98.3(c)(8) 98.326(o)] | used for the moisture content used in Equation FF- |
|--|--|--------------|---|---|--|---|--|--|--|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| 1.) Table 9a. Fill out the | | | | ollection System | 2.) Table 9b. Fill out the followi | ng table for De | asification | Gas Collection Syst | m |
| 1.) Table 9a. Fill out the Monitoring Points w place: Degasification Ge System Monito [§99.326(m)] Cor centralized moniti individual well from | s Collection ring Point responds to pring point | n Quarter | Dates where mining operation mining opera p (MM/I | degasification of ations is taking lace DUYYYY) 326(m)] | 2) Table 9b. Fill out the followin Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po (§98.326(m)) Correspon centralized monitoring po individual well from previo | ontinuous moni int ds to pint or | Dat | Gas Collection Syst ment is not properly es when continuous oring equipment is n operly functioning, if applicable (MMDD/YYYY) [§98.326(n)] | |
| Monitoring Points w place: Degasification Ge System Monito [§98.326(m)] Cor centralized monito | s Collection ring Point responds to pring point | n Quarter | Dates where mining operation mining opera p (MM/I | degasification of ations is taking lace DD/YYYY) | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |
| Monitoring Points w place: Degasification Ge System Monito [§98.326(m)] Cor centralized monito | s Collection ring Point responds to pring point | n Quarter | Dates where Dates where mining oper (MM/I [§98. | degasification of ations is taking lace DD/YYYY) .326(m)] | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat Dat monit pro | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |
| Monitoring Points w place: Degasification Ge System Monito [§98.326(m)] Cor centralized monito | s Collection ring Point responds to pring point | n Quarter | Dates where Dates where mining oper (MM/I [§98. | degasification of ations is taking lace DD/YYYY) .326(m)] | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat Dat monit pro | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |
| Monitoring Points w place: Degasification Ge System Monito [§98.326(m)] Cor centralized monito | s Collection ring Point responds to pring point | n Quarter | Dates where Dates where mining oper (MM/I [§98. | degasification of ations is taking lace DD/YYYY) .326(m)] | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat Dat monit pro | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |
| Degasification Ge System Monito [§98.326(m)] Cor centralized monito | s Collection ring Point responds to pring point | n Quarter | Dates where Dates where mining oper (MM/I [§98. | degasification of ations is taking lace DD/YYYY) .326(m)] | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat Dat monit pro | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |
| Monitoring Points w place: Degasification Ga System Monito [§98.326(m)] Cor centralized monit | s Collection ring Point responds to pring point | n Quarter | Dates where Dates where mining oper (MM/I [§98. | degasification of ations is taking lace DD/YYYY) .326(m)] | Monitoring Points where co functioning: Degasification Gas Colle System Monitoring Po [§98.326(m)] Correspon centralized monitoring po | ontinuous moni int ds to pint or | Dat Dat monit pro | ment is not properly es when continuous oring equipment is n perly functioning, if applicable (MM/DD/YYYY) [§98.326(n)] | ot |

The old Tab 8 - Degas Quarterly and Tab 9 - Degas Quarterly Dates have been consolidated with related new data elements into a single wide table on Tab 5

Lets quickly look at the old form for these for Tabs to refresh your memory on the data collected here:

Tab 8. Degas Quarterly collected the degasification system monitoring concentration data and the amounts of time substitute data were used for temperature, pressure and moisture content in Eq. FF-3. (without equation inputs of course); and Tab 9. Degas Quarterly Dates, collected date data in 2 tables: dates when degasification operation are taking place and dates when continuous monitoring equipment was not functioning properly.

These are consolidated in the new Tab 5.

| ĺ | A1 | | A2 | | A3 | A4 | | A5 | |
|---|---|---|--|-----|--|-------------------------------|--|---|--|
| | Degasification Gas Collection System Monitoring Point (§98.326(m)) Corresponds to centralized monitoring point or individual well from previous tab | | Quarte | er | Dates where de mining operat pla (MM/DI [§98.3 | ons is taking ce (YYYY) | CC | thod used for oncentration 88.326(r), (s)] | |
| | | | | | Start date | Stop date | | | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| A6 Quarterly CEMS CH ₄ concentration used to calculate CH ₄ liberated from degasification systems (average from daily data, volume %) [§98.326(0)] | A7 Length of time that substitute data are used for the quarterly CBMS CH4 concentration used to calculate CH4 liberated from depasification systems (average from daily data, hours) | A8 Dates when monitoring equ property fun applic (MM/DD [§98.32 | ipment is not ctioning, if able YYYY) | COL | A10 C _i - Quarterly CH ₄ ncentration based on esults from weekly mpling data, volume % [§98.326(i)] | from degasificat (hour: | at substitute d for the oncentration esults from g data used 4 liberated ion systems 5) | A12 Was Eq. FF-9 required to calculate CH4 concentration? [§98.326(o)] | A13 If yes, provide the gaseou organic concentration correction factor, used in Eq. FF-9 [§98.326(o)] |
| 1300000(0) | [§98.3(c)(8), 98.326(i)] | | Stop date | | | [§98.3(c)(8), § | 98.326(i)1 | | |

The new Tab 5 has 19 columns. This table directs uses to "Fill out the following table for Degasification Gas Collection System Monitoring Points on a quarterly basis." Again, the new data elements being collected this year are highlighted in yellow.

Lets look at the first 5 columns

•Column A1 – use the pick list to identify Degasification Gas Collection System Monitoring Points from those identified on Tab 3

•Column A2 through A5: Quarter, Active dates and Concentration Rate Method. For Method, if you choose Monitored using 98.324(c)(1) – Continuous Monitoring you will have to provide quarterly calculated CH4 concentration, substitute data times, "not functioning" dates later in this tab. If you select Monitored using 98.324(c)(2) you will provide quarterly concentration and substitute data times later in this tab

Next block of 8 columns

 Column A6 – Quarterly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems

•Column A7 -- Length of time that substitute data are used for the quarterly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems

-Column A8 – A9 -- Dates when continuous monitoring equipment is not properly functioning, if applicable (if you selected Method 1)

•Column A10 – A11 Quarterly CH4 concentration based on results from weekly sampling data and 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

And two new data elements

•Column A12 – A13 – Was Eq. FF-9 required to calculate CH4 concentration and If yes, provide the gaseous organic concentration correction factor, used in Eq. FF-9 - these are shown with yellow highlighting new data elements.

| emperature used in Eq. Fr-3 (F-3 (F-3) (F- | _ | _ | | , | A17 | | _ | | A18 | | | , | 19 | _ |
|--|-----------------------|--------------|------------------|----------------------------|----------------------------|----------------------------|----------------|--------------------------|----------------------------------|----------------------|-------|----------------------------------|---------------------------------------|------------------|
| | ata ari ssure (| dat press | data a ressur | ta are i sure u: (hi | e used used i hours) | d for th in Eq. F s) | the q. FF-3 | used ubic feet fee | in Eq. Ff water p t biogas | F-3 er cubic) | c moi | lata are sture cor I (h | used for itent use F-3 ours) | r the ed in E |
| | | | | | | | | | | | | | | |

And the final 6 columns:

Column A14 -- Temperature used in Eq. FF-3 (this is a new data element)
Column A15 -- Length of time that substitute data are used for the temperature used in Eq. FF-3

•Column A16 -- Pressure used in Eq. FF-3 (this is a new data element)

 $\mbox{-}Column$ A17 -- Length of time that substitute data are used for the pressure used in Eq. FF-3

•Column A18 – Moisture content used in Eq. FF-3 (this is a new data element)

•Column A19 -- Length of time that substitute data are used for the moisture content used in Eq. FF-3

| Old T | ab 1 | 0 | | | | | | | | | |
|---|--------------|-------------|---|--|--|---|--|--|--|---|---|
| .) Table 10a. Fill out the following tabl | e for Degasi | fication Ga | s Collection System Monitori | ng Points on a weekly ba | sis: | | Table 10b. Insert the first date of the the last date of the episode in the c needed for the quarter and week. I functioning properly during the wee below includes space for 2080 row | olumn labe f CEMS wa k, do not e | led "Stop date s not used due nter any infor | e"; include as man ring the week, or i mation in Table 8t | iy rows as f CEMS was b. Table 8b |
| 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 [§98.326(h), (r), (s)] | 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 Equation FF-3, hours [§98.3(c)(8), 98.326(h)) | Method of measurement (sampling or continuous monitoring) used to calculate CH ₄ liberated from degasification systems, used in Equation FF-3 [§98.326(h)] | | Degasification Gas Collection System Monitoring Point [§98.326(m)] Corresponds to centralized monitoring point or individual well from previous tab | Quarter | Week | Dates when monitoring eq property fu appli (MM/DD [§98.3 | uipment is r nctioning, if cable D/YYYY) |
| 1 | | | | (3(-)) | 13 | | | | | Start date | Stop da |
| 2 3 4 | | | | | | | | | | | |
| 5 5 | | | | | | | | | | | |
| | | | | | | 7 | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

For the Degas Weekly tab, we have simplified the tab by consolidating the two tables and have also added some new columns, highlighted in yellow here. Lets look at the old form first.

The old Tab 10 - Degas Weekly collected the degasification system monitoring concentration data and the amounts of time substitute data were used for concentration in Eq. FF-3. (without equation inputs)



In contrast the new Tab 6 is a single table with a couple equation inputs now collected.

The new tab has 10 Columns:

•Column A1 through A3 – use the pick list to identify Degasification Gas Collection System Monitoring Points from those identified on Tab 3, and the quarter and week

•Column A4: Method used for flow rate and to calculate CH4 liberated from degasification systems used in Eq. FF-3. For Method if you choose Monitored using 98.324(c)(1) – Continuous Monitoring you will have to provide "not functioning" dates later in this tab.

•Column A5 – A6 -- Weekly volumetric flow rate used to calculate CH4 liberated from degasification systems, used in Eq. FF-3 and units (these are new data elements)

•Column A7 -- Length of time that substitute data are used for the weekly CEMS CH4 concentration used to calculate CH4 liberated from degasification systems

•Column A8 – A9 -- Dates when continuous monitoring equipment is not properly functioning, if applicable (if you selected Method 1 in column A4)

•Column A10 -- Weekly CH4 liberated at the monitoring point, this is Output of Eq. FF-3 and a new data element



Last Years Tab 11 Destruction and Offsite had two tables: Table 11a collected most of the data identifying destruction devices onsite and points of offsite transport as well as descriptive information and operating hours. Table 11b linked destruction devices and points of offsite transport to specific wells, shafts, or monitoring points



The new Destruction or Offsite tab (Tab 7) these same data, along with new data regarding destruction efficiency (highlighted in yellow) in a single table with 22 columns, instead of the two separate tables linking destruction devices and points of offsite transport to specific wells, shafts, or monitoring points. Each destruction device can be linked to up to 10 wells, shafts, or monitoring points

Lets quickly walk through the 22 columns:

•Column A1 – Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name from Tab 2

• Column A2 -- Is gas destroyed at the mine or transported offsite? Yes or No, if yes you fill out Columns A3-A11 plus A13-A22 as needed, if no just A12 plus A13-A22 as needed

•Column A3 - A4: Description of the Device – this is a pick list. If you select Other (specify) you will provide a free form text description of the device in Column A4

•Column A5-- Indicate if a back-up destruction device (or devices) is present at the mine

•Column A6-- Annual operating hours of primary destruction device

•Column A7 -- Destruction efficiency assumed for primary destruction device and used in Eq. FF-5 (this is a new data element)



•Column A9 -- Destruction efficiency assumed for back-up destruction device Number 1 and used in Eq. FF-5 (this is a new data element)

•Column A10 -- Annual operating hours of back-up destruction device Number 2

•Column A11 -- Destruction efficiency assumed for back-up destruction device Number 2 and used in Eq. FF-5 (this is a new data element)

•Column A12 -- If gas is transported offsite, is the gas destroyed offsite? -this is only applicable if you answered no in Column A2

•Column A13 – A22 Identify the Individual well, shaft, or centralized monitoring point associated with the offsite transport or destruction device (up to 10) If one column is used then the next will be enabled

| | New Tab: Destruction | or Offsit | e Quarterly | | |
|----------|--|-----------|--|--|-------------------------|
| | Fill out the following table for ventilatio Complete the table from top to bottom | | | ices or points of offsite transp | ort on a quarterly basi |
| ſ | 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} - Quarterly CH4 destroyed onsite (MT CH4) [§98.326(c)] | CH4DestroyedB - Quarterly CH4 transported offsite (MT CH4) [§98.326(c)] | |
| 1 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 9 | | | | | |
| 10 | | | | | |
| 11 12 | | | | | |
| 12 | | | | | |
| | | | | | |
| | | | | | |

Tab 8 is a new tab for RY2012 – its very simple. Here we simply collect the Quarterly CH4 destroyed or transported of site for each relevant ventilation or degasification unit.

We have 4 columns:

Column A1 -- Provide each Ventilation and degasification system destruction device or point of offsite transport Unit ID or Name associated with destruction of offsite

Column A2 -- Quarter

Column A3 -- Quarterly CH4 destroyed onsite (this is a new data element this year)

Column A4 -- Quarterly CH4 transported offsite (this is a new data element this year)



Last year's weekly data on methane destruction and offsite transport was collected on Tab 12. This tab (now Tab 9) still collects the same data related to weekly concentration and flow rates of gas going to destruction devices or points of offsite transport. 3 new columns have been added to collect equation inputs: weekly flow rates, weekly flow units, and weekly concentrations. These are highlighted in yellow.

We have 8 columns:

Column A1 - A3 -- Provide each the name or ID for each ventilation and degasification system destruction device or point of offsite transport, along with the quarter and week for which you are reporting.

Column A4 - A6 - Weekly volumetric flow rate used to calculate CH4 destruction, units for that flow rate (new data elements), and the length of time that substitute data are used for the weekly volumetric flow rate used to calculate CH4 destruction.

Column A7 -- Weekly CH4 concentration used to calculate CH4 flow (new data element)

Column A8 -- Length of time that substitute data are used for the weekly CH4 concentration used to calculate CH4 flow.

| ıb 10 - Em | issions S | ummary (New) | | Electronic Greenhouse Gas Reporting Tool |
|---|--|---|--|--|
| following table calculates facili columns A3 and A4 in the table $\mathbf{H}_{4\text{VTotal}} = \sum_{m}^{m} (CH_{4\nu})_i$ | | from ventilation systems according to Eq. FF-2. To overri | | eport an alternative value, rom Ventilatic |
| i=1 | | | | |
| 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)] | What result do you want to report to EPA? (Calculated result initially selected by default) | CH _{4VTots} - Facility total quarterly CH4 liberated from ventilation systems (MT CH4, unrounded) [§98.3(c)(4)(iii)] | CH _{evrote} - Facility total quarterly CH4 liberated from ventilation systems (MT CH4, unrounded) [§98.3(c)(4)(iii)] |
| | Calculated Result | | User Override Value | Reported Value |
| Quarter 1 (Jan-Mar) | | Ise the calculated result rounded | | 0 |
| Quarter 2 (Apr-Jun) | | Ise the calculated result rounded | | 0 |
| Quarter 3 (Jul-Sep) Quarter 4 (Oct-Dec) | | lse the calculated result rounded | | 0 |
| he following table calculates fa Iternative value, use columns B m w | 3 and B4 in the table. | ed from all degasification monitoring points according to | | |
| | | | niccione fron | |
| $C\mathbf{H}_{4DTotal} = \sum_{i=l} \sum_{j=l} (CH)$ | 4D)ij (Eq. FF-4 | " EII | 13310113 11011 | n Degasificati |
| | 4D)i,j (Eq. FF-4 | " L II | B4 | |
| | | | B4 CH ₂₀₇₆₈ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] | B5 CH407668 - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] |
| I=I j=I B1 Quarter | E2 CH _{iOTelar} - Facility total quarterly CH4 liberated from all degasification monitoring points according to Eq. F4 (MT CH4, unrounded) [§98.3(c)(4)(iii)] Calculated Result | 83 What result do you want to report to EPA? (Calculated result initially selected by default) | 84 CH ₄₀₇₆₄₈ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) | B5 CH _{itoretar} -Facility total quartery (CH liberated from all degasification monitoring points (INT CH4, unrounded) [§98.3(c)(4)(iii)] Reported Value |
| I=I j=I B1 Quarter Quarter 1 (Jan-Mar) | E2 CHorster - Facility total quarterly CH4 liberated from all degasification monitoring points according to Eq. FF-4 (NT CH4, unrounded) [§98.3(c)(4)(iii)] Calculated Result | B3 What result do you want to report to EPA? (Calculated result initially selected by default) Use the calculated result rounded | B4 CH ₂₀₇₆₈ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] | E5 CHurren - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] Reported Value |
| I=I j=I B1 Quarter | E2 CHarter Facility total quarterly CH4 liberated from all degasification monitoring points according to Q, FF4 (MT CH4, unrounded) [§98.3(c)4(4)(ii)] Calculated Result | 83 What result do you want to report to EPA? (Calculated result initially selected by default) | B4 CH ₂₀₇₆₈ - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(c)(4)(iii)] | B5 CH _{itoretar} -Facility total quartery (CH liberated from all degasification monitoring points (INT CH4, unrounded) [§98.3(c)(4)(iii)] Reported Value |

Finally, this year we have a new Tab 10, which is an emissions summary that pulls data you entered in prior tabs and totals it in a mass balance.

Note that on this tab you may override the number prepared by the reporting form. Lets look at Column A2 – this will pull the emission number you provided from Tab 4. You then have the option of selection in column A3 whether you'd prefer to use own calculated result or use the result calculated by the form. If you choose "Enter my own result" you will be must enter a value in Column A4each value. Column A5 will present the number you chose, rounded to the hundredth, and that number will be used in the rollup calculations lower down lower on this tab.

We use the same format in the first three emission tables on the is page. Finally, in the bottom table we combine these data into quarterly emissions totals.

Lets take close look at each table.

Table 10a captures data from Eq. FF-2 previously entered on Tab 4 – Ventilation Quarterly

Table 10b captures data from Eq. FF-4 previously entered on Tab 5 – Degas Quarterly

| e following table calculates facility ernative value, use columns C3 an | | | | | | | |
|--|---|---|--|---|---|---|--|
| $\mathbf{H}_{4\text{DestroyedTotal}} = \sum_{l=1}^{d} (CH)$ | | (Eq. FF-6) | | | 6. To override a calculat | | |
| C1 | C2 | | C3 | | C4 | C5 | 5 |
| | CH _{LOSETOyed} Test quarterly CH4 destroyed at the mine and transported offsite according to Eq. FF-6 (MT CH4, unrounded) [§98.3(c)(4)(iii)] | What result (| do you want to report to EPA? (Ca sult initially selected by default) | | CH4Osttoystow - Facility t quarterly CH4 destroyer the mine and transport offsite (MT CH4, unrounded [§98.3(c)(4)(iii)] | otal CH _{aDestroyedTetal} - d at quarterly CH4 d the mine and t offsit | - Facility total destroyed at transported ite nrounded) |
| | Calculated Result | | | | User Override Value | Reported | - d Value |
| Quarter 1 (Jan-Mar) | | | lated result rounded | | | | 0 |
| Quarter 2 (Apr-Jun) | | | ated result rounded | | | | |
| Quarter 3 (Jul-Sep) | | | | | | | 0 |
| Quarter 4 (Oct-Dec) | | | ated result rounded | | | | 0 |
| | 0 | | lated result rounded | | G | and Tot | tal Er |
| The following table calculates \mathbf{CH}_4 emitted (net) = 6 | s facility total quarterly n | Use the calcul net CH4 emis | lated result rounded | m the mi (Eq. F | ine according to Eq. (| rand Tot | tal En |
| - | s facility total quarterly n | Use the calcul net CH4 emis | lated result rounded | | ine according to Eq. (| | tal En |
| CH_4 emitted (net) = 0 | 5 facility total quarterly n $\mathbf{CH}_{4\mathrm{VTotal}}+\mathbf{CH}_{4\mathrm{D}}$ | use the calcul net CH4 emiss Total - CH liberated n systems ounded) 4)(iii)] | sions to the atmosphere fro 4DestroyedTotal D3 CH _{4DT500} - Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [§98.3(cH4)(m)] | (Eq. F CH _{4Destro} quarter the min (MT C [§ | D4 parton - Facility total by CH4 destroyed at te and transported offsite CH4, unrounded) 98.3(c)(4)(iii)) | D5 CHaenettagnett - Fa quarterty - Fa according to 1 (MT CH4, unrc [§98.3(c)(4) | acility total et CH4 to the m the mine Eq. FF-7 ounded) 4)(iii)] |
| CH ₄ emitted (net) = 4 | a facility total quarterly m CH _{4VTotal} + CH _{4D} D2 CH _{eV7ee} - Fac quarterly CH4 from ventilation (MT CH4, unr [§98.3(c)() | Use the calcul net CH4 emis Total - CH ility total literated n systems rounded) 4)(iii) r A4)] | Atter result rounded sistons to the atmosphere frov 4DestroyedTotal D3 CHartee, Facility total quarterly CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [938.3:(-4(40))] [03-(02 or B4)]] | (Eq. F CH _{4Destro} quarter the min (MT C [§ | D4 D4 particle - Facility total y CH4 destroyed at te and transported offsite CH4, unrounded) 98.3(C(4)(iii)] | F-7. CH _{sentitud(ret)} - Fa quarterly ne emissions t atmosphere fron according to l (MT CH4, unrc | acility total et CH4 to the m the mine Eq. FF-7 rounded) 4)(iii)] 3-D4] |
| CH₄ emitted (net) = + D1 Quarter Quarter 1(Jan-Mar) | a facility total quarterly m CH _{4VTotal} + CH _{4D} D2 CH _{eV7ee} - Fac quarterly CH4 from ventilation (MT CH4, unr [§98.3(c)() | Use the calcul net CH4 emiss Total - CH illity total liberated n systems ounded) 4((iii)] r A4)] 0 | sions to the atmosphere fro (4DestroyedTotal D3 CHernae - Facility total quarterly CH4 liberated from all degastification monitoring points (MT CH4, unrounded) [§98.3(c)(4(iii)) [D3-(62 or 64)] 0 | (Eq. F CH _{40estro} quarteri the min (MT ([§ [D | D4 pertors - Facility total (y CH4 destroyed at te and transported offsite CH4, unrounded) 98.3(C)(4)(iii)] | D5 CHaevettegrett - Fa quarterty - Fa according to 1 (MT CH4, unrc [§98.3(c)(4) | acility total et CH4 to the m the mine Eq. FF-7 ounded) 4)(iii)] 3-D4] |
| D1 Quarter (Jan-Mar) Quarter (Jan-Mar) | a facility total quarterly m CH _{4VTotal} + CH _{4D} D2 CH _{eV7ee} - Fac quarterly CH4 from ventilation (MT CH4, unr [§98.3(c)() | Use the calcul net CH4 emiss Total - CH iliberated n systems ounded) 4)(iii) r A4)] 0 0 | Atter result rounded sistons to the atmosphere frov 4DestroyedTotal D3 CHartue, Facility total quarterly (CH4 liberated from all degasification monitoring points (MT CH4, unrounded) [S98.3(cH4)(Mi)] [D3-(C2 or B4)] 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | (Eq. F CH _{4Destro} quarter the min (MT C [§ | The according to Eq. (F-7) D4 Metroda - Facility total ty CH4 destroyed at e and transported offsite CH4, unrounded) 98.3.(c)(4)(iii)] Ha-(C2 or C4)] 0 0 | D5 CHaevettegrett - Fa quarterty - Fa according to 1 (MT CH4, unrc [§98.3(c)(4) | acility total et CH4 to the Eq. FF-7 ounded) 4)(iii)] 3-D4] 0 0 |
| CH₄ emitted (net) = + D1 Quarter Quarter 1(Jan-Mar) | a facility total quarterly m CH _{4VTotal} + CH _{4D} D2 CH _{eV7ee} - Fac quarterly CH4 from ventilation (MT CH4, unr [§98.3(c)() | Use the calcul net CH4 emiss Total - CH illity total liberated n systems ounded) 4((iii)] r A4)] 0 | sions to the atmosphere fro (4DestroyedTotal D3 CHernae - Facility total quarterly CH4 liberated from all degastification monitoring points (MT CH4, unrounded) [§98.3(c)(4(iii)) [D3-(62 or 64)] 0 | (Eq. F CH _{4Oastro} quarter the min (MT C [§ | D4 pertors - Facility total (y CH4 destroyed at te and transported offsite CH4, unrounded) 98.3(C)(4)(iii)] | D5 CHaevettegrett - Fa quarterty - Fa according to 1 (MT CH4, unrc [§98.3(c)(4) | acility total et CH4 to the m the mine Eq. FF-7 ounded) 4)(iii)] 3-D4] |

Table 10c captures data from Eq. FF-6 previously entered on Tab 8 – Destruction or Offsite Quarterly

As I mentioned, each of these calculated quarterly values can be overridden using Column A5, B5 or C5 respectively

Table 10d uses this data to provide a quarterly mass balance that provides the Facility total quarterly net CH4 emissions to the atmosphere from the mine according to Eq. FF-7. This number (Column D5) is carried up to Tab 1 where it is read by e-GGRT upon upload.



When you use the reporting form you will notice a couple types of on-board validation which help improve data quality. For example;

Some prevent irrational input (e.g., > 8784 hours in a yr)

Some just warn you that you are outside the normal range.

Other ensure that the dates you have entered are sequenced correctly and in the correct year and quarter.

Here in the webinar we have shown an example of an hours range check. Some validation will not let you continue because the data is illogical and clearly wrong. Other validation like this one in our example are just warnings and will allow to you to enter data outside of the specified range.



It may save time to cut and paste some data from the old format RY2011 form your submitted last year into the new format RY2011 reporting form you are required to submit this year.

If you Cut & Paste EPA strongly recommends using Paste Special, Values. We repeat, Please use Cut and Paste Special/Values (or Text) always. Even cutting and pasting from one tab to another can cause problems. Incorrect Cut and Paste processes can alter conditional formatting and even distort pick lists. Even worse cutting and pasting from external sources can cause cells to be protected so they no longer can be edited. We have worked very hard to prevent unintended alteration of formats and protection, but there are limitations within MS Excel.

Use of the Paste Special / Values will ensure that formatting and cell protection is not altered. If you use cut and paste processes and later encounter problems with your reporting form please contact the <u>GHGRP Help Desk</u>.

One more tip - It may be faster to move your RY2011 data the new reporting form, and add the equation inputs first, and work on RY2012 second. If you follow that path you will be sure to consistently migrate your previously submitted data into the new form, and after augmenting to provide the previously deferred items you can use the saved RY2011 form and use it as your starting point for RY2012. Presumably your degasification systems, well and shaft identifies, and destruction and offsite systems will be similar in both years.



When you log into e-GGRT you may notice some other changes:

First, e-GGRT / CDX passwords expire after 90 days; you password may need to be updates.

Second, e-GGRT CDX maintains secret questions and answers for each user which are used to certify your submission. The structure of these questions changes in October 2012 and you will have to update these question selection and answers if you haven't already.



When you first get into e-GGRT you should click the Data Reporting tab

You will see a facility & reporting year selection page: If you have more than one facility you will see all of the on this page as in the example.

First I want to call you attention to the reporting year selection box. You will be able to select RY2010, RY2011, or RY2012. This will default to 2012 so you will need to use this when you get ready to resubmit your RY2011 data.

If you click a past year and click 'Go' you will see the current status of your submissions for each facility for that reporting year. To resubmit for a prior year, simply go that year and click 'Open' next to the facility name. That will open the facility overview screen for that particular facility and reporting year. From the facility overview screen you can perform most of the critical functions including adding and removing subparts, opening subparts to add subpart-specific data or reporting forms and/or go to the validation or submission pages.

If you need help regarding this page or any page in e-GGRT you can us the help links on the left hand side. In this case the red arrow highlights the link to the 'About the Data Reporting Tab'.

| Select Facility » Facility or Supplier Overvie | a Reporting (2012 w |) | |
|--|--|--|--|
| FACILITY OR SUPPLIER OVERVIEW This page allows you to add the source and/c facility or supplier will be reporting, then to ac using the OPEN buttons. After data reporting is complete, you can initi submission process from this page by using subsequent submissions if needed). Facility's GHG Reporting Method: Data | cess those data reporting s ate the annual report review the SUBMIT button (or RES | creens CC2 equivalent e subparts C-11, SS and UBMIT for Biogenic CO2 em subparts C-11, SS e (Change) | 0.0 missions from facility , and TT (metric tons) 0.0 wissions from facility , and TT (metric tons) 0.0 missions from supplier (metric tons) |
| | | VIEW GHG DETAI | |
| REPORT DATA | | | |
| 2012 Reporting Source or Supplier Catego Subpart A—General Information | vory Validation Messages | OPEN | |
| Subpart FF—Underground Coal Mines | View Messages | OPEN | |
| ADD or REMOVE Subparts | view Messages | OPEN | |
| If all subparts are completed and Validation Me an Annual Report. | ssages addressed to your | atisfaction, you are ready to prepa | are and submit |
| SUBMIT ANNUAL REPORT | us Submitted Date | Certification Date | |

Lets take a quick look at the Facility Overview Screen we just mentioned

Inside of e-GGRT, the central screen is the Facility Overview

The upper portion of facility overview page is largely unchanged. But you can use it to add or delete subparts, open subpart reports, open validation messages, view GHG details and use the generate/submit button to go the Generate/Submit page.

If you have forgotten how to use the features of this screen we have a help link on the page detailing all these features. Or use the link shown here.

| SUBPART FF SUMMARY INFORMATION | FOR THIS FACILITY | | |
|--------------------------------------|--|--------------------------|----------------|
| 1.) DOWNLOAD FORM | | | |
| Subpart FF GHG Reporting | | | |
| emitters. See 76 FR 53057 (published | e deadline for reporting data elements used as inp I August 25, 2011). In accordance with the rule, e- If you choose to report these inputs to EPA by in ybe subject to public release. | GGRT is not currently co | ollecting data |
| Uploaded File Name | Attached By | Date | Delete |
| No files found | | | |

Just like last year, you will upload your Subpart FF Reporting Form.

E-GGRT will not accept last year's form or an preliminary version of the RY2012 multiyear form. Otherwise, the interface is unchanged.

| SUBPART FF SUMMAR | RY INFORMATION FOR 1 | THIS FACILITY | | |
|---------------------|--|---|--|--------------------------|
| uploading the corre | ion "e-GGRT RY2011.R.01" ct version of the Reporting f correct Reporting Form file | is not equal to the expected workbook version Form for this subpart. Use the link provided in for this subpart. | n "R.02". Please confirm yo the "1.) Download Form" s | u are section of this |
| 1.) DOWNLOAD FORM | | | | |
| Subpart FF GHG Re | eporting | | | |
| 2.) UPLOAD COMPLET | ED FORM | | | |
| | | Browse_ UPLOA | D | |
| Uploaded File Name | e | Attached By | Date | Delete |
| No files found. | | | | |

In our example I have attempted to upload a old RY2011 format reporting form to show you an example of a screen error. A screen error is a stopper – if your form has a screen error you will see a yellow message after upload and e-GGRT will reject your reporting form until the error is corrected.

To resubmit your RY2011 data, you must also use the new reporting form. You must submit your RY2012 report as well as resubmit your RY2011 report no later than April 1, 2013.



e-GGRT will validate your reporting form after you upload.

Validations have been added to ensure your new equations inputs data is complete.

Screen Errors, as we just saw, will appear in yellow on the upload page and will prevent a successful upload – another example of a screen error is if the facility ID in the reporting form does not match the facility in e-GGRT.

Data quality and completeness errors will appear in the Validation Report in the format presented here.





EPA has updated its help content located on its <u>www.ccdsupport.com</u> site.

If you are looking for additional information please go to <u>http://www.ccdsupport.com/confluence/display/Help/Subpart+FF+-</u>+Underground+Coal+Mines

Or contact the GHGRP Help Desk at GHGReporting@epa.gov or call 1-877-444-1188



EPA maintains a RSS feed which provides timely news and updates on e-GGRT system status, updates and outages. If you are interested some web addresses for that content and subscription links are provided.



Thanks for your attention during this portion of our presentation.

Now we will answer questions that have been submitted through the webinar interface.