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Electronic Greenhouse Gas Reporting Tool

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Petroleum and Natural Gas Systems (Subpart W) Reporting Form Revisions for Stakeholder Preview

U.S. Environmental Protection Agency
Greenhouse Gas Reporting Program (GHGRP)
November 2014

Overview of Webinar

- Overview of this webinar
- About Subpart W data deferred until 2015
- EPA's approach to collecting these data: Reporting Year (RY) 2014 and prior RYs
- Review changes to the reporting form for RY14
- Review the RY2011 – RY2013 deferred data reporting form and the submission process for deferred data
- Discuss the XML reporting methods
- Questions and answers

About Subpart W Data Deferred until 2015

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- In August 2011, EPA deferred the reporting deadline for a number of Subpart W equation inputs until March 31, 2015. The inputs to equations whose reporting deadline was deferred until 2015 are listed in Table A-7 of subpart A.
- In October 2014, EPA finalized the approach to collecting these deferred inputs and in that rule made several minor modifications to the reporting requirements for Subpart W.
- As a result, reporter must submit both an expanded set of Subpart W data for Reporting Year 2014 and deferred data elements for Reporting Years 2011, 2012, and 2013 by March 31, 2015. These data must be submitted as part of the facility's RY2014 submission.

EPA's Approach to Collecting These Data

To accommodate the reporting requirements of Subpart W inputs, EPA has:

1) Expanded the RY14 Reporting Form to include the previously deferred items. New items added to the right side of existing tables.

2) Created a separate reporting form for collection of the deferred data elements for RY11, 12, and 13. This new form is designed to ensure that the reporting of the deferred data is consistent with data previously submitted.

3) Revised the XML schema supporting Subpart W to accommodate these new data and defined an additional branch of the schema to accommodate deferred data.

Download the Draft Forms or Schema

- EPA is providing a draft version of the RY14 and Deferred Data reporting forms to the public and is seeking comments and suggestions regarding these reporting tools.
- These draft forms and the draft version of the XML reporting schema for Subpart W can be downloaded at http://www.ccdsupport.com/confluence/display/help/RY2014+Subpart+W+Preview+Materials
- On the following pages, we will first review the changes to the RY14 reporting form, then review the deferred reporting form, and finally discuss the changes to the XML schema for Subpart W.

RY2014 Reporting Form

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– Data elements related to inputs to emissions equations have been included for 16 sources:

Source
Natural Gas Pneumatic Device Venting
Natural Gas Driven Pneumatic Pumps
Acid Gas Removal Units
Dehydrators
Well Venting for Liquid Unloading
Gas Well Completion & Workovers
Blowdown Vent Stacks
Atmospheric Tanks
Flare Stacks
Centrifugal Compressors
Reciprocating Compressors
Equipment Leaks
Local Distribution
EOR Injection Pump Blowdown
EOR Liquids Dissolved CO_2
Combustion Emissions

Natural Gas Pneumatic Device Venting

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Natural gas pneumatic device venting [98.236(c)(1)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for natural gas pneumatic device venting: -Onshore petroleum and natural gas production [98.230(a)(2)] -Onshore natural gas transmission compression [98.230(a)(4)] -Underground natural gas storage [98.230(a)(5)]
External Links:

Type of Pneumatic Device	Total CO_2 Emissions (mt CO_2) [98.236(c)(1)(iv)]	Total CH_4 Emissions (mt CO_2e) [98.236(c)(1)(iv)]	Actual Count 98.236(c)(1)(i) 98.236(c)(1)(ii) 98.236(c)(1)(iii)	Estimated Count 98.236(c)(1)(i) 98.236(c)(1)(ii) 98.236(c)(1)(iii)
High-bleed Pneumatic Devices				
Intermittent Bleed Pneumatic Devices				
Low-Bleed Pneumatic Devices				

For Natural Gas Pneumatic Device Venting there are 2 new additions to the form.

Natural Gas Driven Pnuematic Pumps

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Natural Gas Driven Pneumatic Pumps [98.236(c)(2)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for natural gas driven pneumatic pumps: -Onshore petroleum and natural gas production [98.230(a)(2)]
External Links:

Type of Pneumatic Pump	Total CO_2 Emissions (mt CO_2) [98.236(c)(2)(ii)]	Total CH_4 Emissions (mt CO_2e) [98.236(c)(2)(ii)]	Total count of Natural Gas Driven Pneumatic pumps 98.236(c)(2)(i)
Natural Gas Driven Pneumatic Pumps			

For Natural Gas Driven Pneumatic Pump
there is 1 new addition to the form

Acid Gas Removal Units

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Acid Gas Removal Units [98.236(c)(3)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for acid gas removal units: -Onshore petroleum and natural gas production [98.230(a)(2)] -Onshore natural gas processing [98.230(a)(3)]
External Links:

Unique ID	Complete Only if Using Calculation Methodology 1 Annual average fraction of CO_2 content in the vent from the acid gas removal unit (volumetric fraction) [98.236(c)(3)(ii)]	Complete Only if Using Calculation Methodology 2 Annual average fraction of CO_2 content in the vent from each acid gas removal unit (volumetric fraction) [98.236(c)(3)(ii)]	Complete Only if Using Calculation Methodology 3 Annual average volume fraction of CO_2 content of natural gas into each acid gas removal unit [98.236(c)(3)(iii)]	Total throughput off each acid gas removal unit using a meter or engineering estimate based on process knowledge or best available data (million cubic feet per year) 98.236(c)(3)(i)	Annual quantity of CO_2, recovered from each acid gas removal unit and transferred outside the facility (metric tons CO_2e), under subpart PP of this part 98.233(d)(11) 98.236(c)(3)(iv)

For Acid Gas Removal Units
there is 1 new addition to the form for each calculation methodology plus 2 more for each unit

Dehydrators

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Dehydrators [98.236(c)(4)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for dehydrators: -Onshore petroleum and natural gas production [98.230(a)(2)] -Onshore natural gas processing [98.230(a)(3)]
External Links:

If the facility has any glycol dehydrators with a throughput <0.4 MMscfd, complete following table:

What vent gas controls used [98.236(c)(4)(ii)(B)]	Describe "Other/Multiple" vent gas controls [98.236(c)(4)(ii)(B)]	Total CO_2 Emissions from Venting ($mtCO_2$) [98.236(c)(4)(ii)(C)]	Total CH from (m [98.23	$_2O$ Emissions om Flaring nt CO_2e) 6(c)(4)(ii)(D)]	Count of glycol dehydrators (W-5) 98.236(c)(4)(ii)(A)
Vapor Recovery					
Dehydrator Vents to Flares					
Regenerator fire-box/fire tubes					
No Vent Controls					
Other / Multiple Vent Gas Controls					

For Dehydrators there is 1 new addition to the form for small dehydrators (<0.4 MMscfd) and 10 new additions to the form for large dehydrators (>=0.4 MMscfd)

Dehydrators (continued)

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If the facility has any glycol dehydrators with a throughput ≥0.4 MMscfd, complete following table:

Unique ID	[illegible]	Glycol dehydrator feed natural gas flow rate determined by engineering estimate based on best available data (MMscfd)	Glycol dehydrator absorbent circulation pump type	Report whether stripper gas is used in glycol dehydrator	Report whether a flash tank separator is used in glycol dehydrator	Report type of absorbent used
		98.236(c)(4)(i)(A)	98.236(c)(4)(i)(B)	98.236(c)(4)(i)(C)	98.236(c)(4)(i)(D)	98.236(c)(4)(i)(E)

Total time the glycol dehydrator is operating in hours	Temperature of the wet natural gas (degrees Fahrenheit)	Pressure of the wet natural gas (psig)	Concentration of CO_2 in wet natural gas (as a fraction)	Concentration of CH_4 in wet natural gas (as a fraction)
98.236(c)(4)(i)(F)	98.236(c)(4)(i)(G)	98.236(c)(4)(i)(G)	98.236(c)(4)(i)(H)	98.236(c)(4)(i)(H)

Well Venting for Liquid Unloading

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Well Venting for Liquids Unloading [98.236(c)(5)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for well venting for liquids unloading: -Onshore petroleum and natural gas production [98.230(a)(2)]
External Links:

For Sub-basins using Calculation Method 1, complete following table:

Sub-Basin ID	Tubing Diameter Gro [98.23	CO_2 Emissions (mt CO_2)	Total CH_4 Emissions (mt CO_2e)	Average flow rate of the measured well venting (cubic feet per hour)
		(c)(5)(i)(H)]	[98.236(c)(5)(i)(H)]	98.236(c)(5)(i)(D)

For Sub-basins using Calculation Method 2 (without plunger lifts), complete following table:

Sub-Basin ID	Number of Wells ve liquids unload (without plunge	missions O_2)	Total CH_4 Emissions (mt CO_2e)	Cumulative number of unloadings vented to the atmosphere
	[98.236(c)(5)(i,	)(ii)(E)]	[98.236(c)(5)(ii)(E)]	98.236(c)(5)(ii)(c)

For Sub-basins using Calculation Method 3 (with plunger lifts), complete following table:

Sub-Basin ID	Number of Wells v liquids unloa (with plunger	issions O_2)	Total CH_4 Emissions (mt CO_2e)	Cumulative number of unloadings vented to the atmosphere
	[98.236(c)(5)(i	)(ii)(E)]	[98.236(c)(5)(ii)(E)]	98.236(c)(5)(ii)(c)

Gas Well Completions & Workovers

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Gas Well Completions and Workovers [98.236(c)(6)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for gas well completions and workovers: -Onshore petroleum and natural gas production [98.230(a)(2)] **NOTE:** Reporting is required for gas well completions WITH and WITHOUT hydraulic fracturing (as applicable). Use the navigation links below to move
External Links:

Complete the following table for gas well completions and workovers *with* hydraulic fracturing

	Wildcat or Delineation Wells Subject to a 2 Year Delay in Reporting		When using Equation W-10A			
Sub-Basin ID [98.236(c)(6)]	Are the Only Wells in the Sub-basin Wildcat or Delineation Well Subject to a 2 Year Delay in Reporting [98.236(c)(6)(i)(G)]	API Well Number(s) [98.236(c)(6)(i)(G)]	Measured flow rate of backflow during well completion (cubic feet per hour) 98.236(c)(6)(i)(B)	Measured flow rate of backflow during well workover (cubic feet per hour) 98.236(c)(6)(i)(D)	Total number of days of backflow from all wells during completions 98.236(c)(6)(i)(E)	Total number of days of backflow from all wells during workovers 98.236(c)(6)(i)(F)

For Gas Well Completions and Workovers with Hydraulic Fracturing there are 10 new additions to the form. If the only wells in the sub-basin are wildcat or delineation wells, reporting of inputs supporting Eq. W-10a may be delayed 2 years

Gas Well Completions & Workovers (continued)

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Four additional new data elements for gas well completions and workovers *with* hydraulic fracturing

For well completions that employed purposely designed equipment that separates natural gas from the backflow		For well workovers that employed purposely designed equipment that separates natural gas from the backflow	
Number of Completions [98.236(c)(6)(i)(G)]	The amount of gas recovered to sales using engineering estimate based on best available data (standard cubic feet) 98.236(c)(6)(i)(G)	Number of Workovers 98.236(c)(6)(i)(H)	The amount of gas recovered to sales using engineering estimate based on best available data (standard cubic feet) 98.236(c)(6)(i)(H)

Complete the following table for gas well completions and workovers *without* hydraulic fracturing

Sub-Basin ID [98.236(c)(6)]	Tota… of … …ns …e) [9…	Total count of completions in calendar year 98.236(c)(6)(ii)(A)	Total count of workovers in calendar year that flare gas or vent gas to the atmosphere 98.236(c)(6)(ii)(B)

For Gas Well Completions and Workovers without Hydraulic Fracturing there are 2 new additions to the form

Blowdown Vent Stacks

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Blowdown Vent Stacks [98.236(c)(7)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for blowdown vent stacks: -Onshore natural gas processing [98.230(a)(3)] -Onshore natural gas transmission compression [98.230(a)(4)] -LNG import and export equipment [98.230(a)(7)]
External Links:

For *each* unique physical volume that is blown down more than once during the calendar year, complete the following table:

Unique name or ID for unique physical volume [98.236(c)(7)(i)(C)]	Which equation was us… calculate natural gas … emissions? (Select from list)	…ssions (mt CO_2) …c)(7)(i)(B)]	Total CH_4 Emissions (mt CO_2e) [98.236(c)(7)(i)(B)]	Report Only if Using Eq. W-14A Total number of blowdowns for each unique physical volume in the calendar year 98.236(c)(7)(i)(A)

For Blowdown Vent Stacks there is 1 new addition to the form applicable to blowdown volumes based on Eq W-14a

Atmospheric Tanks

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Gas from Produced Oil Sent to Atmospheric Tanks [98.236(c)(8)]

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Worksheet Instructions:

In accordance with 98.232, only the following industry segment must report data for gas from produced oil sent to atmospheric tanks:

-Onshore petroleum and natural gas production [98.230(a)(2)]

Note: The facility should report emissions collectively. Reporters are not restricted to using only one calculation methodology per sub-basin, and may use the requisite methods to report collective emissions, by sub-basin, for their facility.

External Links:

For wellhead gas-liquid separator with oil throughput >10 barrels/day using Calculation Methodologies 1 or 2, complete the following table for each sub-basin:

Sub-Basin ID [98.236(c)(8)(i)]	...m ...$_2$e) ...(L)]	Are the Only Wells in the Sub-basin Wildcat or Delineation Well Subject to a 2 Year Delay in Reporting [98.236(c)(8)(i)(F)]	API Well Number(s) [98.236(c)(8)(i)(F)]	Total volume of oil from all wellhead separators sent to tank(s) (bbls per yr) [98.236(c)(8)(i)(F)]	Annual CO_2 gas quantities that were recovered (mt CO_2) [98.236(c)(8)(i)(K)]	Annual CH_4 gas quantities that were recovered (mt CO_2e) [98.236(c)(8)(i)(K)]

For Atmospheric Tanks, there are new additions to the form applicable to Methodologies 1 & 2, 3 & 4, and 5. If the only wells in the sub-basin are wildcat or delineation wells, reporting of total volume of oil may be delayed 2 years

Atmospheric Tanks (continued)

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For wellhead gas-liquid separator with oil throughput >10 barrels/day using Calculation Methodologies 3 or 4, complete the following table for each sub-basin:

Sub-Basin ID [98.236(c)(8)(ii)]	...l N_2O ...ns from ...nt CO_2e) ...)(8)(ii)(I)]	Are the Only Wells in the Sub-basin Wildcat or Delineation Well Subject to a 2 Year Delay in Reporting [98.236(c)(8)(ii)(A)]	API Well Number(s) [98.236(c)(8)(ii)(A)]	Total volume of sales oil from all wells (bbls per yr) [98.236(c)(8)(ii)(A)]	Annual CO_2 gas quantities that were recovered (mt CO_2) [98.236(c)(8)(ii)(H)]	Annual CH_4 gas quantities that were recovered (mt CO_2e) [98.236(c)(8)(ii)(H)]

For wellhead gas-liquid separators and wells with oil throughput <10 barrels/day using Calculation Methodology 5, complete the following table for each sub-basin:

Sub-Basin ID [98.236(c)(8)(iii)]	Annual CO_2 ...ssions from Ventin... ...O_2e) [98.236(c)(...(H)]	Number of wellhead separators [98.236(c)(8)(iii)(A)]	Number of wells without wellhead separators [98.236(c)(8)(iii)(B)]	Annual CO_2 gas quantities that were recovered (mt CO_2) [98.236(c)(8)(iii)(G)]	Annual CH_4 gas quantities that were recovered (mt CO_2e) [98.236(c)(8)(iii)(G)]

Flare Stacks

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Flare Stacks [98.236(c)(12)]

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Worksheet Instructions:

In accordance with 98.232, only the following industry segments must report data for flare stacks:

-Onshore petroleum and natural gas production [98.230(a)(2)]

-Onshore natural gas processing [98.230(a)(3)]

IMPORTANT NOTE: If your flare emissions are reported on another source type, you must complete columns D through F on this sheet and enter zero (0) in columns H through L.

External Links:

Unique ID	N	Combusted CO_2 Emissions (mt CO_2)	N_2O emissions (mt CO_2e)	Volume of gas sent to flare (cubic feet per year)	Flare combustion efficiency
		98.236(c)(12)(viii)]	[98.236(c)(12)(ix)]	[98.236(c)(12)(ii)]	[98.236(c)(12)(v)]

For Flare Stacks there are 2 new additions to the form

Centrifugal Compressors

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Centrifugal Compressors [98.236(c)(13)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for centrifugal compressors: -Onshore petroleum and natural gas production [98.230(a)(2)] -Onshore natural gas processing [98.230(a)(3)] -Onshore natural gas transmission compression [98.230(a)(4)] -Underground natural gas storage [98.230(a)(5)] -Liquefied natural gas (LNG) storage [98.230(a)(6)] -LNG import and export equipment [98.230(a)(7)] **Note:** If a compressor has no emissions for a mode, enter zero, do not leave blank
External Links:

For Onshore Petroleum and Natural Gas Production Only		
Total annual compressor emissions CO2 Emissions (mt CO2) [98.236(c)(13)(v)(B)]	Total annual compressor emissions CH4 Emissions (mt CO2e) [98.236(c)(13)(v)(B)]	Count of compressors [98.236(c)(13)(v)(A)]

For Centrifugal Compressors, Onshore Production facilities have 1 new addition to the form

Centrifugal Compressors (continued)

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Compressor ID	We… T…	…NG MODES	For Centrifugal Compressors in OPERATING MODE			For Centrifugal Compressors in Shutdown Depressurized mode	
		Total annual N_2O …ssions from all modes of operation combined (mt CO_2e) [98.23(c)(13(iv)]	Total time in operating mode (hours) [98.236(c)(13)(i)(F)] [98.236(c)(13)(ii)(A)]	Reporter emission factor for wet seal oil degassing vents (cubic feet per hour) [98.236(c)(13)(i)(E]	Reporter emission factor for blowdown vents (cubic feet per hour) [98.236(c)(13)(ii)(B)]	Total time in shutdown, depressurized mode (hours) [98.236(c)(13)(iii)(A]	Reporter emission factor for isolation valve emissions (cubic feet per hour) [98.236(c)(13)(iii)(B)]

Other types of facilities have 5 new additions to the form

Reciprocating Compressors

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Reciprocating Compressors [98.236(c)(14)]

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Worksheet Instructions:

In accordance with 98.232, only the following industry segments must report data for reciprocating compressors:

- -Onshore petroleum and natural gas production [98.230(a)(2)]
- -Onshore natural gas processing [98.230(a)(3)]
- -Onshore natural gas transmission compression [98.230(a)(4)]
- -Underground natural gas storage [98.230(a)(5)]
- -Liquefied natural gas (LNG) storage [98.230(a)(6)]
- -LNG import and export equipment [98.230(a)(7)]

Note: If a compressor has no emissions for a mode, enter zero, do not leave blank

External Links:

For Onshore Petroleum and Natural Gas Production Only		
Total annual compressor emissions CO_2 Emissions (mt CO_2) [98.236(c)(14)(v)(B)]	Total annual compressor emissions CH_4 Emissions (mt CO_2e) [98.236(c)(14)(v)(B)]	Count of compressors [98.236(c)(14)(v)(A)]

For Reciprocating Compressors, Onshore Production facilities have 1 new addition to the form

Reciprocating Compressors (continued)

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Compressor ID	5	For Reciprocating Compressors with Rod Packing in Operating Mode	For Reciprocating Compressors with blowdown vents not manifolded		For Reciprocating Compressors in Not Operating, Depressurized MODES	
		Total time in operating mode (hours) [98.236(c)(14)(i)(B)]	Total time in standby, pressurized mode (hours) [98.236(c)(14)(ii)(A)]	Emission factor for blowdown vents (cubic feet per hour) [98.236(c)(14)(ii)(B)]	Total time the compressor is in not operating, depressurized mode (hours) [98.236(c)(14)(iii)(A)]	Reporter emission factor for isolation valve emissions (cubic feet per hour) [98.236(c)(14)(iii)(B)]

Other types of facilities have 5 new additions to the form

Equipment Leaks

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Other Emissions from Equipment Leaks Estimated Using Emission Factors [98.236(c)(15)]

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Worksheet Instructions:

In accordance with 98.232, only the following industry segments must report data for other emissions from equipment leaks estimated using emission factors:

- -Onshore petroleum and natural gas production [98.230(a)(2)]
- -Onshore natural gas processing [98.230(a)(3)]
- -Onshore natural gas transmission compression [98.230(a)(4)]
- -Underground natural gas storage [98.230(a)(5)]
- -Liquefied natural gas (LNG) storage [98.230(a)(6)]
- -LNG import and export equipment [98.230(a)(7)]
- -Natural Gas Distribution [98.230(a)(8)]

External Links:

Complete the following table for each component type (major equipment type for onshore production) that uses emission factors for estimating emissions for equipment leaks calculated using population counts and factors:

Component Type (Select from list) [98.236(c)(15)]	CO_2 Emissions (mt CO_2) [98.236(c)(15)(ii)(C)]	CH_4 Emissions (mt CO_2e) [98.236(c)(15)(ii)(C)]	Total count for each type of leak source [98.236(c)(15)(ii)(A)]

For Equipment Leaks there is 1 new addition to the form

Local Distribution

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Local Distribution Companies [98.236(c)(16)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segments must report data for Local Distribution Companies: -Natural gas distribution [98.230(a)(8)] **NOTE:** CO_2 and CH_4 emissions from Sheet 15 (Equipment Leaks Using EFs) do not add into the Total Emissions for Local Distribution Companies.
External Links:

Total number of above grade T-D transfer stations [98.236(c)(16)(i)]	
Leak factor for meter/regulator run developed in Equation W-32 of §98.233 [98.236(c)(16)(viii)]	
Number of miles of unprotected steel distribution mains (W-31) [98.236(c)(16)(ix)]	
Number of miles of protected steel distribution mains (W-31) [98.236(c)(16)(x)]	
Number of miles of plastic distribution mains (W-31) [98.236(c)(16)(xi)]	
Number of miles of cast iron distribution mains (W-31) [98.236(c)(16)(xii)]	
Number of unprotected steel distribution services (W-31) [98.236(c)(16)(xiii)]	
Number of protected steel distribution services (W-31) [98.236(c)(16)(xiv)]	
Number of plastic distribution services (W-31) [98.236(c)(16)(xv)]	
Number of copper distribution services (W-31) [98.236(c)(16)(xvi)]	

For Local Distribution there are 9 new additions to the form. For RY11, 12, and 13 these 9 were optional items. For RY14 they are required.

EOR Injection Pump Blowdown

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Enhanced Oil Recovery Injection Pump Blowdown [98.236(c)(17)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for EOR injection pump blowdown: -Onshore petroleum and natural gas production [98.230(a)(2)]
External Links:

Complete the following table for each EOR Injection Pump:

Unique ID	Unique Name or ID Number for EOR Injection Pump (Optional)	CO_2 emissions (mt CO_2) [98.236(c)(17)(v)]	Volume of critical phase gas between isolation valves (cubic feet) 98.236(c)(17)(ii)	Number of blowdowns per year 98.236(c)(17)(iii)	Critical phase EOR injection gas density (kg/ft^3) 98.236(c)(17)(iv)

For EOR Injection Pump Blowdown there are 3 new additions to the form

EOR Liquids Dissolved CO2

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Enhanced Oil Recovery Hydrocarbon Liquids Dissolved CO2 [98.236(c)(18)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for EOR hydrocarbon liquids dissolved CO2: -Onshore petroleum and natural gas production [98.230(a)(2)]
External Links:

Complete the following table for each sub-basin:

Sub-Basin ID	Annual CO_2 emissions (mt CO_2) [98.236(c)(18)(iii)]	Volume of crude oil produced (barrels per year) 98.236(c)(18)(i)	Amount of CO_2 retained in hydrocarbon liquids (mt CO_2 per barrel) 98.236(c)(18)(ii)

For EOR Injection Liquid Dissolved CO2 there are 2 new additions to the form

Combustion Emissions

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Onshore Petroleum and Natural Gas Production and Natural Gas Distribution Combustion Emissions [98.236(c)(19)]

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Worksheet Instructions:
In accordance with 98.232, only the following industry segment must report data for combustion emissions: -Onshore petroleum and natural gas production [98.230(a)(2)] -Natural gas distribution [98.230(a)(8)]
External Links:

Complete the following table for external fuel combustion units with a heat capacity greater than 5 mmBtu/hr:

Type of fuel combusted [98.236(c)(19)(iv)]	Cumulative volume of fuel combusted [98.236(c)(19)(iv)]	Fuel volume Units [98.236(c)(19)(iv)]

Complete the following table for internal fuel combustion units with a heat capacity greater than 1 mmBtu/hr:

Type of fuel combusted [98.236(c)(19)(vii)]	Cumulative volume of fuel combusted [98.236(c)(19)(vii)]	Fuel volume Units [98.236(c)(19)(vii)]

For Combustion Emissions there are 2 new tables for types and volumes of fuels combusted

Deferred Data Reporting - Overview

Now we will review the process the Agency intends to use to collect deferred data elements for RY11, RY12, and RY13

Since the Deferred Data must be submitted as part of your RY2014 submission, EPA has created reporting methods (reporting forms or XML schema) that allow these data to be included with your RY14 submission

As we noted when reviewing the RY14 Reporting Form, deferred data elements are closely related to the previous data reporting. In most cases deferred elements are just additional columns which must be provided for every unit or sub-basin applicable on a previously reported tab or table.

Deferred Data Reporting - Overview

For these deferred data it is very important that the deferred data match up, line for line, with the previously submitted data. EPA is planning to verify your deferred data by integrating it with your previously submitted data.

The Deferred Reporting form is designed to ease data preparation by presenting previously submitted data side by side with the deferred data which must now be submitted.

Data in grey cells comes from the previously submitted reporting form; blue cells identify deferred data that must be submitted. Only the blue deferred data elements (plus data elements that link deferred items to previous year annual reports, such as unit ID numbers) will be extracted from the reporting form and submitted.

Deferred Data Reporting - Overview

e-GGRT Electronic Greenhouse Gas Reporting Tool

Subpart W: Petroleum and Natural Gas Systems - Reporting Years 2011, 2012 and 2013 Deferred Data Reporting Form

Version D.1 Updated: 10/29/2014

For RY2011, RY2012, and RY2013 the Subpart W reporting requirement deferred collection of a number of data elements until March 30, 2015. The Reporting Form is designed to allow reporting of those deferred data elements. This form extracts the originally submitted data from for Subpart W Reporting Form and presents it in the tables throughout this form to provide a context and continuity for deferred data. Previously entered data will be presented in Gray shaded cells and deferred data which you must enter will be presented in Blue shaded cells.

You do not need to re-enter previously submitted data. Instead you must identify your original reporting form in Cell C10, open that file in background using the line in Cell C12 and this form will extract your previously submitted data from the referened form

1.) Enter the location and name of original Subpart W Form
(you may include a drive or folder references, for example "C:\EGGRT\SP W\Deferred Capture\Onshore Test.xls", do not include quotes or special characters

2.) Click this Link Once the File Name Has Been Entered Above
Once you click the link above you should see the industry segment from your orginal form below

Offshore petroleum and natural gas production [98.230(a)(1)]
Onshore petroleum and natural gas production [98.230(a)(2)]
Onshore natural gas processing [98.230(a)(3)]
Onshore natural gas transmission compression [98.230(a)(4)]
Underground natural gas storage [98.230(a)(5)]
Liquefied natural gas (LNG) storage [98.230(a)(6)]
LNG import and export equipment [98.230(a)(7)]
Natural gas distribution [98.230(a)(8)]

3.) The following table provide general information about this facility from your original form:

Facility Name:		
GHGRP ID:		
Reporting Period:		
Annual throughput [98.236(d)]	Gaseous Throughput (MMscf)	
Annual throughput [98.236(d)]	Liquid Throughput (thousand barrels)	
Comments:		

Deferred Reporting Form (continued)

To use the Deferred Reporting Form you must have your previously submitted reporting form. If you don't have the submitted version or are uncertain which version of your form was submitted, you can download the submitted form from e-GGRT. (Instructions for downloading previously submitted forms can be found at http://www.ccdsupport.com/confluence/x/PIvADg)

You will need to prepare a Deferred Reporting form for each reporting year, e.g., RY11, RY12,and RY13 assuming you had sources with deferred inputs.

Deferred Reporting Form (continued)

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To initiate data entry on a deferred form you must first provide the name and folder location of the previously submitted form.

1.) Enter the location and name of original Subpart W Form

This entry can be a complete file reference like **C:\EGGRT\SP W\Deferred Capture\Onshore Test.xls** or if both the source file and deferred form are in the same folder just the file name will suffice. Once the source file has been identified use the link below to open that file in excel. Once opened the source file can be minimized.

2.) Click this Link Once the File Name Has Been Entered Above

Deferred Reporting Form (continued)

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Once the source file is identified and opened in Excel the Deferred form will read all the contents from the Source file into the Deferred Form.
Note: Grey Background data cannot be edited – it coming from the source file.
On the Introduction Tab only the source file can be entered – the rest is imported.

1.) Enter the location and name of original Subpart W Form
(you may include a drive or folder references, for example "C:\EGGRT\SP W\Deferred Capture\Onshore Test.xls", do not include quotes or special characters

Onshore Test.xls

2.) Click this Link Once the File Name Has Been Entered Above
Once you click the link above you should see the industry segment from your orginal form below

	Offshore petroleum and natural gas production [98.230(a)(1)]
X	Onshore petroleum and natural gas production [98.230(a)(2)]
	Onshore natural gas processing [98.230(a)(3)]
	Onshore natural gas transmission compression [98.230(a)(4)]
	Underground natural gas storage [98.230(a)(5)]
	Liquefied natural gas (LNG) storage [98.230(a)(6)]
	LNG import and export equipment [98.230(a)(7)]
	Natural gas distribution [98.230(a)(8)]

3.) The following table provide general information about this facility from your original form:

Facility Name:			MLH Resources
GHGRP ID:			513108
Reporting Period:			2013
Annual throughput [98.236(d)]	Gaseous Throughput (MMscf)		2452.534
Annual throughput [98.236(d)]	Liquid Throughput (thousand barrels)		4345.1
Comments:			Test for Onshore Production

Deferred Reporting Form (continued)

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4.) Fill out the applicable source deferred reporting forms for your industry segment, as indicated with a green "Yes", below:

	Deferred Data Elements Required for Onshore petroleum and natural gas production [98.230(a)(2)]:	Go to Reporting Spreadsheet
Sub-Basin Selection	No	Go to Form
Natural Gas Pneumatic Devices [98.236(c)(1)]	Yes	Go to Form
Natural Gas Driven Pneumatic Pumps [98.236(c)(2)]	Yes	Go to Form
Acid Gas Removal Units [98.236(c)(3)]	Yes	Go to Form
Dehydrators [98.236(c)(4)]	Yes	Go to Form
Well Venting for Liquids Unloading [98.236(c)(5)]	Yes	Go to Form
Gas Well Completions and Workovers [98.236(c)(6)]	Yes	Go to Form
Blowdown Vent Stacks [98.236(c)(7)]	No	Go to Form
Gas from Produced Oil Sent to Atmospheric Tanks [98.236(c)(8)]	Yes	Go to Form
Reciprocating Compressors [98.236(c)(14)]	Yes	Go to Form
Other Emissions from Equipment Leaks Estimated Using Emission Factors [98.236(c)(15)]	Yes	Go to Form
Local Distribution Companies [98.236(c)(16)]	No	Go to Form
Enhanced Oil Recovery Injection Pump Blowdown [98.236(c)(17)]	Yes	Go to Form
Enhanced Oil Recovery Hydrocarbon Liquids Dissolved CO_2 [98.236(c)(18)]	Yes	Go to Form
Onshore Petroleum and Natural Gas Production and Natural Gas Distribution Combustion Emissions [98.236(c)(19)]	Yes	Go to Form
Offshore Sources [98.236(b)]	No	Go to Form

Deferred Reporting Form - Example

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Natural gas pneumatic device venting [98.236(c)(1)]

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Worksheet Instructions:
The Reporting Form is designed to allow reporting of deferred data elements. This form extracts the originally submitted data from for Subpart W Reporting Form and presents it in the tables throughout this form to provide a context and continuity for deferred data. Previously entered data will be presented in Gray shaded cells and deferred data which you must enter will be presented in Blue shaded cells.
In accordance with 98.232, only the following industry segments must report data for natural gas pneumatic device venting: -Onshore petroleum and natural gas production [98.230(a)(2)] -Onshore natural gas transmission compression [98.230(a)(4)] -Underground natural gas storage [98.230(a)(5)]
External Links:

Does the Facility have any continuous high-bleed pneumatic devices subject to reporting under 98.232? **Yes**

Does the Facility have any intermittent bleed pneumatic devices subject to reporting under 98.232? **Yes**

Does the Facility have any continuous low-bleed pneumatic devices subject to reporting under 98.232? **Yes**

Type of Pneumatic Device	Total CO_2 Emissions (mt CO_2) [98.236(c)(1)(iv)]	Total CH_4 Emissions (mt CO_2e) [98.236(c)(1)(iv)]	Actual Count 98.236(c)(1)(i) 98.236(c)(1)(ii) 98.236(c)(1)(iii)	Estimated Count 98.236(c)(1)(i) 98.236(c)(1)(ii) 98.236(c)(1)(iii)
High-bleed Pneumatic Devices	975.0	11,323.5		
Intermittent Bleed Pneumatic Devices	430.1	4,995.6		
Low-Bleed Pneumatic Devices	28.6	333.0		

Deferred Reporting Form – Example (continued)

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Gas Well Completions and Workovers [98.236(c)(6)]

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Worksheet Instructions:
The Reporting Form is designed to allow reporting of deferred data elements. This form extracts the originally submitted data from for Subpart W Reporting Form and presents it in the tables throughout this form to provide a context and continuity for deferred data. Previously entered data will be presented in Gray shaded cells and deferred data which you must enter will be presented in Blue shaded cells. In accordance with 98.232, only the following industry segment must report data for gas well completions and workovers: -Onshore petroleum and natural gas production [98.230(a)(2)] **NOTE:** Reporting is required for gas well completions WITH and WITHOUT hydraulic fracturing (as applicable) . Use the navigation links below
External Links:

Did the facility have any gas well completions or workovers WITH hydraulic fracturing? Yes

Did the facility have any gas well completions or workovers WITHOUT hydraulic fracturing No

				Wildcat or Delineation Wells Subject to a 2 Year Delay in Reporting		
Sub-Basin ID [98.236(c)(6)]	Well Type (Select from list) [98.236(c)(6)(i)]	Select the Equati… to Calculate Em… From Gas W… Completions … Hydraulic Frac… [98.236(c)(6…	Emissions …laring for …rkovers …t CO_2e) …(c)(6)(i)(J)]	Are the Only Wells in the Sub-basin Wildcat or Delineation Well Subject to a 2 Year Delay in Reporting [98.236(c)(6)(i)(G)]	API Well Number(s) [98.236(c)(6)(i)(G)]	Measured flow rat… of backflow during well completion (cubic feet per hour) 98.236(c)(6)(i)(B)
535 - ALBANY, WY (1) - Oil	Vertical	Flow Rates (bas…	7.6	No		
535 - CARBON, WY (7) - High permeability	Vertical	Eq. W-10A and Me…	7.6	Yes		
535 - MOFFAT, CO (81) - Shale gas	Horizontal	Equation W-10B	7.6	No		

Deferred Reporting Form – Example (continued)

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Local Distribution Companies [98.236(c)(16)]

Complete the following table for the facility:

Total number of above grade T-D transfer stations [98.236(c)(16)(i)]	4
Leak factor for meter/regulator run developed in Equation W-32 of §98.233 [98.236(c)(16)(viii)]	
Number of miles of unprotected steel distribution mains (W-31) [98.236(c)(16)(ix)]	
Number of miles of protected steel distribution mains (W-31) [98.236(c)(16)(x)]	
Number of miles of plastic distribution mains (W-31) [98.236(c)(16)(xi)]	
Number of miles of cast iron distribution mains (W-31) [98.236(c)(16)(xii)]	
Number of unprotected steel distribution services (W-31) [98.236(c)(16)(xiii)]	
Number of protected steel distribution services (W-31) [98.236(c)(16)(xiv)]	
Number of plastic distribution services (W-31) [98.236(c)(16)(xv)]	
Number of copper distribution services (W-31) [98.236(c)(16)(xvi)]	

These data were optional in the original reporting form. If these data were previously provided they do not need to be inlcuded in your deferred submission. If all the deferred items were submitted voluntarily you are not required to use and submit this form.

XML-based Submission – Schema Changes

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- EPA has revised the XML schema for Subpart W and added a section at the bottom of the schema to accommodate deferred data submissions for RY11, 12, and 13.
- The draft version of the XML reporting schema for Subpart W can be downloaded at http://www.ccdsupport.com/confluence/display/help/RY2014+Subpart+W+Preview+Materials

FAQs about Deferred Reporting

Q. Would a facility have to submit a separate deferred reporting form for RY11, 12, and 13?

A. Yes, if applicable all three would be uploaded on the deferred Subpart W upload page. This information would be submitted as part of the RY14 annual report.

Q. If the facility discovers an error in their previously reported data how can they correct that?

A. The facility must re-submit the prior year form using the resubmit features in e-GGRT. Then the user can revise their deferred reporting form using the revised original reporting form as a source.

Q. How do facilities which include more than one Subpart W segment report their deferred data?

A. The deferred upload page will allow the upload of multiple deferred reporting forms for each year. One deferred form should be prepared for each original reporting form submitted in the prior year.

Questions and Answers

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GHGRP Help Desk

Email: ghgreporting@epa.gov

Web:

http://www.ccdsupport.com/confluence/display/help/GHGRP+Help+Desk+Contact+Information

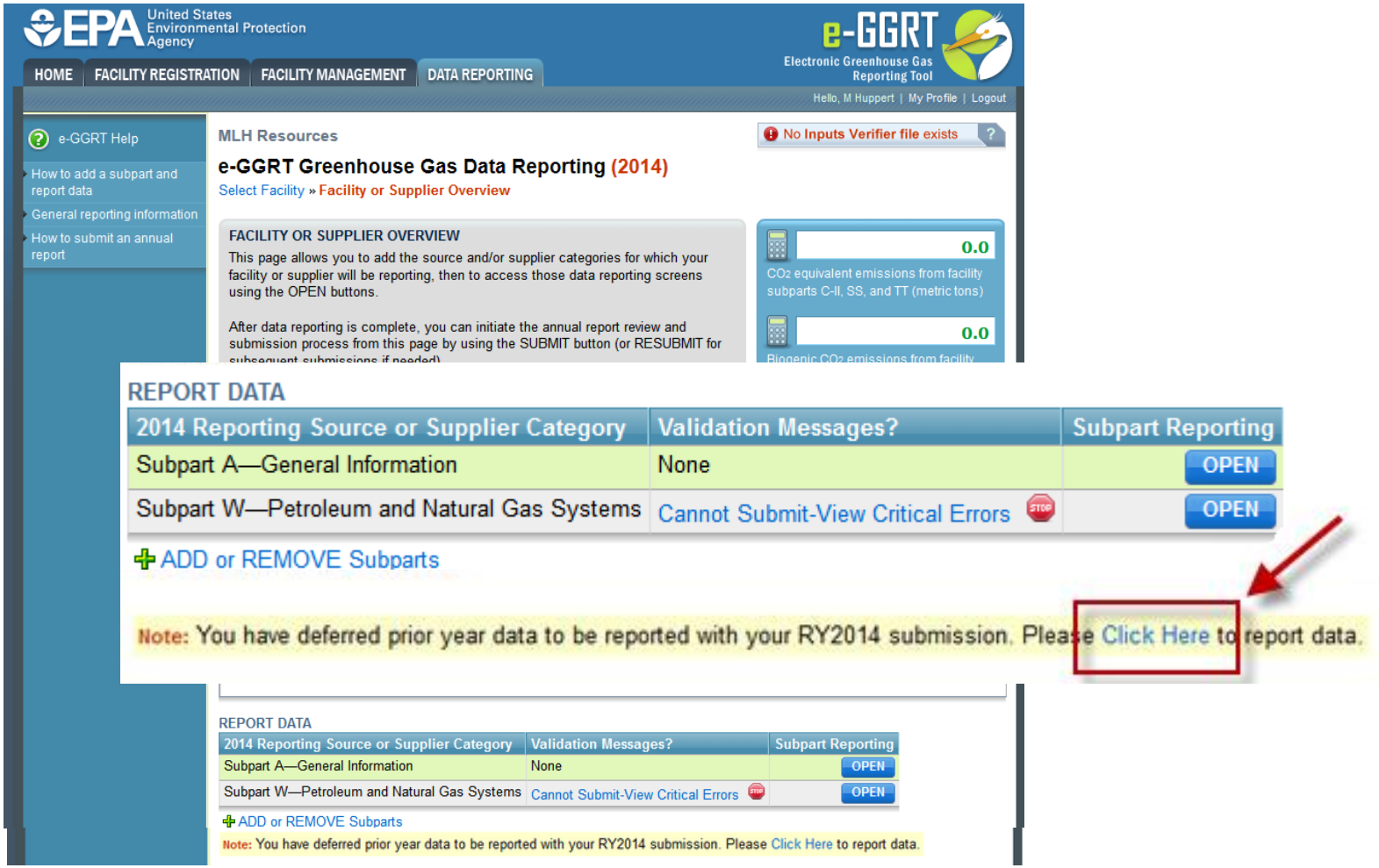
Telephone:

1-877-444-1188 (toll free)
1-703-676-4400 (outside U.S.)

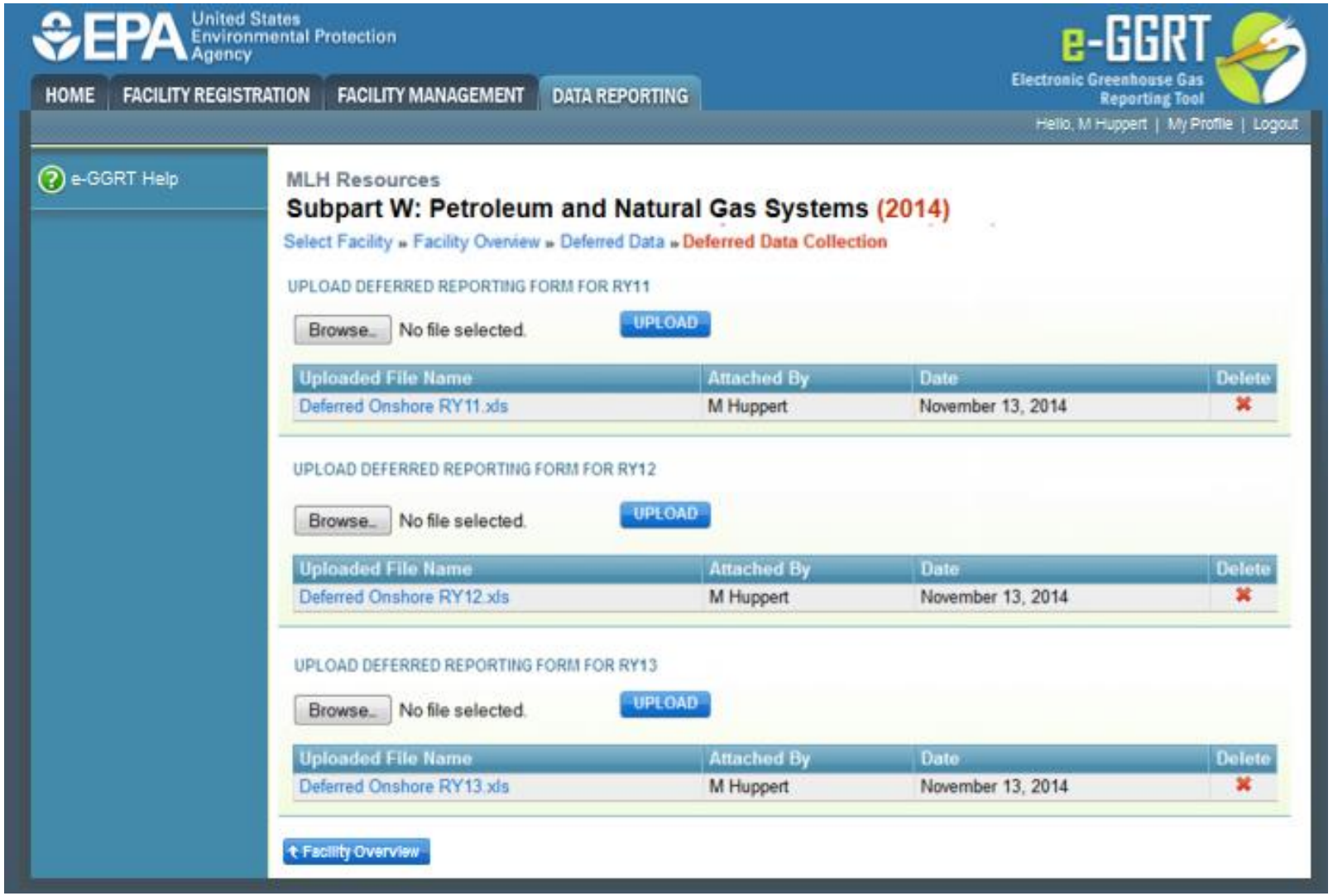
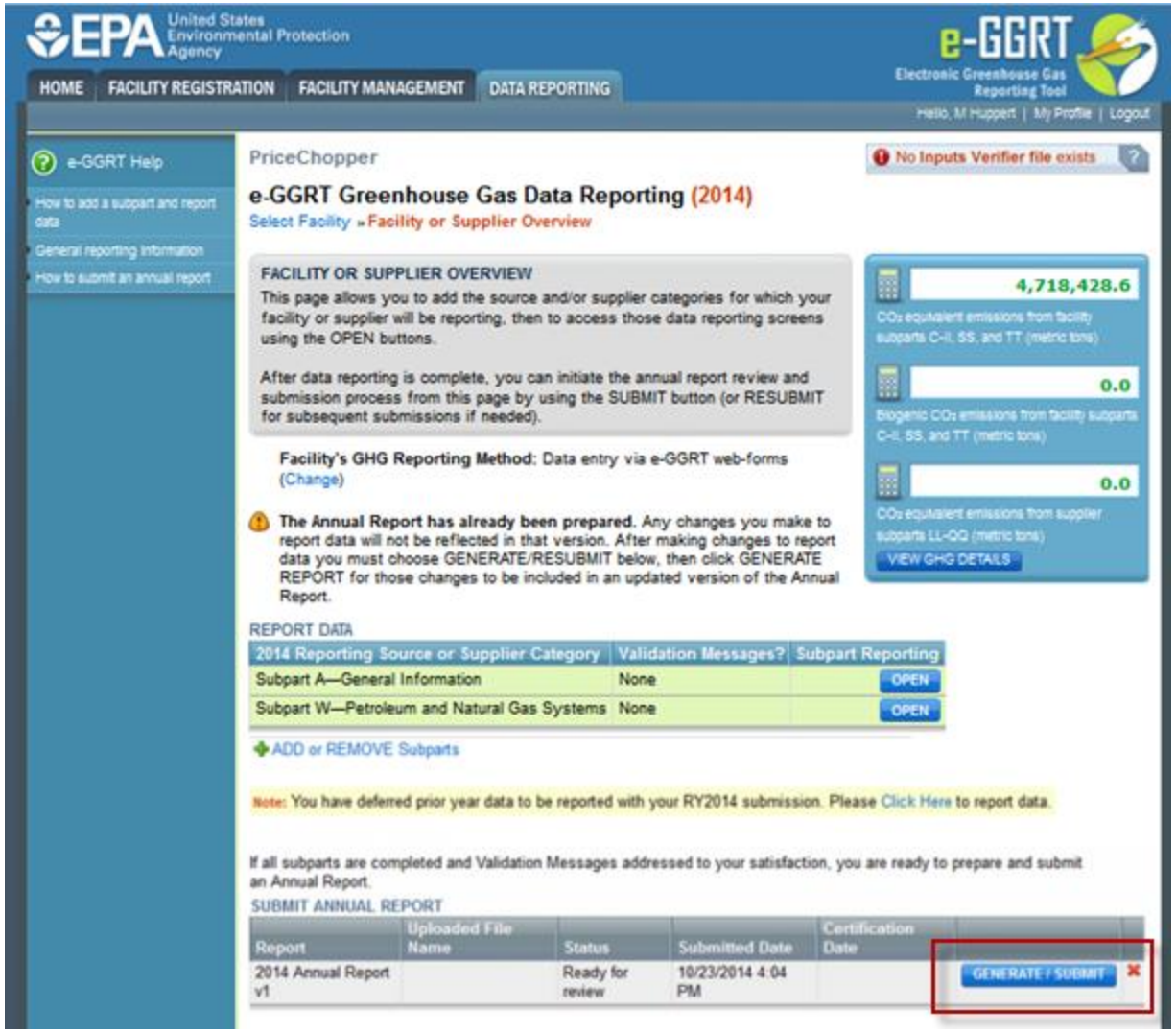
As a reminder, please do not submit sensitive or business confidential information to the helpline. Anything you send to the Help Desk may be made available to the public.

Appendix

How to Submit Your Deferred Reporting



How to Submit Your Deferred Reporting (continued)



How to Submit Your Deferred Reporting (continued)