E-GGGRT Electronic Greenhouse Gas Reporting Tool



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Petroleum and Natural Gas Systems (Subpart W) Reporting Form Revisions for Deferred Data Elements

U.S. Environmental Protection Agency Greenhouse Gas Reporting Program (GHGRP) February 2015

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



- 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 <u>Table A-7 of subpart A</u>.
- 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, reporters 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.



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.



- The forms for Subpart W can be downloaded at <u>http://www.ccdsupport.com/confluence/display/help/Reporting+Form+Instructions</u>
- The XML schema for Subpart W can be downloaded at http://www.ccdsupport.com/confluence/display/help/XML+R
 eporting+Instructions
- 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



 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 CO2	
Combustion Emissions	

Natural Gas Pneumatic Device Venting

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

Version R.03

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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 CH₄ Emissions (mt CO₂e) [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. P -

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

Version R.03 Back to Summary Tab
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 CH₄ Emissions (mt CO₂e) [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 **P**-

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Acid Gas Removal Units



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

Version R.03	Back to Summary Tab					
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:						

	ng gy 1	Complete Only if Using Calculation Methodology 2	Complete Only if Using C		
H C	in of int oval	Annual average fraction of CO ₂ content in the vent from the acid gas removal unit (volumetric fraction)	Annual average fraction of CO2 content of natural gas into the acid gas removal unit (volumetric fraction)	Annual average fraction of CO ₂ content of natural gas out of the acid gas removal unit (volumetric fraction)	Total annual volume of natural gas flowing out of the acid gas removal unit, using a meter or engineering estimate based on process knowledge or best available data (million actual cubic feet per year)
		[98.236(c)(3)(ii)]	[98.236(c)(3)(iii)]	[98.236(c)(3)(iii)]	[98.236(c)(3)(i)]

For Acid Gas Removal Units, there are 3 new additions to the form covering Calculation Methodologies 2 and 3, plus 1 more for each unit





Dehydrators [98.236(c)(4)]

Version R.03	Back to Summary Tab				
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	Describe "Other/Multiple" Vent Gas Controls	Total CO ₂ Emissions from Venting (mt CO ₂)	Total CH from (mi	Emissions Flaring CO ₂ e)	Count of Glycol Dehydrators (W-5)
[98.236(c)(4)(ii)(B)]	[98.236(c)(4)(ii)(B)]	[98.236(c)(4)(ii)(C)]	[98.236	c)(4)(ii)(D)]	[98.236(c)(4)(ii)(A)]
Vapor Recovery				<u></u>	
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)

Dehydrators (continued)



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

		Glycol dehydrator feed natural				
		gas flow rate determined by	Glycol dehydrator		Report whether a	
		engineering estimate based on	absorbent	Report whether	flash tank separator	
		best available data	circulation pump	stripper gas is used	is used in glycol	Report type of
Unique ID		(MMscfd)	type	in glycol dehydrator	dehydrator	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 g dehydrator operating (ho [98.236(c)(4)(i	is wet urs) (degre	erature of the natural gas es Fahrenheit) 36(c)(4)(i)(G)]	Pressure of the wet natural gas (psig) [98.236(c)(4)(i)(G)]	Concentration of CO ₂ in wet natural gas (mole fraction) [98.236(c)(4)(i)(H)]	Concentration of CH₄ in wet natural gas (mole fraction) [98.236(c)(4)(i)(H)]

For large dehydrators (>=0.4 MMscfd) there are 10 new additions to the form

Well Venting for Liquid Unloading

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

Version	R.03	Back to Summary Tab				
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:						

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

Sub-Basin ID	Tubing Diamet [9:	sions	Total CH₄ Emissions	Average flow rate of the measured well venting (cubic feet per hour)
)(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 unloar (without plunge)	nissions رير	Total CH₄ Emissions (mt CO₂e)	Cumulative number of unloadings vented to the atmosphere
	[98.236(c)(5)(h,	<u>_)(ii)(E)]</u>	[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 unloau (with plunger ' [98.236(c)(5)(*	,,issions 7₂) ₹\ <u>(ii)(E)]</u>	Total CH₄ Emissions (mt CO₂e) [98.236(c)(5)(ii)(E)]	Cumulative number of unloadings vented to the atmosphere 98.236(c)(5)(ii)(c)

Gas Well Completions & Workovers



Gas Well Completions and Workovers [98.236(c)(6	5)]
Version R.03	Back to Summary Tab
Worksheet Instructions:	
In accordance with 98.232, only the following industry segment must -Onshore petroleum and natural gas production [98.230(a)(2)]	report data for gas well completions and workovers:
NOTE: Reporting is required for gas well completions WITH and WIT	HOUT 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



For Gas Well Completions and Workovers with Hydraulic Fracturing there are 8 new additions to the form—6 are shown here.

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)



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

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

For Gas Well Completions and Workovers with Hydraulic Fracturing , these are the final 2 of 8 new additions to the form

Gas Well Completions & Workovers (continued)



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



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

Blowdown Vent Stacks



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

Version	R.03

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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 fo physical volur [98.236(c)(7)(i)	ne	Which equation was used to calculate natural gas venting emissions? (Select from list)	Total number of blowdowns for each unique physical volume in the calendar year [98.236(c)(7)(i)(A)]	Total CO2 Emissions (mt CO2) [98.236(c)(7)(i)(B)]	Total CH₄ Emissions (mt CO₂e) [98.236(c)(7)(i)(B)]

For Blowdown Vent Stacks, unique volumes that use Eq. W-14A now must report the total number of blowdowns in the year



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

Version R.03	Back to Summary Tab					
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		Are the only wells in the sub-basin wildcat or delineation wells subject to a 2 year delay in reporting?	API Well Number(s)	Total volume of oil from all wellhead separators sent to tank(s) (bbl per yr)	-	Annual CH₄ gas quantities that were recovered (mt CO₂e)
[98.236(c)(8)(i)]	<u> </u>	[98.236(c)(8)(i)(F)]	[98.236(c)(8)(i)(F)]	[98.236(c)(8)(i)(F)]	[98.236(c)(8)(i)(K)]	[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)



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)]	ıl N₂O ns from nt CO₂e))(8)(ii)(l)]	Are the only wells in the sub-basin wildcat or delineation wells 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 (bbl per yr) [98.236(c)(8)(ii)(A)]		Annual CH ₄ gas quantities that were recovered (mt CO ₂ e) [98.236(c)(8)(ii)(H)]
[00.200(0)(0)(0)]		[00.200(0/(0/(/(//		[001200(0/(0/(0/(0/(0/	[001200(0/(0/(0/(0/(0/	[001200(0/(0/(0/(0/(0/

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	Annual CO ₂ from Ventin ²	sions .O₂e)	Number of wellhead separators	Number of wells without wellhead separators		Annual CH ₄ gas quantities that were recovered (mt CO ₂ e)
[98.236(c)(8)(iii)]	[98.236(c)	<u>(H)]</u>	[98.236(c)(8)(iii)(A)]	[98.236(c)(8)(iii)(B)]	[98.236(c)(8)(iii)(G)]	[98.236(c)(8)(iii)(G)]
			8			





Flare Stacks [98.236(c)(12)]

Version R.03	Back to Summary Tab							
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	Unique Name (for the Fla	emissions nt CO ₂ e)	Volume of gas sent to flare (actual cubic feet per year)	Flare combustion efficiency (decimal value)
	[98.236(c	6(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



Centrifugal Compressors [98.236(c)(13)] Version R.03 Back to Summary Tab 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)	Total annual compressor emissions CH4 Emissions (mt CO2e)	Count of compressors		
[98.236(c)(13)(v)(B)]	[98.236(c)(13)(v)(B)]	[98.236(c)(13)(v)(A)]		

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

Centrifugal Compressors (continued)



		MODES	For Centrifuga	l Compressors in <u>OPE</u>	RATING MODE	-	Compressors in RESSURIZED MODE
Compressor ID	Were BAMM This Comp	al annual N ₂ O emissions n all modes of operation combined (mt CO ₂ e) [98.23(c)(13(iv)]	operating mode (hours) [98.236(c)(13)(i)(F)]	oil degassing vents (standard cubic feet per hour)	(standard cubic feet per hour)	shutdown, depressurized mode (hours)	Reporter emission factor for isolation valve emissions (standard cubic feet per hour) [98.236(c)(13)(iii)(B)]

Facilities subject to centrifugal compressor reporting in oil and gas industry segments other than onshore petroleum and natural gas production have 5 new additions to the form

Reciprocating Compressors



Reciprocating Compressors [98.236(c)(14)] Version R.03 Back to Summary Tab 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)	Total annual compressor emissions CH ₄ Emissions (mt CO ₂ e)	Count of compressors		
[98.236(c)(14)(v)(B)]	[98.236(c)(14)(v)(B)]	[98.236(c)(14)(v)(A)]		

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

Reciprocating Compressors (continued)



Other types of facilities have 5 new additions to the form

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Equipment Leaks



Other Emissions from Equipment Leaks Estimated Using Emission Factors [98.236(c)(15)] Version R.03 Back to Summary Tab 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)(7)] -Natural Gas Distribution [98.230(a)(8)]

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)	CH₄ Emissions (mt CO₂e)	Total count for each type of leak source
	[98.236(c)(15)(ii)(C)]	[98.236(c)(15)(ii)(C)]	[98.236(c)(15)(ii)(A)]

For Equipment Leaks there is 1 new addition to the form, and for Onshore Production facilities, there is an additional table

Equipment Leaks (continued)



For Onshore Production facilities that use Component Count Methodology 1 complete the following table:

Major Equipment Type	Total count for each type of Major Equipment
[98.236(c)(15)(ii)(B)]	
	[98.236(c)(15)(ii)(B)]
Wellheads	
Separators	
Meters/piping	
Compressors	
In-line heaters	
Dehydrators	
Heater-treater	
Header	

For Onshore Production facilities that use Component Count Methodology 1, this new table is to be completed

Local Distribution



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

Version R.03

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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: CO₂ and CH₄ 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.



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

Version R.03	Back to Summary Tab
Worksheet Instructions:	
In accordance with 98.232, only the following industry segment me	ust report data for EOR injection pump blowdown:
-Onshore petroleum and natural gas production [98.230(a)(2)	1
External Links:	

Complete the following table for each EOR Injection Pump:

Unique ID	Unique Name or I 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



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

Version R.03	Back to Summary Tab				
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



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

Version	R.03

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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:

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

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

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

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



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.



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.



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 <u>http://www.ccdsupport.com/confluence/x/PlvADg</u>)

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 data elements.

Deferred Reporting Form



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

Version D.1

Updated: 12/23/2014

For RY2011, RY2012, and RY2013 the Subpart W reporting requirement deferred collection of a number of data elements until March 31, 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 C5, open that file in background using the line in Cell C7 and this form will extract your previously submitted data from the referenced form. Source files stored on network drives should not be used; remote files should be copied to the local computer.

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 original 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 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)



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 comes 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)]
 Noshore 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 Throu	ghput (MMscf)	2452.534
Annual throughput [98.236(d)] Liquid Throughp	ut (thousand barrels)	4345.1
Comments:		
		Test for Onshore Production
Deferred Reporting Form (continued)



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	<u>Go to Form</u>
Natural Gas Pneumatic Devices [98.236(c)(1)]	Yes	<u>Go to Form</u>
Natural Gas Driven Pneumatic Pumps [98.236(c)(2)]	Yes	<u>Go to Form</u>
Acid Gas Removal Units [98.236(c)(3)]	Yes	<u>Go to Form</u>
Dehydrators [98.236(c)(4)]	Yes	<u>Go to Form</u>
Well Venting for Liquids Unloading [98.236(c)(5)]	Yes	<u>Go to Form</u>
Gas Well Completions and Workovers [98.236(c)(6)]	Yes	<u>Go to Form</u>
Blowdown Vent Stacks [98.236(c)(7)]	No	<u>Go to Form</u>
Gas from Produced Oil Sent to Atmospheric Tanks [98.236(c)(8)]	Yes	<u>Go to Form</u>
Reciprocating Compressors [98.236(c)(14)]	Yes	<u>Go to Form</u>
Other Emissions from Equipment Leaks Estimated Using Emission Factors [98.236(c)(15)]	Yes	<u>Go to Form</u>
Local Distribution Companies [98.236(c)(16)]	No	<u>Go to Form</u>
Enhanced Oil Recovery Injection Pump Blowdown [98.236(c)(17)]	Yes	<u>Go to Form</u>
Enhanced Oil Recovery Hydrocarbon Liquids Dissolved CO ₂ [98.236(c)(18)]	Yes	<u>Go to Form</u>
Onshore Petroleum and Natural Gas Production and Natural Gas Distribution Combustion Emissions [98.236(c)(19)]	Yes	<u>Go to Form</u>
Offshore Sources [98.236(b)]	No	<u>Go to Form</u>

Deferred Reporting Form -Example



Natural gas pneumatic device venting [98.236(c)(1)]
Version D.1 Back to Summary Tab
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 CH₄ Emissions (mt CO₂e) [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)



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

Version D.1

Back to Summary Tab

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 Year Delay in		
Sub-Basin ID	Well Type (Select from list)	From Gas W Completions '	Emissions rlaring for vrkovers rt COze)	Are the Only Wells in the Sub-basin Wildcat or Delineation Well Subject to a 2 Year Delay in Reporting		Measured flow rat of backflow during well completion (cubic feet per hour)
[98.236(c)(6)]	[98.236(c)(6)(i)]	[98.236(c)(6,	ə(c)(6)(i)(J)]	[98.236(c)(6)(i)(G)]	[98.236(c)(6)(i)(G)]	98.236(c)(6)(i)(B)
535 - ALBANY, WY (1) - Oil	Vertical	Flow Rates (base	7.6	No		1000
535 - CARBON, WY (7) - High permeability	Vertical	Eq. W-10A and Ms	7.6	Yes		
535 - MOFFAT, CO (81) - Shale gas	Horizontal	Equation W-10B	7.6	No		2000

Blowdown Vent Stacks



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

/ersion	R.03
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Back to Summary Tab

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:

		Report Only if Using Eq. W-14B		Report Only if Using Eq. W-14A
Unique name or ID for unique calculat physical volume	equation was used to ate natural gas venting emissions? (Select from list)	Total number of blowdowns for each unique physical volume in the calendar year [98.236(c)(7)(i)(A)]	Total CH₄ Emissions (mt CO₂e) [98.236(c)(7)(i)(B)]	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

Deferred Reporting Form – Example (continued)



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

Complete the following table for the facility:

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.

How to Submit Your Deferred Reporting Form



ACILITY REGISTRATIC	N FACILITY MANAGEMENT	DATA REPORTING		c Greenhouse Gas Reporting Tool Huppert My Profile L
	ngkor Subpart W: Petroleum ubpart Overview	n and Natural Gas Systen	ns (2014)	
	onshore and offshore petroleum other subparts (e.g. Subpart C) y select the appropriate subpart(s) each subpart. To satisfy the Sub download the Subpart W reporti form(s) and find instructions for or completed form(s) and e-GGRT the "View Validation" link to rev necessary, make any revisions ne revised reporting forms.	DRTING REQUIREMENTS ilities to report CO2, CH4, and N2O emis- and natural gas production. If you are- you should return to the Facility Overvie, and complete the data reporting requ- part W reporting requirements you will 1 ng form(s). Use the link provided to aco- completing those forms. Next, you will 1 will validate the data contained within iew any issues found in your reporting 1 eccessary to your reporting forms and up at Subpart W reporting, please use the o	e subject to ew page, uirements of first cess the upload the n them. Use forms. If pload the	1,421,350. s of CO2 (metric tons) 149,185.9 s of CH4 (metric tons) 4.47 s of N2O (metric tons) art W: View Validation
		ATION FOR THIS FACILITY		
) DOWNLOAD FORM			
2) UPLOAD COMPLETED SUBPAR FORMS FOR RY2011, RY2012, A Browse No file selected.	T W INTEGRATED REPORTING FORM A ND RY2013 UPLOAD	ND/OR APPLICABLE DEFERRE	DREPORTING
	Uploaded File Name	Attached By	Date	Deferred? Dele
	RY14 OnshoreProduction.xls	M Huppert	February 2, 2015	

Navigate to the Subpart W reporting page.

Then upload the completed RY 2014 reporting form and all applicable backyear deferred data reporting forms.

How to Submit Your Deferred Reporting Form (continued)



IOME FACILITY R	GISTRATION FACILITY MANAGEMENT DATA REPORTING			Greenhouse Gas Reporting Tool	
e-GGRT Help	Angkor Subpart W: Petroleum and Natura Subpart Overview OVERVIEW OF SUBPART REPORTING REQUIRE Subpart W requires affected facilities to report CO onshore and offshore petroleum and natural gas p other subparts (e.g. Subpart C) you should return to select the appropriate subpart(s), and complete this each subpart. To satisfy the Subpart W reporting re- download the Subpart W reporting form(s). Use the form(s) and find instructions for completing those for completed form(s) and e-GGRT will validate the do the "View Validation" link to review any issues four necessary, make any revisions necessary to your re- revised reporting forms. For additional information about Subpart W report link(s) provided. SUBPART W SUMMARY INFORMATION FOR THIS FORMATION FORMATION FOR THIS FORMATION FORMATION FOR THIS FORMATION FORMATION FOR THIS FORMATION FOR FORMATION FOR THIS FORMATION FOR FORMATION FORM	EMENTS 12, CH4, and N2O emissions production. If you are subject to the Facility Overview pag- te data reporting requireme- equirements you will first e link provided to access the forms. Next, you will upload data contained within them and in your reporting forms. seporting forms and upload to tring, please use the e-GGF FACILITY	2014) from tot to ge, ants of e d the b. Use If Annual mass of Annual mass of Annual mass of Extra the RT Help	1,421, of CO2 (metric to 149,1 of CO2 (metric to 149,1 tw: View Valid	,350.4 ns) 85.91 ns) 4.471 ns)
	2.) UPLOAD COMPLETED SUBPART W INTEGRATED R	REPORTING FORM AND/OR	APPLICABLE DEFERRED RI	EPORTING	
	FORMS FOR RY2011, RY2012, AND RY2013 Browse_ No file selected. UPLC				
	Browse_ No file selected.	Attached By	Date	Deferred?	Delet
	Browse_ No file selected. UPLC Uploaded File Name RY14_OnshoreProduction.xls	Attached By M Huppert	February 2, 2015		Delet
	BrowseNo file selected. UPLC Uploaded File Name RY14_OnshoreProduction xls RY12 Deferred OnshoreProd Test_12.xls	Attached By M Huppert M Huppert	February 2, 2015 February 2, 2015	Yes	×
	Browse_ No file selected. UPLC Uploaded File Name RY14_OnshoreProduction.xls	Attached By M Huppert	February 2, 2015		Delet X X X X

Once all forms are uploaded, review any validation errors that may have triggered.

How to Submit Your Deferred Reporting Form (continued)



SEPA United States Environmental Protection Agency						6		0
IOME FACILITY REGISTR	ATION FACILITY MAN	AGEMENT DA	TA REPORTING			Electronic G	Reporting Tool	
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e-GGRT Help	PriceChopper							
ow to add a subpart and report Ra	e-GGRT Green Select Facility - Faci			orting (2014)				
eneral reporting information	-					-		
re to autorită an annual report	(Change) The Annual Rep report data will no data you must ci	u to add the sou ill be reporting, itons. is complete, yo from this page missions if neer Reporting Meth ort has already to be reflected in noose GENERA	urce and/or supp then to access i bu can initiate th by using the SI sed). tod: Data entry theen prepare that version. A TE/RESUBIIT b	hose data reporting e annual report revi JBMIT button (or RE via e-GGRT web-fo	ew and ESUBMIT rms u make to is to report NERATE	Buccans C-I, 55 Biogenic CO; en C-II, 55, and TT	emissions from supply (metric bans)	0.0
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	2014 Reporting So	substantial states of states	and the second se	Supply in the local division of the local division of the	es? Subpart P			
	Subpart A-General			lone		OPEN		
	Subpart W-Petroles	im and Natural	Gas Systems 1	ione		OPEN		
						-		
	ADD or REMOVE Note: You have deferre If all subparts are com an Annual Report.	ed prior year data						
	ADD or REMOVE	ed prior year data	ation Messages		atisfaction, you			
	ADD or REMOVE Note: You have deferre If all subparts are com an Annual Report.	nd prior year data pleted and Valid PORT	ation Messages	addressed to your sa	atisfaction, you Certifi Date Date	are ready to pre		

When finished, return to the Facility Overview page to generate and submit the RY 2014 report.



- 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 revised XML reporting schema for Subpart W can be downloaded at

http://www.ccdsupport.com/confluence/display/help/XML+R eporting+Instructions



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 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 standard process for resubmitting 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 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



GHGRP Help Desk

Email: ghgreporting@epa.gov

Web:

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

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.

Subpart W Resources



- Training website:
 <u>http://www.epa.gov/ghgreporting/reporters/training/index.ht</u>
 <u>ml</u>
 - This webinar will be uploaded here
 - Upcoming webinar on March 3 about how to access GHGRP data
- GHGRP Help pages: <u>http://www.ccdsupport.com/confluence/display/help/Home</u>