

**BEFORE THE  
UNITED STATES ENVIRONMENTAL PROTECTION  
AGENCY  
WASHINGTON, D.C.**

Greenhouse Gas Reporting Rule: Revisions and Confidentiality Determinations for Petroleum and Natural Gas Systems; Proposed Rule )  
Docket ID No. EPA-HQ-OAR-2011-0512 )

**Comments of the American Public Gas Association**

The American Public Gas Association (“APGA”) is the national, non-profit association of publicly-owned natural gas distribution systems. APGA was formed in 1961 as a non-profit, non-partisan organization, and currently has approximately 700 members in 36 states. Overall, there are nearly 1,000 municipally-owned systems in the U.S. serving more than five million customers. Publicly-owned gas systems are not-for-profit retail distribution entities that are owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities. All of APGA’s members deliver natural gas to consumers, thus may be required to report as prescribed in this Proposed Rule of the Environmental Protection Agency (“EPA”) published in the Federal Register on March 10, 2014 (“Proposed Rule”). APGA is, therefore, vitally interested in this rulemaking.

***Summary of EPA Proposal:***

EPA is proposing to amend the reporting requirements under Subpart W that requires certain operators of natural gas distribution systems to annually report to EPA estimated fugitive emissions of methane, carbon dioxide and other greenhouse. Currently, subpart W requires that reported GHG emissions be expressed in metric tons of carbon dioxide equivalent (“CO<sub>2</sub>e”). In this rulemaking EPA is proposing to amend 40 CFR 98.236 to revise the reporting of GHG emissions from units of metric tons of CO<sub>2</sub>e of each reported GHG to metric tons of each reported GHG. This requires one less calculation by reporting utilities.

***Summary of APGA Comments***

APGA commends EPA for proposing to simplify the reporting. APGA encourages EPA to even further simplify reporting by natural gas distribution operators by limiting reporting to only those data that are necessary for EPA to calculate estimated

Greenhouse Gas (“GHG”) emissions. EPA could and should further reduce the number of calculations reporting distribution operators need to performt.

Specifically, EPA should modify the regulation and it’s electronic Greenhouse Gas Reporting Tool (“e-GGRT”) to require natural gas distribution operators reporting under Subpart W to report only the following:

1. The number of distribution services by material type;
2. Miles of distribution mains by material type;
3. The number of below grade metering-regulating stations, by pressure type;
4. The number of below grade transmission-distribution transfer stations;
5. Average estimated time that each emission source type associated with the equipment leak emission was operational in the calendar year;
6. The total number of specific component type detected as leaking during annual leak surveys of above grade transmission/distribution transfer stations;
7. The total time the surveyed component types, were found leaking and operational;
8. The total time the surveyed meter/ regulator run was operational during survey year;
9. The count of meter/regulator runs surveyed at above grade transmission distribution transfer stations;
10. The number of years of data used to calculate emission factor;
11. The total number of meter/regulator runs at above grade metering-regulating stations that are not above grade transmission-distribution transfer stations; and
12. The average estimated time that each meter/regulator run was operational in the calendar year.

From these data EPA can calculate the estimated metric tons of GHG emissions from renatural gas distribution system operators. Reducing the number of calculations EPA requires responders to perform would ease reporting burdens and improve the quality of the data by reducing the potential for calculation errors.

Even though EPA is proposing to no longer require natural gas distribution operators to convert metric tons of individual GHGs into CO<sub>2</sub>e, APGA notes that these operators must still determine if their estimated GHG emissions exceed the reporting threshold of 25,0000 in metric tons CO<sub>2</sub>e. This conversion should be performed by e-GGRT and e-GGRT should alert the reporting entity if the results of calculations using the 12 data elements listed above result in estimated GHG emissions at or above the reporting threshold of 25,000 metric tons CO<sub>2</sub>e.

### ***Specific Comments:***

APGA commends EPA for proposing to simplify the reporting of estimated greenhouse gas emission under Subpart W. The Subpart W regulations are extremely complex and confusing. Public gas utility managers have made best efforts to comply with EPA’s reporting requirements but still report difficulty understanding the equations and calculation methods. EPA should reduce reporting burdens and increase the

accuracy of its data by limiting reporting to only those data necessary for EPA to calculate estimated GHG emissions.

### **Minimum Reporting Required to Estimate GHG from Mains, Service Lines and Below Grade Metering Regulating & Transmission-Distribution Transfer Stations**

Estimated GHG emissions from below grade metering regulating stations, below grade transmission-distribution transfer stations, distribution mains, and distribution services are calculated using Equation W-32A of 40 CFR 98.233(r):

$$\text{EQ W-32A} \quad E_{s,e,i} = \text{Counte} * E_{Fs,e} * \text{GHGi} * T_e$$

Where:

$E_{s,e,i}$  = Annual volumetric emissions of  $\text{GHGi}$  from the emission source type in standard cubic feet. The emission source type may be a component (e.g. connector, open-ended line, etc.), below grade metering-regulating station, below grade transmission-distribution transfer station, distribution main, or distribution service.

Counte = Total number of the emission source type at the facility. Natural gas distribution facilities must count: (1) The number of distribution services by material type; (2) miles of distribution mains by material type; and (3) number of below grade metering-regulating stations, by pressure type; as listed in Table W-7.

$E_{Fs,e}$  = Population emission factor for the specific emission source type, as listed in Table W-7.

$\text{GHGi} = 1$  for  $\text{CH}_4$  and  $1.1 \times 10^{-2} \text{CO}_2$ .

$T_e$  = Average estimated time that each emission source type associated with the equipment leak emission was operational in the calendar year, in hours, using engineering estimate based on best available data.

EPA could calculate the metric tons of GHGs using Equation W-32A and other equations in the rule if operators submitted the following:

1. Number of distribution services by material type;
2. Miles of distribution mains by material type;
3. Number of below grade metering-regulating stations, by pressure type;
4. The number of below grade transmission-distribution transfer stations and
5. Average estimated time that each emission source type associated with the equipment leak emission was operational in the calendar year.

Everything from this point on is calculated using equations and factors mandated by EPA. From that data, EPA can calculate estimated emissions from these

sources, so requiring the reporting operators to perform those calculations is an unnecessary reporting burden increases the likelihood of calculation errors that would reduce the value of the resulting data.

### **Minimum Reporting Required to Estimate GHG from Above Grade Transmission-Distribution Transfer Stations and Other Above Grade Metering Regulating Stations**

In addition, EPA's rule requires utilities to conduct leakage surveys at transmission/distribution transfer stations ("TD transfer stations") and calculate component-specific emissions estimates using Equations W-30, W-31 and W-32B:

$$\text{EQ W-30: } E_{s,p,i} = E_{Fs,p} * GHG_i * \text{Sum}(T_{p,z})$$

Where:

$E_{s,p,i}$  = Annual total volumetric emissions of  $GHG_i$  from specific component type "p" in standard ("s") cubic feet.

$t_{xp}$  = Total number of specific component type "p" detected as leaking during annual leak surveys.

$E_{Fs,p}$  = Leaker emission factor for specific component types listed in Table W-7 of this subpart.

$GHG_i$  = For natural gas distribution,  $GHG_i$  equals 1 for  $CH_4$  and  $1.1 \times 10^{-2}$   $CO_2$ .

$T_{p,z}$  = The total time the surveyed component "z", component type "p", was found leaking and operational, in hours.

EPA could calculate the annual total volumetric emissions of  $GHG_i$  from specific component type "p" using Equation W-30 if operators submitted the following:

1. Total number of specific component type detected as leaking during annual leak surveys and
2. Total time the surveyed component types were found leaking and operational.

The result of Equation W-30 is used in Equation W-31 to calculate an emission factor for meter/regulator runs.

$$\text{EQ W-31 } E_{Fs,MR,i} = \text{Double sum}(E_{s,p,i,y}) / \text{Double sum}(T_{w,y})$$

Where:

$E_{Fs,MR,i}$  = Meter/regulator run population emission factor for  $GHG_i$  based on all surveyed above grade transmission distribution transfer stations over "n" years, in standard cubic feet of  $GHG_i$  per operational hour of all meter/regulator runs.

$E_{s,p,i,y}$  = Annual total volumetric emissions at standard conditions of GHG<sub>i</sub> from component type “p” during year “y” in standard (“s”) cubic feet, as calculated using Equation W-30.

p = Seven component types listed in Table W-7 for transmission distribution transfer stations.

$T_{w,y}$  = The total time the surveyed meter/ regulator run “w” was operational, in hours during survey year “y.”

CountMR<sub>y</sub> = Count of meter/regulator runs surveyed at above grade transmission distribution transfer stations in year “y”.

y = Year of data included in emission factor “EFs,MR,I.”

n = Number of years of data used to calculate emission factor “EFs,MR,I”.

EPA could calculate the meter/regulator run population emission factor “EFs,MR,I” for the distribution system using Equation W-31 if operators submitted the following:

1. Total time the surveyed meter/ regulator run was operational during survey year,
2. Count of meter/regulator runs surveyed at above grade transmission distribution transfer stations in the year of data included in emission and the number of years of data used to calculate emission factor “EFs,MR,I”.

The result of Equation W-30 is used in Equation W-32B to calculate annual volumetric emissions of GHG<sub>i</sub>.

$$\text{EQ W-32B} \quad E_{s,MR,i} = \text{CountMR} * \text{EFs,MR,I} * T_{w,avg}$$

Where:

$E_{s,MR,i}$  = Annual volumetric emissions of GHG<sub>i</sub> from all meter/regulator runs at above grade metering regulating stations that are not above grade transmission distribution transfer stations, in standard cubic feet.

CountMR = Total number of meter/regulator runs at above grade metering-regulating stations that are not above grade transmission-distribution transfer stations.

EFs,MR,i = Meter/regulator run population emission factor for GHG<sub>i</sub> based on all surveyed above grade transmission distribution transfer stations over “n” years, in standard cubic feet of GHG<sub>i</sub> per operational hour of all meter/regulator runs., as determined in Equation W-31.

$T_{w,avg}$  = Average estimated time that each meter/regulator run was operational in the calendar year, in hours per meter/ regulator run.

EPA could calculate the annual volumetric emissions of GHG<sub>i</sub> from all meter/regulator runs at above grade metering regulating stations that are not above grade transmission distribution transfer stations using Equation W-32B if operators submitted the following:

1. Total number of meter/regulator runs at above grade metering-regulating stations that are not above grade transmission-distribution transfer stations and
2. Average estimated time that each meter/regulator run was operational in the calendar year.

Everything from this point on relies on equations and fixed factors specified in the rule with no further information needed from the responder. EPA could calculate GHG mass emissions in metric tons by converting the GHG volumetric emissions estimated using Equations W-32 A & B into estimated mass emissions using Equation W-36.

$$EQ\ W-36\ Mass_i = E_{s,i} * P_i$$

Where:

Mass<sub>i</sub> = GHG<sub>i</sub> mass emissions in metric tons.

$E_{s,i}$  = GHG<sub>i</sub> volumetric emissions at standard conditions, in cubic feet, calculated using Equations W-32 A&B

$P_i$  = Density of GHG<sub>i</sub>.

EPA should modify its e-GGRT program to collect only the 12 data elements listed above from natural gas distribution operators reporting under Subpart W. These data are sufficient to allow e-GGRT to calculate volumetric, metric tons and metric ton CO<sub>2e</sub> without any additional input from the responding distribution operator. E-GGRT should alert the reporting entity whether the data entered results in estimated emissions at or above the 25,000 metric ton CO<sub>2e</sub> reporting threshold.

APGA appreciates the opportunity to comment on the Proposed Rule and respectfully requests that the above comments be taken into account in formulating a Final Rule in this docket. APGA welcomes any questions regarding these comments.



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Bert Kalisch, President & CEO