

Greenhouse Gas Reporting Program and U.S. Greenhouse Gas Inventory

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- Background on GHG Reporting Program (GHGRP)
- Integrating GHG Reporting Program data into US GHG Inventory
- Considerations relating to data reported under Subpart W (Petroleum and Natural Gas Systems)

Overview of the GHG Reporting Program



- Goal of GHG Reporting Program: To collect accurate GHG data to inform future policy decisions
- Program launched in response to FY 2008 Consolidated Appropriations Act
- Monitoring began in 2010 for most source categories with first annual reports submitted to EPA in 2011
- An additional 12 source categories began collecting data in 2011 (to report in 2012)
- Reporting only, no control or use requirements



Key Elements of the GHG Reporting Program



- Annual reporting of GHGs by 41 source categories, accounting for about 85-90% of U.S. GHG emissions
 - 33 types of direct emitters
 - 6 types of suppliers of fuel and industrial GHG
 - Facilities that inject CO₂ underground for geologic sequestration, enhanced oil recovery, or any other purpose
- 25,000 metric tons CO₂ equivalent (CO₂e) or more per year reporting threshold for most sources
- All affected entities report all highest level US parent companies & percentage ownership for each parent company

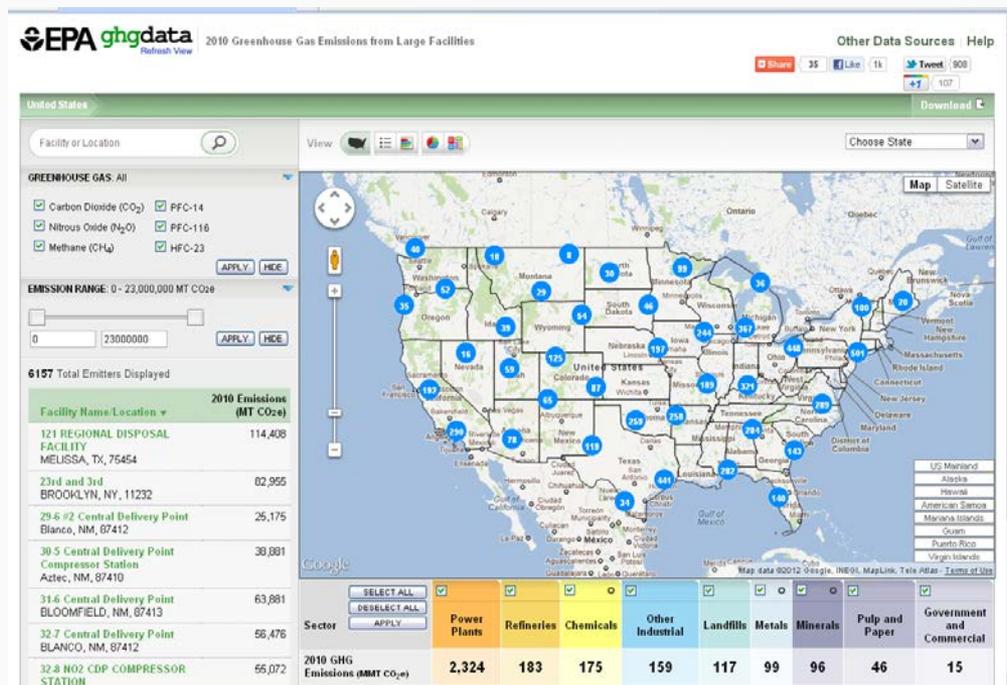


- Data Collection through EPA's electronic Greenhouse Gas Reporting Tool (e-GGRT)
 - Web-based application for facilities/suppliers to report directly to EPA via self-guided web forms
 - Also includes option for direct data upload via XML
- Electronic Verification
 - Pre-submittal warning for reporters entering data outside reasonable ranges or missing data
 - Post-submittal verification through logic checks, use of outside data sets, and statistical analyses across facilities
- Staff review and direct follow-up
 - Staff review electronic verification results
 - Phone/email and additional follow-up, as necessary

Data Publication



- <http://ghgdata.epa.gov/ghgp/main.do>
- 2010 data published in January 2012
- 2011 data to be published in early 2013
- Data publication website allows stakeholders and the public to access the key data elements quickly and easily and to sort data by location, sector, and by gas



Subpart W: Petroleum and Natural Gas Systems



- Industry segments covered:
 - Offshore petroleum and natural gas production
 - Onshore petroleum and natural gas production*
 - Onshore natural gas processing facilities
 - Onshore natural gas transmission compression
 - Underground natural gas storage
 - Liquefied natural gas (LNG) storage
 - LNG import and export equipment
 - Natural gas distribution*
- Reporting is required by facilities that emit GHGs $\geq 25,000$ metric tons carbon dioxide equivalent (CO₂e) per year
- Data collection started in 2011 (for reporting in 2012)

* Due to their unique characteristics, the facility definition for onshore petroleum and natural gas production and natural gas distribution differs from the definition of facility in Subpart A

Approaches for Incorporating GHGRP Data into Inventory



- Direct Use
 - Replace the entire estimate
 - Example: categories where the GHG Reporting Program has complete coverage
 - Replace part of an estimate
 - Example: emissions for facilities above 25,000 metric tons CO₂e
- Indirect Use
 - Develop a more accurate national emission factor based on plant measurements
 - Example: industrial processes
 - Disaggregate national estimates to show more detail
 - Example: energy-related emissions by industrial sub-sector
 - General QA/QC on a national estimate
 - Example: cement sector
- Explaining trends
 - Using the GHG Reporting Program data to improve our ability to understand and communicate US emission trends

Considerations for Integrating Subpart W Data into the Inventory



- Timing
 - Subpart W annual reports for Reporting Year 2011 are due September 28, 2012
 - Verification and QA/QC of annual reports after submission
 - Publication of non-CBI data in early 2013
 - First draft of US GHG Inventory compiled in October/November, with expert review in December/January
- Best Available Monitoring Methods (BAMM)
 - In certain unique and unusual circumstances, facilities may use alternate means for estimating the inputs to emissions equations (also known as Best Available Monitoring Methods or “BAMM”)
 - Automatic BAMM for Reporting Year 2011
- EPA has deferred GHG reporting for inputs to emission equations

Additional Considerations



- Transparency
 - Example: Ensuring that in using the GHG Reporting Program data, our emissions estimates are accurate for the current year as well as the time series and that we can clearly convey how the emission estimates were generated
- Accuracy
 - Example: Accounting for use of BAMM in first years of the GHG Reporting Program
- Consistency
 - Example: Aligning GHG Reporting Program data with earlier years in the time series
- Comparability
 - Example: Clearly presenting data where facilities have choice of facility specific method or continuous emissions monitoring systems (half of an industry could use Tier 2 and half could use Tier 3)
- Completeness
 - Example: Considering use of GHG Reporting Program data where there are thresholds for reporting

For More Information on the GHG Reporting Program



GHG Reporting Program:

<http://www.epa.gov/climatechange/emissions/ghgrulemaking.html>

GHG Data Publication:

<http://ghgdata.epa.gov/ghgp/main.do>

Questions?

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