

**New Mexico Greenhouse Gas Mandatory Emissions
Reporting
Emissions Quantification Procedures
For 20.2.73 NMAC**

Emissions year: 2012

January 5, 2012

Part 1: General Reporting Instructions

These procedures specify or reference acceptable Greenhouse Gas (“GHG”) emission calculation methods and emission factors that Title V source owners must use when preparing GHG emissions data reports for submission to the New Mexico Environment Department (NMED), as specified in 20.2.73 NMAC.

Emissions reports are required from the following sources and pollutants as outlined in Table 1.1:

Table 1.1: NMED GHG Reporting Options By Source Type

Source Type	Pollutants	Reporting Options
Title V Oil and Gas (Stationary Combustion)	CO ₂ & CH ₄	<ul style="list-style-type: none">• EPA GHG reports or methods, for combustion sources
Title V Oil and Gas Vented Emissions	CO ₂ & CH ₄	<ul style="list-style-type: none">• NMED 2012 procedures for Title V non-combustion sources at facilities not subject to 40 CFR Part 98 Subpart W; or• Subpart W for sources that are subject to those requirements
Title V (non-oil and gas)	CO ₂ & CH ₄	<ul style="list-style-type: none">• EPA GHG reports;• EPA methods applied to facilities not subject to EPA reporting;• NMED 2012 procedures; or• Best Available Data <u>only</u> for sources lacking quantification methods under EPA methods or NMED procedures

NMED will accept GHG emission reports submitted to EPA pursuant to 40 CFR Part 98 as a method of complying with 20.2.73 NMAC GHG emissions reporting requirements for those emissions sources covered by the EPA rule. Use the following link for additional information regarding the EPA reporting rule:

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

Title V sources not subject to EPA GHG reporting shall use NMED’s web-based Air Emissions Inventory Reporting (AEIR) tool to report greenhouse gas emissions, as well as criteria and hazardous air pollutants. Here is a link to the AEIR tool:

<https://eidea.nmenv.state.nm.us/sep/>

Title V non-oil and gas facilities not subject to EPA GHG reporting and for which there are not EPA source specific emissions quantification methods may use industry specific methods (i.e., Best Available Data) to calculate process vented and non routine emissions, including vented and fugitive carbon dioxide and methane emissions.

Each GHG report shall also include GHG emissions occurring during regular operation, maintenance, start-ups, shutdowns, upsets and malfunctions. GHG emissions data from

combustion, vented and fugitive units can be aggregated at the facility level. For example, all combustion sources can be reported in aggregate at the facility level. Vented or fugitive GHG emission sources may also be aggregated by category type at the facility level.

If using NMED's AEIR tool to report GHG emissions, please include the following data on an Excel spreadsheet as an electronic attachment with your emissions inventory submittal:

- Facility GHG emissions total(s) as follows:
 1. GHG emissions in carbon dioxide equivalent (CO₂e);
 2. CO₂e for combustion sources;
 3. CO₂ vented emissions (i.e., process and fugitive emissions); and
 4. Methane vented emissions (i.e., process and fugitive emissions);
- Detailed GHG emission calculations and calculation methodology used for each subject item type (e.g., combustion, vented and fugitive); and
- Vented and fugitive methane and CO₂ emissions by equipment type

Part 2: Requirements for the Mandatory Reporting of Greenhouse Gas Emissions from Specific Types of Facilities

95110. Data Requirements and Calculation Methods for Cement Plants

- (1) 40 CFR Part 98 Subpart H – Cement Production

95111. Data Requirements and Calculation Methods for Electricity Generating or Cogeneration Facilities

- (1) 40 CFR Part 98 Subpart D - Electricity Generation

95112. Data Requirements and Calculation Methods for Petroleum Refineries

- (1) 40 CFR Part 98 Subpart Y – Petroleum Refineries

95113. Data Requirements and Calculation Methods for Hydrogen Plants

- (1) 40 CFR Part 98 Subpart P - Hydrogen Production

95114. Data Requirements and Calculation Methods for General Stationary Combustion Facilities

- (1) 40 CFR Part 98 Subpart C – General Stationary Fuel Combustion Sources

95115. Data Requirements and Calculation methods for Landfill facilities

- (1) 40 CFR Part 98 Subpart HH – Municipal Solid Waste Landfills;

- (2) California Climate Action Registry (CCAR) Local Government Protocol; or
- (3) Current MSW Industry Position and State of the Practice on LFG Destruction Efficiency in Flares, Turbines and Engines. Presented to: Solid Waste Industry for Climate Solutions (SWICS), by SCS Engineers, July 2007.

Note: CO₂ vented landfill emissions are not required.

95116. Data Requirements and Calculation Methods for Title V Oil and Gas Sources Not Subject to 40 CFR Part 98 Subpart W

1. Facilities meeting one or more of the Subpart W industry segment definitions (but not reporting because emissions are <25,000 metric tons CO₂e):
 - i. Option 1: Follow Subpart W requirements (source types covered and quantification methods) for the appropriate industry segment.
 - ii. Option 2: Use any method in the API Compendium for the vented and fugitive source types covered for your industry segment in Subpart W (listed in 40 CFR 98.232).
2. Other Title V oil and gas facilities exempt from Subpart W (e.g., booster stations, small non-fractionating gas plants):
 - i. Option 1: Follow Subpart W requirements for all vented and fugitive source types listed for the onshore production and natural gas processing industry segments, except well-related sources*.
 - ii. Option 2: Use any method in the API Compendium for the same source types as in Option 1.

*Onshore production and gas processing segment vented and fugitive source types, excluding well-related:

- Natural gas pneumatic device venting
- Natural gas driven pneumatic pump venting
- Acid gas removal vent
- Dehydrator vent
- Blowdown vent stacks
- Onshore production storage tanks
- Flare stacks
- Centrifugal compressor venting
- Reciprocating compressor rod packing venting
- Other emissions from equipment leaks
- Population count and emissions factor
- Enhanced oil recovery hydrocarbon liquids dissolved CO₂
- Enhanced oil recovery injection pump blowdown

API's Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Natural Gas Industry is available at this link: <http://ghg.api.org/>

95117. Data Requirements and Calculation Methods for Miscellaneous Sources

Greenhouse Gas Emissions Data Report. An operator subject to Greenhouse Gas Emissions reporting and not subject to the requirements specified by 95110-95116 shall include the following information in the greenhouse gas emissions data report for each report year from facility sources as specified:

(1) **Stationary Combustion – CO₂ and Methane Emissions by Fuel Type**

Combustion GHG emissions using the method stated in 95114

(2) **Process Vented and Non-Routine CO₂ and Methane Emissions (>1 TPY) Including Fugitives**

The operator shall calculate emissions from each applicable facility source using an appropriate and relevant method for CO₂ and Methane.