

NMED's Greenhouse Gases Reporting Workshop

Presented by:
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January 26, 2011

Agenda

- 2009 GHG Emissions Inventory results.
- 2010 GHG Emissions Reporting requirements and process.
- 2011 GHG Emissions Reporting requirements.
- Questions/Comments.

2009 GHG EI Results

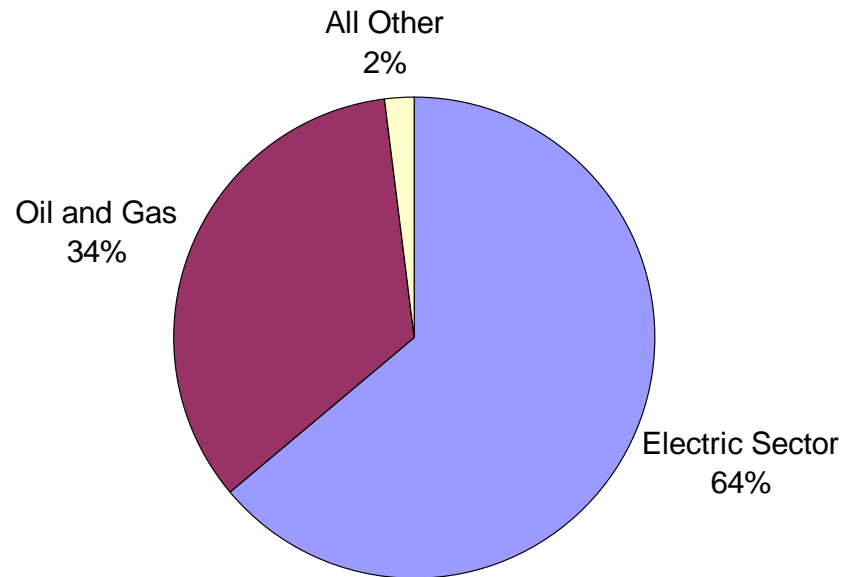
- CO₂ & CH₄ emissions data from 145 Title V Facilities 27.8 Million Metric Tons (“MMT”).
- 25 Highest emitting facilities contributed 86% of Title V emissions.
- Facilities emitting 25,000 metric tons or more contributed 97.2% of Title V emissions.
- Facilities emitting 10,000 metric tons or more contributed 99.7% of Title V emissions.

2009 GHG EI Results

- Data Caveats:
 - Does not reflect all revisions of data.
 - Some submittals initially only included CH₄ from combustion.
 - Excel SS's not always equal to AEIR entry.
 - Does not include emissions from Tribal Land or Bernalillo County.

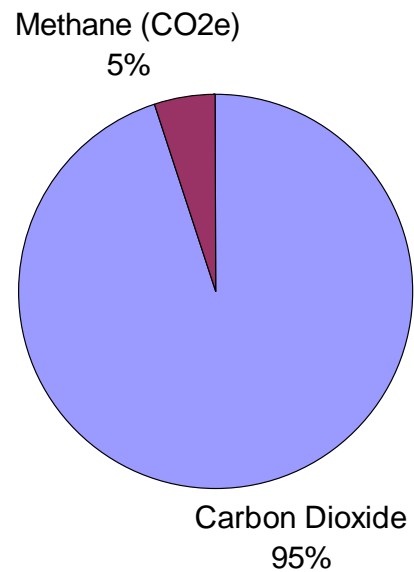
2009 GHG EI Results

GHG Distribution by Sector (27.8 MMT)



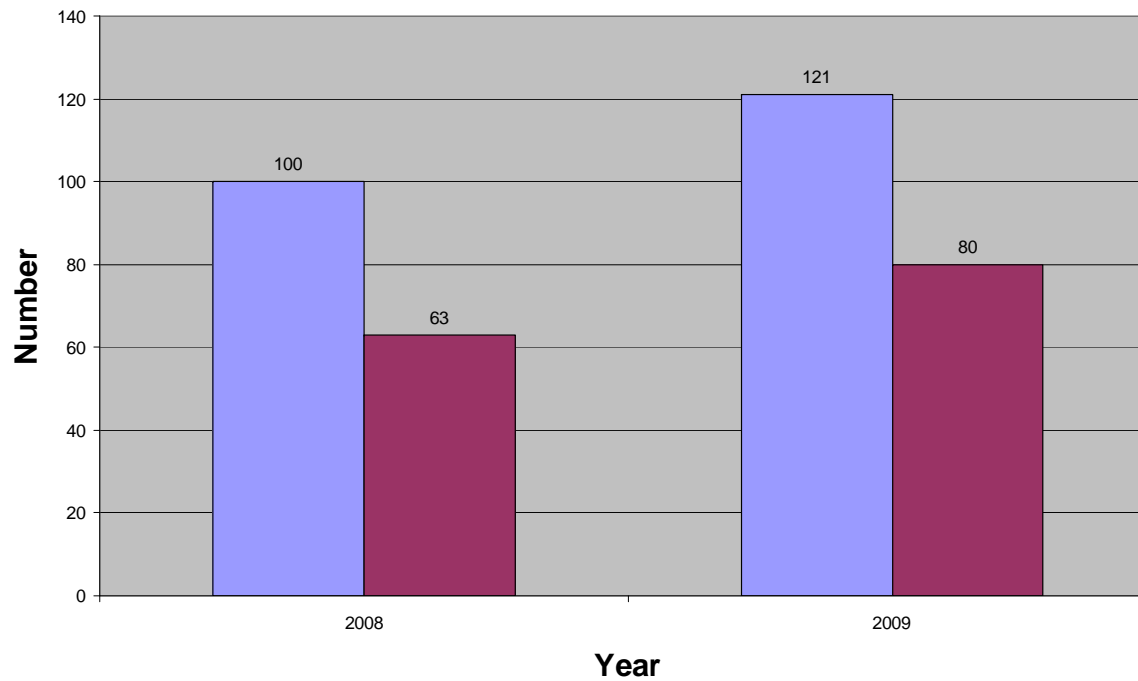
2009 GHG EI Results

GHG Distribution by Pollutant (27.8 MMT)



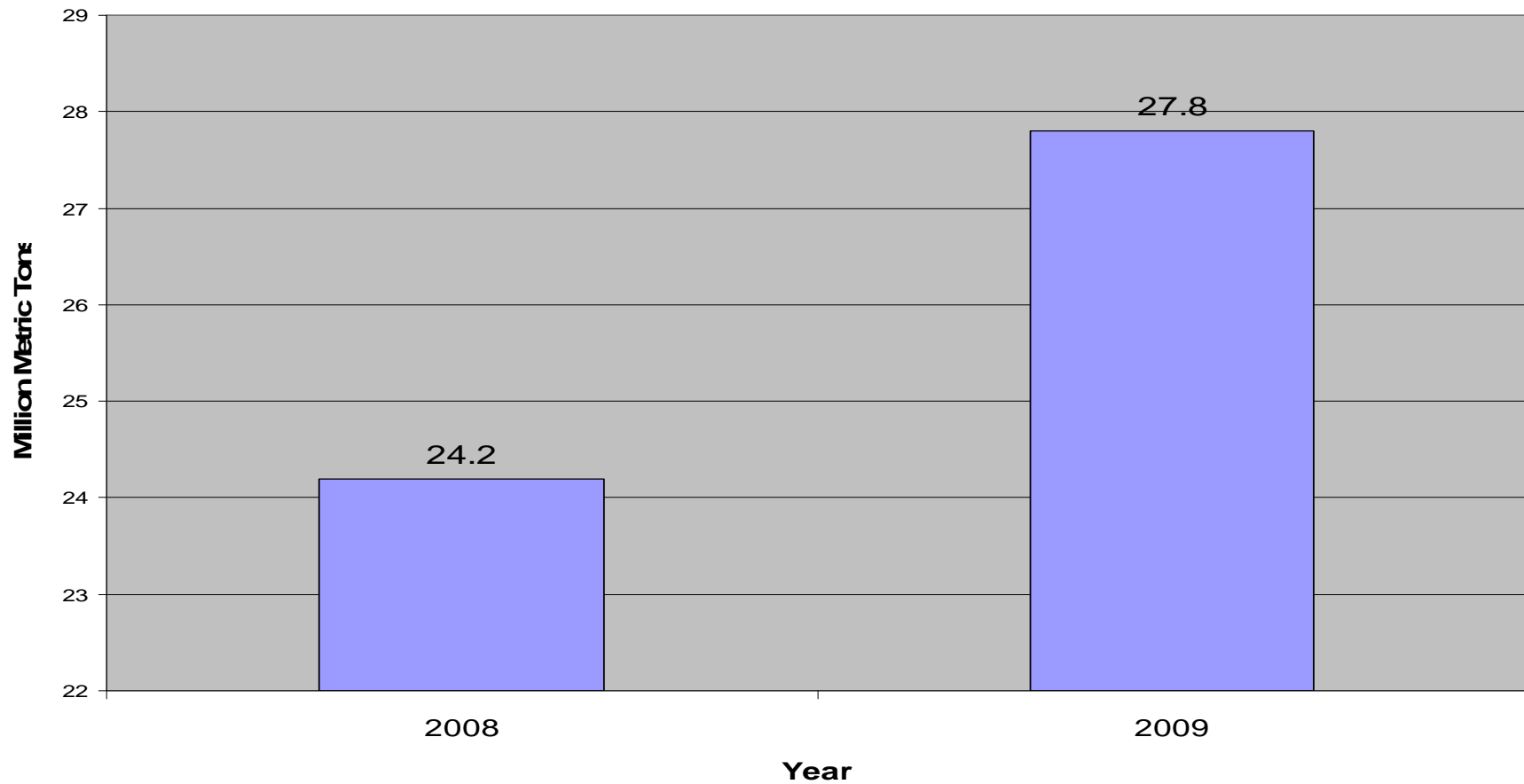
2009 GHG EI Results

Source Distribution >10,000 &
25,000 Metric Tons



2008 & 2009 TV Comparison

TV GHG Emissions



GHG Reporting Requirements for 2010 Emissions

- Title V sources report CO₂ & CH₄ emissions.
- Oil and gas sources having a NOI or permit report CO₂ & CH₄ emissions.
- CO₂ & CH₄ combustion, vented and fugitive emissions must be included in emission reports.
- 20.2.87 NMAC – Greenhouse Gas Emissions Reporting no longer in effect.
- GHG reports Due April 1st, 2011.

2010 GHG Reporting Process

- Emissions Year 2010 GHG reporting procedures.
- http://www.nmenv.state.nm.us/aqb/ghg/ghgrr_index.html
- Sector specific GHG emissions calculation methods & reported data requirements.
- Title V Sources use AEIR tool for submitting non-EPA reported GHG emissions data.
- Include electronic calculation (i.e. Excel spreadsheet) attachment with your submittal as outlined in the procedures.

2010 GHG Reporting Process

- 40 CFR Part 98 EPA GHG emission reports suffice for meeting NMED's requirements for emissions covered by that rule.
 1. EPA to provide list of NM federal GHG reporters "shortly after reporting deadline."
 2. EPA reported data to be publicly available by June 15, 2011.
 3. EPA to provide complete data set to states a month prior to June 15, 2011.
 4. EPA's CBI rule may restrict state access to data elements used to calculate GHG emissions.
- However, this is "theoretical" at this point which creates uncertainty as to when and how NMED will receive 2010 EPA reported data.
- How much of a burden would it be to include stationary combustion GHG emissions reported to EPA in your AEIR submittals?

2010 GHG Reporting Process

- NMED is working on technical fix to avoid duplicate reporting of stationary combustion emissions reported to EPA.
- We anticipate approximately 64 sources being subject to 2010 EPA reporting.
- Non-combustion emissions (e.g. vented and fugitive) not covered by EPA - include in AEIR submittals.
- API Compendium or 40 CFR Part 98 Subpart W calculation methods may be used by oil and gas sources to report non-combustion emissions.

2010 GHG Reporting Process

- Landfills are required to report CO₂ & CH₄ emissions.
- Landfills subject to 40 CFR Part 98 Subpart HH (four landfills?): AQB will get copy of report from EPA.
- All others can use EPA methods or industry specific protocols.
- Landfill reporters may voluntarily submit as an attachment sequestered carbon emissions to demonstrate the complete carbon footprint of their facility.

2010 GHG Reporting Process

- Non-TV O&G sources have four options to submit GHG emissions data:
 1. Develop unique Excel SS
 2. Hire a consultant
 3. Utilize API's SANGEA GHG emissions tool
 4. Utilize NMED Excel SS
- NMED's SS requires the following:
 1. Company Name and list of facilities
 2. Fuel and operating parameters

2010 GHG Reporting Requirements

- NMED's Excel SS:
 - Simple, straightforward and user-friendly.
 - Eliminates the need to look up GHG emission calculation methods.
 - Generates GHG emission totals from combustion, fugitive and vented sources.
 - Meets NMED's 2010 GHG reporting requirements for minor oil and gas sources.
 - Demonstrate Spreadsheet

2010 GHG Reporting Process

- Minor oil and gas GHG reporting additional considerations:
 1. Can list multiple permitted facilities in a single report.
 2. GHG emissions summary report includes: facility list (Permit/NOI No. and Agency Interest ID).
 3. CO₂e, CO₂ and CH₄ from combustion, vented and fugitive sources.
 4. Don't use NMED's AEIR emissions inventory tool
 5. Include emissions calculations if you don't use NMED's spreadsheet.
 6. Link to NMED's 2010 procedures (See Slide 10).

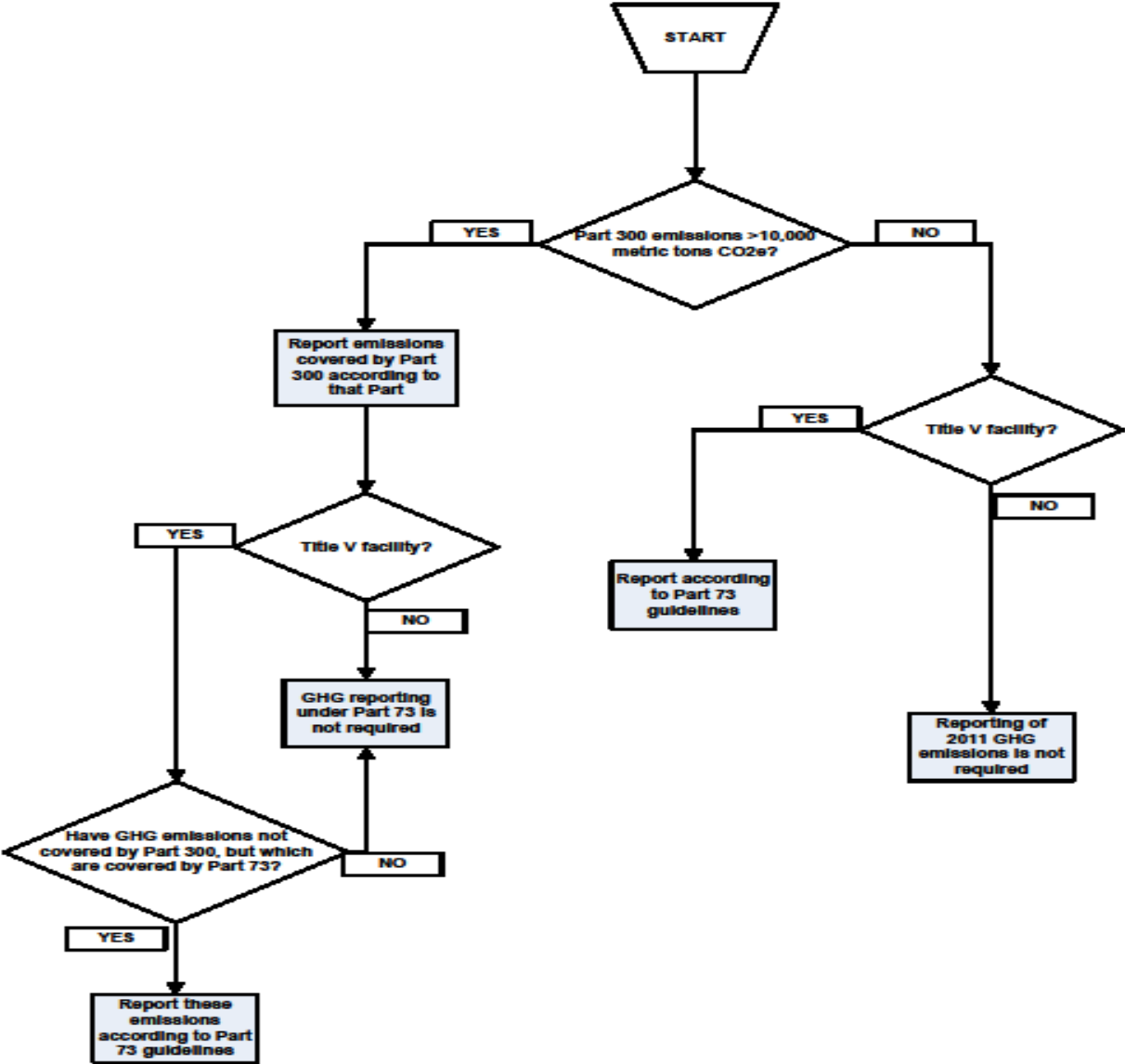
2011 GHG Reporting Requirements

- Three rules to consider:
 1. 40 CFR Part 98
 2. 20.2.73 NMAC
 3. 20.2.300 & 20.2.301 NMAC
- Non-TV oil and gas sources will not be required to report 2011 GHG emissions under 20.2.73 NMAC
- If 20.2.300 NMAC is no longer in effect at the end of 2011, all Title V sources will be required to report GHG emissions pursuant to 20.2.73 NMAC only.
- 20.2.300 NMAC applies to Title V or minor source facility having GHG emissions covered by that Part greater than 10,000 metric tons.

2011 GHG Reporting Requirements

	Emissions covered by Part 300	
	> 10,000 metric tons CO₂e/yr	< 10,000 metric tons CO₂e/yr
Title V facility	Part 300 and possibly Part 73 (Part 73 <u>only</u> for emissions not reported under Part 300, if any -- e.g., vented and fugitive methane emissions from oil and gas facilities other than refineries)	Report according to Part 73 guidelines
non-Title V facility	Report according to Part 300	No GHG reporting required

GHG REPORTING UNDER PART 300 VS. PART 73



2011 GHG Reporting Requirements

- Overlap does exist between the rules.
- However, emissions reported under 20.2.300 NMAC are not required to be reported under 20.2.73 NMAC.
- 20.2.300 NMAC covers non-combustion vented CO₂ from acid gas units.
- All other non-combustion oil and gas emissions will be reported following NMED's 2011 procedures.

2011 GHG Reporting Requirements

- NMED's procedures for non-combustion oil and gas GHG emission sources:
 1. 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; best available data may be used for part or all of 2011.
 2. Option 2: Use any method in the API Compendium for the same source types as in Option 1.

2011 GHG Reporting Requirements

- 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

2011 GHG Reporting Requirements

- Farmington, NM meeting February 3rd.
- Artesia, NM meeting February 7th.
- Additional Questions or Comments?