Petroleum and Natural Gas Systems in the Greenhouse Gas Reporting Program Distribution Segment

U.S. Environmental Protection Agency
Office of Atmospheric Programs, Climate Change Division
Description of Natural Gas Distribution Segment

- Natural gas distribution generally means the distribution pipelines and metering and regulating equipment/stations that are operated by a Local Distribution Company (LDC).
- For Natural Gas Distribution, the “facility” is a local distribution company as regulated by a single state public utility commission.
Emissions Distribution for the Natural Gas Distribution Segment

GHGRP, 2014

Natural Gas Distribution (metric tons CO2e)
- 0 - 25,000
- 25,000 - 50,000
- 50,000 - 100,000
- 100,000 - 250,000
- 250,000 - 500,000
- > 500,000

Natural Gas Distribution* (metric tons CO2e)
- 0 - 5,000
- 5,000 - 25,000
- 25,000 - 50,000
- 50,000 - 100,000
- > 100,000

* Emissions are provided by company/utility address for facilities where service territories were not yet identified.

Data Source: 2014 Greenhouse Gas Reporting Program
As of 08/16/2015

GHGRP data as of 8/16/15
Top Reported Emission Sources

- Reported emissions in natural gas distribution totaled 14.8 MMT CO$_2$e
- 181 facilities reported under this sector
- Methane emissions totaled 14.3 MMT CO$_2$e and carbon dioxide emissions totaled 0.5 MMT CO$_2$e
Select Newly Reported Activity Data

• Leak factor for meter/regulator run
• Miles of distribution mains by material:
  – Unprotected steel
  – Protected steel
  – Plastic
  – Cast iron
• Miles of distribution services by material:
  – Unprotected steel
  – Protected steel
  – Plastic
  – Copper
Reported Activity Counts: 2011-2014

<table>
<thead>
<tr>
<th>Industry Segment</th>
<th>Source Type</th>
<th>2011 Count</th>
<th>2012 Count</th>
<th>2013 Count</th>
<th>2014 Count</th>
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<tbody>
<tr>
<td>Natural Gas Distribution</td>
<td>Reporting Facilities</td>
<td>183</td>
<td>183</td>
<td>175</td>
<td>181</td>
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<tr>
<td></td>
<td>Miles of Unprotected Steel Mains</td>
<td>59,599</td>
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<td>Miles of Protected Steel Mains</td>
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<td>Miles of Plastic Mains</td>
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<td>Miles of Cast Iron Mains</td>
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<td>29,282</td>
<td>29,650</td>
<td>28,909</td>
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</table>
Natural Gas Distribution
Miles of distribution mains by state and material

Note: Only the 10 states with the largest total miles of distribution mains are shown.