Connecticut Department of Energy and Environmental Protection
Status of
RCSA Section 22a-174-22 – The
Next Generation

October 9, 2014
Wendy Jacobs
Individual meetings held so far...

- PSEG
- Yale
- Navy Sub Base
- UTC
- Dominion
- NRG
- UCONN (written comments only)
- MIRA (meeting to be scheduled)
Common Issues

• **Applicability**
  – Define non-road engine applicability.
  – NY-type applicability is very clear.
  – Define the universe impacted by 137/274 lb/day provisions.

• **Emissions limits**
  – Averaging times and startup/shutdown are important considerations.
  – Averaging provisions across units could be useful.
  – NY-type stratification of boiler limits by size and fuel makes more sense than a “one-size fits all” limit.
  – Concerns raised about feasibility of trading in Phase 1.

• **Implementation of the requirement not to test engines on bad ozone days** can be logistically challenging.

• **Compliance testing.**
  – Allow the schedule for retesting to prevent test creep.
  – Test requirements (especially with respect the capacity at the time of the test) should be consistent with federal requirements (i.e., MATS, Boiler MACT, RICE NESHAP, NSPS).
Current Thinking

• For Phase 2, divide boiler emissions limits by size and fuel.
• Include clarifying language regarding non-road engines.
• Considering whether the goal of the 137/274 lb/day applicability requirement could be met with a different provision or whether to maintain as is.
• Redefine Phase 1 with no trading (program feasibility in doubt) and other compliance options.
• Redefine Phase 2.
• Considering Phase 1/Phase 2 requirements specific to High Electric Demand Day (HEDD) units.
## NJ and NY NOx limits for Boilers Serving EGUs and ICI boilers

<table>
<thead>
<tr>
<th>NJ</th>
<th>Coal</th>
<th>Natural gas</th>
<th>Other gas (not refinery)</th>
<th>No. 2 oil</th>
<th>Other liquid fuels</th>
<th>Dual fuel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boilers serving EGUs</td>
<td>1.50 lb/MWh</td>
<td>1.00 lb/MWh</td>
<td>_____________</td>
<td>1.00 lb/MWh</td>
<td>2.00 lb/MWh</td>
<td>_____________</td>
</tr>
<tr>
<td>ICI boilers* 25 MMBtu/hr up to 100 MMBtu/hr</td>
<td>_____________</td>
<td>0.05 lb/MMBtu</td>
<td>0.20 lb/MMBtu</td>
<td>0.08 lb/MMBtu</td>
<td>0.20 lb/MMBtu</td>
<td>0.12 lb/MMBtu</td>
</tr>
<tr>
<td>ICI boilers* 100 MMBtu/hr or greater</td>
<td>_____________</td>
<td>0.10 lb/MMBtu</td>
<td>0.20 lb/MMBtu</td>
<td>0.10 lb/MMBtu</td>
<td>0.20 lb/MMBtu</td>
<td>0.20 lb/MMBtu</td>
</tr>
</tbody>
</table>

*Whether or not at a major NOx facility

## NY

<table>
<thead>
<tr>
<th>NY</th>
<th>Coal</th>
<th>Gas only</th>
<th>Gas/Oil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mid size boilers 25-100 MMBtu/hr</td>
<td>_____________</td>
<td>0.05 lb/MMBtu</td>
<td>0.08 lb/MMBtu (distillate oil/gas)</td>
</tr>
<tr>
<td>Large boilers 100-250 MMBtu/hr</td>
<td>0.20 lb/MMBtu (pulverized)</td>
<td>0.06 lb/MMBtu</td>
<td>0.15 lb/MMBtu</td>
</tr>
<tr>
<td>Very large boilers 250 MMBtu/hr and &gt;</td>
<td>0.12 lb/MMBtu (cyclone)</td>
<td>0.08 lb/MMBtu</td>
<td>0.15 lb/MMBtu (cyclone)</td>
</tr>
</tbody>
</table>
## Single Fuel ICI Boilers in 2013 EMIT

<table>
<thead>
<tr>
<th>Design Capacity (MMBtu/hr)</th>
<th>Natural Gas</th>
<th>No. 2 Oil</th>
<th>No. 4 Oil</th>
<th>No. 6 Oil</th>
<th>Other Fuels</th>
<th>Total No. Units</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - &lt;5</td>
<td>118</td>
<td>195</td>
<td>94</td>
<td>1</td>
<td>21</td>
<td>429</td>
<td>33.4</td>
</tr>
<tr>
<td>5 - &lt;25</td>
<td>202</td>
<td>363</td>
<td>175</td>
<td>45</td>
<td>13</td>
<td>798</td>
<td>62.1</td>
</tr>
<tr>
<td>25 - &lt;100</td>
<td>31</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>51</td>
<td>4.0</td>
</tr>
<tr>
<td>100 - &lt;250</td>
<td>6</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>0.5</td>
</tr>
<tr>
<td>250&gt;</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.1</td>
</tr>
<tr>
<td>Total No. Units</td>
<td>358</td>
<td>563</td>
<td>275</td>
<td>54</td>
<td>36</td>
<td>1286</td>
<td></td>
</tr>
<tr>
<td>% Total</td>
<td>27.8</td>
<td>43.8</td>
<td>21.4</td>
<td>4.2</td>
<td>2.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Next steps

• If any other source would like to come in and meet with us, please let us know ASAP.

• Focus on applicability, emissions limitations, and compliance options in Phase 1 and Phase 2 in October.
  – Develop an outline and perhaps rule language for the first two areas.

• Share draft regulation outline/language with SIPRAC subcommittee by November 13th SIPRAC meeting.