Air Construction Permitting Update

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Construction Permit Section
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Presentation Outline

• Overview
• Statistics
• Recent and Upcoming Changes
• Specific Topics Requested by Attendees
Overview
Construction Permit Program

• In Iowa our rules require:
  – Unless exempt, all new or modified equipment and control equipment is required to obtain a construction permit if constructed after 9/23/70

• Currently 41 specific exemptions from construction permitting listed in our rules
  – Ex. Equipment used for indirect heating burning natural gas or propane rated at < 10 MMBTU/hr heat input
Critical Services Beyond Permitting

• We also provide technical assistance to Business and Industry, the Public and the rest of the Air Quality Bureau:
  – Economic Development Prospects
  – Permit Helpline
  – Applicability Determinations / Assistance
  – Emissions Estimation Assistance
  – Review and Assist Local Programs
  – SIP / Non-Attainment Plan Development
  – Rules Review
Statistics
# Construction Permit Statistics

<table>
<thead>
<tr>
<th></th>
<th>5-yr Average (2010 – 2014)</th>
<th>2015 (as of 7/1/15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Projects</td>
<td>407</td>
<td>184</td>
</tr>
<tr>
<td>Standard Permit Actions</td>
<td>1451</td>
<td>650</td>
</tr>
<tr>
<td>Standard Project Average Leadtime</td>
<td>64 days</td>
<td>61 days</td>
</tr>
<tr>
<td>PSD/NA NSR Complex Projects</td>
<td>21</td>
<td>17</td>
</tr>
<tr>
<td>PSD/NA NSR Complex Complex Permit Actions</td>
<td>124</td>
<td>57</td>
</tr>
<tr>
<td>PSD/NA NSR Complex Project Average Leadtime</td>
<td>198 days</td>
<td>144 days</td>
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<tr>
<td>Other Complex Projects</td>
<td>32</td>
<td>22</td>
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<tr>
<td>Other Complex Permit Actions</td>
<td>285</td>
<td>388</td>
</tr>
<tr>
<td>Other Complex Project Average Leadtime</td>
<td>284 days</td>
<td>226 days</td>
</tr>
</tbody>
</table>
Construction Permit Backlog

Projection of Projects Received
Projection of Staff Capacity to Issue
May 2015 Projection
Actual Observed data

IOWA DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR
Recent and Upcoming Changes
Construction Permit Application Forms Revision

• Currently have 21 forms
• Last major revision 08/2010
• Minor revisions made every year or as necessary

• 2014-2015 Revisions
  – Input from ABI, industry, consultants
  – Goals
    • Easier to fill out
    • Fewer mistakes – fewer information requests
    • ADA compliant
    • Quicker application turnaround time
    • Improved instructions
Construction Permit Application Forms

• Major changes
  – Eliminated form FRA
  – Added form CP – cover page
  – Removed redundant questions
  – Added questions needed to address rules and regulations
  – Stack information now on form EP only (except cooling tower form)
  – Changed layout
  – Revised instructions
  – ADA compliant
Construction Permit Application Forms

- Draft forms out for comment

- Comment period ended 6/30/15
- Working on final revisions

- Expect to start using July 2015
  - Old forms will continue to be accepted – may cause time delay
  - Periodic updates in future
  - New forms as necessary (e.g. fee submission form)
Construction Permit Application Fees

- Legislation allowed fees for:
  - New Source Review at Major Sources
    - Applications for a construction permit
    - Regulatory Determinations
    - Dispersion model review
    - Expedited processing
  - New Source Review at Minor Sources
    - Applications for a construction permit
    - Registrations
    - Permit by rule
    - Permit templates
- Legislation also allowed fees for Title V Applications, Asbestos Notifications, in addition to the continuation of the Title V emissions fees.
Construction Permit Application Fees

• Rulemaking underway
  – 2nd stakeholder meetings July 7-8
  – Stakeholders making recommendations on fees and draft rules

• Rules to EPC for Notice of Intended Action August 18th

• Public Comment Period mid September through mid October

• Rules to EPC for Final Adoption November 17th

• January 1, 2016 fee start date

• Timeline, draft rules and budget information available on DNR Website at http://www.iowadnr.gov/feegroups
Greenhouse Gases (GHGs) and Construction Permitting

- Applicants are required to include potential GHG emissions on construction permit applications per Iowa Code 455B.134. [Form GHG]

- Use the *Stationary Fossil Fuel Combustion Calculation Tool* and *Greenhouse Gas Estimations Estimation Guidance* to help with GHG calculations. Both are available on our website under “Greenhouse Gas Estimation Tools”. Form GHG also contains hyperlinks to both documents.

- Applicants are required to calculate the potential of each individual GHG. Though updated Form GHG no longer asks applicants to calculated CO$_{2e}$

- The deferral for biogenic CO$_2$ expired on 07/21/14. All CO$_2$ emissions must be included in potential emissions calculations.
Revised Global Warming Potentials (GWP)

- EPA revised its accepted GWPs effective January 1, 2014 to match those in the 2007 Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4).

- Previously EPA used values from the 2001 IPCC Third Assessment Report (TAR).

<table>
<thead>
<tr>
<th>GHG</th>
<th>IPCC TAR Value</th>
<th>IPCC AR4 Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Dioxide (CO₂)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Methane (CH₄)</td>
<td>21</td>
<td>25</td>
</tr>
<tr>
<td>Nitrous Oxide (N₂O)</td>
<td>310</td>
<td>298</td>
</tr>
<tr>
<td>Sulfur Hexafluoride (SF₆)</td>
<td>23,900</td>
<td>22,800</td>
</tr>
<tr>
<td>HFCs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PFCs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The GWPs for many of individual HFCs and PFCs have been revised. Refer to 40 CFR 98, Subpart A, Table 1 for the complete list.
Revised Global Warming Potentials (GWP)

- Iowa DNR has not yet updated its rules to use the revised GWP values.
  - The revised value for methane is more conservative.
  - Facilities that are subject to EPA’s federal GHG rules (40 CFR 98) are required to use the AR4 values, as Iowa does not have delegation of that program.

- The GWP values will be updated via the DNR’s draft “Rulemaking to Provide Regulatory Certainty”.
  - Has already been out for informal public comment.
  - Will go through the rulemaking process after the DNR’s draft “Sustainable Funding” rulemaking.
GHGs and PSD Permitting

• The 2014 U.S. Supreme Court ruling *Utility Air Regulatory Group (UARG) v. EPA* and the amended appeals court judgement in *Coalition for Responsible Regulation v. EPA* vacated EPA’s GHG Tailoring Rule.
  
  – A source can no longer be classified as major for PSD solely because of its GHG emissions.
  – A source that is already major for PSD for other pollutants can no longer be required to go through PSD for an increase of only GHGs above a certain level.

• DNR’s draft “Rulemaking to Provide Regulatory Certainty” proposes to amend 567 IAC 33.3(22) to allow for rescission of PSD permits that were issued based on the above criteria. This matches changes EPA made to the federal PSD regulations on effective 07/06/15 in response to the vacature.

• EPA may continue to require sources that need PSD permits based on their emission of other pollutants to comply with BACT for GHGs.
Specific Topics Requested by Attendees
Equipment Leaks

• Transitioning to one permit per facility
  – Easier to modify
  – Allow range of equipment
  – Use conservative estimates

• NSPS VV and VVa
  – One facility can be subject to both
  – Many choose to use VVa for all components

• LDAR – Leak Detection and Repair
  – Specified by NSPS
  – Useful in non-NSPS cases
Pollution Control Equipment Monitoring

- Ensure ongoing compliance
- Case-by-case determination
- Common parameters
  - Pressure drop
  - Flow rate
  - Temperature
  - Opacity
  - pH
  - Reactant injection rates
- Based on test data or estimations
- Consider averaging times and consequences of a failure
- Updated Form CE asks for facility input on monitoring parameters and frequency
PSD Excludable Emissions

• 567 IAC Chapter 33 allows emissions exclusions for:
  – Demand growth; and
  – Could otherwise accommodate

• Facility should estimate excludable emissions prior to change

• Track emissions for 5 or 10 years

• Little EPA guidance on how to estimate demand growth however EPA is following all requests for demand growth exclusion closely