Air Quality Update

Linn County Public Health
Air Quality Branch
December 1, 2011
Overview

• Organizational Activity Update
• Ambient Air Quality Update
• Regulatory Update
• Questions
Budget Trend

5-Yr AQ Budget Trend

<table>
<thead>
<tr>
<th></th>
<th>FY08 Budget</th>
<th>FY09 Budget</th>
<th>FY10 Budget</th>
<th>FY11 Budget</th>
<th>FY12 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary &amp; Benefits</td>
<td>$897,364</td>
<td>$937,157</td>
<td>$1,047,719</td>
<td>$1,016,206</td>
<td>$1,027,811</td>
</tr>
<tr>
<td>Travel / Training</td>
<td></td>
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</tr>
<tr>
<td>Supplies</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Actuals</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
FY12 Permit Fees

- No planned increases in local fees for FY12
- Proposing to eliminate government fee exemption for FY13 ($8K revenue)
- Title V fee will remain at $56/ton
Linn County Title V Trends

**Linn County Chargeable Tons vs. Fees**

- Years: FY01 to FY10
- Tons: 0 to 30,000
- Fees: $0 to $60 per ton

**Linn County Title V Revenue**

- Years: FY01 to FY10
- Revenue: $579,332 to $885,345

**Linn County Major Source Effort vs. TV Tons**

- Years: FY07 to FY10
- Tons: 0 to 25,000

**Linn County Average Tons and Revenue**

<table>
<thead>
<tr>
<th>Period</th>
<th>Average Tons</th>
<th>Average Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY01 – FY10</td>
<td>20,754</td>
<td>$767,398</td>
</tr>
<tr>
<td>FY08 – FY10</td>
<td>13,416</td>
<td>$730,869</td>
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</tbody>
</table>
Potential Impact on Emissions with On-the-books Federal Regulations

- CSAPR
- CISWI NSPS
- Utility MACT
- ICI Boiler MACT
- Cement Kiln MACT
- NAAQS Revisions

Chargeable Title V Emissions
5-Yr Core Activity Trends

- FY11 permitting down 38% vs. FY10
- FY12 is trending up (2.8x through Oct.)
- FY11 inspections up 67% vs. FY10 – focus on minors
- Planning fewer inspections in FY12
- Inspection to NOV ratio around 3:1
## Workforce Deployment

<table>
<thead>
<tr>
<th>Activity Description</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Permits/ Local Operating Permits</td>
<td>3.31</td>
</tr>
<tr>
<td>• Minor Source</td>
<td>0.80</td>
</tr>
<tr>
<td>• Major Source</td>
<td>1.79</td>
</tr>
<tr>
<td>• Title V operating permits</td>
<td>0.72</td>
</tr>
<tr>
<td>Program Development (including public outreach)</td>
<td>0.30</td>
</tr>
<tr>
<td>Ambient Air Monitoring &amp; Quality Assurance</td>
<td>3.75</td>
</tr>
<tr>
<td>Compliance Inspections</td>
<td>1.46</td>
</tr>
<tr>
<td>• Minor Source</td>
<td>0.94</td>
</tr>
<tr>
<td>• Major Source</td>
<td>0.52</td>
</tr>
<tr>
<td>Personnel Development (e.g. Training/Conferences)</td>
<td>0.31</td>
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<tr>
<td>Administration</td>
<td>1.18</td>
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<tr>
<td><strong>Total SFY11</strong></td>
<td><strong>10.31</strong></td>
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### Pie Chart:
- **Permitting**: 32%
- **Ambient Monitoring**: 37%
- **Program Development**: 3%
- **Compliance**: 14%
- **Personnel Development**: 3%
- **Administration**: 11%
Ambient Monitoring Update

Ozone 3 Year Design Values

- 2005-2007: 0.071
- 2006-2008: 0.068
- 2007-2009: 0.066
- 2008-2010: 0.062
- 2009-2011: 0.062

Ozone 4th Highest by Year

- 2005: 0.072
- 2006: 0.066
- 2007: 0.076
- 2008: 0.063
- 2009: 0.060
- 2010: 0.066
- 2011: 0.068
Ambient Monitoring Update

Linn County Ozone Design Value
History 1999-2011

Linn County Ozone 21 Year History
4th Highest 8-Hour
Ambient Monitoring Update

PM 2.5 Annual 98th Percentile Linn County All Sites
Note: Used to determine 3 year Average (NAAQS)

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>35.4</td>
<td>24.4</td>
<td>25.9</td>
<td>25.4</td>
<td>32.1</td>
<td>35.8</td>
<td>34.6</td>
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</table>

Army Reserve ■ Public Health

Annual PM 2.5 Averages (NAAQS)
Note: Standard is 15 ug/m3

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>11.8</td>
<td>9.7</td>
<td>11.1</td>
<td>10.4</td>
<td>10.3</td>
<td>11.1</td>
<td>9.6</td>
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Ambient Monitoring Update

Linn County PM 2.5 Annual 98th Percentiles
History 1999-2011

Linn County PM 2.5 Design Value
History 2001 - 2010
IDNR Regulatory Relief Initiative

• IDNR has been working with ABI to identify opportunities to reduce regulatory burden for business and industry.
  – Reducing the level of dispersion modeling for minor projects
    • Currently model about 20% of the minor projects with only 25% of those requiring some type of remediation
  – Codifying informal enforcement options (567 IAC Chapter 9A)
    • Intent is to reduce the number of NOVs and keep minor deviations out of the Enforcement and Compliance History Online (ECHO) database
  – Reducing the notification period for portable plants from 14 days to 7 days
  – Eliminating the Iowa Compliance Sampling Manual
    • Method 5 will require back half – adopting federal methods
    • IDNR will have to change some definitions
    • IDNR is not allowed to be more stringent than federal requirements
PM$_{2.5}$ Implementation

- EPA issued a finding of failure to submit a timely infrastructure SIP for PM$_{2.5}$.
- Started a 24-month FIP clock – giving IDNR 12 – 15 months to get a SIP submitted to allow time for EPA approval.
  - If no approved SIP, EPA would take over implementation of PM$_{2.5}$ through the FIP.
    - This would be a bad situation for all involved
    - Not sure how federal implementation of PM$_{2.5}$ NAAQS would work.
- IDNR’s SIP goal is to be “middle of the pack” regarding stringency and policies.
  - NACAA survey to other states to see how they are implementing permitting, modeling and stack testing for PM$_{2.5}$
September 2, 2011 - President Obama directed EPA to withdraw its reconsideration of the 2008 ozone NAAQS.

- 75 ppb (current standard)
- Ozone NAAQS will be revisited in 2013 according to CAA timelines
1-hour SO$_2$ Implementation

• Draft Implementation Guidance for the Primary NAAQS for Sulfur Dioxide
  – Comments due December 2.
  – Varying responses to the guidance across the county.
  – Linn County’s concerns include:
    • Monitoring only is not sufficient to demonstrate attainment.
    • Required modeling of potential emissions rather than actual to demonstrate compliance.
    • Lack of resources for implementation / unachievable timeline
    • Nonbinding guidance vs. rule.
Federal Rules Update

• Utility MACT
  – New proposal due 12/16/11
• Boiler MACT
  – New proposal due 11/30/11
• CISWI NSPS
  – New proposal due 11/30/11
• Cross State Air Pollution Rule
  – Moving forward
• RICE NESHAP
  – Demand response under reconsideration
Direct Delegation Update

• Problem Statement (Why)
  – Current state-local contracting process is overly time consuming and involves a top down approach for budgeting and program administration.
  – This approach does not provide flexibility for local stakeholders to set and fund priorities.
  – Accountability is to more weighted to state contract requirements than local needs.
Direct Delegation Research

- Recent DNR feedback from state administration
- Survey of other local agencies
  - Title V delegation / fee delegation survey
  - SIP duties
    - A mix of SIP submittal on their own (staffing < 1 FTE) or submit to state for inclusion with State SIP.
    - Many local programs have more specificity in state regulation that defines their duties and legal standing.
Direct Delegation Approach

- Obtain primacy for Title V and PSD (e.g. Linn County issues Title V/PSD Permits).
- All SIP revisions including adoptions of NSPS, NESHAP, etc. goes through state for approval, then to EPA.
- Establish local Air Quality Committee under the Board of Health for rule and fee oversight
Air Quality Branch  
Contact Information  

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