Livestock & Poultry (L&P) Air Emissions Standardization Workshop

Hosted by:
USDA – Agricultural Air Quality Task Force

Location:
Environmental Protection Agency
Research Triangle Park, NC
September 27-28, 2010
L&P Subcommittee Members

• Gary Baise
• Robert Burns
• Paul Martin
• Wendy Powers
• Sally Shaver
• Bryan Shaw

• Doug Shelmidine
• Leon Weaver
• Eileen Wheeler
• Hongwei Xin
• Ben Weinheimer, Chr.

NRCS staff:

Greg Zwickel
Background Statement

Standardization of information collected/reported for livestock and poultry air emissions studies is needed.
Purpose

- **Engage:**
  - Research, extension, industry, regulators & other interested persons

- **Develop:**
  - Guidance document or other document
Purpose (Continued)

• Outline/define:
  • Data collection, emissions estimating methodologies, & reporting procedures for air emissions & mitigation practices

• Provide input:
  • NAEMS project/all livestock & poultry air emissions research
Principles of Standardization

- Principle #1 – Recommended units for reporting emissions
- Principle #2 – Data collection
- Principle #3 – Methodologies & protocols
- Principle #4 – Consistency in reporting mitigation practices
Principles #1 - #4
Workgroup Chairpersons

- Principle #1/#2 – Dr. Eileen Wheeler
- Principle #3 – Dr. Hongwei Xin
- Principle #4 – Dr. Robert Burns
L&P Subcommittee
Recommendations to AAQTF

• Workshop materials (emailed to AAQTF members and included in notebooks)
  • Agenda
  • White Papers on Principles of Standardization
  • Video/audio recording to be made publicly available by EPA/USDA
# Livestock and Poultry Air Emissions Standardization Workshop – Hosted by the USDA Agricultural Air Quality Task Force

**FINAL AGENDA**

Monday, September 27, 2010  
2:00 p.m. – 6:00 p.m.

Environmental Protection Agency Headquarters  
Research Triangle Park, North Carolina  
Room C111 A-B-C

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Presenter, Affiliation</th>
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| 2:00 p.m. – 2:05 p.m. | Welcome and Opening Remarks  
*Ben Weinheimer*, Agriculture Air Quality Task Force Member, Afternoon Moderator |
| 2:05 p.m. – 2:35 p.m. | The Importance of Standardization  
*Tom Hebert*, Bayard Ridge Group |
| 2:35 p.m. – 4:30 p.m. | Overviews and Recommendations for Principles  
Principles 1 & 2  
*Dr. Ken Casey*, Texas AgriLife  
Principle 3  
*Dr. Richard Gates*, University of Illinois  
Principle 4  
*David Schmidt P.E.*, University of Minnesota |
| 4:30 p.m. – 6:00 p.m. | NAEMS Data Analysis, Interpretation, and Emissions Estimating Methodologies Under Consideration  
*Larry Elmore*, EPA |
<p>| 6:00 p.m.      | Adjourn                                  |</p>
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<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>Discussion/Q&amp;A with EPA &lt;br&gt; <strong>Sally Shaver</strong>, Shaver Consulting, Inc.</td>
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<td>9:00 a.m. – 10:00 a.m.</td>
<td>Moderated Session for Principle 1 – Recommended Units for Reporting Emissions &lt;br&gt; <strong>Dr. Jerry Hatfield</strong>, ARS, and <strong>Dr. Brent Auvermann</strong>, Texas AgriLife</td>
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<td>10:00 a.m. – 10:30 a.m.</td>
<td>Break</td>
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<td>10:30 a.m. – 11:30 a.m.</td>
<td>Moderated Session for Principle 2 – Data Collection &lt;br&gt; <strong>Dr. Jerry Hatfield</strong>, ARS, and <strong>Dr. Brent Auvermann</strong>, Texas AgriLife</td>
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<td>11:30 a.m. – 1:00 p.m.</td>
<td>Lunch on your own</td>
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<td>1:00 p.m. – 2:00 p.m.</td>
<td>Moderated Session for Principle 3 – Methodologies and Protocols &lt;br&gt; <strong>Dr. Jerry Hatfield</strong>, ARS, and <strong>Dr. Brent Auvermann</strong>, Texas AgriLife</td>
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<td>2:00 p.m. – 3:00 p.m.</td>
<td>Moderated Session for Principle 4 – Consistency in Reporting Mitigation Practices &lt;br&gt; <strong>Dr. Jerry Hatfield</strong>, ARS, and <strong>Dr. Brent Auvermann</strong>, Texas AgriLife</td>
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<td>3:00 p.m. – 3:30 p.m.</td>
<td>Break</td>
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<td>3:30 p.m. – 5:00 p.m.</td>
<td>Wrap-Up and Next Steps – Identify Points of Agreement and Identify Where Additional Discussions are Needed &lt;br&gt; <strong>Dr. Jerry Hatfield</strong>, ARS, and <strong>Dr. Brent Auvermann</strong>, Texas AgriLife</td>
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L&P Subcommittee Recommendations to AAQTF

- National Air Emissions Monitoring Study
  - Update on EPA data analysis
    - Larry Elmore, OAQPS, EPA-RTP
    - Danny Greene, ERG (contractor)

- Moderated Discussion – Ms. Sally Shaver
L&P Subcommittee Recommendations

• NAEMS Study – Issues to be Addressed
  • EPA shared where they are with data analysis for broilers, with intentions to publish a draft by Dec. 2010. In a stair-step manner, EPA/ERG will publish drafts on broilers, layers, swine and dairy.
    • AAQTF is concerned that the timeline and stair-step approach outlined by EPA will NOT provide for adequate data analysis and public participation.
    • AAQTF recommends that final emission estimating methodologies be published at the same time for all NAEMS datasets.
L&P Subcommittee Recommendations

- **NAEMS Study – Issues to be Addressed**
  - EPA and ERG have not engaged stakeholders or technical experts.
    - **AAQTF recommends that NAEMS-project funding organizations quickly establish species-specific advisory panels.**
      - Industry stakeholders
      - Agricultural air quality experts
    - **Advisory panels should initially meet with EPA/ERG by Nov. 1, 2010.**
L&P Subcommittee Recommendations

• NAEMS Study – Issues to be Addressed
  • EPA presented preliminary data summary and analysis for broilers.
  • EPA failed to demonstrate appropriate analytical techniques in the approach presented.
  • AAQTF recommends that EPA/ERG develop and provide a written emissions estimating methodologies plan, that includes both data confidence intervals and model validation, subject to review by the advisory panels, prior to conducting any further data analysis.
L&P Subcommittee Recommendations

• NAEMS Study – Issues to be Addressed
  • EPA indicated that no progress has been made to define “facility” or “source.”
  • AAQTF recommends that the definitions for “facility” and “source” need to be publicly vetted and finalized, as they will be applied to agricultural operations.
L&P Subcommittee Recommendations

- NAEMS Study – Issues to be Addressed
  - EPA has not established a process for including the results of other studies.
  - AAQTF recommends that EPA utilize other research studies, outside NAEMS, in developing and validating the emissions estimating methodologies, as directed by the advisory panels.
Principles of Standardization

• Moderated session – Dr. Jerry Hatfield and Dr. Brent Auvermann

• Principle #1 – Recommended units for reporting emissions

• Principle #2 – Data collection

• Principle #3 – Methodologies & protocols

• Principle #4 – Consistency in reporting mitigation practices
Principles #1 - #4

Workgroup Chairpersons

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L&P Subcommittee Recommendations

- White Papers
  - AAQTF recommends that the L&P Subcommittee and moderators develop a 2-4 page summary to be included with the three white papers:
    - Included in minutes of AAQTF meeting
    - Published as ASABE technical reference
    - Published through Livestock and Poultry Environmental Learning Center
    - Support development of a standardization framework proposal for future funding (David Schmidt to lead)
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