Air & Waste Management Association Meeting
State & Local Emissions Inventory System (SLEIS) &
Emissions Inventory Reporting
October 18, 2016
SLEIS Implementation Group

• Iowa DNR - Air Quality, Legal Services, IT Services

• Windsor Solutions

• Stakeholders

• SLEIS Consortium

• EPA
SLEIS Timeline

- **2013**: SLEIS Analysis Report
- **2014**: EN Grant Awarded, SLEIS Phase I Contract Begins, SLEIS Contract Approved
- **2015**: Installation and Configuration in Test Environment, Internal Training, Stakeholder Testing, CROMERR App Submitted, Data Migration Clean-up Complete
- **2016**: Installation in Production, Addition of 2014 EI Data to SLEIS, CROMERR Approval by EPA, Decision on SLEIS for 2016 Reporting, Primary Enhancements Complete, Secondary Enhancements Complete, 2016 Title V EI Due
- **2017**: SLEIS Training for 2016 Reporting, 2016 Minor Source EI Due, 2016 Title V EI Due
Why Change?

• SPARS has been in production for more than 16 years

• At-risk because of outdated and non-standard technology

• SPARS requires additional IT support

• Developers & training not widely available
SPARS Feedback Survey

- Not intuitive or easy to use
- Not easy to navigate
- Too slow
- Security settings required for set-up
- Lacks the ability to upload or import data
What is SLEIS?

- SLEIS = State and Local Emissions Inventory System

- A web-based, emissions inventory system (not a permitting system)

- Developed by Windsor Solutions and SLEIS Consortium
  - Arkansas Dept. of Environmental Quality
  - Arizona Dept. of Environmental Quality
  - Delaware Dept. of Natural Resources and Environmental Control
  - New Hampshire Dept. of Environmental Services
  - West Virginia Dept. of Environmental Protection
  - Metropolitan Government of Nashville and Davidson County, TN
SLEIS Data Flow
SLEIS Capabilities

• Can import data for process emissions

• Data export function for facility equipment and process lists

• Ability to request amendments to or repudiate emissions inventory submittals

• Offers a tip tool and field help text providing guidance on type of data requested

• Provides validation errors to alert user what data elements are required
SLEIS Capabilities (continued)

- Multi-browser support
- No special add-ons to install
- Forgot password feature
# Completed Enhancements

<table>
<thead>
<tr>
<th>#</th>
<th>Enhancement Name</th>
<th>Reason For Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Annual Throughput/Emission Factor UOM</td>
<td>Adding this functionality will allow facilities to use EPA-published emission factors (required data element by Air Emissions Reporting Requirement &amp; Emissions Inventory System) despite the units of measure being different.</td>
</tr>
<tr>
<td>2</td>
<td>Configurable Data Entry for Emission Factor/Emission Factor UOM</td>
<td>Adding this functionality will allow entry of an emission factor regardless of the calculation method code that is selected.</td>
</tr>
<tr>
<td>3</td>
<td>Screen Format For Emissions Data</td>
<td>Add a tabular format to enter and display emissions data so that more data can be viewed at one time. Enhancement will significantly reduce the data entry and research time for internal &amp; external users.</td>
</tr>
<tr>
<td>4</td>
<td>Emission Fee Calculations</td>
<td>Enhancement will allow agencies to sum and track emissions subject to fees using an automated process. Ability to avoid double counting Particulate Matter Hazardous Air Pollutants and Volatile Hazardous Air Pollutants.</td>
</tr>
<tr>
<td>5</td>
<td>Order of Pollutants</td>
<td>Enhancement will allow users to view pollutants in a standardized and consistent format. This will reduce the amount of data entry time and make it easier to search for pollutant-specific data.</td>
</tr>
<tr>
<td>6</td>
<td>Source Classification Code Data Entry</td>
<td>Enhancement will allow for significantly quicker data entry for experienced users that already know the complete SCC code (rather than going through the 4-step process of entering the SCC).</td>
</tr>
<tr>
<td>7</td>
<td>Submission Report Readability</td>
<td>Enhancement will make it easier for users to quickly view emissions at the emission point, emission unit, and emission process levels. Improves data quality and copy of record formatting.</td>
</tr>
</tbody>
</table>
## Completed Enhancements - continued

<table>
<thead>
<tr>
<th>#</th>
<th>Enhancement Name</th>
<th>Reason For Enhancement</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>Stack Parameter Changes</td>
<td>Enhancement will allow for inclusion of rectangular exit dimensions and also store these dimensions in a format that is accepted by EIS. Adding the option to enter flow rate in either Standard Cubic Feet per Minute or Actual Cubic Feet per Minute will improve data accuracy because users won't have to perform the conversion manually.</td>
</tr>
<tr>
<td>9</td>
<td>Auto-population of Estimated Emissions</td>
<td>Enhancement will ensure the facility has a chance to view what the auto calculation of the actual emissions estimate was before they clicked the save button (and moved onto the next emissions process). Improves data quality.</td>
</tr>
</tbody>
</table>
SLEIS Access Request Form

MAIL TO: Air Quality Bureau
7700 Hickman Road, Suite 1
Windsor Heights, IA 50324
ATTN: SLEIS Administrator

By completing this form, you are requesting the Iowa DNR to create a user account for you to access the State & Local Emissions Inventory System (SLEIS). Once this account is created, you will receive an email which will allow you to access the SLEIS application and complete the registration process.

☐ Checking this box indicates: (1) that you agree to protect your user ID and password and (2) that you will promptly notify the SLEIS Administrator if you discover that your user ID or password has been compromised.

******************************************************************************
The person identified in this form is a:

**Viewer:** Can view the contents of an emissions inventory report, but cannot make any data modifications.

**Editor:** Can view and start/modify the contents of an emissions inventory report (i.e., can modify facility inventory and emissions data).

**Administrator:** Can remove facility users (does not delete the account, just removes association with the facility) and change a user’s role who is assigned to the same facility as a user with the Administrator role. While an Administrator can assign someone as a Submitter, a user with the Submitter role cannot submit the report unless the DNR - AQB has received an Electronic Submitter Agreement Form for that user.

******************************************************************************

List all facilities for which you wish to be designated as the Facility Administrator/Editor/Viewer in the Role column. Arrow down in the field to choose each role. (Duplicate this form as needed)

<table>
<thead>
<tr>
<th>FACILITY NAME</th>
<th>FACILITY LOCATION</th>
<th>FACILITY NUMBER (if any)</th>
<th>ROLE</th>
</tr>
</thead>
<tbody>
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</table>

**Facility User’s Identification**

<table>
<thead>
<tr>
<th>Facility User’s Name (Print)</th>
<th>Facility User’s Title</th>
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<tbody>
<tr>
<td>Facility User’s Phone Number</td>
<td>Facility User’s E-Mail Address</td>
</tr>
<tr>
<td>Facility User’s Mailing Address</td>
<td>Date</td>
</tr>
</tbody>
</table>

06/03/15

IOWA DEPARTMENT OF NATURAL RESOURCES
CHUCK GIPP, DIRECTOR
SLEIS Subscriber Agreement Forms

Iowa DNR - Air Quality Bureau
State & Local Emission Inventory System (SLEIS)
Electronic Subscriber Agreement Form

SLEIS Registration

First Name: [Blank]
Last Name: [Blank]
Facility Name: [Blank]
Title: [Blank]
Phone Number: [Blank]
E-Mail Address: [Blank]
Mailing Address: [Blank]
City: [Blank]
Zip Code: [Blank]

SLEIS Access Request

By completing the following information, you are requesting the Iowa DNR to create a Facility Signatory (Responsible Official) account for you. NOTE: Only facility employees may be designated as Facility Signatories (Responsible Officials).

Check the appropriate boxes:

☐ Minor Source Emissions Inventories
☐ Title V Emission Inventories

The person identified in this form is the Responsible Official (Signatory) for:
☐ An additional Responsible Official or Signatory

List the facilities for which you wish to be designated as the Signatory or Responsible Official. (Link to add another Facility)

Facility Name: [Blank]
Facility Street Address: [Blank]
Facility City and Zip Code: [Blank]

SLEIS E-Signature Agreement and Certification

I agree:

a. That for Title V purposes, I am a responsible official as defined by 567 IAC 22.100.
b. To protect my unique electronic signature device (SLEIS account ID, SLEIS password, and knowledge-based questions) from compromise and from use by anyone except me.
c. To maintain the secrecy of my electronic signature device; i.e., I will not disclose or delegate my SLEIS account ID, SLEIS password, or my answers to the knowledge-based questions included in my signatory identity baseline to any other individual. Furthermore, I will not store these in an uncontrolled location and will not allow them to be written into computer scripts to achieve automated login.
d. To contact the SLEIS Administrator within one business day from suspecting or determining that my SLEIS account ID, SLEIS password, and/or my answers to the knowledge-based questions included in my signatory identity baseline have become lost, stolen, or otherwise compromised.

e. That prior to submission, I will review the contents of the electronic document for which I am the signatory.
f. To verify, in a timely manner, each e-mail receipt from DNR for all electronic submissions for which I am the signatory. In addition to the date and time of submission, each e-mail should identify the document submitted and the submitter.
g. To contact the SLEIS Administrator if I do not receive an e-mail receipt as specified above within five (5) business days of my submission.
h. To contact the SLEIS Administrator if I find any evidence of discrepancy between documents submitted and those accepted by SLEIS.
i. That if I cease to be a signatory for the requested facility or facilities, I will notify the SLEIS Administrator within five (5) business days from the time I know of the change in my duties.
j. To retain a copy of this signed agreement as long as I am a signatory for the requested facility or facilities.

2. I understand:

a. That the DNR will contact my company to verify my identity and signing authority.
b. That signing this agreement allows me to use the Iowa DNR SLEIS program to submit electronic documents in lieu of paper submissions to the Iowa DNR’s Air Quality Bureau.
c. That after submission, I will have the opportunity to review the electronic document for which I am the signatory and that I will be able to republish it based on this review.
d. That I will be legally bound, obligated, and responsible by using my electronic signature device as I would by using my handwritten signature.
e. That the Iowa DNR SLEIS program will automatically reject any electronic document attempted to be submitted without a valid electronic signature if such signature is required.

3. I certify:

a. Under penalty of law that based on the information and belief formed after reasonable inquiry, the statements and information contained in electronic submissions for which I am the signatory are true, accurate, and complete.
b. That my company has obtained legal entitlement to install and operate the equipment covered by and on the property identified in electronic construction permit applications for which I am the signatory.
c. That naming false statement, representation, or certification of electronic submissions for which I am the signatory may result in civil or criminal penalties.

Responsible Official’s Signature: [Blank]
Date Signed: [Blank]

IMPORTANT – Sign and mail or hand-deliver this completed form to:

Air Quality Bureau
7900 Hickman Rd, Suite 1
Windsor Heights, IA 50324
Attn: SLEIS Administrator

Iowa Department of Natural Resources
Chuck Gipp, Director

003015.1k 1
DNR Form 543-xxx

003016.1k 2
DNR Form 543-xxx
### Additional Facilities

<table>
<thead>
<tr>
<th>Facility Name</th>
<th>Facility Street Address</th>
<th>Facility City</th>
<th>Facility Plant Number</th>
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(Duplicate this form as needed)
2017 SLEIS Training Dates and Locations

• Cedar Rapids
  • January 31, 2017 10:30 am to 3:30 pm
  • February 7, 2017 10:30 am to 3:30 pm

• Des Moines
  • February 2, 2017 10:30 am to 3:30 pm
  • February 9, 2017 10:30 am to 3:30 pm

• Registration will open in December and be announced via Air Quality list serv
SLEIS User Resources

• Recorded SLEIS Training Tutorials
  • [http://www.iowadnr.gov/Environmental-Protection/Air-Quality/eAirServices/eAirServices-Online-Training](http://www.iowadnr.gov/Environmental-Protection/Air-Quality/eAirServices/eAirServices-Online-Training)
  • Twelve tutorials that cover updating facility and equipment information, emissions inventory data entry, file import, and how to submit
SLEIS User Resources (continued)

- eAirServices webpage
  - www.iowadnr.gov/eairservices
  - Scheduled trainings
  - SLEIS access forms
  - SLEIS 101 user’s guide

- https://programs.iowadnr.gov/sleis

- E-mail questions/comments to sleis@dnr.iowa.gov
2015 Emissions Inventory Reporting Summary

• 2015 Title V Emissions Inventory Submittals
  • SLEIS: 122 (43%)
  • SPARS: 33 (12%)
  • Paper: 127 (45%)

• 2015 Minor Source Emissions Inventory Submittals
  • SLEIS: 151 (35%)
  • SPARS: 7 (2%)
  • Spreadsheet: 14 (3%)
  • Paper: 258 (60%)
Reporting Requirement

• AERR
  • Air Emissions Reporting Requirement
  • https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr
  • 40 CFR Part 51
  • Requires states to submit emissions inventories for criteria pollutants to EPA’s Emissions Inventory System (EIS). EPA uses these submittals, along with other data sources (primarily for air toxics), to build the NEI.
Reporting Requirement (continued)

- Title V emissions inventory reporting deadline is March 31st each year

- Minor Source emissions inventory reporting deadline is May 15th each year (FO2/FO5/Portables due in 2017)

- Title V emissions inventories collected annually

- Minor sources emissions inventories collected once every three years
Reporting Requirement (continued)

• EI forms available at

  • [http://www.iowadnr.gov/Environmental-Protection/Air-Quality/Operating-Permits/Title-V-Forms-Instructions](http://www.iowadnr.gov/Environmental-Protection/Air-Quality/Operating-Permits/Title-V-Forms-Instructions)

  • [http://www.iowadnr.gov/Environmental-Protection/Air-Quality/Emissions-Inventory/Minor-Sources](http://www.iowadnr.gov/Environmental-Protection/Air-Quality/Emissions-Inventory/Minor-Sources)
What the Data is Used For

• Track Iowa's progress towards meeting national air quality standards
• Perform regional and local air pollution dispersion modeling
• Develop control and maintenance strategies required by the Clean Air Act
• Identify emission levels and trends throughout the state
What the Data is Used For (continued)

- NATA (National Air Toxics Assessment) data verification
- SIP (State Implementation Plan) work
- Information requests
- Monitoring siting
Emissions Inventory Resources

  - Example calculations
  - Emissions inventory calculators (excel files)
  - Source Classification Code lists
  - Definitions
  - Links to emission factor publications
Iowa Title V Emissions Inventory Trends

Annual Major Source Emissions Inventory Trends

- Sulfur Dioxide
- Nitrogen Oxides
- Carbon Monoxide
- Volatile Organic Compounds
- Particulate Matter < 10 microns in diameter
- Particulate Matter < 2.5 microns in diameter
- Total Hazardous Air Pollutants

1. Emissions data collected by Iowa DNR from facilities considered to be major source at the time of emissions estimates.
2. The Iowa DNR started collecting PM 2.5 emissions data in 2006.
Contact Information

- Nick Page (Emissions Inventory)
  - 515-725-9544 (nick.page@dnr.iowa.gov)

- Seth Anderson (Emissions Inventory)
  - 515-725-9559 (seth.anderson@dnr.iowa.gov)

- Krysti Mostert (Emissions Inventory)
  - 515-725-9567 (krysti.mostert@dnr.iowa.gov)

- SLEIS Help Desk
  - (sleis@dnr.iowa.gov)
e-AirServices Updates

Jason Marcel, Supervisor
Iowa DNR – Air Quality Bureau
Project Updates

- SLEIS version 1.6.3
- Asbestos NESHAP Notification System
- e-Application Project
Asbestos Notification System

- Agile Scrum Development
- Shared CROMERR Services
- ePay Services
- Real-time User Registration & Identity Proofing
- Anticipated Launch – January 2017
Welcome to the State of Iowa Asbestos Notification System. This system allows contractors to electronically submit notifications for asbestos abatement, demolition, renovation, training fires, and building burns. If you already have an account, you can log in below. Otherwise, click the Create Account button.

Building Owners and Managers

Log In
For Existing Accounts

Email

Password

Forgot Password

Log In

Create Account

Why is this needed? You must create an account in order to submit your notifications electronically to the Iowa DNR. Creating an account will protect the security of your submissions and prevent unauthorized individuals from accessing your information.

Create Account
e-Application Project Update

January 2016 – DNR began gathering stakeholder input to develop new electronic permit application tools

July 2016 – Draft Software Requirements Specifications Completed

September 2016 – Request For Proposals (RFP) posted
http://bidopportunities.iowa.gov/?pgname=viewrfp&rfp_id=12772
## Stakeholder Input

<table>
<thead>
<tr>
<th>Question</th>
<th>Survey Says</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>What type of technology will you use to enter permit applications?</td>
<td>Desktop/Laptop</td>
<td>Must be compatible with desktop, laptop and tablet-type devices, as well as common internet browsers.</td>
</tr>
<tr>
<td>How does your facility want to pay permit application fees?</td>
<td>Option to pay online</td>
<td>Must provide access to a third party vendor that complies with Payment Card Industry Data Security Standards.</td>
</tr>
<tr>
<td>What type of system works best, a database with online forms or a document storage library?</td>
<td>Robust database with a web-based user interface</td>
<td>Online forms must meet needs of both internal and external users, and include data validation rules.</td>
</tr>
<tr>
<td>How much data should be copied from existing data systems?</td>
<td>Copy the most recent application and equipment data</td>
<td>Must minimize the amount of obsolete data transferred to the new system. Include an opportunity for customers to review and update data.</td>
</tr>
<tr>
<td>How should the new system handle Equipment IDs?</td>
<td>Facility has autonomy managing Equipment IDs</td>
<td>Must provide flexibility for users to create and manage equipment IDs and maintain data integrity.</td>
</tr>
</tbody>
</table>
Stakeholder Input

Ranked Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Points per Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copy Previous Application</td>
<td>105</td>
</tr>
<tr>
<td>Connected to SLEIS</td>
<td>95</td>
</tr>
<tr>
<td>Ability to Import Data</td>
<td>88</td>
</tr>
<tr>
<td>Print Resembles Paper Forms</td>
<td>58</td>
</tr>
<tr>
<td>Ease of Getting Data Out</td>
<td>57</td>
</tr>
<tr>
<td>Help Tools for Each Field</td>
<td>50</td>
</tr>
<tr>
<td>User Interface Resembles Paper Forms</td>
<td>33</td>
</tr>
</tbody>
</table>

1 Each participant was given 14 points to vote for a feature more than once or not at all.
Next Steps

- Phase 1
- Phase 2
- Phase 3
- Phase 4

Gather Requirements

- Solicit Bids & Select Vendor

Implementation
Configure/Test/Refine

Deploy
Goal: Fall 2017

- Post Request for Proposal
- Vendor Conference
- Notice of Intent to Award
- Execute Contract
Contact Info

Jason Marcel
515-725-9529
Jason.Marcel@dnr.iowa.gov

www.iowadnr.gov/eAirServices