Nonroad
Input and Emissions Data Submission
Laurel Driver
July 24, 2012
EIS vs NEI

• Emission Inventory System (EIS)
  – Data repository for air emissions data used to create the NEI
  – Contains State, Local, Tribal and EPA submitted data
  – Can store multiple emissions values for the same unit/process
  – Can store annual, monthly, daily data (e.g., fires, events)
  – Data available via a password-protected web site
    • EIS Gateway https://eis.epa.gov/eis-system-web/welcome.html

• National Emission Inventory (NEI)
  – Snapshot in time from EIS
  – Inventory version shared with the public
  – One emissions value per process selected
  – Annual emissions values
S/L/T Reporting Requirement

- Air Emissions Reporting Rule (AERR)  
  [http://www.epa.gov/ttn/chief/aerr/](http://www.epa.gov/ttn/chief/aerr/)
  - Complete criteria pollutant inventory every 3 years
    - All point sources (100 tpy potential to emit threshold)
    - Nonpoint Sources
      - Onroad and Nonroad sources
    - Events (wildfires and prescribed fires)
    - 2011 Emissions due 12/31/2012, EIS window opens 6/1/2012
  - Annual reporting for type A point source facilities
    - SO2, NOx, CO with potential to emit > 2,500 tpy
    - VOC, PM, NH3 with potential to emit > 250 tpy
    - Pb with potential to emit > 0.5 tpy (to be amended to agree with Lead NAAQS level of > 0.5 tpy)
  - HAPs are submitted voluntarily by many S/L/Ts and are encouraged as part of an integrated report
Uses of the NEI

• The NEI is one of the key inputs for:
  – Modeling of national rules
    - NAAQS reviews, CSAPR, etc
  – Non-attainment Designations
  – NATA Review – toxics risk modeling
  – Trends reports and analyses
Components of the EIS

- Six different data categories
  - Facility Inventory
  - Point Emissions
  - Nonpoint Emissions
  - Onroad Emissions
  - Nonroad Emissions
  - Event Emissions (wildfires and prescribed fires)
  - No biogenic emissions, although these are part of EPA’s modeling files
Nonroad Submissions

• Emissions in NEI must be from an EPA-approved model
  – NONROAD (EPA)
  – Off-Road (California)
• EPA strongly encourages submittals of National Mobile Inventory Model (NMIM) National County Database (NCD) rather than emissions
• Tribes and CA should submit emissions
Why Inputs?

- EPA prefers to receive activity data instead of emissions as they allow for more in-depth analysis and consistent, integrated emissions in the NEI. If you do not submit nonroad input data, EPA will generate emission estimates using national defaults.
- EPA will provide a set of default nonroad inputs for agencies to review/ customize as desired.
- Agencies may accept EPA defaults in lieu of submittals by sending a “support request” to EIS that states this.
- To the extent resources allow, EPA will assist agencies to build their submittals.
Support Request

Create a Support Request:

- Request Creator: Laurel Driver
- Support Category: Accept EPA Data
- Support Request Message:

[Submit, Undo, Cancel]
Calculation of Emissions

• Why is EPA using NMIM?
  – NMIM runs the NONROAD model, and produces CAP and HAP results with common inputs
  – The EIS process to accept NCDs is in place and is the least resource intensive way to proceed until MOVES includes nonroad
Summary of NCDSubmittal Steps

- Got to 2011NEI web page for instructions on onroad and nonroad input submittal instructions
- Pick up your draft default NCD from EIS
- Make changes and keep a complete NCD set
- Compile Submission:
  - 1. Folder of tables in .csv
  - 2. Folder of External Files
  - 3. .txt file with documentation

- EACH SUBMITTAL IS A COMPLETE REPLACEMENT OF PREVIOUS SUBMITTALS!
County vs State Submissions

• Encouraged to submit all activity data in a single submission
• Permitted to send one county file vs a complete State file
• **NOT** permitted to send a group of counties
  – NMIM can not accommodate county groups or Tribes
Pick up your draft default NCD
Nonroad NCD

- Tables included in download (blue ones are for nonroad)
  - baseyearvmt
  - county
  - countynrfile
  - countyvmtmonthallocation
  - countyyear
  - countyyearmonth
  - countyyearmonthhour
  - diesel
  - gasoline
  - naturalgas
  - state

- Preferred method
  - EPA to use NMIM
  - more in-depth analysis
  - consistent, integrated calculated emissions in the NEI

- EPA will provide default data
  - SLT can provide revised input NCD data

- Tribes and NCD Activity Tables
  - Can not accommodate Tribal lands, but tribes can use neighboring county NCDs for help with inputs
  - Submit emissions

- Can not submit NONROAD input files

- To the extent resources allow, EPA will provide assistance in building NCDs for submittal
Suggested Process:
1. Download file from EIS
2. Load to your local system
3. Make changes to tables
4. Save files to specified folders
5. Bundle and re-submit

NCD tables are in .csv format

The referenced external files are in ASCII format
How to Bundle Your NCD Activity Data for Re-Submission

![Folder structure with sample data files](image)
Creating XML HEADER

• 2 ways

  – Using staging tables
    • CERS and ExchangeHeader tables only -- currently under revision

  – Edit XML available from 2011 NEI page
xsi:schemaLocation="http://www.exchangenetwork.net/schema/header/2 http://www.exchangenetwork.net/schema/header/2/header_v2.0.xsd">
  <hdr:Header>
    <hdr:AuthorName>Your Name</hdr:AuthorName>
    <hdr:OrganizationName>Your Organization</hdr:OrganizationName>
    <hdr:DocumentTitle>EIS</hdr:DocumentTitle>
    <hdr:CreationDateTime>2012-04-10T14:02:39</hdr:CreationDateTime>
    <hdr:Keywords></hdr:Keywords>
    <hdr:Comment></hdr:Comment>
    <hdr:DataFlowName>EISv1.0</hdr:DataFlowName>
    <hdr:Property>
      <hdr:PropertyName>SubmissionType</hdr:PropertyName>
      <hdr:PropertyValue>QA</hdr:PropertyValue>
    </hdr:Property>
    <hdr:Property>
      <hdr:PropertyName>DataCategory</hdr:PropertyName>
      <hdr:PropertyValue>Nonroad</hdr:PropertyValue>
    </hdr:Property>
    <hdr:Property>
      <hdr:PropertyName>NCDDataFile</hdr:PropertyName>
      <hdr:PropertyValue>Sample_submission_file.zip</hdr:PropertyValue>
    </hdr:Property>
  </hdr:Header>
  <hdr:Payload>
xsi:schemaLocation="http://www.exchangenetwork.net/schema/cer/1 http://www.exchangenetwork.net/schema/cer/1/index.xsd">
      <cer:UserIdentifier>youruserid.gov</cer:UserIdentifier>
      <cer:ProgramSystemCode>yourPSC</cer:ProgramSystemCode>
      <cer:EmissionsYear>2011</cer:EmissionsYear>
    </cer:CERS>
  </hdr:Payload>
</hdr:Document>
What Will Be Checked

• QA checks on:
  – Limited checks will be done on the NCD tables
  – No checks will be done on the external reference files, but naming convention and presence are checked.
  – THE REJECTION OF ANY ACTIVITY DATA WILL CAUSE THE REJECTION OF THE ENTIRE SUBMISSION
What EPA will do with submittals

• Collect and compile submitted NCD
• Do QA checks
• Contact agencies with questions
• Run NONROAD via NMIM model for CAP/HAP at monthly or finer level
• Load emissions into EIS
Emissions Submittals

• Agencies may submit emissions, but inputs are preferred
• Multiple emissions data are accessible in EIS. If an agency submits, EPA and SLT data will be present.
Nonroad Emissions Submittals

• Requirements for submitting onroad emissions inventory
  – CERS
  – Exchange Header
  – Location
  – Emissions Process
  – Reporting Period
  – Emissions

• Optional
  – Excluded Location Parameter
Required - CERS

• Required
  – User ID (EIS login)
  – Program System Code
  – Emissions Year

• Optional
  – Model
  – Model Version
  – Emissions Creation Date
  – Submittal Comment
Required - Exchange Header

Required:
- AuthorName
- OrganizationName
- DocumentTitle (EIS)
- DataFlowName (EIS_v1_0)
- SubmissionType ("QA" or "Production")
- PropertyName ("Data Category")
- PropertyValue ("Nonroad")

Optional:
- Keywords
- Comments
- PropertyName ("NCDDataFile" - required when submitting NCD data)
  - PropertyValue (the name of the NCD zip file being submitted - required when submitting NCD data)
Required - Location

• Required
  – State/County FIPS or Tribal Code

• Optional
  – Census Tract Identifier
  – Shape Identifier
  – Location Comment
Required - Emissions Process

• Required
  – State/County FIPS or Tribal Code
  – Source Classification Code
  – Emissions Type Code

• Optional
  – Census Tract
  – Shape Identifier
  – Process Comment
Required - Reporting Period

• Required
  – State/County FIPS or Tribal Code
  – Source Classification Code
  – Emissions Type Code
  – Reporting Period Type Code

• Optional
  – Census Tract and Shape Identifier
  – Calculation Data Year – Only Onroad
  – Calculation Data Source – Only Onroad
  – Reporting Period Comment
Required - Emissions

- Required
  - State/County FIPS or Tribal Code
  - Source Classification Code
  - Emissions Type Code
  - Reporting Period type Code
  - Pollutant Code
  - Total Emissions and UOM

- Optional
  - Census Tract and Shape Identifier
  - Emissions Comment
Creating XML File via the Bridge Tool

Select the Data Category being converted.

Browse for Access file and select “Start”.

**REMEMBER:** The Bridge Tool works on Access 2003. If your file is saved as Access 2007 or later, you will need to do a “save as” to Access 2003 prior to using the Bridge Tool.
Common Bridge Tool Errors

• Look at your xml file prior to zipping it using Note Pad or your web browser. Make sure you see all of the components.
Submitting the zipped XML File

• Two methods
  – Node-to-node
  – CDX web client (most common method)
    • https://nodewebrss.epa.gov/user/Login.aspx
    • Use Gateway login and password

• QA and Production Environment
  – QA is always open to check your data. Does not change anything in the EIS
  – Production submission is your official submission and will update the EIS
  – Recommend always sending to QA first
Select EIS from the left-hand side bar.
Browse for your **ZIPPED XML** submission file. Then complete your email notification. This can be more than one email address. Then select “Submit”.
Email Notifications

• First email, from “CDXNotification”, immediate
  – Transaction Status: **Pending**

• Second email, also from “CDXNotification”, when EIS completes processing
  – Transaction Status: **Completed**. Feedback report is available at EIS Gateway

• Third email, from “noreply” (EIS Gateway), on quarter hours
  – Status: Completed or **Failed**
    • Wrong file submission error – Usually a zipped Access file is submitted instead of the xml file
    • Window closed error – “User, agency, submission year not authorized”
    • Completed might be for an XML file containing no data

• Go to EIS Gateway and read the Feedback Report and resolve any critical errors and Potential Duplicates
The Feedback Report

• Summary Page
  – Name of submitter
  – What environment submissions was made to
    • QA or Production
  – Data Category submitted
    • Nonroad
  – Total number of critical and warning errors.
Feedback Report

Critical Errors

• The most important page of your feedback report

• All critical errors must be resolved prior to submitting to Production
Feedback
Feedback
When will my data show up in EIS?

• Nonroad data on the Gateway is available immediately
• Reports available the next day
Nonpoint/Onroad/Nonroad Emissions

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<tr>
<th>Source Classification</th>
<th>Emissions Type Code</th>
<th>HPS State and County</th>
<th>Tribal Item</th>
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Agency Submission History Report
How do I get data out of EIS?
Report Downloads

![EIS Gateway](https://es.epa.gov/es-syscan-web/reports/downloads/list.html)

### Reports Available for Download

<table>
<thead>
<tr>
<th>Report Type</th>
<th>Time Requested</th>
<th>Time Generated</th>
<th>First Name</th>
<th>Last Name</th>
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<td>Ross</td>
</tr>
</tbody>
</table>

**Report Type:** Facility
**Data Set:** 2002-2008 V2.0 CPR
**Pollutants:** CO, SO2, NOX, VOC, PM2.5-PRL, PM10-PRL, 7490021
**States:** MN
How does EPA Check Your Data?

• Again, inputs are strongly preferred.
• Submitted emissions are compared to EPA’s for pollutants covered, disagreement between CAP/HAP, anomalous emis type/pol combinations, SCC coverage, etc.
Common Problems

• Overwriting previous submittals. Several submitters in trying to update/correct emissions values, submitted only one pollutant which overwrote previous submittal which contained many pollutants

• Poor use of emission type. For example, all emissions as evap does not make sense.

• Bad emis type/pollutant combinations (e.g., evap pm)
Contacts

• Submittal Issues
  - Sally Dombrowski  dombrowski.sally@epa.gov; 919-541-3269

• Inventory Issues
  – Laurel Driver – Mobile Sources driver.laurel@epa.gov, 919-541-2859

• NONROAD model Issues
  – mobile@epa.gov