

Instructions for Submitting NONROAD Inputs for the 2014 NEI

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U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Air Quality Assessment Division Research Triangle Park, NC

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The U.S. Environmental Protection Agency (EPA)'s Air Emissions Reporting Rule (http://www.epa.gov/ttn/chief/aerr/) requires state and local (S/L) agencies who submit to the National Emissions Inventory (NEI) to submit model inputs for mobile sources, rather than emissions. Emissions estimates may be submitted in addition, and will still be accepted as the sole submittal type from tribes. For the 2014 NEI, EPA plans to use the most current version of the Motor Vehicle Emission Simulator (MOVES) model to estimate both onroad and nonroad emissions. However, because the MOVES version that includes nonroad emissions estimation is not expected to be available, or widely used, in time for most agencies to be familiar with its use for nonroad, we will be accepting National Mobile Inventory Model (NMIM) National County Database (NCD) inputs for nonroad and will be converting them for use in MOVES for the 2014 NEI estimation. Agencies that want to submit MOVES nonroad inputs as county databases (CDBs) may do so and should follow instructions when they become available from EPA. Agencies that want to submit onroad MOVES CDB inputs, should go to the 2014 NEI webpage (http://www.epa.gov/ttn/chief/net/2014inventory.html) for instructions.

If you do not submit nonroad input data, EPA will generate emission estimates using EPA-derived defaults. Agencies may accept the EPA defaults in lieu of submittals by sending a "support request" to Emission Inventory System (EIS) that states this.

I. NCD SUBMITTALS

The purpose of these instructions is to explain to S/L agencies what data are contained in the NMIM county-level database that EPA is asking them to review and update as needed. Reviewers can use EPA-provided templates to create their NCDs for submittal.

EPA is only asking for S/L agencies to revise NCDs that affects the nonroad emission calculations in your own jurisdiction. Only inputs that relate to nonroad from your state or counties will be harvested from the submitted NCDs. Thus, although the NMIM NCD includes onroad information, it should be ignored by S/L agencies in their review of the NCD.

Data in the NCD are stored in two ways: either as entries in database tables (referred to as tables) or as external text files (referred to as files). The names of external files are referenced in database tables. S/L agencies may add or change table entries or external files. If an external file is added or its name is changed, you must also add or change the name in the database table that references it. Agencies making any updates are required to send the complete set of NCD tables back to EPA even if changes were not made to every table.

All external text files submitted by each S/L agencies must conform to the specified NMIM file format. You need submit only new or updated external files. All external input files shall be submitted in NMIM file format and shall contain comments such as year, source of information,

etc. Note that all the external files that reference onroad inputs have been removed to save space and simplify.

S/L agencies must provide documentation for changes. Such documentation should describe what was changed and why it was changed. If the change involves new data, the documentation should describe how the data were collected, quality assured, and analyzed. A listing of the tables with changes and the number of rows per table that have been added or updated would be extremely helpful for EPA's review. S/L agencies are required to include a text file with this information. The submission must also include a spreadsheet checklist indicating any new information. This is described below.

II. DATA FOR REVIEW/SUBMITTAL

Each of the NMIM tables that provide information that can be updated by S/L agencies is described below. The level of detail and the parameters contained in each table are listed. This is followed by a comment section indicating the updates that EPA hopes to obtain for each table. It is not expected that S/L agencies will have updates to all of the files and table fields listed below

EPA does not claim that the inventories EPA produces will match those done by the S/L agencies, but does hope to come closer to representing the those inventories than would be done using only EPA default information.

A. COUNTY

This is a county-level table. It contains:

- The altitude (high or low) and average barometric pressure of each county;
- The starting month and day of the ozone season and the ending month and day of the ozone season (this information is not currently used);
- Onroad Stage 2 control program information;
- Natural gas vehicle fractions; and
- Data source codes for VMT allocation fractions and temperature/relative humidity data.

Comments

This table should be reviewed, and updated as necessary, but in almost all cases, no changes should be needed to this table.

NOTE: Special instructions for Alaska. The following county Federal Information Processing Standard (FIPS) codes 201, 232, and 280 have been replaced by county FIPS codes 105, 195, 198, 230, and 275. The NONROAD model has not been updated to include the newer set of county codes and NMIM produces errors when the new county codes are used. By default, EPA uses results from the old set of counties and allocates emissions from the three old county codes to the five new county codes. Table 1 shows the default relationship between the older invalid county FIPS codes and the new county FIPS codes. EPA will accept a NMIM submittal from

Alaska using either the old or new county codes, however, Alaska will not be able to use their NMIM data submittal to actually run NONROAD or NMIM for all counties if the submittal includes the new counties. EPA intends to convert all NMIM data submittals to MOVES2014 format for calculation of 2014 calendar year inventories. The MOVES2014 model can accept data from the new Alaska counties, so Alaska may choose to submit the nonroad data from those counties in MOVES2014 CDBs, however, they will need to contact EPA staff for assistance.

Table 1. Relationship between Valid and Invalid County FIPS Codes in Alaska

New State/ County FIPS Code	New County Name	Fraction of Invalid County Emissions (based on 2010 population)	Invalid State/ County FIPS Code	Old County Name
02198	Prince of Wales-Hyder Census Area	1.000	02201	Prince of Wales-Outer Ketchikan Census Area
02105	Hoonah-Angoon Census Area	0.690	02232	Skagway-Hoonah-Angoon
02230	Skagway Municipality	0.310	02232	Census Area
02195	Petersburg Census Area	0.617	02280	Wrangell-Petersburg Census
02275	Wrangell City and Borough	0.383	02200	Area

B. COUNTYYEARMONTHHOUR

This table contains the average hourly temperatures and relative humidity for each month by county. The hour ID codes used in this table are defined in Table A-1.

Comments

NMIM requires that each county have both hourly average temperatures and hourly relative humidity values for each month of the year. Default values, based on National Climatic Data Center (NCDC) data and calculations described below, are provided in the NMIM County Database (NCD). The default values included in this table represent 2011 data calculated by EPA. Prior to running NMIM, EPA will update these default data with 2014 data.

EPA is confident that in most cases the default 2014 temperature and humidity values to be developed for the NCD will be the best values to use in the inventory calculations for each county. However, EPA recognizes that there are circumstances under which S/L agencies may have better temperature and humidity information. These circumstances include:

- The use of local temperature and humidity measurements that are not provided to the National Climatic Data Center (NCDC).
- Physical characteristics of the county (such as sea shores, valleys and sudden changes in altitude) which make the centroid interpolation methodology used by EPA inappropriate.

In these cases, EPA would be happy to incorporate temperature and humidity values submitted by a S/L agency if it meets the following criteria:

- Monthly average temperature and relative humidity values are submitted for each hour of the day for each month of the year for each county. Any change in temperature values will require a corresponding change in relative humidity.
- Dew point values have been obtained from the same data sources as the temperature data submitted.
- Monthly average hourly temperatures and relative humidity values have been calculated using the averaging methods described below.
- Documentation of the data sources and methods used to calculate the average temperatures and relative humidity values is provided.

New or updated monthly average hourly temperatures and relative humidity submitted by S/L agencies must be in accordance with the NMIM CountyYearMonthHour database formatting.

C. COUNTYNRFILE

This table contains fields for specifying the file names of external data files containing county-specific nonroad data.

Comments

S/L agencies may provide data in the appropriate NONROAD external data file format to replace the default NONROAD model data. The NONROAD external data files which S/L agencies may provide are: (1) activity rates; (2) seasonal allocations; (3) source populations; (4) growth indexes; and (5) equipment-specific county allocations. The FileTypeID field in this table should be filled in with one of the FileTypeID codes listed in Table A-2.

External File Naming Convention

There may be many external data files supplied by S/L agencies, which will need to be stored along with the NCDs. Since these files will be submitted by different agencies, EPA has developed a file naming convention to prevent two files submitted by different areas from having the same name. The NONROAD model requires file names with only eight characters with a three character file name extension (after the decimal). The file naming convention developed for NMIM is based on the FIPS state and county codes of the data represented in the file. The basic file name convention begins with the two digit FIPS state code followed by the three digit FIPS county code followed in some cases by a nonroad ID code with a three letter code extension to identify the file type. Table A-3 summarizes the NMIM file naming convention for external data files named in the CountyNRFile table.

External data files that apply to the whole state (rather than individual counties) should start with the two digit FIPS state code followed by "000". Only a unique set of external data files is needed. Therefore, for external data files that apply to more than one, but not all, counties in a state, only a single external file should be submitted. In this case, the three digit FIPS county code should be filled in with the FIPS county code of one of the counties that use this data file. However, a record must be added to the CountyNRFile table for EACH county that uses one of these external data files, but the CountyNRFileName field should then be filled in with the same file name for each file that uses a single external data file.

D. COUNTYYEAR

This county-level table contains the names of external data files used by the MOBILE6.2 and NONROAD models. While most of the fields in this table are relevant only to onroad emission calculations, and therefore, do not need to be updated, the following fields are used by the NONROAD model and should be reviewed and updated for the 2014 NEI as needed:

- NONROAD Stage 2 control percentage (Stage2Pct);
- NONROAD activity files (NRACTFileName);
- Identifier for nonroad S/L agency inputs (HasNRStateInputs); and
- Average hourly temperatures and relative humidity data sources.

Comments

S/L agencies that are providing NONROAD activity files should input the file name of the corresponding external file, excluding the file extension, in the NRACTFileName field. In addition to populating or updating this table, S/L agencies also need to provide each of the external data files referenced in the table that has either been modified from the file provided by EPA or is a new file. EPA requires S/L agencies to submit new or updated files in the appropriate NMIM data format with comments (e.g., source of information and year(s) of applicability), where possible.

Note that the Stage2Pct field refers to the nonroad Stage 2 percentage control efficiency (not onroad Stage 2) and should be populated with values ranging from 0 to 100, where applicable.

External File Naming Convention

As with the CountyNRFile table, this table includes the names of external data files used by the S/L agencies. The file naming conventions for the external data files referenced in the CountyYear table are similar to those used for the CountyNRFile table. Table A-4 in the Appendix contains the extensions and file naming convention for the external NONROAD activity files referenced in the CountyYear table.

The NONROAD model requires file names with only eight characters with a three character file name extension (after the decimal). The file naming convention developed for NMIM is based on the FIPS state and county codes of the data represented in the file. Many files will be valid

only for specific calendar years. The file name convention begins with the two digit FIPS state code followed by the three digit FIPS county code followed by a two digit calendar year with a three letter code extension to identify the file. The file names input in the NRACTFileName field of the CountyYear table should NOT include the file extensions.

External data files that apply to the whole state (rather than individual counties) should start with the two digit FIPS state code followed by "000". Only a unique set of external data files is needed. Therefore, for external data files that apply to more than one, but not all, counties in a state, only a single external file should be submitted. In this case, the three digit FIPS county code should be filled in with the FIPS county code of one of the counties that use this data file. However, this external file name must be entered for EACH county that uses this external data file in the appropriate field of the CountyYear table. Data from a single year may be used for multiple calendar years without submitting separate files for each year. (EPA is only requesting 2014 data at this time.) In these cases the two calendar year digits should contain the letter "Y" to indicate that the file may be used for multiple calendar years.

E. COUNTYYEARMONTH

This table maps each county to both onroad and nonroad gasoline, diesel, and natural gas fuel data for each month.

Comments

The default values included in this table and the corresponding fuel properties in the gasoline, diesel, and natural gas tables represent 2011 fuel data, as calculated by EPA. Prior to running NMIM, EPA will update these default data with 2014 data.

NMIM models both criteria pollutants and HAPs simultaneously. Thus, all of the fuel parameters needed for the toxics are also needed to model the criteria pollutants. S/L agencies should review the information in this file. If the S/L agency knows that a group of counties should all receive the same fuel parameters (e.g., if a low RVP program applies to all counties within a nonattainment area) and the NMIM CountyYearMonth table lists different gasoline IDs for these counties, the S/L agencies should indicate which counties should receive the same fuel parameters, and which gasoline ID should apply to these counties.

There are separate gasoline IDs for onroad (HwyGasolineId) and nonroad (NRGasolineId). Currently, we assume that onroad and nonroad gasoline IDs are identical. Any updates to the gasoline properties should be done by first replacing both the HwyGasolineID and NRGasolineID in the CountyYearMonth table with a new ID not yet used in the Gasoline table. When adding new gasoline IDs, the naming convention is SSNNN, where SS indicates the state number and NNNN is a unique number chosen by the state. Local agencies should coordinate with their S/L agency to ensure that any county-specific new gasoline IDs are unique.

A new record should then be added to the Gasoline table with this same new gasoline ID and a full set of the fuel parameters. EPA will allow S/L agencies to make changes to Reid vapor pressure (RVP) and sulfur levels. EPA will be more cautious about accepting fuel parameter changes to the other fuel properties.

Currently, the only property of diesel fuel in the NCD is sulfur content. Sulfur content is specified separately for highway (HwyDieselId), recreational marine equipment (RMDieselId), and other nonroad equipment (NRDieselId). The table has been designed so that the each of these diesel IDs is equal to the integer value of the diesel sulfur content in parts per million (ppm). To change the sulfur value of the diesel fuel, first change the corresponding diesel ID to the integer value of the diesel sulfur content in ppm. Then check the Diesel table to see if this value exists. If not, add a record to the Diesel table with this new value.

Currently, the only property of natural gas in the NCD is sulfur content. Any updates to the natural gas should be done by first replacing NGId in the CountyYearMonth table with a new ID not yet used in the NaturalGas table. A new record should then be added to the NaturalGas table with this same new NGId and the sulfur content in ppm.

F. DIESEL

This table contains the diesel sulfur content for each diesel fuel ID contained in the CountyYearMonth file.

Comments

Most S/L agencies will not need to update this file. However, S/L agencies with information on the diesel fuel sulfur content of diesel fuel sold in their agency that differs from the NMIM defaults should update this table accordingly. How to update this table is described under CountyYearMonth above.

G. GASOLINE

This table provides all of the gasoline fuel properties for each of the gasoline IDs included in the CountyYearMonth file. These are the properties needed for both criteria pollutants and toxics. If you are also submitting gasoline parameters in the onroad MOVES County Database input, you do not need to submit revisions to this table in your NCD. The gasoline fuel properties are used for both onroad and nonroad calculations.

Comments

As indicated above in the CountyYearMonth section, the properties of the existing gasoline IDs should not be modified since other S/L agencies may be using the same gasoline ID. Instead, a new record should be added to the Gasoline table with a new gasoline ID and the appropriate fuel properties. The CountyYearMonth table should also be updated at the same time, updating the gasoline ID for the affected counties. When adding new gasoline IDs to the table, the naming convention is SSNNNN, where SS indicates the state number and NNNN is a unique number chosen by the state. Local agencies should coordinate with their S/L agency to ensure that any county-specific new gasoline IDs are unique.

Interpolation Instructions

The purpose of this section is to provide S/L agencies with instructions on how to develop a complete set of 12 monthly values for one or more of the following gasoline variables when the agency has less than a full set of monthly values: RVP, Gas Sulfur, Gas Max Sulfur, Aromatic Content, Olefin Content, Benzene Content, E200, E300, ETOH Volume and ETOH Market Share. MTBE, ETBE, and TAME are not included in the interpolation procedure because they are all assumed to be 0. The interpolation procedure requires values for January and July (in cases where a agency only has a value for one of these months, it would need to rely on EPA's default value for the other month), and relies on the use of ratios computed from county-month level RVP values developed by EPA. These ratios are available from the file "InterpolationRatios.csv" Agencies should apply these ratios in the following equation for the gasoline variables for which S/L agencies have data:

$$Var_{month} = Var_{July} + (Var_{January} - Var_{July}) * Ratio_{RVP}$$

Where:

*Var*_{Month} represents the variable for a county-month; *Var*_{January} is the county's value for the variable in January; and *Var*_{July} is the county's value for the variable in July.

The lone exception to use of the above procedure is ETOH Volume. The procedure for ETOH Volume also takes the ETOH Market Share into account—interpolated values for this variable are computed using the following equation:

```
ETOH\ Vol_{Month} = ((ETOH\ Vol_{July}\ *ETOH\ Mkt\ Share_{July}) + ((ETOH\ Vol_{Jan}\ *ETOH\ MktShare_{Jan}) - (ETOH\ Vol_{July}\ *ETOH\ Mkt\ Share_{July}))\ *Ratio_{RVP}) \div ETOH\ Mkt\ Share_{Month}
```

The above formulas are used to compute values for each of the remaining 10 months.

H. NATURAL GAS

This file contains the natural gas sulfur content for each natural gas ID.

Comments

Most S/L agencies will not need to update this file. However, S/L agencies with information on the sulfur content of natural gas sold in their agency that differs from the NMIM default natural gas sulfur content should update this table accordingly. How to update this table is described under CountyYearMonth above.

I. STATE

This is a state-level file that lists external file names used by MOBILE6.2 for modeling non-default NLEV implementation schedules or non-default Tier 2 exhaust phase-in schedules, evaporative phase-in schedules, and alternative Tier 2 certification standards.

Comments

The only fields in this table relevant to the nonroad sector are the fields listing the state FIPS identifier, state name, and state abbreviation. These fields will not change. Therefore, no updates should be made to this file for the 2014NEI. However, this table must be present in the submissions to the EIS, so the default table provided by EPA should be included in the submission, with no changes from the S/L agency.

J. BASEYEARVMT

This table contains the 2011 annual VMT data by state, county, vehicle type, and roadway type. The VMT units are millions of miles.

Comments

This table affects only the onroad emission calculations and will not be used in the 2014 NEI. Therefore, S/L agencies should not make any updates to this table for the 2014 NEI. However, this table must be present in the submissions to the EIS, so the default table provided by EPA should be included in the submission, with no changes from the S/L agency.

K. COUNTYVMTMONTHALLOCATION

This table contains monthly VMT allocation fractions by county, vehicle type, and roadway type.

Comments

This table affects only the onroad emission calculations and will not be used in the 2014 NEI. Therefore, S/L agencies should not make any updates to this table for the 2014 NEI. However, this table must be present in the submissions to the EIS, so the default table provided by EPA should be included in the submission, with no changes from the S/L agency.

III. COUNTY SUBMISSION DOCUMENTATION

All submissions of data should include documentation of the sources of data and processes used to organize the information into the format required. This documentation may include existing presentations and papers in any format, but should include a summary that explicitly connects the documentation provided with specific tables provided.

The submission must also contain a spreadsheet checklist that indicates where county specific data has been provided. From the 2014 NEI webpage (http://www.epa.gov/ttn/chief/net/2014inventory.html), download the QA checklist "National_County_Checklist_2014_NCD.xlsx". This spreadsheet will contain rows for every county in the nation. You may trim this list to only include the counties in your agency.

This checklist is intended to indicate which tables your agency has revised from EPA's defaults for each county. It also indicates counties for which the submitter accepts EPA default estimates as equivalent to their submittal. The list you submit should include all of the counties in your agency, even if you are only submitting CDBs for some of the counties.

Name your checklist with your agency Program System Code (PSC), such as "PSC_Checklist.xls (or xlsx)". For example, Delaware's state agency PSC is "DEDNR" and their checklist would be named "DEDNR_Checklist.xls".

The purpose of the checklist is to provide a method to determine which parts of the agency submission contain new information. This will greatly assist EPA is using this information for making projections to other calendar years. The figure below shows the content of this checklist.

X . 5- 0 DE_Example_National_County_Checklist_2014_NCD.xlsx - Excel Brzezinski, David * HOME INSERT PAGE LAYOUT **FORMULAS** DATA REVIEW X Insert Σ -- A A = = Delete 4 Conditional Format as Cell Sort & Find & Paste € € □・ 00.00 \$ - % , Format Formatting * Table * Styles * Filter * Select * Fa. Styles Editing C D E F G H I J K L M N O P Q R S T U V W County NMIM County Database Tables and (sbr.alo) residential snowblower allocations sbc.alo) commercial snowblower allocations con. alo) construction equipment allocations (wob.alo) outboard watercraft allocations (frm.alo) farming equipment allocations (snm.alo) snowmobile allocations (yy.act) yearly activity rates Accept EPA Default Values (sea) seasonal allocations NMIM CountyYearMonth NMIM CountyYearMonth (pop) source populations NMIM CountyNRFile (grw) growth rates NMIM CountyYear NMIM NaturalGas NMIM County NMIM Gasoline NMIM Diesel stateid statename countyid countyname 10 DELAWARE 10001 Kent County 10 DELAWARE 10003 New Castle County X 10 DELAWARE 10005 Sussex County 6 Table1 (+) 4.

Figure 1: National_County_Checklist_2014_NCD

IV. METHOD FOR PROVIDING UPDATES AND CHANGES TO THE NMIM COUNTY-LEVEL DATABASE

This section discusses how S/L agencies should access EPA's default NMIM county-level database and submit updates and changes. You may do this in one of two ways:

1. Using the Emissions Inventory System (EIS) Gateway, select "NCD Activity Data," "EPADefault," and your state, as illustrated in Figure 2. EIS contains zipped files for each of the 50 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands. Download the file that includes all the NCD data for your state. Each zip file contains early 2011 county-level database NCD tables in CSV format that can be adapted for 2014 for that state along with the associated external data files. It is important to note that S/L agencies are required to send the complete set of NCD tables back to EPA even if changes were not made to each table.

2. If instead, you choose to work from the national final 2011NEIv2 NCD file (2011nei_supdata_nonroad.zip), located at ftp://ftp.epa.gov/EmisInventory/2011/doc, you will need to extract your state or counties of interest, revise them, and convert the tables to .csv format for submittal.

File Edit View Favorites Tools Help 👍 👺 U.S EPA Web Server 👢 Microsoft 🕶 🥃 Best of the Web 🥑 Channel Guide 🏠 ▼ 🔝 ▼ 📑 幈 ▼ Page ▼ Safety ▼ Tools ▼ 🕡 ▼ EIS Gateway VIEW/ADD/EDIT NCD Data » Facility Inventory and EPA Default Age cy Submitted » Potential Duplicate Facilities **EPA DEFAULT NCD DATA SETS** » Merge Processes » Nonpoint/ Onroad/ Download 2011 State NCD Data Set View Submission History Download 2011 State NCD Data Set View Submission History Alaska 2012-06-27 10:37 AM 308 2012-06-27 10:37 AM 261 Download 2011 State NCD Data Set View Submission History » NCD Activity Data 2012-06-27 10:37 AM 529 Download 2011 State NCD Data Set View Submission History Arkansas Download 2011 State NCD Data Set View Submission History California 2012-06-27 10:37 AM 481 Colorado 2012-06-27 10:37 AM 480 Download 2011 State NCD Data Set View Submission History » Inventory Selection Connecticut 2012-06-27 10:37 AM 228 Download 2011 State NCD Data Set View Submission History » Schedule Augmentation Delaware 2012-06-27 10:37 AM 243 Download 2011 State NCD Data Set View Submission History » Data Tagging District of Columbia 2012-06-27 10:37 AM 193 Download 2011 State NCD Data Set View Submission History 2012-06-27 10:37 AM 492 Download 2011 State NCD Data Set View Submission History REPORTS Georgia 2012-06-27 10:37 AM 690 Download 2011 State NCD Data Set View Submission History Hawaii 2012-06-27 10:37 AM 212 Download 2011 State NCD Data Set View Submission History Download 2011 State NCD Data Set View Submission History 2012-06-27 10:37 AM 349 » Report Downloads Idaho 2012-06-27 10:37 AM 707 Download 2011 State NCD Data Set View Submission History » Large File Download Indiana 2012-06-27 10:37 AM 648 Download 2011 State NCD Data Set View Submission History » Feedback Reports Download 2011 State NCD Data Set View Submission History lowa 2012-06-27 10:37 AM 620 2012-06-27 10:37 AM 638 » Agency Submission History Report Kansas Download 2011 State NCD Data Set View Submission History 2012-06-27 10:37 AM 676 Download 2011 State NCD Data Set View Submission History Kentucky

Figure 2. EIS Gateway—2014 EPA Default NCD Data Sets

Once you make corrections to the EPA default NCD tables and external files, prepare a zipped named "SS000.zip" for a complete state submittal, or "SSCCC.zip" for a county submittal,, where SS=the 2 digit state code, and CCC= the 3 digit county code, that contains:

Download 2011 State NCD Data Set View Submission History

- 1. All eleven NCD tables in a folder named "Tables" for all the counties included (submittals must be for only one county, or for all counties in the state).
- 2. All external files in a folder named "External Files"

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Louisiana

- 3. A folder named "Text File" that contains documents(s) that contain descriptions of revisions made to EPA default values and sources of the revised data. A .txt file must be present, but additional files (e.g., .xls, .doc) can also be added to support your data.
- 4. A copy of the county checklist spreadsheet indicating the files and tables provided that contain county specific data.

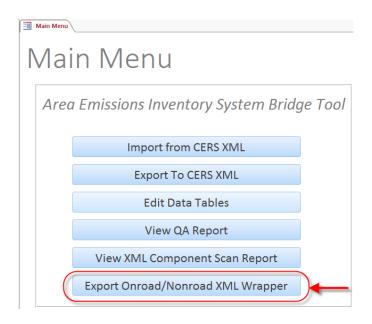
Creating the EIS/CDX-required XML

There are two ways to create the xml file

Use notepad or other editing software to edit the sample xml
 [ncd_sampleheader.xml] which you can download from the 2014 NEI webpage.
 Edit the red text shown below:

```
<a href="hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" <a href="hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" > hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" > hdr:Document id="IDxx" xmlns:hdr="http://www.exchangenetwork.net/schema/header/2" > hdr:Document id="http://www.exchangenetwork.net/schema/header/2" > hdr:Document id="ht
                                 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                                 xsi:schemaLocation="http://www.exchangenetwork.net/schema/header/2
                                 http://www.exchangenetwork.net/schema/header/2/header v2.0.xsd">
                                  <hdr:Header>
                                             <a href="https://www.authorName">https://www.authorName</a>
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                                             </hdr:Property>
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                                  instance" xsi:schemaLocation="http://www.exchangenetwork.net/schema/cer/1
                                 http://www.exchangenetwork.net/schema/cer/1/index.xsd">
                 <cer:UserIdentifier>youruserid@xyz.gov</cer:UserIdentifier>
                 <cer:ProgramSystemCode>yourPSC</cer:ProgramSystemCode>
                 <cer:EmissionsYear>2014</cer:EmissionsYear>
          </cer:CERS>
     </hdr:Pavload>
</hdr:Document>
```

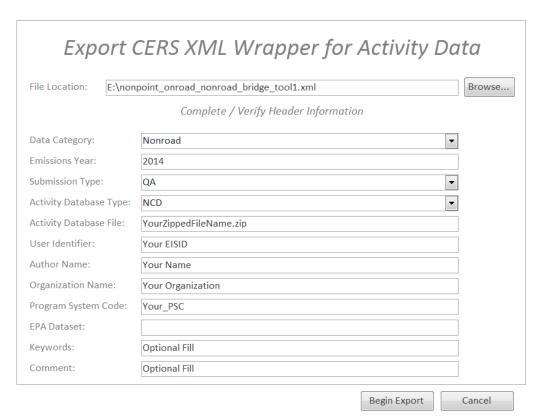
- 2. Use the EIS Access Bridge Tool (as revised May 2015).
 - a. Download the "Area Emissions Inventory Bridge Tool" from http://www.epa.gov/ttn/chief/software/.
 - b. Open the file in Microsoft Access.
 - c. Choose the "Export Onroad/NonRoad XML Wrapper" from the Main Menu



d. Fill out the form with the appropriate information



Export CERS XML Wrapper for Activity Data

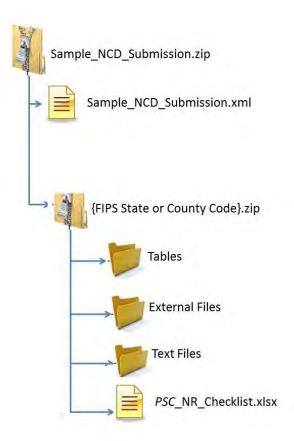


- i. File Location = The name and location where the resulting XML file will be generated.
- ii. Data Category: Choose either "Nonroad"

- iii. Emissions Year: Set to 2014
- iv. Submission Type: Choose either "QA" or "Production"
- v. Activity Database Type: Set to "NCD"
- vi. Activity Database File: The name of the packaged set of zip files. Using the earlier example: "Sample_CDB_Submission.zip"
- vii. User Identifier: Your EIS User ID
- viii. Author Name: Your name (optional)
- ix. Organization Name: The name of your organization (optional)
- x. Program System Code: The program system code of your organization
- xi. EPA Dataset: Leave blank
- xii. Keywords: Any keywords you would like to submit about the document (optional)
- xiii. Comment: Any comments about the document (optional)
- e. Press the "Begin Export" button. Your file will be generated to the location specified.

NOTE: Each NCD submittal is a total replacement to any NCDs previously submitted by that agency. Thus, if a state submits every county in one submittal, then submits only one county in a subsequent submittal, only the one county will be present in EIS.

Figure 3. Required Directory Structure to be used for NCD Submittals



When submitting to EIS, be sure to submit to the Quality Assurance Environment first to insure your NCD files pass EIS QA before submitting to production.

You can check the feedback on your submittal in EIS by choosing your agency and the "Feedback Reports" tab as shown in Figure 4.

EIS - Windows Internet Explorer powerpoint group picture File Edit View Favorites Tools Help 🐴 * 🔝 🖷 * 🕞 Page * 🚭 Tools * A SEIS X US Emissions Inventories | Cleari... EIS Gateway VIEW/ADD/EDIT Agency Organization Detail » Facility Inventory and Point Emissions **CURRENT AGENCY** » Potential Duplicate Facilities Agency Description: Alabama Department of Environmental Management » Merge Processes Edit Agency Organization Agency Type: State » Nonpoint/ Onroad/ Nonroad » Event Emissions SUBMISSION HISTORY » NCD Activity Data » CDB Activity Data Status = Submitter = Data Category = Type » Inventory Selection 5504f8b4-133c-411f-8848-3f9cd588efe0 COMPLETED Elizabeth Tate Point PRODUCTION 2011-12-28 03:31 PM Download Report _86df631b-988c-4b8d-b03a-1b3176d74cf4 COMPLETED Elizabeth Tate Facility Inventory PRODUCTION 2011-12-22 04:42 PM Download Report REPORTS Facility Inventory 2011-12-21 05:20 PM Download Re » Request Reports ce1d6db1-23f1-4890-a7a2-02617ad49202 COMPLETED Elizabeth Tate Facility Inventory PRODUCTION 2011-10-11 09:40 AM Download Report _3036ab41-9662-4548-b56a-d62399c75e15 COMPLETED Elizabeth Tate » Report Downloads PRODUCTION 2011-04-04 04:42 PM Download Rep _fe74ddf5-30fa-40b1-b9fc-f509d6397a2d COMPLETED Elizabeth Tate Point » Large File Download COMPLETED Tracy Anderson Nonpoint fff203ab-07f3-451c-a558-8aa9258df95d PRODUCTION 2011-02-17 05:38 PM Download Repor » Feedback Reports 0b8e6e98-489f-4426-995d-80fd0fc1746e COMPLETED Tracy Anderson Nonpoint PRODUCTION 2011-02-15 04:17 PM Download Re » Agency Submission History 5541c065-1fbf-4bfa-b056-74e03da37a8c COMPLETED Elizabeth Tate Point PRODUCTION 2011-02-02 03:19 PM Download Rep _5f2f9709-0616-4d70-8c6a-cb6fe576791e COMPLETED Elizabeth Tate Point PRODUCTION 2011-02-01 04:39 PM Download Report 2011-02-01 03:17 PM Download Re REFERENCE DATA 4a8a3eaf-390a-4462-b50a-4f0593be5480 COMPLETED Elizabeth Tate Facility Inventory PRODUCTION 2011-02-01 11:34 AM Download Report _a20bfb31-6d4c-49cf-9dc2-9444a379905a COMPLETED Elizabeth Tate Facility Inventory QA 2011-01-29 08:56 PM Download Report Download XML Subm » Reporting Code Tables PRODUCTION 2010-11-01 05:41 PM Download Re _3cbfd3f8-6fbb-4b3b-b225-16df19950648 COMPLETED Tracy Anderson Nonpoint » OA Checks 2a150c8d-90d5-4d71-b2bc-0e8818df4e7e COMPLETED Tracy Anderson Nonpoint PRODUCTION 2010-11-01 04:51 PM Download Report » View Dataset Identifiers PRODUCTION 2010-11-01 04:52 PM Download Report » Inventory Cycle 4485324a-095a-4602-ab1d-71f67eb3996a COMPLETED Tracy Anderson Nonpoint PRODUCTION 2010-11-01 04:51 PM Download Report Managemen PRODUCTION 2010-10-29 04:29 PM Download Report PRODUCTION 2010-10-29 04:03 PM Dow » EIS Bridge _8013991c-d680-42a9-bb9f-dd2d2befd78f COMPLETED Tracy Anderson Nonpoint PRODUCTION 2010-10-29 04:08 PM Download Report SUPPORT PRODUCTION 2010-10-29 06:05 PM Download Report _cffe882a-211f-4177-a03f-04947a5500ee COMPLETED Tracy Anderson Nonpoint PRODUCTION 2010-10-29 06:13 PM Download Report 7248ff60-af30-4c67-9b5a-410e7f872d97 COMPLETED Tracy Anderson Nonpoint » Administration Console 10f82859-6493-4154-a8a1-af6d5b073e2b COMPLETED Tracy Anderson Nonpoint PRODUCTION 2010-10-29 11:56 AM Download Rep _4d718831-f643-4eee-bf26-ff2e7d47c2e6 COMPLETED Elizabeth Tate Point Supplementation Local Intranet **100%**

Figure 4. EIS Gateway—Agency Organization Detail

IV. FURTHER INFORMATION

For questions or comments regarding the NMIM data base structure, format, the mechanics of the NMIM framework or recommendations for improvements, contact EPA's OTAQ at mobile@epa.gov.

For questions or comments about the NEI or the December 31, 2015 submittal deadline, contact *Laurel Driver* in EPA's Emission Inventory and Analysis Group at (919) 541-2859 or email to driver.laurel@epa.gov.

For questions or comments regarding the MOVES data base structure, format, the mechanics of the MOVES framework for nonroad inputs or recommendations for improvements, contact EPA's OTAQ at mobile@epa.gov

APPENDIX A. NMIM NAMING CONVENTIONS AND CODE

Table A-1. Definition of NMIM HourID Codes Used in the CountyYearMonthHour Table

HourID Code	Hour Description
1	Hour beginning at 12:00
	midnight
2	Hour beginning at 1:00 AM
3	Hour beginning at 2:00 AM
4	Hour beginning at 3:00 AM
5	Hour beginning at 4:00 AM
6	Hour beginning at 5:00 AM
7	Hour beginning at 6:00 AM
8	Hour beginning at 7:00 AM
9	Hour beginning at 8:00 AM
10	Hour beginning at 9:00 AM
11	Hour beginning at 10:00 AM
12	Hour beginning at 11:00 AM
13	Hour beginning at 12:00 Noon
14	Hour beginning at 1:00 PM
15	Hour beginning at 2:00 PM
16	Hour beginning at 3:00 PM
17	Hour beginning at 4:00 PM
18	Hour beginning at 5:00 PM
19	Hour beginning at 6:00 PM
20	Hour beginning at 7:00 PM
21	Hour beginning at 8:00 PM
22	Hour beginning at 9:00 PM
23	Hour beginning at 10:00 PM
24	Hour beginning at 11:00 PM

Table A-2. Valid NMIM FileTypeID Codes Used in the CountyNRFile Table

FileTerrolD Codes	File Time Description
FileTypeID Codes	File Type Description
sea	Seasonality
pop	Population files
grw	National defaults
sbr	Snowblowers res.
sbc	Snowblowers comm.
snm	Snowmobiles
frm	Harvested acres
con	Construction empl.
wob	Rec marine outbrd
wib	Rec marine inbrd
gc	Golf course estab.
air	Air Transportation
min	Coal mining empl.
com	Wholesale establis.
log	Logging empl.
lsc	Landscape empl.
mfg	Manufacturing empl.
oil	Oil & Gas empl.
rvp	RV Park establish.
cen	Census population
hou	Family housing
rr	Railway maintenance equipment

Table A-3. File Naming Conventions for External Data Files Named in the NMIM CountyNRFile Table

File Name	Description	Corresponding NONROAD Default File
*****.sea	Seasonal allocations.	season.dat
*****.pop	Source populations.	us.pop, xx.pop (where xx is state abbr.)
*****.grw	Growth rates.	nation.grw
****sbr.alo	Residential snowblower allocations.	sbr.alo
****sbc.alo	Commercial snowblower allocations.	sbc.alo
*****snm.al	Snowmobile allocations.	snowm.alo
О		
****frm.alo	Farming equipment allocations.	farms.alo
*****con.alo	Construction equipment allocations.	const.alo
*****wob.alo	Outboard watercraft allocations.	wob.alo
	Inboard watercraft allocations.	wib.alo
*****gc.alo	Golf equipment allocations.	golf.alo
****air.alo	Airport equipment allocations.	airtr.alo
*****min.alo	Coal mining equipment allocations.	coal.alo
*****com.al	Wholesale establishment allocations.	holsl.alo
0		
*****log.alo	Logging equipment allocations.	loggn.alo
*****Isc.alo	Commercial landscaping equipment allocations.	Iscap.alo
	Manufacturing equipment allocations.	mnfg.alo
*****oil.alo	Oil production equipment allocations.	oil.alo
****rvp.alo	Recreational vehicle park allocations.	rvprk.alo
*****pop.alo	Human population allocations.	pop.alo
	Household allocations.	house.alo
*****rr.alo	Railway maintenance equipment	rail.alo

NOTES: ***** Indicates the five digit FIPS code for the county. Use "000" for the county code portion of the FIPS for statewide submissions. All files are external data files in text format.

Table A-4. File Naming Conventions for NONROAD External Data Files Named in the NMIM CountyYear Table

File Name	Description
*****YY.act	Activity rates. (NONROAD)

NOTES: ***** indicates the five digit FIPS code for the county. YY indicates valid calendar year (1951 - 2050). Use "000" for the county code portion of the FIPS for statewide submissions. All files are external data files in text format.

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Environmental Protection	Air Quality Assessment Division	May 2015
Agency	Research Triangle Park, NC	