

2008 National Emissions Inventory

Emissions Inventory System Implementation Plan

Section 2

Transitioning from NIF 3.0 to the 2008 NEI

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Section 2

Transitioning from NIF 3.0 to the 2008 NEI

2.0 Transitioning to the 2008 NEI

EPA has determined that for the 2008 NEI, all data must be reported using Extensible Markup Language (XML) documents. The 2008 NEI-EIS Implementation Plan (NEIP) includes information, references, and other resources to assist S/L/Ts with this transition to the new EIS reporting format. For more information, see the NEIP reporting instructions sections (Sections 6 through 12) and Section 5, "Submitting XML Data to the EIS."

The new EIS reporting format utilizes the Consolidated Emissions Reporting Schema (CERS), an emissions and inventory reporting schema that accommodates multiple programs, such as NEI and the Climate Registry. Since the previous reporting format of NIF 3.0 will no longer be accepted, and the time in which to implement changes to information systems is brief, EPA will offer models and processes to aid in converting data into the new XML format.

The purpose of this section is to outline the resources EPA will make available to assist in the transition from NIF 3.0 to the new CERS EIS format. These resources will only address the requirements for EIS, and do not address the requirements of the other programs. With the exception of the XML File Generator, these resources will be available by December 2008.

2.1 XML Schemas, Model and Data Dictionaries

EPA will provide the following artifacts to aid data submitters in converting from NIF 3.0 to the EIS portion of the CERS. These transition aids are designed to provide the information necessary to modify the output of an inventory information system and to transition easily to the new XML reporting format.

2.1.1 CERS EIS Data Model

EPA will provide a logical data model that maps the hierarchical structure of the EIS portion of the CERS to a set of relational tables. This model will contain tables that correspond to the relative components in the EIS portion of the CERS, including additional attributes that create relationship attributes (such as foreign keys). Regardless of your inventory information system, using this model to create these tables will allow you to create staging tables in your own technical environment.

2.1.2 CERS EIS Staging Table Mapping Documentation

For the CERS EIS data model, EPA will provide documentation identifying each attribute and definition. This documentation will also include a mapping of each attribute to its corresponding component and tag name in the EIS portion of the CERS. From this document, you will be able to create an XML mapping file allowing you to import and export EIS-related CERS data content. This document will not include the instructions on the data type or any restrictions (required, conditional, etc.) for each element. Refer to each data category section of this implementation plan to learn how these data should be reported.

2.1.3 CERS EIS Staging Tables

EPA will provide a set of empty staging tables, corresponding to the CERS EIS data, into which you may load your inventory data. If you are unsure of your capability to create staging tables on your own inventory information system, you may use these tables instead to load data. These staging tables work in conjunction with the XML file generator tool described in Section 2.1.5.

2.1.4 NIF 3.0 Mapping Documentation

For users who have inventory information systems that output data in the NIF 3.0 format, and who do not intend to build functionality into their existing information systems to output data in the CERS XML format, EPA will provide a document that maps the NIF 3.0 tables and data elements to the CERS EIS data model and staging tables. This document may be used to construct queries from your NIF 3.0 Microsoft Access tables to populate either the EPA-supplied staging tables or the staging tables you create on your backend database. However, because the 2008 NEI supports the reporting of additional data not found in the NIF 3.0, relying solely on NIF 3.0 to populate your staging tables will prevent you from loading and reporting all your inventory data to the EIS.

2.1.5 XML File Generator

EPA will provide a utility that will generate valid XML files that are in compliance with the CERS using the data stored in the EPA-supplied CERS EIS staging tables.

2.2 S/L/T Responsibilities

Any or all of these various models, documents, and utilities, will provide you the information necessary to export data that is compliant with the CERS. It is your responsibility to design and create the queries needed for your inventory information systems to export data either directly as XML output or to the staging tables so that the XML file generator tool can create a valid XML document.