

NEI Input Format (NIF)
Version 3.0

User's Guide Instructions and Conventions of Use
Released April 2003
Revised November 2003 (Errata Included)

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Errata for:

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Changes

1. Scientific notation

Revise noted pages/ paragraph as follows -

Pages Affected:

Pg 9, paragraph 4
Pg 45, last paragraph
Pg 48, first paragraph
Page 73, paragraph 7
Page 75, paragraph 4
Page 91, paragraph 7
Page 105, paragraph 7

Exponential notation *is allowed* for the expressing Emission Numeric Value field in the Emissions record. For reporting annual HAP data then, the NIF user should report valid unit of measure as TON – see NIF Code table – UNITS, and use scientific notation as necessary to ‘fit’ the data value into the field (length of 10 digits).

2. Process level data entry in NIF MS Access shell

Revise noted page/ paragraph as follows -

Page Affected: Page 110, last paragraph

The ‘design view’ for each table in the MS Access data base has been developed in a manner to reinforce data entry according to the NIF specifications. A validation rule ‘not null’ is assigned to the primary keys fields of records to specify data entry at the process level for both criteria and HAP reporting. The validation rule ‘not null’ may need to be deleted by the user in order for the MS Access shell to take data entered at the conditional (non-process) emission data level(s) allowed for HAPs, as discussed in User Guide Section 1.3. An Import Specification has been developed and saved with each table to help ensure that the data imported, and the files exported, from the database adhere to the Format.

To maintain this consistency, do not alter the shell in any way except in the case noted above for HAP reporting. After data export, each resulting text file should be checked to confirm that the data file adheres to the NIF Version specifications being implemented.

3. Tribal Code field length and implementation

Revise noted pages/ paragraphs as follows to indicate change in field length of Tribal Code, from 4 to 3 bytes; and new convention for reporting value for Tribal Code and State and County FIPS Code.

A. Pages Affected: All records in each NIF source type file - pages documented in MS Excel spreadsheet, and posted on <http://www.epa.gov/ttn/chief/nif/index.html#ver3>. Hardcopy included in text. (Change indicated by *)

Data element = TRIBAL CODE

* Length = 3

Data Definition = Codes that represent American Indian tribes and Alaskan Native entities.

* User Convention Notes = Key field and Code table implementation. Code table TRIBAL_CODES.

If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).

* End Position = (minus 1).

Data element = STATE AND COUNTY FIPS CODE

* User Convention Notes = Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).

B. Pages Affected: All pages describing implementation instructions for the TR – Transmittal record, e.g., pages 15, 57, 83, and 101.

TRIBAL CODE = TRIBAL CODE is a primary key field that may be reported by a tribal entity instead of STATE AND COUNTY FIPS CODE. NIF users must complete either the STATE AND COUNTY FIPS CODE or the TRIBAL CODE. The fields STATE AND COUNTY FIPS CODE and TRIBAL ID are used as primary keys on each NIF record to uniquely identify geographic and jurisdictional areas where emissions occur.

In order to satisfy the *not null* constraint required for these primary key (PKs) fields, do the following: Where TRIBAL ID code is not provided as not applicable, the user must enter the value = 000 (3 numeric zeroes) in the TRIBAL ID field, and the STATE AND COUNTY FIPS CODE field must contain a valid value from the NIF code table.

Where STATE AND COUNTY FIPS CODE is not provided as not applicable, the user must enter the value = 00000 (5 numeric zeroes) in the STATE AND COUNTY FIPS CODE field, and the TRIBAL ID field must contain a valid value from the NIF code table.

NIF users should submit separate NIF source files by unique local, state, or tribal organization, where it makes sense. It is expected that the NIF user will characterize the data either for tribal land areas only, or for state and county areas only, or in some cases by both geographic descriptors. If a NIF user reports both valid STATE AND COUNTY FIPS CODE *and* TRIBAL CODE, the data will be processed as a source on the noted Tribal Land and designated in the NEI as a Tribal Emissions Source.

The NIF user must provide a Transmittal (TR) record for each unique reported combination of STATE AND COUNTY FIPS CODE and TRIBAL ID to describe the submitting organization. One TR record should be provided for every unique Tribe and Tribal Band included in data source file.

Preface

How This NEI Input Format (NIF) User's Guide Is Organized

This NIFV3.0 User's Guide begins with an introduction to the NIF to identify the intended user community, and the purpose and role of the NIF in the EPA's compilation of the National Emission Inventory (NEI) for criteria and hazardous air pollutants (HAP). The relational structure of the NIF is described; the use of 'Mandatory' and 'Necessary' designations for certain data elements is discussed, and some conditional circumstances are noted relative to using the NIF to report HAP data.

Section 2 explains the changes from NIF Version 2.0 to NIF Version 3.0 and list the location of available references that detail those changes in order to assist with quick and thorough identification of necessary revisions to NIF data format conversion software.

Section 3 explains how the NIF format specifications are documented and the available forms and purpose of that documentation.

The NIFV3.0 specifications are provided in Section 4 by source file type - that is, source files Point, Area and Nonroad Mobile, Onroad Mobile and Biogenics. Because data compilers tend to work primarily with one source sector, it is expected that organizing the format instruction by source file type will be efficient to the NIF user. Because many of the NIF records are implemented similarly across source files, some of the individual record information and general user instruction will be repeated in this Guide. For each source file, each record of the file is described individually in terms of the format specification, data dictionary, and any additional specific user instructions for implementing the record correctly.

Following the above format instructions for each NIF source file record, is a general discussion in Section 5 regarding data types, how to enter data into the NIF records and organize records in a source file, as well as an emphasis and reminder to use the NIF QC check software to confirm correct formatting prior to sending the file to EPA.

Section 6 provides some additional considerations for those that will use the NIFV3.0 as it is available in MS Access.

Section 7 discusses the steps of transferring NIF data files electronically to the EPA's Emission Factors & Inventory Group through the EPA Central Data Exchange (CDX).

The EFIG plans for using the NIFV3.0 as a distribution format for publishing NEI data is discussed in Section 8.

Attached to the end of this User's Guide, and incorporated by reference are the NIFV3.0 Code Tables.

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Section 1.0 Introduction to the NEI Input Format

The NEI Input Format (NIF) is a data format specification for state, local, and tribal agencies to use as they prepare their air emissions inventory data files for electronic transfer to the Environmental Protection Agency. The NIF is an acceptable data format for use in transferring criteria air pollutant data to EPA in compliance with the Consolidated Emission Reporting Rule (CERR, 40 CFR 51). The Format specifies the data relevant to EPA for compiling the National Emissions Inventory (NEI) for criteria and hazardous air pollutants. Specific information on how the EPA's Emission Factor and Inventory Group (EFIG) compiles the NEI may be located on <http://www.epa.gov/ttn/chief/eidocs/nei.html>.

The EFIG is also responsible for implementing and maintaining the NIF. The NIF design is intended to provide users certain flexibility for data reporting and to reduce the conversion effort needed to transform the various agencies' local system data formats to the NIF. A consequence of that flexibility is that EPA has had to expend more resources than intended to interpret the intent of what is reported by an agency. To avoid ambiguities and to increase the efficiency of processing data for the NEI, this User Guide provides in some cases, more prescriptive instruction for reporting data to EFIG. An example of this instruction is the Section describing how to code specific NIF records when submitting data to EPA for annual emissions, average season day emissions, or season total emissions.

While state, local, and tribal agencies are the primary users of the NIF, the NIF is also used by EFIG as a distribution format for publishing much of the detailed data in the NEI. A discussion of this is provided at the end of this Guide, in Section *Use of NIF by EPA as a NEI Distribution Format*.

1.1 NIF File Structure

The NIF is composed of four files, by data source type - Point, Area and Nonroad Mobile, Onroad Mobile, and Biogenics. The NIF is a relational, fixed-position format. There are specific records within each source type file and the records are related to one another by a set of common data fields known as "key" data fields. The key data fields are highlighted in each record. All data fields in a record have a designated begin and end (fixed) position.

Figure 1 illustrates the way that records relate in the NIF, and which records are included in each source file. Reporting the key fields is mandatory as they make each record unique and must relate all the pertinent records that contain the reported information about an emission source. For instance, in the NIF Point Source file, most of the key fields are unique identifiers (IDs) such as STATE FACILITY IDENTIFIER, EMISSION UNIT ID, PROCESS ID, etc. NIF users that report key fields consistently over time will help EPA track specific facility plant data correctly in the NEI. Due to the nature of HAP data collection at this time, some of the record key fields, while mandatory for reporting criteria data, may not be mandatory for reporting HAP data. See Section *Using NIF to Report HAP Data* for specific information and instruction on that issue.

1.2 Data Elements Designated As ‘Mandatory’ and ‘Necessary’

The NIF specification for each record includes a notation to indicate which data elements in the record is ‘Mandatory’ or ‘Necessary’ for reporting criteria and HAP (toxics) air pollutant emissions data. Most of the data elements marked ‘M’ for mandatory are essential for maintaining the referential relationships across records, so blanks or errors in these data elements can make whole record portions of the file unavailable, or can cause it to be interpreted incorrectly. As discussed above, these data elements are key data fields. In some cases, ‘M’ designates a data element that EPA and most other data users require to be present in order to consider an inventory useful. Data submitters are considered capable of providing these data and the best and only source. Because data elements marked ‘M’ are so important, in general EPA will not attempt to incorporate into the NEI, records with those missing values. The consequence is that emissions information for such records may be assumed from available data of earlier years or from data sources other than the state or local agency.

Data elements marked ‘N’ for necessary are also important to NEI data users, but for which reasonable defaulting schemes may be applied by EPA if the value is not reported. EPA also recognizes that inventory data users may have lower expectations for this set of data elements due to a tendency that they may receive lower priority by the data submitting agencies.

It is important to note that the ‘Mandatory’ and ‘Necessary’ designations do not indicate all fields that are required to be submitted to EPA under the CERR. A separate document is posted with the NIF V3.0 user materials to list the CERR data elements and the corresponding data element in the NIFV3.0, see document *Cross-reference CERR to NIFV3.0*.

1.3 Using NIF to Report HAP Data

The NEI Input Format supports transfer of both criteria and HAP data to the EPA National Emission Inventory. For each data element there is a notation in the record, whether the element is mandatory for criteria and HAP data reporting. Due to the nature of HAP data collection at this time, some of the key fields, while mandatory for reporting criteria data, may not be mandatory for reporting HAP data.

For the NEI, *process-level* data for point sources is required for criteria emissions data, but not for the HAP data at this time. While HAP data is also preferred at the process-level, if process-level information is not available, the NIF user may report HAP data at the site, or unit, or emission release point level, and EFIG will process it for incorporation into the NEI. The following describes the record type(s) that you must provide depending on the EMISSIONS DATA LEVEL field value reported on the Emissions record for HAPs. *This convention is for HAP data reporting only. All these records are Mandatory for reporting the criteria data.*

If..... HAP data reported as
EMISSION DATA LEVEL =
SITE
UNIT

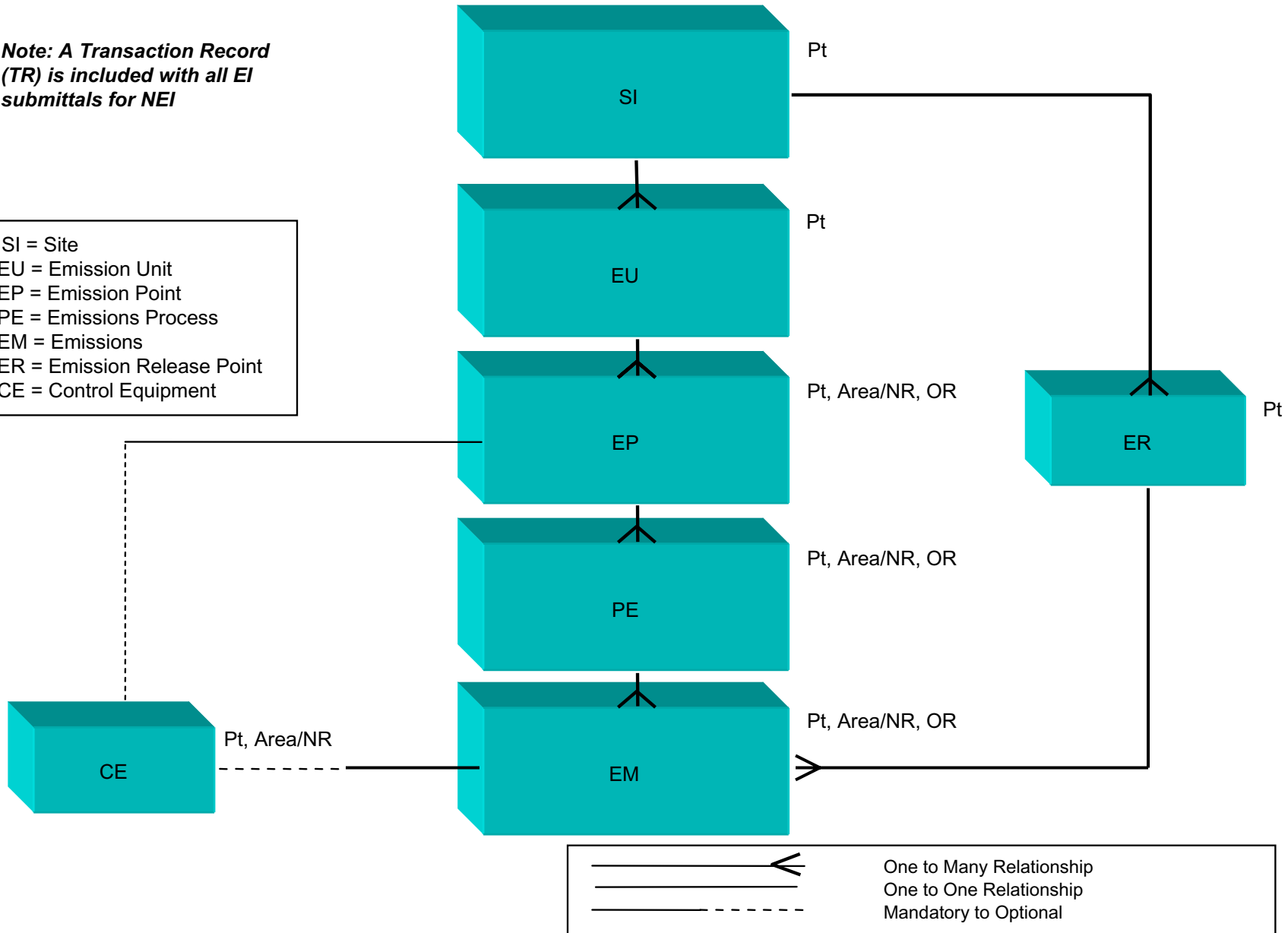
STACK
PROCESS

Mandatory Records are.....
Site, Emission Release Point, Emission Period, Emission
Site, Emission Unit, Emission Release Point, Emission
Period, Emission
Site, Emission Release Point, Emission Period, Emission
Site, Emission Unit, Emission Release Point, Emission
Process, Emission Period, Emission

Figure 1 - EI Data Relationships in NIF

Note: A Transaction Record (TR) is included with all EI submittals for NEI

SI = Site
 EU = Emission Unit
 EP = Emission Point
 PE = Emissions Process
 EM = Emissions
 ER = Emission Release Point
 CE = Control Equipment



In order to support the collection of HAP pollutant data, the NIF also includes data elements for reporting MACT applicability information, through the use of MACT codes. Maximum Achievable Control Technology standards and emission limits are developed by EPA, as mandated by Section 112(d) of the Clean Air Act (National Emission Standards for Hazardous Air Pollutants). More information on the MACT source categories and the MACT program may be located at www.epa.gov/ttn/uatw/eparules.html .

MACT codes are 4-digit codes assigned to all MACT categories and sub-categories. See Code table – MACT Codes. The MACT code should be reported for all facilities and processes within a MACT category. If you do not report MACT codes, EFIG will make default assignments.

In addition to PROCESS MACT CODE, other relevant fields are PROCESS MACT COMPLIANCE STATUS, HAP EMISSIONS PERFORMANCE LEVEL, and CONTROL STATUS. The implementation of these fields will be described in detail in Sections of this Guide pertaining to Point Source file - see Emission Process record and Emission record.

Another unique reporting issue for the HAP pollutant data is that the emissions are typically characterized in very small mass amounts. Emissions are reported in the field - EMISSION NUMERIC VALUE - of the Emissions record. This field is a decimal data type with fixed length of 10 bytes. Exponential notation is not allowed. For reporting HAP data then, the NIF user must determine if a unit conversion is required to ‘fit’ data in the emissions numeric field using valid NIF units. It is expected that the reported HAP data may be fit in the field using one of the NIF valid units of measure such as LB (pounds), G (grams), KG (kilograms) - see NIF Code table - UNITS.

Section 2.0 Changes from NIF Version 2.0 to Version 3.0

While some tuning has been done for reporting of hazardous air pollutants (HAPs), the primary reason for the modification and update to Version 3.0 is to comply with EPA data standards. The EPA Office of Environmental Information (OEI) is facilitating the Agency’s required transition to the final data standards and has been consulted regarding the implementation of the specific data standards relevant to the NIF. The vision for the EPA data standards program is to promote the efficient sharing of environmental information among EPA, states, tribes, and other information partners. In partnership with the Environmental Data Standards Council (EDSC), the EPA is developing data standards for environmental information collection and exchange. The use of common data standards among partners will foster consistently defined and formatted data elements and sets of data values, and provide public access to more meaningful data, including cross-media reporting of information to the public.

The EPA data standards which are relevant to the NEI data collection (NIF), storage and public distribution are:

- Latitude/Longitude
- Chemical Identification
- Date
- SIC/NAICS
- Facility Identification
- Contact
- Tribal Identifier

Detailed information on these data standards is found in the EPA's Environmental Data Registry (EDR) located on [http://oaspub.epa.gov/edr/epastd\\$.startup](http://oaspub.epa.gov/edr/epastd$.startup), and have been used to map and implement the relevant data standards in the NIF.

Included with the NIFV3.0 materials posted on the EPA Website <http://www.epa.gov/ttn/chief/nif/index.html> is a spreadsheet document describing the changes in NIFV3.0 from the NIFV2.0. The documentation of changes is prepared in a manner intended to assist with quick and thorough identification of necessary revisions to NIF data format conversion software. In the spreadsheet workbook, a quick-glance summary is included for each source type file and lists, by record, the changes in the V3.0 compared to the V2.0 and the reason for the change. In addition, each NIF V3.0 record is documented with notation at the bottom describing the changes in specific data element fields and any changes in begin and end positions.

Many of the new final EPA data standards relevant to the NIF implementation are reported as coded values. In most cases, the new standard code table is added to NIFV3.0 set of tables. The NIFV3.0 Code tables are incorporated by reference at the end of this User Guide. The cover to the NIFV3.0 Code Tables indicates the new tables whose values are valid for NIFV3.0 and not NIFV2.0.

The EFIG, through consultation with the OEI, has determined in the case of some EPA standards that are relevant to the NIF, that it is more effective for data collection purposes to continue implementing current familiar NIF data elements and code values. In those cases, the EFIG must convert the collected data to the corresponding data standard terminology for purposes of system storage and data distribution.

One of the most notable of these cases is the NIF Pollutant Code table, whereby the NIF user will recognize and may implement the previous familiar valid code values for Pollutant, while the EPA's Chemical Identification standard requires a different set of chemical ID codes. In order to comply with the chemical ID data standard, EFIG will match the NIF pollutant code data received to the EPA standard chemical ID, and store both for purposes of public distribution and sharing with other EPA data systems.

Another exception made for NIF data collection, is the Latitude/ Longitude data standard, whereby the EPA standard requires latitude and longitude measures in decimal degrees, and the NIF user may report latitude/ longitude in decimal degrees, or continue reporting geographic coordinates as UTM. In order to comply with the latitude longitude data standard, EFIG will convert, store, and distribute all geographic x and y coordinate data received, to latitude and longitude measures in decimal degrees.

Section 3.0 Explanation of How the NIFV3.0 Specification is Documented

The NIF format specification is documented using MS Excel. The format is documented by source file type and the Excel file for each source type consists of a workbook containing a worksheet for each record of the source file. The worksheet document is the data dictionary for the record, as it describes for each record: the data element names; their fixed position on the record; the data type; the data definition; and may include some additional user notes on how to correctly implement specific data fields. In addition, the record data dictionary notes for each data field, how to specify the field if using

MS Access as the file type. A copy of each record documented in MS Excel, is also included in this Guide under the Section *NIFV3.0 Specification by Source Type File*.

NIF users should download from <http://www.epa.gov/ttn/chief/nif/index.html> the MS Excel workbook document for the NIFV3.0 source file specification of interest, e.g., point, area and nonroad mobile, onroad mobile, or biogenics, and retain it as a desk reference copy.

The NIF files may be submitted to EPA as a text file type (.txt) or as a MS Access file type (.mdb). The EFIG has prepared the NIF in MS Access as a format specification ‘shell’ that may be populated through an import specification. NIF users preferring to work in MS Access must use the NIFV3.0 Access shell published by EFIG in order to ensure that the resultant .mdb file is correctly formatted according to the NIFV3.0 specifications. The NIFV3.0 Access shell must not be altered by the user, i.e., do not change table names, data element names, data field specifications, nor import mask specifications. The NIFV3.0 in MS Access is available for download at <http://www.epa.gov/ttn/chief/nif/index.html>. Also see the Section in this Guide - *Use of NIF in MS Access*, for discussion of additional considerations and benefits when using the NIF in MS Access.

Section 4.0 NIFV3.0 Specification by Source Type File

This section documents the NIFV3.0 format specifications for each record in each source file beginning with the Point Source file, followed by the Area and Nonroad Source file, etc. It is intended that organizing the format instruction by source file type will be efficient to the NIF user. Because many of the NIF records are implemented similarly across source files, some of the individual record information and general user instruction will be repeated.

Each of the following source file subsections define the records which are included in the file and the key fields in each record - followed by a printout of the data dictionary for the record, and any additional user instructions to successfully implement the data elements in the record. The full data dictionary is also documented and available by source type file in MS Excel (xls) and Adobe Acrobat (pdf) and is available for download at <http://www.epa.gov/ttn/chief/nif/index.html> .

4.1 Point Source File

The NIFV3.0 Point Source file contains the following (8) records with the noted key fields:

<u>Record</u>	<u>(Mandatory*) Key Fields</u>
TR - Transmittal	STATE AND COUNTY FIPS CODE TRIBAL CODE
SI - Site	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER TRIBAL CODE
EU - Emission Unit	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION UNIT ID

	TRIBAL CODE
EP - Emission Process	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION UNIT ID PROCESS ID TRIBAL CODE
CE - Control Equipment	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION UNIT ID PROCESS ID POLLUTANT CODE TRIBAL CODE
ER - Emission Release Point	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION RELEASE POINT ID TRIBAL CODE
PE - Emission Period	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION UNIT ID PROCESS ID START DATE END DATE TRIBAL CODE
EM - Emission	STATE AND COUNTY FIPS CODE STATE FACILITY IDENTIFIER EMISSION UNIT ID PROCESS ID POLLUTANT CODE EMISSION RELEASE POINT ID START DATE END DATE EMISSION TYPE TRIBAL CODE

* Reporting these key fields are mandatory when submitting criteria data to the NEI, and conditionally mandatory if submitting HAP data to the NEI, e.g., see Section 1.0 regarding *Using NIF to Report HAP Data*. TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE.

NEI Input Format - Point Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Transmittal										
If Using MSAccess										
Position		Mandatory / Necessary								Table: tblPointTR
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	TR	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	87	M	M	ORGANIZATION NAME	CHARACTER	80	The name of the organization that is affiliated with a facility or project (i.e., this data submittal).	Name of organization submitting the dataset.	strOrganizationName	Text
88	89	M	M	TRANSACTION TYPE	CHARACTER	2	Original or Correction (replacement) data set.	Code table - TRANSACTION_TYPES	strTransactionType	Text
90	93	M	M	INVENTORY YEAR	NUMBER	4	Year of inventory data in dataset.	A four digit year, ie. 1998	intInventoryYear	Integer
94	103	M	M	INVENTORY TYPE CODE	CHARACTER	10	Indicates that the data set contains criteria data, toxics data, or both.	Code table - INVENTORY_TYPES	strInventoryTypeCode	Text
104	111	M	M	TRANSACTION CREATION DATE	NUMBER	8	Creation date of transmittal data.	Format: YYYYMMDD	lngTransactionCreationDate	Lng Integer
112	115	M	M	INCREMENTAL SUBMISSION NUMBER	NUMBER	4	A unique report number that differentiates this submission from others.	The initial number is 1 and it is incremented by 1 for every submission per transaction type.	intIncrementalSubmissionNumber	Integer
116	120			RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for overall inventory.	Percent value with 2 decimal places	sngReliabilityIndicator	Single
121	200			TRANSACTION COMMENTS	CHARACTER	80	General comments regarding transmittal.		strTransactionComments	Text
201	270	M	M	CONTACT PERSON NAME	CHARACTER	70	The complete name of the contact person, including first name, middle name or initial, and surname. Lead contact for organization transmitting dataset.	EPA's single point of contact for questions that may arise concerning how the data in the file was developed. See also Affiliation Type.	strContactPersonName	Text
271	285	M	M	CONTACT PHONE NUMBER	CHARACTER	15	The phone number for the contact name.		strContactPhoneNumber	Text
286	295	M	M	TELEPHONE NUMBER TYPE NAME	CHARACTER	10	The name that describes telephone number type, e.g., the CONTACT PHONE NUMBER. Valid values include: Office, Fax, Mobile, Pager, Home.	Report a voice communication number available during normal work hours, i.e., Office.	strTelephoneNumberTypeName	Text
296	395	M	M	ELECTRONIC ADDRESS TEXT	CHARACTER	100	A resource address usually consisting of the access protocol, the domain name, and optionally, the path to a file or location.	Report Email.	strElectronicAddressText	Text
396	405	M	M	ELECTRONIC ADDRESS TYPE NAME	CHARACTER	10	The name that describes the type of electronic address reported. Valid values include: Email, Internet, Intranet, HTTP, FTP, Telnet, and WAIS.	Report Email.	strElectronicAddressTypeName	Text
406	430	M	M	SOURCE TYPE	CHARACTER	25	Source type = Point.	Code table - SOURCE_TYPES	strSourceType	Text
431	470	M	M	AFFILIATION TYPE	CHARACTER	40	The name that describes the capacity or function that an organization or individual serves for a facility or project. Report value = Report Certifier.	Code table - AFFILIATION_TYPE. Report Certifier for NEI is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.	strAffiliationType	Text
471	474	M	M	FORMAT VERSION	DECIMAL	4	Indicates the NEI Input Format version number of the dataset.		sngFormatVersion	Single
475	477	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

Landscape
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Point Source File
TR - TRANSMITTAL RECORD

The following information is for specific data elements in the TR record and is in addition to the specifications provided in the TR record data dictionary. This information will assist the NIF user in correctly implementing the noted fields. Elements are listed in the order they appear on the TR record.

A Transmittal record (TR) must be included with each source file, e.g., point, area and nonroad mobile, onroad mobile or biogenic file submitted. The information in the Transmittal record is used to describe the entire source file and its origin. One TR record must be included per unique county. This, along with ORGANIZATION NAME will help distinguish and track Local (county) agency submittals separately from the State agency submittals.

TRANSACTION TYPE = 00 for, Original if file is the original or first submittal of a source file type; otherwise = 05 for, Replacement if file is submittal of data corrections in response to scheduled NEI data review cycle. See Code table – TRANSACTION TYPE.

INVENTORY TYPE CODE = indicates whether the data set contains criteria data, toxics data, or both. See Code table - INVENTORY TYPES. Submit only one INVENTORY TYPE at a time. If your source type file contains *any* toxic pollutant data, INVENTORY TYPE = HAP (HAP Inventory) or CRITHAP (Combined Criteria and HAP Inventory).

CONTACT PERSON NAME = one person EFIG can contact, and who may help if there are questions as the data file is processed and iterations must be initiated with the submitting organization. The contact provided should be the Report Certifier as defined in AFFILIATION TYPE.

AFFILIATION TYPE = Report Certifier. This coded field is part of the EPA data standard Contact Information. One of the standard valid code values is relevant to NEI and NIF users – Report Certifier. NIF users must report Affiliation Type = Report Certifier to confirm that the CONTACT PERSON NAME reported is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.

FORMAT VERSION = version of the NIF that used to format and submit data files. It is mandatory that the format version be specified, as EFIG may be supporting two versions at any given time, which need to be processed differently.

TRIBAL CODE = TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE. NIF users must complete either the STATE AND COUNTY FIPS CODE or the TRIBAL CODE. Whichever is provided will be used by EPA for the NEI, as the key geocode field. If a NIF user reports both valid STATE AND COUNTY FIPS CODE *and* TRIBAL CODE, the data will be processed as a source on Tribal Land and designated in the NEI as a Tribal Emissions Source.

NEI Input Format - Point Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Site										
										If Using MSAccess
Position		Mandatory / Necessary						Table: tblPointSI		
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	SI	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county. Unique ID number used by a state/loca/tribal agency to identify a facility.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	The ID number assigned by the EPA Facility Registry System.		strStateFacilityIdentifier	Text
23	34			FACILITY REGISTRY IDENTIFIER	CHARACTER	12			strFacilityRegistryIdentifier	Text
35	36		M	FACILITY CATEGORY	CHARACTER	2	Indicates if HAP emitting facility is MAJOR or AREA.	Code table - FACILITY_CATEGORY	strFacilityCategory	Text
37	42			ORIS FACILITY CODE	CHARACTER	6	Unique identifier for electric generating units.	DOE code for electric generating units.	strORISFacilityCode	Text
43	46	N	N	SIC PRIMARY	CHARACTER	4	Standard Industrial Classification code system.	Code table - SIC	strSICPrimary	Text
47	52	M	M	NAICS PRIMARY	CHARACTER	6	North American Industry Classification code.	Code table - NAICS	strNAICSPPrimary	Text
53	132	M	M	FACILITY NAME	CHARACTER	80	The name of the facility.		strFacilityName	Text
133	172			SITE DESCRIPTION	CHARACTER	40	Comments/ description for this facility. Physical location of the front door / main entrance of the facility site.		strSiteDescription	Text
173	222	M	M	LOCATION ADDRESS	CHARACTER	50			strLocationAddress	Text
223	282	M	M	CITY	CHARACTER	60	The name of the city.		strCity	Text
283	284	M	M	STATE	CHARACTER	2	State abbreviation.		strState	Text
285	298	M	M	ZIPCODE	CHARACTER	14	The U.S. Postal Service zip code.		strZipCode	Text
299	338			COUNTRY	CHARACTER	40	The country name.		strCountry	Text
339	358			NTI SITE ID	CHARACTER	20	ID for the facility in the 1996 NTI.		strNTISiteID	Text
359	367			DUN & BRADSTREET NUMBER	CHARACTER	9	Dun & Bradstreet no. for the facility.		strDun&BradstreetNumber	Text
368	387			TRI ID	CHARACTER	20	Toxic Release Inventory (TRI) ID for facility.		strTRIID	Text
388	391			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
392	394	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Point Source File
SI - SITE RECORD

The following information is for specific data elements in the SI record and is in addition to the specifications provided in the SI record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Point Source portion of the NIF contains several data elements to uniquely identify a facility for criteria emissions, HAP emissions, and both criteria and HAP emissions. These identifiers should be reported to EPA consistently over time in order to facility emissions from year to year. The unique facility identifiers on the Site record include the following:

STATE FACILITY IDENTIFER = Unique ID number used by a state / local / tribal agency to identify a facility and a key field in the Site record.

FACILITY REGISTRY IDENTIFER = unique Federal ID assigned to a facility *by EPA* in the Facility Registry System (FRS) – see <http://www.epa.gov/enviro/html/facility.html>. Once assigned and published in the EPA’s National Emission Inventory for point sources, the organization submitting a NIF Site record should then report the FACILITY REGISTRY IDENTIFER.

NTI SITE ID = ID for the facility that was assigned in the EPA’s 1996 NTI (National Toxics Inventory). For HAP reporting only. Refer to the 1996 NTI to obtain this ID. Leave this field blank if the facility was not represented in the 1996 NTI.

TRI ID = the unique ID that is assigned to the plant in the EPA Toxic Release Inventory (TRI) data system. Provide if applicable, and for HAP reporting only.

Several data elements in the Site record serve as additional facility descriptors, including the following:

FACILITY CATEGORY = = 01 (MAJOR) or (02) AREA for sources that emit HAPs. This field indicates whether the facility is classified as a major source or an area source by the following Clean Air Act definitions:

MAJOR Sources are large stationary sources that have the potential to emit more than 10 tons per year of any listed HAP or 25 tons per year or more of a combination of listed HAPs;

AREA Sources are smaller stationary sources that have the potential to emit less than 10 tons per year of a single HAP or less than 25 tons per year of a combination of listed HAPs.

ORIS FACILITY CODE = unique identifier for electric generating units (primarily SIC = 4911). ORIS Code is assigned by the Dept. Of Energy, Energy Information Administration (EIA) and is reported by industry on DOE EIA Forms. See www.eia.doe.gov

SIC PRIMARY = Standard Industrial Classification System Code. SIC is now superceded by NAICS (see below). If reporting SIC in Site record, enter primary SIC for overall facility business operation. See www.census.gov/epcd/www/naics.html for valid NAICS values and correspondence tables NAICS to SIC... SIC to NAICS.

NAICS PRIMARY = North American Industry Classification System. Enter primary NAICS for overall facility operations. (A unit level NAICS may be reported on the Emission Unit record, e.g.,

more detailed NAICS). See www.census.gov/epcd/www/naics.html for valid NAICS values and correspondence tables NAICS to SIC... SIC to NAICS.

LOCATION ADDRESS = physical address only.

DUN & BRADSTREET NUMBER = number assigned to the facility in the Dun & Bradstreet Businesses Data Base.

The following field is included on all NIF records except the Transmittal record, and should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

NEI Input Format - Point Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Emission Unit										
										If Using MSAccess
										Table: tblPointEU
Position		Mandatory/Necessary								
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EU	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/loca/tribal agency to identify a facility.		strStateFacilityIdentifier	Text
23	28	M	* M *	EMISSION UNIT ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strEmissionUnitID	Text
29	33			ORIS BOILER ID	CHARACTER	5	EPA code for electric generating units.		strORISBoilerID	Text
34	37	N		SIC UNIT LEVEL	CHARACTER	4	Standard Industrial Classification code system.	Code table - SIC	strSICUnitLevel	Text
38	43	N		NAICS UNIT LEVEL	CHARACTER	6	North American Industry Classification code.	Code table - NAICS	strNAICSUnitLevel	Text
44	45					2			strBlankField	Text
46	55			DESIGN CAPACITY	DECIMAL	10	Numeric value of average operational capacity for an Emission Unit.	Report design capacity value if unit is a boiler or turbine.	sngDesignCapacity	Single
56	65			DESIGN CAPACITY UNIT NUMERATOR	CHARACTER	10	The unit of measure for the design capacity reported (ie., BTU, E6BTU, or HP).	If boiler, report numerator = BTU, E6BTU, or HP. If other than boiler, report appropriate numerator from Code table - UNITS.	strDesignCapacityUnitNumerator	Text
66	75			DESIGN CAPACITY UNIT DENOMINATOR	CHARACTER	10	The unit of measure for the design capacity reported (ie., HR).	If boiler, report denominator as HR. If numerator above = HP, denominator does not apply (leave blank). If other than boiler, report appropriate denominator from Code table - UNITS.	strDesignCapacityUnitDenominator	Text
76	85			MAX NAMEPLATE CAPACITY	DECIMAL	10	Electric Generator's rated design capacity at 100% (max) operation.	Report value in unit of measure MW.	sngMaxNameplateCapacity	Single
86	165			EMISSION UNIT DESCRIPTION	CHARACTER	80	Emission unit description		strEmissionUnitDescription	Text
166	169			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
170	172	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

* M * - EMISSION UNIT ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = UNIT, OR PROCESS.
(See NIF User Guide regarding EM record and EMISSION DATA LEVEL.)

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Point Source File
EU – EMISSION UNIT RECORD

The following information is for specific data elements in the EU record and is in addition to the specifications provided in the EU record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

Several data elements in the EU records are used to characterize and describe the unit reported which is producing emissions.

ORIS BOILER ID = unique identifier for electric generating units (EGUs), primarily of SIC = 4911. ORIS Code is reported by industry on DOE EIA Forms. See www.eia.doe.gov EPA assigns/ includes ORIS BOILER ID for EGUs in the NEI.

SIC UNIT LEVEL = Standard Industrial Classification System Code. SIC is now superceded by NAICS (see below). SIC may be reported on the Site record as primary SIC for overall facility business operation. SIC may also be reported on EU record as unit level SIC, e.g., more detailed SIC. See www.census.gov/epcd/www/naics.html for valid NAICS values and correspondence tables NAICS to SIC... SIC to NAICS.

NAICS UNIT LEVEL = North American Industry Classification System. Report the unit level NAICS, e.g., more detailed NAICS, than that reported on Site record as primary NAICS for overall facility operations. See www.census.gov/epcd/www/naics.html for valid NAICS values and correspondence tables NAICS to SIC... SIC to NAICS.

DESIGN CAPACITY = average operational capacity of an emission unit that is a boiler or turbine.

MAX NAMEPLATE CAPACITY = for electric generating unit (EGU) only, the rated design capacity at 100% (maximum) operation, reported in MW.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Point Sources											
Version 3.0 Released April 2003, Revised Nov 2003											
Record: Emission Process (EP)											
											If Using MSAccess
Position	Mandatory / Necessary							Table: tblPointEP			
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type	
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EP	strRecordType	Text	
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text	
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/local/tribal agency to identify a facility.		strStateFacilityIdentifier	Text	
23	28	M	*M*	EMISSION UNIT ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strEmissionUnitID	Text	
29	34	M	M	EMISSION RELEASE POINT ID	CHARACTER	6	State/ local/ tribal ID for point / location where emissions are released to ambient air.	Unique ID required - If no stack, then ID for fugitive release.	strEmissionReleasePointID	Text	
35	40	M	*M*	PROCESS ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strProcessID	Text	
41	50	M		SCC	CHARACTER	10	EPA Source Category Code for Point Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text	
51	56		N	PROCESS MACT CODE	CHARACTER	6	Maximum Achievable Control Technology for HAP regulated sources	Code table - MACT_CATEGORY_CODE	strProcessMACTCode	Text	
57	134			EMISSION PROCESS DESCRIPTION	CHARACTER	78	A text description of the Emission Process.		strEmissionProcessDescription	Text	
135	137	N		WINTER THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intWinterThroughputPCT	Integer	
138	140	N		SPRING THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intSpringThroughputPCT	Integer	
141	143	N		SUMMER THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intSummerThroughputPCT	Integer	
144	146	N		FALL THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intFallThroughputPCT	Integer	
147	147	N		ANNUAL AVG DAYS PER WEEK	NUMBER	1	Average number of days per week an emission process is active within year.		intAnnualAvgDaysPerWeek	Integer	
148	149	N		ANNUAL AVG WEEKS PER YEAR	NUMBER	2	Average number of weeks per year an emission process is active.		intAnnualAvgWeeksPerYear	Integer	
150	151	N		ANNUAL AVG HOURS PER DAY	NUMBER	2	Average number of hours per day an emission process is active within year.		intAnnualAvgHoursPerDay	Integer	
152	155	N		ANNUAL AVG HOURS PER YEAR	NUMBER	4	Average number of hours per year an emission process is active.		intAnnualAvgHoursPerYear	Integer	
156	163	N		HEAT CONTENT	DECIMAL	8	The heat content of a fuel in million BTU's per Ton of coal, 1000 Gals of oil, or million SCF gas.		sngHeatContent	Single	
164	168	N		SULFUR CONTENT	DECIMAL	5	The sulfur content of a fuel (mass percent).		sngSulfurContent	Single	
169	173	N		ASH CONTENT	DECIMAL	5	The ash content of a fuel (mass percent).		sngAshContent	Single	
174	179		N	PROCESS MACT COMPLIANCE STATUS	CHARACTER	6	Major/Area classification and status under CAAA Sections 112&129.	Code table - MACT COMPLIANCE STATUS	strProcessMACTComplianceStatus	Text	
180	183			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text	
184	186	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text	
* M * -											
EMISSION UNIT ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = UNIT or PROCESS.											
PROCESS ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = PROCESS.											
(See NIF User Guide regarding EM record and EMISSION DATA LEVEL.)											

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Point Source File
EP – EMISSION PROCESS RECORD

The following information is for specific data elements in the EP record and is in addition to the specifications provided in the EP record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

In addition to several unique process identifiers, the EP record contains some additional data fields that are used to further characterize the specific operational process that influences and produces the pollutant emissions. Additional fields specific to reporting HAP emissions, include PROCESS MACT CODE and PROCESS MACT COMPLIANCE STATUS.

PROCESS MACT CODE = 4-digit code assigned to all MACT categories and sub-categories. See Code table – MACT Code. More information on the MACT source categories and the MACT program may be located at www.epa.gov/ttn/uatw/eparules.html .

PROCESS MACT COMPLIANCE STATUS = See Code table – MACT Compliance Status and code value discussion below. The available code values allow data submitters to confirm the Major / Area classification, which also provides information on the controls that are in place due to Sections 112 & 129 of the Clean Air Act Amendments (CAAA). Codes are provided for the following:

Major Sources that are *listed* under Sections 112 & 129, for which:

Compliance date has **not** yet occurred; source is assumed major (>10/25 tons per year) and will be subject to standards under Sections 112 & 129, Code value = 01; or

Compliance date **has** occurred; source is classified major because emission levels are >10/25 tons per year as of initial compliance date, even if emission levels are <10/25 tpy at a later date, Code value = 02.

Area Sources (<10/25 tpy) that are *listed* under Sections 112 & 129, and:

Are subject to Section 112 or 129 standards as regulated area source category, Code value = 03; or
Are not subject to Section 112 or 129 standards as a synthetic minor source (regulated major source category and the source has reduced emissions below major source status before initial compliance date), Code value = 04; or

Are not subject to Section 112 or 129 standards as a true area or natural minor source, Code value = 05.

Several data fields on the EP record may be used to report the seasonal and daily operating parameters as an annual average for the process reported. These reported data will be used by EPA, or other NEI users, to disaggregate the reported annual activity and emissions to seasonal activity and emissions in order to compute emissions for an average day in a specific season. Also see at the end of this Section for Point Source File – *General Instructions, Reporting Emissions for Specific Time Periods*.

These data fields are:

WINTER THROUGHPUT PCT
SPRING THROUGHPUT PCT
SUMMER THROUGHPUT PCT
FALL THROUGHPUT PCT

ANNUAL AVG DAYS PER WEEK, ANNUAL AVG WEEKS PER YEAR; or
ANNUAL AVG HOURS PER DAY, ANNUAL AVG HOURS PER YEAR

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA’s National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Point Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Control Equipment										
										If Using MSAccess
Position		Mandatory/ Necessary						Table: tbIPointCE		
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	CE Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.		strStateCountyFIPs	Text
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/local/tribal agency to identify a facility.		strStateFacilityIdentifier	Text
23	28	M	* M *	EMISSION UNIT ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strEmissionUnitID	Text
29	34	M	* M *	PROCESS ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strProcessID	Text
35	43	M	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS	strPollutantCode	Text
44	54					11			strBlankField	Text
55	59	N	N	PRIMARY PCT CONTROL EFFICIENCY	DECIMAL	5	The percent effectiveness of primary control device.		sngPrimaryPCTControlEfficiency	Single
60	64	N	N	PCT CAPTURE EFFICIENCY	DECIMAL	5	Numeric value for percentage capture efficiency of control system.		sngPCTCaptureEfficiency	Single
65	69	N	N	TOTAL CAPTURE CONTROL EFFICIENCY	DECIMAL	5	Collective (aggregate) value for all controls.		sngTotalCaptureControlEfficiency	Single
70	73	M	M	PRIMARY DEVICE TYPE CODE	CHARACTER	4	The primary type of control equipment used.	Code table - CONTROL_DEVICE_TYPES	strPrimaryDeviceTypeCode	Text
74	77			SECONDARY DEVICE TYPE CODE	CHARACTER	4	Secondary control device type.	Code table - CONTROL_DEVICE_TYPES	strSecondaryDeviceTypeCode	Text
78	102					25			strBlankField2	Text
103	142			CONTROL SYSTEM DESCRIPTION	CHARACTER	40	Description of control equipment chain.		strControlSystemDescription	Text
143	146			THIRD CONTROL DEVICE TYPE CODE	CHARACTER	4	Third control device type.	Code table - CONTROL_DEVICE_TYPES	strThirdControlDeviceTypeCode	Text
147	150			FOURTH CONTROL DEVICE TYPE CODE	CHARACTER	4	Fourth control device type.	Code table - CONTROL_DEVICE_TYPES	strFourthControlDeviceTypeCode	Text
151	154			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
155	157	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text
* M * -										
EMISSION UNIT ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = UNIT or PROCESS .										
PROCESS ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = PROCESS.										
(See NIF User Guide regarding EM record and EMISSION DATA LEVEL.)										

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Point Source File

CE- CONTROL EQUIPMENT RECORD

The following information is for specific data elements in the CE record and is in addition to the specifications provided in the CE record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The information in the CE record information is reported by process, and by pollutant. The CE record must be included if control(s) are in place which influence the amount of pollutant emitted from the reported process. If a CE record is not reported, EPA assumes no controls are applied to the specific process reported.

Several data fields are available in the CE record to report and document the affect of controls on the process reported.

PRIMARY PCT CONTROL EFFICIENCY = percent control efficiency for the PRIMARY DEVICE TYPE reported.

PRIMARY DEVICE TYPE CODE = code description (see Code table – CONTROL DEVICE) for primary or first-in-line control device.

PCT CAPTURE EFFICIENCY = percent *capture* efficiency for the entire control system – for all devices reported. If unknown, or not reported, it is assumed percent capture efficiency is 100%.

TOTAL CAPTURE/ CONTROL EFFICIENCY = collective percent efficiency value for all controls device reported, including system percent capture efficiency if known. This field is only applicable when there are device types reported in addition to primary control device, and if reported should include capture efficiency if known.

If other control devices are in place, in addition to the primary, or first in line control device reported, those may be reported as codes values using the fields (see Code table – CONTROL DEVICE):

SECONDARY DEVICE TYPE CODE

THIRD CONTROL DEVICE TYPE CODE

FOURTH CONTROL DEVICE TYPE CODE

When One Control Device Serves Multiple Process Segments.....

If one control device serves multiple processes, create a Control Equipment record for every process that is controlled, e.g., duplicate the CE record for each unique process that shares the control device. In this scenario, the CE % reported on duplicate CE records should be the same unless the CE% varies by the pollutant being controlled.

Example: Emission Processes 1 and 2 are vented to the same control device, with PRIMARY PCT CONTROL EFFICIENCY 85%.

<u>Record No.</u>	<u>Record Type</u>	<u>Key Data</u>
1	Emission Process	Process ID = 1
2	Emission Process	Process ID = 2
3	Control Equipment	Process ID = 1 Primary Pct Control Efficiency = .85
4	Control Equipment	Process ID = 2 Primary Pct Control Efficiency = .85

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA’s National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Point Sources												
Version 3.0 Released April 2003, Revised Nov 2003												
Record: Emission Release Point												
											If Using MSAccess	
Position		Mandatory / Necessary									Table: tblPointer	
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type		
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	ER	strRecordType	Text		
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table-STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text		
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/loca/tribal agency to identify a facility.		strStateFacilityIdentifier	Text		
23	28					6			strBlankField	Text		
29	34	M	M	EMISSION RELEASE POINT ID	CHARACTER	6	State/ local/ tribal ID for point / location where emissions are released to ambient air.	Unique ID required - If no stack, then ID for fugitive release.	strEmissionReleasePointID	Text		
35	36	M	M	EMISSION RELEASE POINT TYPE	CHARACTER	2	The code for physical configuration of the release point.	Code table - EMIS_RELEASE_POINT_TYPES	strEmissionReleasePointType	Text		
37	46					10			strBlankField2	Text		
47	56	N	N	STACK HEIGHT	DECIMAL	10	The height (in feet) of a stack.	Report value as measured in feet.	sngStackHeight	Single		
57	66	N	N	STACK DIAMETER	DECIMAL	10	The diameter (in feet) of a stack.	Report value as measured in feet.	sngStackDiameter	Single		
67	74			STACK FENCELINE DISTANCE	DECIMAL	8	Numeric value for stack to fenceline distance (in feet).	Report value as measured in feet.	sngStackFencelineDistance	Single		
75	84	N	N	EXIT GAS TEMPERATURE	DECIMAL	10	The temperature of an exit gas stream (degree Fahrenheit).	Report value as measured in Fahrenheit.	sngExitGasTemperature	Single		
85	94	N	N	EXIT GAS VELOCITY	DECIMAL	10	The velocity of an exit gas stream (feet per second).	Report value as measured in feet/second.	sngExitGasVelocity	Single		
95	104	N	N	EXIT GAS FLOW RATE	DECIMAL	10	Numeric value of stack gas flow rate in actual cubic feet per second.	Report value as measured in cubic feet/second.	sngExitGasFlowRate	Single		
105	115	M	M	X COORDINATE	DECIMAL	11	Longitude measure in decimal degrees of the angular distance on a meridian east or west of the prime meridian. Negative (-) data point for N America. Include (-) sign, Ex. - 123.234561; or UTM Easting in kilometers.	If LATLON measure, report value in decimal degrees. If UTM, report value for UTM zone.	dbiXCoordinate	Double		
116	125	M	M	Y COORDINATE	DECIMAL	10	Northing in kilometers.	If LATLON measure, report value in decimal degrees. If UTM, report value for UTM zone.	dbiYCoordinate	Double		
126	127	M	M	UTM ZONE	NUMBER	2	Zone number in UTM coordinate system.	Required if XY COORDINATE TYPE = UTM.	intUTMZone	Integer		
128	135	M	M	XY COORDINATE TYPE	CHARACTER	8	Type of coordinate system used, eg., LATLON or UTM.	Code table - XY_COORD_TYPE	strXYCoordinateType	Text		
136	143			HORIZONTAL AREA FUGITIVE	NUMBER	8	Horizontal area of fugitive emissions.	Numeric value of horizontal dimension.	lngHorizontalAreaFugitive	Lng Intgr		
144	151			RELEASE HEIGHT FUGITIVE	NUMBER	8	Release height (above terrain) of fugitive emissions.	Numeric value of release height.	lngReleaseHeightFugitive	Lng Intgr		
152	161			FUGITIVE DIMENSIONS UNIT	CHARACTER	10	Unit of measure description. Horizontal area and release height dimensions are same.	Code table - UNITS.	strFugitiveDimensionsUnit	Text		
162	241			EMISSION RELEASE PT DESCRIPTION	CHARACTER	80			strEmissionsReleasePtDescription	Text		
242	245			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del;or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text		
246	248	M	M	HORIZONTAL COLLECTION METHOD CODE	CHARACTER	3	Method used to determine the lat and lon coordinates for a point on the earth.	Code table - HORIZONTAL_COLLECTION_METHOD	strHorizontalCollectionMethodCode	Text		
249	254	M	M	HORIZONTAL ACCURACY MEASURE	CHARACTER	6	The measure of accuracy (in meters) of the lat and lon coordinates.		strHorizontalAccuracyMeasure	Text		
255	257	M	M	HORIZONTAL REFERENCE DATUM CODE	CHARACTER	3	Code that represents the reference datum used to determine the lat / lon coordinates.	Code table - HORIZONTAL_REFERENCE_DATUM	strHorizontalReferenceDatumCode	Text		
258	260	M	M	REFERENCE POINT CODE	CHARACTER	3	The code that represents the place for which geographic coordinates were established. Code value should be 106 (e.g., Point where substance is released).	Code table - REFERENCE_POINT	strReferencePointCode	Text		
261	270			SOURCE MAP SCALE NUMBER	CHARACTER	10	The number that represents the proportional distance on the ground for one unit of measure on the map or photo.	Applicable only when a map has been used to determine lat / lon.	strSourceMapScaleNumber	Text		
271	273			COORDINATE DATA SOURCE CODE	CHARACTER	3	The code that represents the party responsible for providing the lat / lon coordinates.	Code table - COORDINATE_DATA_SOURCE	strCoordinateDataSourceCode	Text		
274	276	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text		

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Point Source File

ER- EMISSION RELEASE POINT RECORD

The following information is for specific data elements in the ER record and is in addition to the specifications provided in the ER record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Emission Release Point record is always required. At least one Emission Release Point record must be provided if a Site record is reported.

The Emission Release Point record is used to report the location and relevant physical attributes of the emission release point. Location coordinates must be reported to identify where emissions are released to the ambient air, via a stack or non-stack (e.g., fugitive release). If a non-stack, or fugitive release, coordinates may be reported for the general location of the emission release point.

In the ER record, location data may be reported as x and y coordinates from either of two coordinate systems - Latitude / Longitude (LATLON), or Universal TransMercator (UTM). X and Y coordinates reported as Latitude and Longitude must be reported in the decimal degree format specified. (If local x and y coordinate data format is DDDMMSS, it will need to be converted into the decimal degree format specified prior to reporting to EPA. X and Y coordinates reported as UTM Easting and UTM Northing, must be reported in kilometers.

In order to comply with the EPA data standard for Latitude/Longitude, any UTM data received in the NIF will be processed by EPA and converted to, and stored in NEI, as Latitude Measure and Longitude Measure in decimal degrees.

In adherence with the EPA Latitude/ Longitude data standard, the x and y coordinate data reported must also include measurement accuracy determination (MAD) information. Specific MAD data fields are noted as mandatory in the ER record in order to comply with the EPA data standard for inter-Agency system storage and sharing, and for public data distribution. If the data are not provided in the NIF ER record, the EFIG will attempt to complete the data using information in the EPA's Facility Registry System (FRS). For instance, if HORIZONTAL COLLECTION METHOD CODE (see below) is provided, two other MAD data values may be derived. Efforts should be prioritized on reporting the HORIZONTAL COLLECTION METHOD CODE.

The MAD data fields in the ER record, including tables of valid code values, are referenced directly from the EPA's Environmental Data Registry (EDR) located at [http://oaspub.epa.gov/edr/epastd\\$.startup](http://oaspub.epa.gov/edr/epastd$.startup) as part of the Latitude / Longitude data standard. As the NIF User Guide is updated periodically, updates to the relevant MAD code tables and values will be included along with any available guidance from the EPA Office of Environmental Information (OEI) regarding the implementation of specific MAD data elements.

The MAD data fields in the ER record are:

HORIZONTAL COLLECTION METHOD CODE = code description for the method used to determine lat and lon (or UTM) coordinates. See Code table - HORIZONTAL COLLECTION METHOD. If the HORIZONTAL COLLECTION METHOD CODE is provided, EPA can likely derive the HORIZONTAL ACCURACY MEASURE and HORIZONTAL REFERENCE DATUM CODE.

HORIZONTAL ACCURACY MEASURE = the measure of accuracy in meters of the lat and lon (or UTM) coordinates reported. HORIZONTAL ACCURACY MEASURE is associated with, and may be derived from the HORIZONTAL COLLECTION METHOD.

HORIZONTAL REFERENCE DATUM CODE = code description of the reference datum used to determine the lat /lon (or UTM) coordinates. Horizontal reference datum is associated with, and may be derived from the HORIZONTAL COLLECTION METHOD.

REFERENCE POINT CODE = code description of place where geographic coordinates were established. For the NEI and the NIF ER record, geographic coordinates should be reported for location where emissions are released. Therefore, Reference Point Code value should = 106 for, Point where a substance is released. See Code table – Reference Point Code.

SOURCE MAP SCALE NUMBER = the proportional distance on the ground for one unit of measure on the map or photo if a map was used to determine lat/lon.

COORDINATE DATA SOURCE CODE = code description of the entity responsible for providing the location coordinate data. See Code table – Coordinate Data Source Code.

In addition to the information noted above on the emission release point location coordinates, the ER record also includes physical attributes of the emission release point type, which should be reported when emission release type is a vertical stack.

EMISSION RELEASE POINT TYPE CODE = code description of physical configuration of the release point. See Code table – Emission Release Point Type.

When reporting Emission Release Point Type Code = 02, 03, 04, or 05 (all stack descriptions), then the ER record data elements for physical stack parameters do apply and should be reported. Those data elements are: STACK HEIGHT, STACK DIAMETER, STACK FENCELINE DISTANCE, EXIT GAS VELOCITY, EXIT GAS TEMPERATURE, and EXIT GAS FLOW RATE.

When reporting Emission Release Point Type Code = 01 (fugitive) or 06 (downward-facing vent), then the stack parameters (listed above) do not apply. The physical parameters of a non stack, or fugitive, release include the ER data elements: HORIZONTAL AREA FUGITIVE, RELEASE HEIGHT FUGITIVE, and FUGITIVE DIMENSIONS UNIT. These dimensional data are used in emission estimation models to predict ambient concentrations of fugitive emissions.

When reporting a single process that goes to multiple stacks -

A very typical scenario is that one emission process vents to one emission release point. In some instances, one emission process may vent to several emission release points. In that instance, the NIF convention of use is to create and report a 'dummy' PROCESS ID for each additional EMISSION RELEASE POINT ID. Split the PROCESS ID (and therefore emissions) and create the necessary number of (unique) PROCESS IDs to match the respective number of emission release points.

Example

NIF record
(Record ID)

SITE (SITE ID)	EMSSION UNIT (EU ID)	EMISSION PROCESS (PROCESS ID)	EMISSION RELEASE POINT (ERP ID)
01	B	1	1
01	C	1A	1
01	C	1B	2
01	C	2	2
01	C	3	2

Emission unit - Point 'C' has a Process segment (1) that goes to both stacks 1 and 2, so Process 1 is divided into PROCESS 1A and PROCESS 1B, creating two unique processes, one for each stack.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Point Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Emission Period (PE)										
If Using MSAccess										
Position		Mandatory/ Necessary								Table: tblPointPE
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	PE	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/loca/tribal agency to identify a facility.		strStateFacilityIdentifier	Text
23	28	M	* M *	EMISSION UNIT ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strEmissionUnitID	Text
29	34	M	* M *	PROCESS ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strProcessID	Text
35	42	M	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	Lng Integer
43	50	M	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	Lng Integer
51	52					2			strBlankField	Text
53	56			START TIME	NUMBER	4	Start time of the period.	Format: HHMM	intStartTime	Integer
57	60			END TIME	NUMBER	4	End time of the period.	Format: HHMM	intEndTime	Integer
61	70					10			strBlankField2	Text
71	80	N		ACTUAL THROUGHPUT	DECIMAL	10	Numeric value of process activity.	Report actual throughput for the emission period designated, e.g., Start Date, End Date.	sngActualThroughput	Single
81	90	N		THROUGHPUT UNIT NUMERATOR	CHARACTER	10	Throughput unit of measure.	Code table - UNITS	strThroughputUnitNumerator	Text
91	94	N		MATERIAL	NUMBER	4	Material code for material processed.	Code table - MATERIALS_PROCESSED	intMaterial	Integer
95	104	N		MATERIAL I/O	CHARACTER	10	A descriptor indicating whether material is used or produced.	Code table - MATERIALS IO	strMaterialIO	Text
105	105	N		PERIOD DAYS PER WEEK	NUMBER	1	Avg no. days/wk the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodDaysPerWeek	Integer
106	107	N		PERIOD WEEKS PER PERIOD	NUMBER	2	Avg no. wks/period the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodWeeksPerPeriod	Integer
108	109	N		PERIOD HOURS PER DAY	NUMBER	2	Avg no. hrs/day the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodHoursPerDay	Integer
110	113	N		PERIOD HOURS PER PERIOD	NUMBER	4	Avg no. hrs/period the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodHoursPerPeriod	Integer
114	117			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
118	120	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text
* M * -										
EMISSION UNIT ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = UNIT or PROCESS.										
PROCESS ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = PROCESS.										
(See NIF User Guide regarding EM record and EMISSION DATA LEVEL.)										

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Point Source File
PE– EMISSION PERIOD RECORD

The following information is for specific data elements in the PE record and is in addition to the specifications provided in the PE record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

An Emission Period record is always required in the NIF file, e.g., if an emission process exists, the emission period must be specified.

To designate on the PE record, the time period during which the reported emissions occur, report the **START DATE and END DATE**. The START DATE and END DATE fields are key fields on the PE record, and are associated with, and must be entered the same, as START DATE and END DATE on the Emission record.

Example.....

To report annual period emissions for year 2002:
START DATE = 20020131; END DATE = 20021231.

As the START DATE and END DATE of the PE record designates the emissions time period, the **ACTUAL THROUGHPUT** field on the PE record should be reported as the activity value of that same time period. In the above example for year 2002, Actual Throughput data reported on the PE record should also be the annual average total for the year 2002.

As annual average throughput is reported on the PE record, the seasonal activity percentages and average annual operating data must be reported in the Emission Process (EP) record in order to enable EPA, or other NEI users, to disaggregate the reported annual activity and emissions to seasonal activity and emissions and compute emissions for an average season day.

Also see at the end of this Section for Point Source File – *General Instructions, Reporting Emissions for Specific Time Periods*.

If reporting ACTUAL THROUGHPUT on the PE record, the following unit codes must also be reported: THROUGHPUT UNIT NUMERATOR, MATERIAL, and MATERIAL I/O. Appropriate valid code values must be reported from the respective NIF Code tables.

The values reported for the three throughput unit fields should match the values reported for the associated unit fields for emission Factor Numeric Value on the Emissions record. The EPA's FIRE database (Factor Information Retrieval data system) of emission factors also references valid values from the NIF Code tables – Unit Codes, Materials, and Material I/O.

Example.....

If FACTOR NUMERIC VALUE units = LB / TON Coal I (Input),
e.g., See Code table – Unit Codes:
FACTOR UNIT NUMERATOR = LB;
FACTOR UNIT DENOMINATOR = TON;
MATERIAL = Coal; and
MATERIAL I/O = I (for, Input)

Then..... ACTUAL THROUGHPUT units should be:
THROUGHPUT UNIT NUMERATOR = TON;
MATERIAL = Coal;
MATERIAL I/O = I

If activity and reported emissions are on a Per Capita or Per Employee basis, unit code values should be reported as follows:

i.e., process emission factor is in terms of lbs/ year/ employee (or person)
See Code table – Unit Codes:
FACTOR UNIT NUMERATOR = LB;
FACTOR UNIT DENOMINATOR = EACH-YR;
MATERIAL = Employee (or Person); and
MATERIAL I/O = E (existing).

ACTUAL THROUGHPUT units should be:
THROUGHPUT UNIT NUMERATOR = EACH-YR;
MATERIAL = Employee (or Person); and
MATERIAL I/O = E (existing).

In Emission Period record, operating schedule parameters may be reported for a facility as / if they differ from the *annual average operating schedule parameters* reported for the facility on the *Emission Process (EP) record*. For example, a facility normally operates 7 days per week and 24 hours per day, but during the summer months (e.g., June through August) only operates 5 days per week and 16 hours per day. The value of 7 days per week and 24 hours per day should be reported in *Annual Average Days per Week and Annual Average Hours per Day fields on the EP record*. The seasonal operating schedule of 5 days per week and 16 hours per day should be reported in the ***Period Days per Week and Period Hours per Day fields on the PE Record***, and should also designate the Start Date and End Date for the seasonal period.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

NEI Input Format - Point Sources

Version 3.0 Released April 2003, Revised Nov 2003

Record: Emission

Table Name: tblPointEM

Position		Mandatory/ Necessary						Table Name: tblPointEM		
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER		2 A code that identifies the type of Record	EM	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPs	Text
8	22	M	M	STATE FACILITY IDENTIFIER	CHARACTER	15	Unique ID number used by a state/local/tribal agency to identify a facility.		strStateFacilityIdentifier	Text
23	28	M	* M *	EMISSION UNIT ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strEmissionUnitID	Text
29	34	M	* M *	PROCESS ID	CHARACTER	6	Unique ID reported consistently over time by state/ local/ tribal agency.		strProcessID	Text
35	43	M	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS	strPollutantCode	Text
44	50					7			strBlankField	Text
51	56		M	EMISSION RELEASE POINT ID	CHARACTER	6	State/ local/ tribal ID for point / location where emissions are released to ambient air.	Unique ID required - If no stack, then ID for fugitive release.	strEmissionReleasePointID	Text
57	64	M	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	Lng Intgr
65	72	M	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	Lng Intgr
73	76			START TIME	NUMBER	4	Start time of the period.	Format: HHMM	intStartTime	Integer
77	80			END TIME	NUMBER	4	End time of the period.	Format: HHMM	intEndTime	Integer
81	90					10			strBlankField2	Text
91	100	M	M	EMISSION NUMERIC VALUE	DECIMAL	10	Numeric value of emission.	Unit for criteria emissions: annual = TON; average season day = LBS.	dblEmissionNumericValue	Double
101	110	M	M	EMISSION UNIT NUMERATOR	CHARACTER	10	Unit of measure for reported emissions value. If criteria emissions, report unit: annual = TON; average season day = LBS.	Code table - UNITS	strEmissionUnitNumerator	Text
111	112	M	M	EMISSION TYPE	CHARACTER	2	Code describing temporal designation of emissions reported, i.e., Entire Period, Average Weekday, etc.	Code table - EMISSION_TYPES. See User's Guide instruction on how to designate time period & emission type for annual or average season day emissions.	strEmissionType	Text
113	117			EM RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for SCC level emissions.	Percent value with 2 decimal places	sngEMReliabilityIndicator	Single
118	127	N		FACTOR NUMERIC VALUE	DECIMAL	10	The numeric value of the emission factor.		sngFactorNumericValue	Single
128	137	N		FACTOR UNIT NUMERATOR	CHARACTER	10	Unit of measure for emission factor numerator.	Code table - UNITS	strFactorUnitNumerator	Text
138	147	N		FACTOR UNIT DENOMINATOR	CHARACTER	10	Unit of measure for emission factor denominator.	Code table - UNITS	strFactorUnitDenominator	Text
148	151	N		MATERIAL	NUMBER	4	Material code for material processed.	Code table - MATERIALS_PROCESSED	intMaterial	Integer
152	161	N		MATERIAL I/O	CHARACTER	10	A descriptor indicating whether material is used or produced.	Code table - MATERIAL IO	strMaterialIO	Text
162	166					5			strBlankField3	Text
167	168			EMISSION CALCULATION METHOD CODE	CHARACTER	2	Code description of the method used to derive emissions.	Code table - EMISSION_CALC_METHOD	strEmissionCalculationMethodCode	Text
169	173			EF RELIABILITY INDICATOR	CHARACTER	5	A reliability indicator code for emission factor rating.	Code table - RELIABILITY_INDICATORS	strEFReliabilityIndicator	Text
174	178	N		RULE EFFECTIVENESS	DECIMAL	5	Measure of the percent effectiveness of the control strategy.		sngRuleEffectiveness	Single
179	180			RULE EFFECTIVENESS METHOD	CHARACTER	2	The code identifying the rule effectiveness method.	Code table - RULE_EFFECT_METHODS	strRuleEffectivenessMethod	Text
181	183					3			strBlankField4	Text
184	185		M	HAP EMISSIONS PERFORMANCE LEVEL	CHARACTER	2	Code that represents the performance level, or operating scenario, for the HAP emissions reported.	Valid values = Actual, Allowable, Maximum, Potential	strHAPemissionsPerformanceLevel	Text
186	197		M	CONTROL STATUS	CHARACTER	12	Indicates if reported emissions are controlled or uncontrolled.	Valid values = CONTROLLED, UNCONTROLLED	strControlStatus	Text
198	207		M	EMISSION DATA LEVEL	CHARACTER	10	The level of site emissions disaggregation reported on the emission record.	Valid values = SITE, UNIT, STACK, or PROCESS	strEmissionDataLevel	Text
208	211			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
212	214	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

* M *

EMISSION UNIT ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = UNIT or PROCESS.

PROCESS ID for toxic pollutant submission is Mandatory if EMISSION DATA LEVEL = PROCESS.

(See NIF User Guide regarding EM record and EMISSION DATA LEVEL.)

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Point Source File
EM– EMISSION RECORD

The following information is for specific data elements in the EM record and is in addition to the specifications provided in the EM record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Emission record specifies process-level data for criteria emissions and possibly a more aggregate data level if reporting HAP emissions, by emission release point, by pollutant, by emission time period, and by emission type. The EM record capitalizes on the specific implementation instructions provided for all previous records in the point source file.

As noted for the Emission Period record, the **START DATE** and **END DATE** fields in the EM record must be reported as the same emission time period as is designated for the process in the related Emission Period record. The **START DATE** and **END DATE** fields in the EM record are key fields as is the field **EMISSION TYPE**. These fields report the time period in which the reported emissions occur and the temporal resolution of the emissions within that period.

EMISSION TYPE = code description of the temporal designation of the emissions reported.
See Code table – Emission Type.

Example.....

EMISSION TYPE =

27, for average weekday emissions within the time period designated; or

29, for average day emissions within the time period designated; or

30, for the emissions within total period designated.

Also see at the end of this Section for Point Source File – *General Instructions, Reporting Emissions for Specific Time Periods.*

EMISSIONS NUMERIC VALUE = the numeric estimate of the emissions released to the ambient air. The field Emission Numeric Value is a decimal type with length of 10 bytes. The following guidance emphasizes appropriate choice for unit of measure and will enable successful use of the 10-byte field length when reporting criteria or HAP emissions:

For criteria pollutant emissions –

Report annual emissions in unit of measure = TON, and report average day emissions in unit = LB.

Values should include no more than two decimal places to the right.

For the HAP pollutant data –

Report the annual emissions data using a unit of measure, See Code table – Unit Codes, which fits the value within the 10-digit field length and allows the precision that is considered adequate. HAP data is typically reported in very small amounts. A good example is for dioxin and furans, which may be reported as G, for grams; or less, in order to fit within the 10-digit field for emission numeric value.

The following two fields in the EM record may be used to report a qualitative indicator of uncertainty for the emission value and for the emission factor used in the emission estimation. The qualitative indicator for the reported emissions value is numeric score resulting from the Data Attribute Ranking System process known as DARS. The qualitative indicator for the reported emission factor is a rank that represents how well the factor is thought to represent the emission process.

EM RELIABILITY INDICATOR = DARS composite numeric score for the process level, e.g., SCC, emissions. The score should be reported as a number value with 2 decimal places, ex. 1.0; 0.75.

EF RELIABILITY INDICATOR = code description of emission factor rating.
See Code table - RELIABILITY _INDICATORS.

Report of the **FACTOR NUMERIC VALUE** must also include the unit of measure fields - FACTOR UNIT NUMERATOR; FACTOR UNIT DENOMINATOR; MATERIAL; and MATERIAL I/O. Refer to the Emission Period record for a discussion of the unit of measure fields and the association with unit fields provided for ACTUAL THROUGHPUT on the Emission Period record.

RULE EFFECTIVENESS = measure of the percent effectiveness of the control strategy. If RE has been applied to the EMISSIONS NUMERIC VALUE, report the RE percent and the RE EFFECTIVENESS METHOD used to determine the rule effectiveness value. Reporting an RE value in the Emission record, indicates that RE has been applied to the reported emissions.

CONTROL STATUS = indicates if the reported HAP emissions are CONTROLLED or UNCONTROLLED. Report valid values = CONTROLLED, or UNCONTROLLED. This indicator is required *for HAP data reporting only*, due to the conditional mandatory nature of some of the records, including the Control Equipment record.

EMISSION DATA LEVEL = the level at which HAP point emissions are reported, e.g., *only applies to HAP data reporting*. Valid values = SITE, UNIT, STACK, or PROCESS. See User Guide Section - *Using NIF to Report HAP Data*.
The field EMISSION DATA LEVEL *does not apply to criteria emissions*.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

Point Source File GENERAL INSTRUCTIONS

Using NIF to Report Point Source HAP Data

The NEI Input Format supports transfer of both criteria and HAP data to the EPA National Emission Inventory. For each record in a source file, there is a notation by each data element to indicate if the element is mandatory for criteria and/ or HAP data reporting. Due to the nature of point source HAP data collection at this time, some of the key fields in the point source records, while mandatory for reporting criteria data, may not be mandatory for reporting HAP data.

For the National Emission Inventory, *process-level* data for point sources is required for criteria emissions data, but not for the HAP data at this time. While HAP data is also preferred at the process-level, if process-level information is not available, the NIF user may report HAP data at the site, or unit, or emission release point level, and EFIG will process it for incorporation into the NEI. The following describes the NIF Point Source record type(s) that must be included in the point source file of HAP emissions depending on the EMISSIONS DATA LEVEL field value reported on the Emission record. *This convention is for HAP data reporting only.* All these records are Mandatory for reporting the criteria data.

If..... **HAP** data reported as

EMISSION DATA LEVEL =

SITE

UNIT

STACK

PROCESS

Mandatory Records are.....

Site, Emission Release Point, Emission Period, Emission

Site, Emission Unit, Emission Release Point, Emission
Period, Emission

Site, Emission Release Point, Emission Period, Emission

Site, Emission Unit, Emission Release Point, Emission
Process, Emission Period, Emission

In order to support the collection of toxic pollutant data, the NIF also includes data elements for reporting MACT information. Maximum Achievable Control Technology standards and emission limits are developed by EPA, as mandated by Section 112(d) of the Clean Air Act (National Emission Standards for Hazardous Air Pollutants). More information on the MACT source categories and the MACT program may be located at www.epa.gov/ttn/uatw/eparules.html.

MACT codes are 4-digit codes assigned to all MACT categories and sub-categories. See Code table – MACT Codes. The MACT code should be reported for all relevant facilities at the process level within a MACT category. If you do not report MACT codes, EFIG will make default assignments.

In addition to PROCESS MACT CODE, other relevant fields are PROCESS MACT COMPLIANCE STATUS, HAP EMISSIONS PERFORMANCE LEVEL, and CONTROL STATUS. The implementation of these fields is explained in the Point Source Section of this Guide pertaining to Emission Process record and Emission record.

Another unique reporting issue for the toxic pollutant data is that the emissions are typically characterized in very small mass amounts. Emissions are reported in the field - EMISSION NUMERIC VALUE - of the Emissions record. This field is a decimal data type with fixed length of 10 bytes.

Exponential notation is not allowed. For reporting HAP data then, the NIF user must determine if a unit conversion is required to ‘fit’ data in the emissions numeric field data using valid NIF units. It is expected that the reported HAP data may be fit to the field using one of the NIF valid units of measure such as LB (pounds), G (grams), KG (kilograms) - see NIF code table - UNITS.

Reporting Emissions in NIF for Specific Time Periods

As described in the NIF record descriptions for Emission Process, Emission Period, and Emission – the NIF provides a lot of flexibility for reporting data for certain time periods. A consequence of that flexibility is that EPA has had to expend more resources than intended to interpret the intent of what is reported. In order to increase the efficiency of processing data for the NEI, the following describes how state, local, and tribal agencies should code specific NIF records when submitting data to EPA for annual emissions, average season day emissions, or season total emissions.

The first priority for the NEI is annual emissions. The preference in reporting annual emissions to EPA is to include an annual emission record and the four seasonal throughput percentages. The seasonal throughputs may be used by EPA or other NEI users to develop seasonal emission data. Providing the seasonal throughput percentages with process schedule data and the total annual emissions is a good way to provide air quality modelers with information needed to determine average day emissions for a specific season of interest.

Annual and Average Season Day Emissions

To designate emissions to represent an annual time period and provide the data necessary for EPA and NEI users to calculate average *work weekday* emissions for a specific season, complete the NIF in the following manner as indicated by the example below. This method allows the NIF user to report both the annual and average season emissions associated with one emission (EM) record.

Preferred NIF Reporting Method

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Process	WINTER THROUGHPUT PCT	Whole number between 0 and 100
	SPRING THROUGHPUT PCT	Whole number between 0 and 100
	SUMMER THROUGHPUT PCT	Whole number between 0 and 100
	FALL THROUGHPUT PCT	Whole number between 0 and 100
	ANNUAL AVG DAYS PER WEEK	Whole number between 1 and 7
	ANNUAL AVG WEEKS PER YEAR	Whole number between 1 and 52
Emission Period	START DATE	YYYY0101 (YYYY = calendar year)
	END DATE	YYYY1231
	ACTUAL THROUGHPUT	Total activity for the year specified
Emission	START DATE	YYYY0101
	END DATE	YYYY1231
	EMISSION TYPE	= 30, for entire period*
	EMISSION NUMERIC VALUE	Total emissions for annual time period specified

* Providing the average day emission rate (Emission Type = 29) for the annual period Jan – Dec, is not the correct method for reporting annual emissions.

Optional NIF Reporting Method

Optionally, to designate average summer *work weekday* emissions, complete the NIF in the following manner:

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Period	START DATE	YYYY0601 (YYYY = calendar year)
	END DATE	YYYY0831
	ACTUAL THROUGHPUT	Total activity value for the summer period
	PERIOD DAYS PER WEEK	Whole number between 1 and 7
	PERIOD WEEKS PER PERIOD	Whole number between 1 and 13
Emission	START DATE	YYYY0601
	END DATE	YYYY0831
	EMISSION TYPE	= 27, for average weekday, <i>e.g., Monday -Friday</i>
	EMISSION NUMERIC VALUE	Emissions for an average work weekday in the summer period

Season Total Emissions

Some state and local agencies that are in the NOx SIP Call Region may use the NIF to report season total emissions, i.e., NOx SIP Call ozone season emissions between May 1 and September 30. In that case, the NIF may be completed in the following manner as indicated in the example below to represent emissions in that specific time period:

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Period	START DATE	YYYY0501 (YYYY = calendar year)
	END DATE	YYYY0930
	ACTUAL THROUGHPUT	Total activity value for May - Sept
	PERIOD DAYS PER WEEK	Whole number between 1 and 7
	PERIOD WEEKS PER PERIOD	Whole number between 1 and 22
Emission	START DATE	YYYY0531
	END DATE	YYYY0930
	EMISSION TYPE	= 30, for entire period
	EMISSION NUMERIC VALUE	Total season emissions for May - Sept

Responding to NEI Data Review - Submitting Data Corrections in NIF

The Emission Factors and Inventory Group (EFIG) of EPA periodically updates the National Emission Inventory (NEI) by using many data sources, including data from the state, local, and tribal air agencies. The development of NEI may include a scheduled data review period for state, local, and tribal agencies. The NEI criteria and HAP inventories are distributed by EFIG in the NIF for local agency review and comment and agencies are invited to submit data revisions to the EFIG for incorporation into the NEI. Data changes must be provided in the NIF and by record.

As with any NIF submittal, the Transmittal (TR) record must be included in the file. The following indicates how to implement specific fields of the TR record when submitting a NIF file of data corrections:

TRANSACTION TYPE = 05 (Replace) when submitting a data correction to the NEI.
See Code table - TRANSACTION TYPES.

INCREMENTAL SUBMISSION NUMBER = the unique report number that designates each submission made within a data correction scenario. The initial number is 1 and is incremented by 1 if more than one data correction / replacement file is submitted for a source file during the NEI review period.

Data corrections must be provided by submitting whole, not partial, NIF records. If the data correction is a revision of one or two data element values in a record of the draft review version of NEI, the NIF replacement file must include the draft NEI record with the SUBMITTAL FLAG field coded to instruct EFIG how to process the intended correction.

If the data correction is intended to add a record that does not appear in the draft review version of NEI, or delete a record of the draft NEI without adding anything in its place, the SUBMITTAL FLAG field must be coded appropriately to instruct EFIG how to process the intended correction.

The following describes which code values to report in the data field SUBMITTAL FLAG.

SUBMITTAL FLAG =

A for Add, to indicate that the record does not appear in the draft NEI public review version and that EPA should add it to complete the emissions information. A request to add a record (SUBMITTAL FLAG = A) that has subordinate related records, must include those specific records in the Add request.

D for Delete, to indicate that the record does appear in the draft NEI public review version, but should not, and that EPA should delete it, without replacement. Be aware that a request to delete a specific record (e.g., SUBMITTAL FLAG = D), also means that EPA will delete, if present in the NEI, any related subordinate records.

To replace specific data element values that exist in the draft NEI, a whole record must be submitted containing the existing values and the revised value(s). There must always be two records provided in that case - one indicating SUBMITTAL FLAG = RD, for Revise/Delete, and a corresponding record type with SUBMITTAL FLAG = RA, for Revise/Add. The RD / RA pairs must have the same key field values.

RD for Revise/Delete, to indicate a record which exists in the draft NEI public review version and that some portion of it is being revised by including respective record with code = RA.

RA for Revise/ Add, to indicate the revised record of data that supercedes (replaces) that in RD record noted above.

4.2 Area and Nonroad Mobile Source File

The NIFV3.0 Area and Nonroad Mobile Source file contains the following (5) records with the noted key fields:

<u>Record</u>	<u>(Mandatory*) Key Fields</u>
TR - Transmittal	STATE AND COUNTY FIPS CODE TRIBAL CODE
EP - Emission Process	STATE AND COUNTY FIPS CODE SCC TRIBAL CODE
PE - Emission Period	STATE AND COUNTY FIPS CODE SCC START DATE END DATE TRIBAL CODE
CE - Control Equipment	STATE AND COUNTY FIPS CODE SCC POLLUTANT CODE TRIBAL CODE
EM - Emission	STATE AND COUNTY FIPS CODE SCC POLLUTANT CODE START DATE END DATE EMISSION TYPE TRIBAL CODE

* Reporting these key fields are mandatory when submitting non-point criteria and HAP data to the NEI. TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE.

NEI Input Format - Area and Non Road Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Transmittal										
										If Using MSAccess
Position										Table: tblAreaTR
Mandatory / Necessary										
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	TR	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPs	Text
8	87	M	M	ORGANIZATION NAME	CHARACTER	80	The name of the organization that is affiliated with a facility or project (i.e., this data submittal).		strOrganizationName	Text
88	89	M	M	TRANSACTION TYPE	CHARACTER	2	Original or Correction (replacement) data set.	Code table - TRANSACTION_TYPES	strTransactionType	Text
90	93	M	M	INVENTORY YEAR	NUMBER	4	Year of inventory data in dataset.	A four digit year, ie. 1998	intInventoryYear	Integer
94	103	M	M	INVENTORY TYPE CODE	CHARACTER	10	Indicates that the data set contains criteria data, toxics data, or both.	Code table - INVENTORY_TYPES	strInventoryTypeCode	Text
104	111	M	M	TRANSACTION CREATION DATE	NUMBER	8	Creation date of transmittal data.	Format: YYYYMMDD	lngTransactionCreationDate	Lng Intgr
112	115	M	M	INCREMENTAL SUBMISSION NUMBER	NUMBER	4	A unique report number that differentiates this submission from others.	The initial number is 1 and it is incremented by 1 for every submission per transaction type.	intIncrementalSubmissionNumber	Integer
116	120			RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for overall inventory.	Report percent value with 2 decimal places.	sngReliabilityIndicator	Single
121	200			TRANSACTION COMMENTS	CHARACTER	80	General comments regarding transmittal.		strTransactionComments	Text
201	270	M	M	CONTACT PERSON NAME	CHARACTER	70	The complete name of the contact person, including first name, middle name or initial, and surname. Lead contact for organization transmitting dataset.	EPA's single point of contact for questions that may arise concerning how the data in the file was developed. See also Affiliation Type.	strContactPersonName	Text
271	285	M	M	CONTACT PHONE NUMBER	CHARACTER	15	The phone number for the contact name.		strContactPhoneNumber	Text
286	295	M	M	TELEPHONE NUMBER TYPE NAME	CHARACTER	10	The name that describes telephone number type, e.g., the CONTACT PHONE NUMBER. Valid values include: Office, Fax, Mobile, Pager, Home.	Report a voice communication number available during normal work hours, i.e., Office.	strTelephoneNumberTypeName	Text
296	395	M	M	ELECTRONIC ADDRESS TEXT	CHARACTER	100	A resource address usually consisting of the access protocol, the domain name, and optionally, the path to a file or location.	Report Email.	strElectronicAddressText	Text
396	405	M	M	ELECTRONIC ADDRESS TYPE NAME	CHARACTER	10	The name that describes the type of electronic address reported. Valid values include: Email, Internet, Intranet, HTTP, FTP, Telnet, and WAIS.	Report Email.	strElectronicAddressTypeName	Text
406	430	M	M	SOURCE TYPE	CHARACTER	25	Source type = Area or Nonroad Mobile.	Code table - SOURCE_TYPES	strSourceType	Text
431	470	M	M	AFFILIATION TYPE	CHARACTER	40	The name that describes the capacity or function that an organization or individual serves for a facility or project. Report value = Report Certifier.	Code table - AFFILIATION_TYPE. Report Certifier for NEI is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.	strAffiliationType	Text
471	474	M	M	FORMAT VERSION	DECIMAL	4	Indicates the NEI Input Format version number of the dataset.		sngFormatVersion	Single
475	477	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Area and Nonroad Mobile Source File
TR - TRANSMITTAL RECORD

The following information is for specific data elements in the TR record and is in addition to the specifications provided in the TR record data dictionary. This information will assist the NIF user in correctly implementing the noted fields. Elements are listed in the order they appear on the TR record.

A Transmittal record (TR) must be included with each source file, e.g., point, area and nonroad mobile, onroad mobile or biogenic file submitted. The information in the Transmittal record is used to describe the entire source file and its origin. One TR record must be included per unique county. This, along with ORGANIZATION NAME will help distinguish and track Local (county) agency submittals separately from the State agency submittals.

TRANSACTION TYPE = 00 (Original) if file is the original or first submittal of a source file type; otherwise = 05 (Replacement) if file is submittal of data corrections in response to scheduled NEI data review cycle. See Code table – TRANSACTION TYPE.

INVENTORY TYPE CODE = indicates whether the data set contains criteria data, toxics data, or both. See Code table - INVENTORY TYPES. Submit only one INVENTORY TYPE at a time. If your source type file contains *any* toxic pollutant data, INVENTORY TYPE = HAP (HAP Inventory) or CRITHAP (Combined Criteria and HAP Inventory).

CONTACT PERSON NAME = one person EFIG can contact, and who may help if there are questions as the data file is processed and iterations must be initiated with the submitting organization. The contact provided should be the Report Certifier as defined in AFFILIATION TYPE.

AFFILIATION TYPE = Report Certifier. This coded field is part of the EPA data standard Contact Information. One of the standard valid code values is relevant to NEI and NIF users – Report Certifier. NIF users must report Affiliation Type = Report Certifier to confirm that the CONTACT PERSON NAME reported is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.

FORMAT VERSION = version of the NIF that used to format and submit data files. It is mandatory that the format version be specified, as EFIG may be supporting two versions at any given time, which need to be processed differently.

TRIBAL CODE = TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE. NIF users must complete either the STATE AND COUNTY FIPS CODE or the TRIBAL CODE. Whichever is provided will be used as the key geocode field. If a NIF user reports both valid STATE AND COUNTY FIPS CODE *and* TRIBAL CODE, the data will be processed as a source on Tribal Land and designated in the NEI as a Tribal Emissions Source.

NEI Input Format - Area and Non Road Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Emission Process								If Using MSAccess		
Position		Mandatory / Necessary						Table: tblAreaEP		
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EP	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPs	Text
8	17	M	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text
18	23		N	PROCESS MACT CODE	CHARACTER	6	Maximum Achievable Control Technology for HAP regulated sources.	Code table - MACT_CATEGORY_CODE	strProcessMACTCode	Text
24	101			EMISSION PROCESS DESCRIPTION	CHARACTER	78	A text description of the Emission Process.		strEmissionProcessDescription	Text
102	105			SIC	CHARACTER	4	Standard Industrial Classification code system.	Code table - SIC	strSIC	Text
106	111			NAICS	CHARACTER	6	North American Industry Classification code.	Code table - NAICS	strNAICS	Text
112	114	N		WINTER THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intWinterThroughputPCT	Integer
115	117	N		SPRING THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intSpringThroughputPCT	Integer
118	120	N		SUMMER THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intSummerThroughputPCT	Integer
121	123	N		FALL THROUGHPUT PCT	NUMBER	3	The percentage a process operates during the spring months. Whole number between 0 to 100.		intFallThroughputPCT	Integer
124	124	N		ANNUAL AVG DAYS PER WEEK	NUMBER	1	Average number of days per week an emission process is active within year.		intAnnualAvgDaysPerWeek	Integer
125	126	N		ANNUAL AVG WEEKS PER YEAR	NUMBER	2	Average number of weeks per year an emission process is active.		intAnnualAvgWeeksPerYear	Integer
127	128	N		ANNUAL AVG HOURS PER DAY	NUMBER	2	Average number of hours per day an emission process is active within year.		intAnnualAvgHoursPerDay	Integer
129	132	N		ANNUAL AVG HOURS PER YEAR	NUMBER	4	Average number of hours per year an emission process is active.		intAnnualAvgHoursPerYear	Integer
133	140			HEAT CONTENT	DECIMAL	8	The heat content of a fuel in million BTU's per Ton of coal, 1000 Gals of oil, or million SCF gas.		sngHeatContent	Single
141	145			SULFUR CONTENT	DECIMAL	5	The sulfur content of a fuel (mass percent).		sngSulfurContent	Single
146	150			ASH CONTENT	DECIMAL	5	The ash content of a fuel (mass percent).		sngAshContent	Single
151	156		N	PROCESS MACT COMPLIANCE STATUS	CHARACTER	6	Major/Area classification and status under CAAA Sections 112&129.	Code table - MACT COMPLIANCE STATUS	strProcessMACTComplianceStatus	Text
157	160			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
161	163	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Area and Nonroad Mobile Source File

EP – EMISSION PROCESS RECORD

The following information is for specific data elements in the EP record and is in addition to the specifications provided in the EP record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

In addition to several unique process identifiers, the EP record contains some additional data fields that are used to further characterize the specific operational process that influences and produces the pollutant emissions. Additional fields specific to reporting HAP emissions, include PROCESS MACT CODE and PROCESS MACT COMPLIANCE STATUS.

PROCESS MACT CODE = 4-digit code assigned to all MACT categories and sub-categories. See Code table – MACT Code. More information on the MACT source categories and the MACT program may be located at www.epa.gov/ttn/uatw/eparules.html .

PROCESS MACT COMPLIANCE STATUS = See Code table – MACT Compliance Status and code value discussion below. The available code values allow data submitters to confirm the Major / Area classification, which also provides information on the controls that are in place due to Sections 112 & 129 of the Clean Air Act Amendments (CAAA). Codes are provided for the following:

Major Sources that are *listed* under Sections 112 & 129, for which:

Compliance date has **not** yet occurred; source is assumed major (>10/25 tons per year) and will be subject to standards under Sections 112 & 129, Code value = 01; or

Compliance date **has** occurred; source is classified major because emission levels are >10/25 tons per year as of initial compliance date, even if emission levels are <10/25 tpy at a later date, Code value = 02.

Area Sources (<10/25 tpy) that are *listed* under Sections 112 & 129, and:

Are subject to Section 112 or 129 standards as regulated area source category, Code value = 03; or

Are not subject to Section 112 or 129 standards as a synthetic minor source (regulated major source category and the source has reduced emissions below major source status before initial compliance date), Code value = 04; or

Are not subject to Section 112 or 129 standards as a true area or natural minor source, Code value = 05.

Several data fields on the EP record may be used to report the seasonal and daily operating parameters for the process reported. These reported data may be used by EPA, or other NEI users, to disaggregate the reported annual activity and emissions to seasonal activity and emissions in order to compute emissions for an average day in a specific season. Also see at the end of this Section for *General Instructions, Reporting Emissions for Specific Time Periods*.

These data fields are:

WINTER THROUGHPUT PCT

SPRING THROUGHPUT PCT

SUMMER THROUGHPUT PCT

FALL THROUGHPUT PCT

ANNUAL AVG DAYS PER WEEK, ANNUAL AVG WEEKS PER YEAR; or

ANNUAL AVG HOURS PER DAY, ANNUAL AVG HOURS PER YEAR

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Area and Non Road Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Emission Period										
If Using MSAccess										
Table: tblAreaPE										
Position	Mandatory / Necessary						Use Convention Notes	Field Name	Field Type	
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	See User's Guide for more information		
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	PE	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	17	M	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text
18	25	M	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	Lng Integer
26	33	M	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	Lng Integer
34	35					2			strBlankField	Text
36	39			START TIME	NUMBER	4	Start time of the activity.	Format: HHMM	intStartTime	Integer
40	43			END TIME	NUMBER	4	End time of the activity.	Format: HHMM	intEndTime	Integer
44	53	N		ACTUAL THROUGHPUT	DECIMAL	10	Numeric value of process activity.	Report actual throughput for the emission period designated, e.g., Start Date, End Date.	sngActualThroughput	Single
54	63	N		THROUGHPUT UNIT NUMERATOR	CHARACTER	10	Throughput unit of measure.	Code table - UNITS	strThroughputUnitNumerator	Text
64	67	N		MATERIAL	NUMBER	4	Material code for material processed.	Code table - MATERIALS_PROCESSED	intMaterial	Integer
68	77	N		MATERIAL I/O	CHARACTER	10	A descriptor indicating whether material is used or produced.	Code table - MATERIALS IO	strMaterialIO	Text
78	78	N		PERIOD DAYS PER WEEK	NUMBER	1	Avg no. days/wk the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodDaysPerWeek	Integer
79	80	N		PERIOD WEEKS PER PERIOD	NUMBER	2	Avg no. wks/period the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodWeeksPerPeriod	Integer
81	82	N		PERIOD HOURS PER DAY	NUMBER	2	Avg no. hrs/day the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodHoursPerDay	Integer
83	86	N		PERIOD HOURS PER PERIOD	NUMBER	4	Avg no. hrs/period the process is active within the time period specified.	Operating parameter applied when emission period is less than annual.	intPeriodHoursPerPeriod	Integer
87	90			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
91	93	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Area and Nonroad Mobile Source File
PE– EMISSION PERIOD RECORD

The following information is for specific data elements in the PE record and is in addition to the specifications provided in the PE record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

An Emission Period record is always required in the NIF file, e.g., if an emission process exists, the emission period must be specified.

To designate on the PE record, the time period during which the reported emissions occur, report the **START DATE and END DATE**. The START DATE and END DATE fields are key fields on the PE record and are associated with, and must be entered the same, as START DATE and END DATE on the Emission record.

Example.....

To report annual period emissions for year 2002:
START DATE = 20020131; END DATE = 20021231.

As the START DATE and END DATE of the PE record designates the emissions time period, the **ACTUAL THROUGHPUT** field on the PE record should be reported as the activity value of that same time period. In the above example for year 2002, Actual Throughput data reported on the PE record should also be the total annual average for the year 2002.

As annual average throughput is reported on the PE record, the seasonal activity percentages and average annual operating data must be reported in the Emission Process (EP) record in order to enable EPA, or other NEI users, to disaggregate the reported annual activity and emissions to seasonal activity and emissions and compute emissions for an average season day.

Also see at the end of this Section *General Instructions, Reporting Emissions for Specific Time Periods*.

If reporting ACTUAL THROUGHPUT on the PE record, the following unit codes must also be reported: THROUGHPUT UNIT NUMERATOR, MATERIAL, and MATERIAL I/O. Appropriate valid code values must be reported from the respective NIF Code table.

The values reported for the three throughput unit fields should match the values reported for the associated unit fields for emission Factor Numeric Value on the Emissions record.

The EPA's FIRE database (Factor Information Retrieval data system) of emission factors data also references valid values from the NIF Code tables – Unit Codes, Materials, and Material I/O.

Example.....

If FACTOR NUMERIC VALUE units = LB / TON Coal I (Input),
e.g., See Code table – Unit Codes:
FACTOR UNIT NUMERATOR = LB;
FACTOR UNIT DENOMINATOR = TON;
MATERIAL = Coal; and
MATERIAL I/O = I (Input)

Then..... ACTUAL THROUGHPUT units should be:
THROUGHPUT UNIT NUMERATOR = TON;
MATERIAL = Coal;
MATERIAL I/O = I

If activity and reported emissions are on a Per Capita or Per Employee basis, unit code values should be reported as follows:

i.e., process emission factor is in terms of lbs/ year/ employee (or person)

See Code table – Unit Codes:

FACTOR UNIT NUMERATOR = LB;
FACTOR UNIT DENOMINATOR = EACH-YR;
MATERIAL = Employee (or Person); and
MATERIAL I/O = E (existing).

ACTUAL THROUGHPUT units should be:
THROUGHPUT UNIT NUMERATOR = EACH-YR;
MATERIAL = Employee (or Person); and
MATERIAL I/O = E (existing).

In Emission Period record, operating schedule parameters may be reported for a process as / if they differ from the *annual average operating schedule parameters* reported for the SCC process on the *Emission Process (EP) record*. For example, a process normally operates 7 days per week and 24 hours per day, but during the summer months (e.g., June through August) only operates 5 days per week and 16 hours per day. The value of 7 days per week and 24 hours per day should be reported in *Annual Average Days per Week and Annual Average Hours per Day fields on the EP record*. The seasonal operating schedule of 5 days per week and 16 hours per day should be reported in the *Period Days per Week and Period Hours per Day fields on the PE Record*, and should also designate the Start Date and End Date for the seasonal period.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

NEI Input Format - Area and Non Road Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Control Equipment								If Using MSAcess		
Table: tblAreaCE										
Position	Mandatory / Necessary									
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	CE	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	17	M	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text
18	26	M	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS	strPollutantCode	Text
27	31	N	N	PRIMARY PCT CONTROL EFFICIENCY	DECIMAL	5	The percent effectiveness of primary control device.		sngPrimaryPCTControlEfficiency	Single
32	36	N	N	PCT CAPTURE EFFICIENCY	DECIMAL	5	Numeric value for percentage capture efficiency of control system.		sngPCTCaptureEfficiency	Single
37	41	N	N	TOTAL CAPTURE CONTROL EFFICIENCY	DECIMAL	5	Collective (aggregate) value for all controls.		sngTotalCaptureControlEfficiency	Single
42	45	M	M	PRIMARY DEVICE TYPE CODE	CHARACTER	4	The primary type of control equipment used.	Code table - CONTROL_DEVICE_TYPES	strPrimaryDeviceTypeCode	Text
46	49			SECONDARY DEVICE TYPE CODE	CHARACTER	4	Secondary control device type.	Code table - CONTROL_DEVICE_TYPES	strSecondaryDeviceTypeCode	Text
50	89			CONTROL SYSTEM DESCRIPTION	CHARACTER	40	Description of control equipment chain.		strControlSystemDescription	Text
90	93			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
94	96	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Area and Nonroad Mobile Source File
CE- CONTROL EQUIPMENT RECORD

The following information is for specific data elements in the CE record and is in addition to the specifications provided in the CE record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The information in the CE record information is reported by process, and by pollutant. The CE record must be included if control(s) are in place which influence the amount of pollutant emitted from the reported process. If a CE record is not reported, EPA assumes no controls are applied to the specific process reported.

Several data fields are available in the CE record to report and document the affect of controls on the process reported.

PRIMARY PCT CONTROL EFFICIENCY = percent control efficiency for the PRIMARY DEVICE TYPE reported.

PRIMARY DEVICE TYPE CODE = code description (see Code table – CONTROL DEVICE) for primary or first-in-line control device.

PCT CAPTURE EFFICIENCY = percent *capture* efficiency for the entire control system – for all devices reported. If unknown, or not reported, it is assumed percent capture efficiency is 100%.

TOTAL CAPTURE/ CONTROL EFFICIENCY = collective percent efficiency value for all controls device reported, including system pct capture efficiency if known. This field is only applicable when there are device types reported in addition to primary control device, and if reported should include capture efficiency if known.

If other control devices are in place, in addition to the primary, or first in line, control device reported, those may be reported as codes values using the fields (see Code table – CONTROL DEVICE):

SECONDARY DEVICE TYPE CODE

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

NEI Input Format - Area and Non Road Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Emission										If Using MSAccess
Position		Mandatory / Necessary						Table: tblAreaEM		
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EM	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	17	M	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text
18	26	M	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS	strPollutantCode	Text
27	37					11			strBlankField	Text
38	45	M	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	Lng Intgr
46	53	M	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	Lng Intgr
54	55					2			strBlankField2	Text
56	59			START TIME	NUMBER	4	Start time of the activity.	Format: HHMM	intStartTime	Integer
60	63			END TIME	NUMBER	4	End time of the activity.	Format: HHMM	intEndTime	Integer
64	73	M	M	EMISSION NUMERIC VALUE	DECIMAL	10	Numeric value of emission.	Unit for criteria emissions: annual = TON; average season day = LBS.	dbEmissionNumericValue	Double
74	83	M	M	EMISSION UNIT NUMERATOR	CHARACTER	10	Unit of measure for reported emissions value. If criteria emissions, report unit: annual = TON; average season day = LBS.	Code table - UNITS.	strEmissionUnitNumerator	Text
84	85	M	M	EMISSION TYPE	CHARACTER	2	Code describing temporal designation of emissions reported, i.e., Entire Period, Average Weekday, etc.	Code table - EMISSION_TYPES. See User's Guide instruction on how to designate time period & emission type for annual or average season day emissions.	strEmissionType	Text
86	90			EM RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for SCC level emissions.	Report value with 2 decimal places.	sngEMReliabilityIndicator	Single
91	100	N		FACTOR NUMERIC VALUE	DECIMAL	10	The numeric value of the emission factor.		sngFactorNumericValue	Single
101	110	N		FACTOR UNIT NUMERATOR	CHARACTER	10	Unit of measure for emission factor numerator.	Code table - UNITS	strFactorUnitNumerator	Text
111	120	N		FACTOR UNIT DENOMINATOR	CHARACTER	10	Unit of measure for emission factor denominator.	Code table - UNITS	strFactorUnitDenominator	Text
121	124	N		MATERIAL	NUMBER	4	Material code for material processed.	Code table - MATERIALS_PROCESSED	intMaterial	Integer
125	134	N		MATERIAL I/O	CHARACTER	10	A descriptor indicating whether material is used or produced.	Code table - MATERIAL IO	strMaterialIO	Text
135	139					5			strBlankField3	Text
140	141			EMISSION CALCULATION METHOD CODE	CHARACTER	2	Code description of method used to derive emissions.	Code table - EMISSION_CALC_METHODS	strEmissionCalculationMethodCode	Text
142	146			EF RELIABILITY INDICATOR	CHARACTER	5	A reliability indicator code for emission factor rating.	Code table - RELIABILITY_INDICATORS	strEFReliabilityIndicator	Text
147	151	N		RULE EFFECTIVENESS	DECIMAL	5	Measure of the percent effectiveness of the control strategy.		sngRuleEffectiveness	Single
152	153			RULE EFFECTIVENESS METHOD	CHARACTER	2	The code identifying the rule effectiveness method.	Code table - RULE_EFFECT_METHODS	strRuleEffectivenessMethod	Text
154	158			RULE PENETRATION	DECIMAL	5	Percent of source category emissions affected by the applied rule.		sngRulePenetration	Single
159	162			SUBMITTAL FLAG	CHARACTER	4	corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
163	165	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Area and Nonroad Mobile Source File

EM– EMISSION RECORD

The following information is for specific data elements in the EM record and is in addition to the specifications provided in the EM record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Emission record specifies process-level data for criteria and HAP emissions, by pollutant, by emission time period, and by emission type. The EM record capitalizes on the specific implementation instructions provided for all previous records in the area and nonroad mobile source file.

As noted for the Emission Period record, the **START DATE** and **END DATE** fields in the EM record must be reported as the same emission time period as is designated for the process in the related Emission Period record. The **START DATE** and **END DATE** fields in the EM record are key fields as is the field **EMISSION TYPE**. These fields report the time period in which the reported emissions occur and the temporal resolution of the emissions within that period.

EMISSION TYPE = code description of the temporal designation of the emissions reported. See Code table – Emission Type.

Example.....

EMISSION TYPE =

27, for average weekday emissions within the time period designated; or

29, for average day emissions within the time period designated; or

30, for the emissions within total period designated.

Also see at the end of this Section *General Instructions, Reporting Emissions for Specific Time Periods*.

EMISSIONS NUMERIC VALUE = the numeric estimate of the emissions released to the ambient air. The field Emission Numeric Value is a decimal type with length of 10 bytes. The following guidance emphasizes appropriate choice for unit of measure and will enable successful use of the 10-byte field length when reporting criteria or HAP emissions:

For criteria pollutant emissions –

Report annual emissions in unit of measure = TON, and report average day emissions in unit = LB.

Values should include no more than two decimal places to the right.

For the HAP pollutant data –

Report the annual emissions data using a unit of measure, See Code table – Unit Codes, which fits the value within the 10-digit field length and allows the precision that is considered adequate. HAP data is typically reported in very small amounts. A good example is for dioxin and furans, which may be reported as G, for grams; or less, in order to fit within the 10-digit field for emission numeric value.

The following two fields in the EM record may be used to report a qualitative indicator of uncertainty for the emission value and for the emission factor used in the emission estimation. The qualitative indicator for the reported emissions value is a numeric score resulting from the Data Attribute Ranking System process known as DARS. The qualitative indicator for the reported emission factor is a rank that represents how well the factor is thought to represent the emission process.

EM RELIABILITY INDICATOR = DARS composite numeric score for the process level, e.g., SCC, emissions. The score should be reported as a number value with 2 decimal places, ex. 1.0; 0.75.

EF RELIABILITY INDICATOR = code description of emission factor rating.
See Code table - RELIABILITY _INDICATORS.

Report of the **FACTOR NUMERIC VALUE** must also include the unit of measure fields - **FACTOR UNIT NUMERATOR**; **FACTOR UNIT DENOMINATOR**; **MATERIAL**; and **MATERIAL I/O**. Refer to the Emission Period record for a discussion of the unit of measure fields and the association with unit fields provided for **ACTUAL THROUGHPUT** on the Emission Period record.

RULE EFFECTIVENESS = measure of the percent effectiveness of the control strategy. If RE has been applied to the **EMISSIONS NUMERIC VALUE**, report the RE percent and the **RE EFFECTIVENESS METHOD** used to determine the rule effectiveness value. Reporting an RE value in the Emission record, indicates that RE has been applied to the reported emissions.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

Area and Nonroad Mobile Source File GENERAL INSTRUCTIONS

Using NIF to Report Non-Point Source HAP Data

The NEI Input Format supports transfer of both criteria and HAP data to the EPA National Emission Inventory. In order to support the collection of toxic pollutant data, the NIF includes data elements for reporting MACT information. Maximum Achievable Control Technology standards and emission limits are developed by EPA, as mandated by Section 112(d) of the Clean Air Act (National Emission Standards for Hazardous Air Pollutants). More information on the MACT source categories and the MACT program may be located at www.epa.gov/ttn/uatw/eparules.html.

MACT codes are 4-digit codes assigned to all MACT categories and sub-categories. See Code table MACT Codes. The MACT code should be reported for all relevant facilities at the process level within a MACT category. If you do not report MACT codes, EFIG will make default assignments.

In addition to PROCESS MACT CODE, another relevant field is PROCESS MACT COMPLIANCE STATUS. The implementation of these fields is explained in the Area and Nonroad Mobile Source Section of this Guide pertaining to the Emission Process record.

Another unique reporting issue for the toxic pollutant data is that the emissions are typically characterized in very small mass amounts. Emissions are reported in the field - EMISSION NUMERIC VALUE - of the Emissions record. This field is a decimal data type with fixed length of 10 bytes. Exponential notation is not allowed. For reporting HAP data then, the NIF user must determine if a unit conversion is required to 'fit' data in the emissions numeric field data using valid NIF units. It is expected that the reported HAP data may be fit to the field using one of the NIF valid units of measure such as LB (pounds), G (grams), KG (kilograms) - see NIF code table - UNITS.

Reporting Emissions in NIF for Specific Time Periods

As described in the NIF record descriptions for Emission Process, Emission Period, and Emission – the NIF provides a lot of flexibility for reporting data for certain time periods. A consequence of that flexibility is that EPA has had to expend more resources than intended to interpret the intent of what is reported. In order to increase the efficiency of processing data for the NEI, the following describes how state, local, and tribal agencies should code specific NIF records when submitting data to EPA for annual emissions, average season day emissions, or season total emissions.

The first priority for the NEI is annual emissions. The preference in reporting annual emissions to EPA is to include an annual emission record and the four seasonal throughput percentages. The seasonal throughputs may be used by EPA or other NEI users to develop seasonal emission data. Providing the seasonal throughput percentages with process schedule data and the total annual emissions is a good way to provide air quality modelers with information needed to determine average day emissions for a specific season of interest.

Annual and Average Season Day Emissions

To designate emissions to represent an annual time period and provide the data necessary for EPA and NEI users to calculate average *work weekday* emissions for a specific season, complete the NIF in the following manner indicated by the example below. This method allows the NIF user to report both the annual and average season emissions associated with one emission (EM) record.

Preferred NIF Reporting Method

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Process	WINTER THROUGHPUT PCT	Whole number between 0 and 100
	SPRING THROUGHPUT PCT	Whole number between 0 and 100
	SUMMER THROUGHPUT PCT	Whole number between 0 and 100
	FALL THROUGHPUT PCT	Whole number between 0 and 100
	ANNUAL AVG DAYS PER WEEK	Whole number between 1 and 7
	ANNUAL AVG WEEKS PER YEAR	Whole number between 1 and 52
Emission Period	START DATE	YYYY0101 (YYYY = calendar year)
	END DATE	YYYY1231
	ACTUAL THROUGHPUT	Total activity for annual time period specified
Emission	START DATE	YYYY0101
	END DATE	YYYY1231
	EMISSION TYPE	= 30, for entire period*
	EMISSION NUMERIC VALUE	Total emissions for annual time period specified

* Providing the average day emission rate (Emission Type = 29) for the annual period Jan – Dec, is not the correct method for reporting annual emissions.

Optional NIF Reporting Method

Optionally, to designate average summer *work weekday* emissions, complete the NIF in the following manner:

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Period	START DATE	YYYY0601 (YYYY = calendar year)
	END DATE	YYYY0831
	ACTUAL THROUGHPUT	Total activity value for the summer period
	PERIOD DAYS PER WEEK	Whole number between 1 and 7
	PERIOD WEEKS PER PERIOD	Whole number between 1 and 13
Emission	START DATE	YYYY0601
	END DATE	YYYY0831
	EMISSION TYPE	= 27, for average weekday, <i>e.g., Monday -Friday</i>
	EMISSION NUMERIC VALUE	Emissions for an average work weekday in the summer period

Season Total Emissions

Some state and local agencies that are in the NOx SIP Call Region may use the NIF to report season total emissions, i.e., NOx SIP Call ozone season emissions between May 1 and September 30. In that case, the NIF may be completed in the following manner as indicated by the example below to represent emissions in that specific time period:

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Period	START DATE	YYYY0501 (YYYY = calendar year)
	END DATE	YYYY0930
	ACTUAL THROUGHPUT	Total activity value for May - Sept
	PERIOD DAYS PER WEEK	Whole number between 1 and 7
	PERIOD WEEKS PER PERIOD	Whole number between 1 and 22
Emission	START DATE	YYYY0531
	END DATE	YYYY0930
	EMISSION TYPE	= 30, for entire period
	EMISSION NUMERIC VALUE	Total season emissions for the five month period

Responding to NEI Data Review - Submitting Data Corrections in NIF

The Emission Factors and Inventory Group (EFIG) of EPA periodically updates the National Emission Inventory (NEI) by using many data sources, including data from the state, local, and tribal air agencies. The development of NEI may include a scheduled data review period for state, local, and tribal agencies. The NEI criteria and HAP inventories are distributed by EFIG in the NIF for local agency review and comment and agencies are invited to submit data revisions to the EFIG for incorporation into the NEI. Data changes must be provided in the NIF and by record.

As with any NIF submittal, the Transmittal (TR) record must be included in the file. The following indicates how to implement specific fields of the TR record when submitting a NIF file of data corrections:

TRANSACTION TYPE = 05, for Replace, when submitting a data correction to the NEI.
See Code table - TRANSACTION TYPES.

INCREMENTAL SUBMISSION NUMBER = the unique report number that designates each submission made within a data correction scenario. The initial number is 1 and is incremented by 1 if more than one data correction / replacement file is submitted for a source file during the NEI review period.

Data corrections must be provided by submitting whole, not partial, NIF records. If the data correction is a revision of one or two data element values in a record of the draft review version of NEI, the NIF replacement file must include the draft NEI record with the SUBMITTAL FLAG field coded to instruct EFIG how to process the intended correction.

If the data correction is intended to add a record that does not appear in the draft review version of NEI, or delete a record of the draft NEI without adding anything in its place, the SUBMITTAL FLAG field must be coded appropriately to instruct EFIG how to process the intended correction.

The following describes which code values to report in the data field SUBMITTAL FLAG.

SUBMITTAL FLAG =

A for Add, to indicate that the record does not appear in the draft NEI public review version and that EPA should add it to complete the emissions information. A request to add a record (SUBMITTAL FLAG = A) that has subordinate related records, must include those specific records in the Add request.

D for Delete, to indicate that the record does appear in the draft NEI public review version, but should not, and that EPA should delete it without replacement. Be aware that a request to delete a specific record (e.g., SUBMITTAL FLAG = D), also means that EPA will delete, if present in the NEI, any related subordinate records.

To replace specific data element values that exist in the draft NEI, a whole record must be submitted containing the revised values. There must always be two records provided in that case - one indicating SUBMITTAL FLAG = RD, for Revise/Delete, and a corresponding record type with SUBMITTAL FLAG = RA, for Revise/Add. The RD / RA pairs must have the same key field values.

RD for Revise/Delete, to indicate a record which exists in the draft NEI public review version and that some portion of it is being revised by including respective record with code = RA.

RA for Revise/ Add, to indicate the revised record of data that supercedes (replaces) that in RD record noted above.

4.3 Onroad Mobile Source File

The NIFV3.0 Area and Onroad Mobile Source file contains the following (3) records with the noted key fields:

<u>Record</u>	<u>(Mandatory*) Key Fields</u>
TR - Transmittal	STATE AND COUNTY FIPS CODE TRIBAL CODE
PE - Emission Period	STATE AND COUNTY FIPS CODE SCC START DATE END DATE TRIBAL CODE
EM - Emission	STATE AND COUNTY FIPS CODE SCC START DATE END DATE POLLUTANT CODE EMISSION TYPE TRIBAL CODE

* Reporting these key fields are mandatory when submitting non-point criteria and HAP data to the NEI. TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE.

NEI Input Format - OnRoad Mobile Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Record: Transmittal										
If Using MSAccess										
Position		Mandatory / Necessary								Table: tblPointTR
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	TR	strRecordType	Text
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	87	M	M	ORGANIZATION NAME	CHARACTER	80	The name of the organization that is affiliated with a facility or project (i.e., this data submittal).	Name of organization submitting the dataset.	strOrganizationName	Text
88	89	M	M	TRANSACTION TYPE	CHARACTER	2	Original or Correction (replacement) data set.	Code table - TRANSACTION_TYPES	strTransactionType	Text
90	93	M	M	INVENTORY YEAR	NUMBER	4	Year of inventory data in dataset.	A four digit year, ie. 1998	intInventoryYear	Integer
94	103	M	M	INVENTORY TYPE CODE	CHARACTER	10	Indicates that the data set contains criteria data, toxics data, or both.	Code table - INVENTORY_TYPES	strInventoryTypeCode	Text
104	111	M	M	TRANSACTION CREATION DATE	NUMBER	8	Creation date of transmittal data.	Format: YYYYMMDD	lngTransactionCreationDate	Lng Integer
112	115	M	M	INCREMENTAL SUBMISSION NUMBER	NUMBER	4	A unique report number that differentiates this submission from others.	The initial number is 1 and it is incremented by 1 for every submission per transaction type.	intIncrementalSubmissionNumber	Integer
116	120			RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for overall inventory.	Percent value with 2 decimal places	sngReliabilityIndicator	Single
121	200			TRANSACTION COMMENTS	CHARACTER	80	General comments regarding transmittal.		strTransactionComments	Text
201	270	M	M	CONTACT PERSON NAME	CHARACTER	70	The complete name of the contact person, including first name, middle name or initial, and surname.	EPA's single point of contact for questions that may arise concerning how the data in the file was developed. See also Affiliation Type.	strContactPersonName	Text
271	285	M	M	CONTACT PHONE NUMBER	CHARACTER	15	Lead contact for organization transmitting dataset.		strContactPhoneNumber	Text
286	295	M	M	TELEPHONE NUMBER TYPE NAME	CHARACTER	10	The name that describes telephone number type, e.g., the CONTACT PHONE NUMBER. Valid values include: Office, Fax, Mobile, Pager, Home.	Report a voice communication number available during normal work hours, i.e., Office.	strTelephoneNumberTypeName	Text
296	395	M	M	ELECTRONIC ADDRESS TEXT	CHARACTER	100	A resource address usually consisting of the access protocol, the domain name, and optionally, the path to a file or location.	Report Email.	strElectronicAddressText	Text
396	405	M	M	ELECTRONIC ADDRESS TYPE NAME	CHARACTER	10	The name that describes the type of electronic address reported. Valid values include: Email, Internet, Intranet, HTTP, FTP, Telnet, and WAIS.	Report Email.	strElectronicAddressTypeName	Text
406	430	M	M	SOURCE TYPE	CHARACTER	25	Source type = Onroad Mobile.	Code table - SOURCE_TYPES	strSourceType	Text
431	470	M	M	AFFILIATION TYPE	CHARACTER	40	The name that describes the capacity or function that an organization or individual serves for a facility or project. Report value = Report Certifier.	Code table - AFFILIATION_TYPE. Report Certifier for NEI is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.	strAffiliationType	Text
471	474	M	M	FORMAT VERSION	DECIMAL	4	Indicates the NEI Input Format version number of the dataset.		sngFormatVersion	Single
475	477	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Onroad Mobile Source File
TR - TRANSMITTAL RECORD

The following information is for specific data elements in the TR record and is in addition to the specifications provided in the TR record data dictionary. This information will assist the NIF user in correctly implementing the noted fields. Elements are listed in the order they appear on the TR record.

A Transmittal record (TR) must be included with each source file, e.g., point, area and nonroad mobile, onroad mobile or biogenic file submitted. The information in the Transmittal record is used to describe the entire source file and its origin. One TR record must be included per unique county. This, along with ORGANIZATION NAME will help distinguish and track Local (county) agency submittals separately from the State agency submittals.

TRANSACTION TYPE = 00 (Original) if file is the original or first submittal of a source file type; otherwise = 05 (Replacement) if file is submittal of data corrections in response to scheduled NEI data review cycle. See Code table – TRANSACTION TYPE.

INVENTORY TYPE CODE = indicates whether the data set contains criteria data, toxics data, or both. See Code table - INVENTORY TYPES. Submit only one INVENTORY TYPE at a time. If your source type file contains *any* toxic pollutant data, INVENTORY TYPE = HAP (HAP Inventory) or CRITHAP (Combined Criteria and HAP Inventory).

CONTACT PERSON NAME = one person EFIG can contact, and who may help if there are questions as the data file is processed and iterations must be initiated with the submitting organization. The contact provided should be the Report Certifier as defined in AFFILIATION TYPE.

AFFILIATION TYPE = Report Certifier. This coded field is part of the EPA data standard Contact Information. One of the standard valid code values is relevant to NEI and NIF users – Report Certifier. NIF users must report Affiliation Type = Report Certifier to confirm that the CONTACT PERSON NAME reported is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.

FORMAT VERSION = version of the NIF that used to format and submit data files. It is mandatory that the format version be specified, as EFIG may be supporting two versions at any given time, which need to be processed differently.

TRIBAL CODE = TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE. NIF users must complete either the STATE AND COUNTY FIPS CODE or the TRIBAL CODE. Whichever is provided will be used as the key geocode field. If a NIF user reports both valid STATE AND COUNTY FIPS CODE *and* TRIBAL CODE, the data will be processed as a source on Tribal Land and designated in the NEI as a Tribal Emissions Source.

NEI Input Format - OnRoad Mobile Sources											
Version 3.0 Released April 2003, Revised Nov 2003											
Record: Emission Period										If Using MSAccess	
Position	Mandatory / Necessary							Table: tblMobilePE			
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type	
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	PE	strRecordType	Text	
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table -STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text	
8	17	M	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text	
18	25	M	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	Lng Integer	
26	33	M	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	Lng Integer	
34	35					2			strBlankField	Text	
36	39			START TIME	NUMBER	4	Start time of the activity.	Format: HHMM	intStartTime	Integer	
40	43			END TIME	NUMBER	4	End time of the activity.	Format: HHMM	intEndTime	Integer	
44	53	N		ACTUAL THROUGHPUT	DECIMAL	10	Numeric value of process activity (VMT).	Report actual throughput for the emission period designated, e.g., Start Date, End Date.	sngActualThroughput	Single	
54	63	N		THROUGHPUT UNIT NUMERATOR	CHARACTER	10	Throughput unit of measure.	Code table - UNITS.	strThroughputUnitNumerator	Text	
64	67			SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del;or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text	
68	70	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table -TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text	

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Onroad Mobile Source File
PE– EMISSION PERIOD RECORD

The following information is for specific data elements in the PE record and is in addition to the specifications provided in the PE record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

An Emission Period record is always required in the NIF file, e.g., if an emission process exists, the emission period must be specified.

To designate on the PE record, the time period during which the reported emissions occur, report the **START DATE and END DATE**. The START DATE and END DATE fields are key fields on the PE record and are associated with, and must be entered the same, as START DATE and END DATE on the Emission record.

Example.....

To report annual period emissions for year 2002:
START DATE = 20020131; END DATE = 20021231.

As the START DATE and END DATE of the PE record designates the emissions time period, the **ACTUAL THROUGHPUT** field on the PE record should be reported as the activity value of that same time period. In the above example for year 2002, Actual Throughput data reported on the PE record should also be the total annual average for the year 2002.

For onroad mobile sources, the throughput is vehicle miles traveled - VMT. The THROUGHPUT UNIT NUMERATOR = MILE or E3MILE or E6MILE, See Code table – Unit Codes.

To develop annual onroad mobile emissions for the NEI, the EPA generally runs the MOBILE estimation model on a monthly basis using national average or regional average inputs. Annual VMT is obtained and may be seasonally adjusted to develop seasonal and monthly VMT estimates. The seasonal and monthly VMT estimates are used with monthly emission rates from the MOBILE model to calculate emissions that may be summed as annual average emissions for the NEI.

Also see at the end of this Section *General Instructions, Reporting Emissions for Specific Time Periods*.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI*.

NEI Input Format - OnRoad Mobile Sources									
Version 3.0 Released April 2003, Revised Nov 2003									
Record: Emission									
If Using MSAccess									
Table: tblMobileEM									
Position		Mandatory / Necessary	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type
Begin	End								
1	2	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EM	strRecordType	Text
3	7	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text
8	17	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html	strSCC	Text
18	27				10			strBlankField	Text
28	35	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngStartDate	LngInteger
36	43	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.	lngEndDate	LngInteger
44	45				2			strBlankField2	Text
46	49		START TIME	NUMBER	4	Start time of the activity.	Format: HHMM	intStartTime	Integer
50	53		END TIME	NUMBER	4	End time of the activity.	Format: HHMM	intEndTime	Integer
54	62	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS	strPollutantCode	Text
63	143		EMISSION PROCESS DESCRIPTION	CHARACTER	81	A text description of the emission process.		strEmissionProcessDescription	Text
144	153	M	EMISSION NUMERIC VALUE	DECIMAL	10	Numeric value of emission.	Unit for criteria emissions: annual = TON; average season day = LBS.	dblEmissionNumericValue	Double
154	163	M	EMISSION UNIT NUMERATOR	CHARACTER	10	Unit of measure for reported emissions value. If criteria emissions, report unit: annual = TON; average season day = LBS.	Code table - UNITS.	strEmissionUnitNumerator	Text
164	165	M	EMISSION TYPE	CHARACTER	2	Emission type code, i.e., Entire Period, Average Weekday, etc.	Code table - EMISSION_TYPES. See User's Guide instruction on how to designate time period & emission type for annual or average season day emissions.	strEmissionType	Text
166	170		EM RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for SCC level emissions.	Report value with 2 decimal places	sngEMReliabilityIndicator	Single
171	174		SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.	strSubmittalFlag	Text
175	177	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text

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Onroad Mobile Source File **EM– EMISSION RECORD**

The following information is for specific data elements in the EM record and is in addition to the specifications provided in the EM record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Emission record specifies process-level data for criteria and HAP emissions, by pollutant, by emission time period, and by emission type. The EM record capitalizes on the specific implementation instructions provided for all previous records in the onroad mobile source file.

As noted for the Emission Period record, the **START DATE** and **END DATE** fields in the EM record must be reported as the same emission time period as is designated for the process in the related Emission Period record. The **START DATE** and **END DATE** fields in the EM record are key fields as is the field **EMISSION TYPE**. These fields report the time period in which the reported emissions occur and the temporal resolution of the emissions within that period.

EMISSION TYPE = code description of the temporal designation of the emissions reported. See Code table – Emission Type.

Example.....

EMISSION TYPE =

27, for average weekday emissions within the time period designated; or

29, for average day emissions within the time period designated; or

30, for the emissions within total period designated.

Also see at the end of this Section *General Instructions, Reporting Emissions for Specific Time Periods*.

EMISSIONS NUMERIC VALUE = the numeric estimate of the emissions released to the ambient air. The field Emission Numeric Value is a decimal type with length of 10 bytes. The following guidance emphasizes appropriate choice for unit of measure and will enable successful use of the 10-byte field length when reporting criteria or HAP emissions:

For criteria pollutant emissions –

Report annual emissions in unit of measure = TON, and report average day emissions in unit = LB.

Values should include no more than two decimal places to the right.

For the HAP pollutant data –

Report the annual emissions data using a unit of measure that fits the value within the 10-digit field length and allows the precision that is considered adequate. It is expected that the reported HAP data may be fit to the field using one of the NIF valid units of measure such as LB (pounds), G (grams), KG (kilograms) - see NIF code table - UNITS.

The following field in the EM record may be used to report a qualitative indicator of uncertainty for the emission value. The qualitative indicator for the reported emissions value is a numeric score resulting from the Data Attribute Ranking System process known as DARS.

EM RELIABILITY INDICATOR = DARS composite numeric score for the process level, e.g., SCC, emissions. The score should be reported as a number value with 2 decimal places, ex. 1.0; 0.75.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA’s National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

**Onroad Mobile Source File
GENERAL INSTRUCTIONS**

Reporting Emissions in NIF for Specific Time Periods

In order to increase the efficiency of processing onroad mobile sources data for the NEI, the following describes how state, local, and tribal agencies should code specific onroad mobile NIF file records when submitting data to EPA for annual VMT and emissions, or monthly VMT and emissions.

The first priority for the NEI is annual emissions. To develop annual onroad mobile emissions for the NEI, the EPA generally runs the MOBILE estimation model on a monthly basis using national average or regional average inputs. Annual VMT is seasonally adjusted to develop seasonal and monthly VMT estimates. The seasonal and monthly VMT estimates are used with monthly emission rates from the MOBILE model to calculate emissions that may be summed as annual average emissions for the NEI.

The preference in reporting annual onroad mobile emissions to EPA is to include annual activity (VMT) and emission records, and MOBILE model input files that were used to compute annual emissions. The EPA may seasonally adjust the annual VMT to develop seasonal or average day emissions for a specific season of interest. However, specific day emissions for onroad mobile sources are more likely to be calculated as part of a specific air quality modeling exercise.

Agencies that have more specific locally adjusted seasonal emissions data than is described by EPA to develop seasonal VMT and emissions for the NEI, should contact the Emission Factors and Inventory Group to determine the most efficient way to provide that seasonal adjustment information.

Annual Emissions

To designate VMT and emissions to represent an annual time period, complete the NIF in the following manner indicated by the example below. This NIF reporting method may also be used to report VMT and/ or emissions for a time period less than annual, e.g., seasonal quarter, NOx SIP Call ozone season emissions between May 1 and September 30, or monthly time period.

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission Period	START DATE	YYYY0101 (YYYY = calendar year)
	END DATE	YYYY1231
	ACTUAL THROUGHPUT	Total activity for annual time period specified
Emission	START DATE	YYYY0101
	END DATE	YYYY1231
	EMISSION TYPE	= 30, for entire period*
	EMISSION NUMERIC VALUE **	Total emissions for annual time period specified

* Providing the average day emission rate (Emission Type = 29) for the annual period Jan – Dec, is not the correct method for reporting annual emissions.

** If reporting emissions, also provide the MOBILE model input files used to compute annual emissions.

Responding to NEI Data Review - Submitting Data Corrections in NIF

The Emission Factors and Inventory Group (EFIG) of EPA periodically updates the National Emission Inventory (NEI) by using many data sources, including data from the state, local, and tribal air agencies. The development of NEI may include a scheduled data review period for state, local, and tribal agencies. The NEI criteria and HAP inventories are distributed by EFIG in the NIF for local agency review and comment and agencies are invited to submit data revisions to the EFIG for incorporation into the NEI. Data changes must be provided in the NIF and by record.

As with any NIF submittal, the Transmittal (TR) record must be included in the file. The following indicates how to implement specific fields of the TR record when submitting a NIF file of data corrections:

TRANSACTION TYPE = 05, for Replace, when submitting a data correction to the NEI.
See Code table - TRANSACTION TYPES.

INCREMENTAL SUBMISSION NUMBER = the unique report number that designates each submission made within a data correction scenario. The initial number is 1 and is incremented by 1 if more than one data correction / replacement file is submitted for a source file during the NEI review period.

Data corrections must be provided by submitting whole, not partial, NIF records. If the data correction is a revision of one or two data element values in a record of the draft review version of NEI, the NIF replacement file must include the draft NEI record with the SUBMITTAL FLAG field coded to instruct EFIG how to process the intended correction.

If the data correction is intended to add a record that does not appear in the draft review version of NEI, or delete a record of the draft NEI without adding anything in its place, the SUBMITTAL FLAG field must be coded appropriately to instruct EFIG how to process the intended correction.

The following describes which code values to report in the data field SUBMITTAL FLAG.

SUBMITTAL FLAG =

A for Add, to indicate that the record does not appear in the draft NEI public review version and that EPA should add it to complete the emissions information. A request to add a record (SUBMITTAL FLAG = A) that has subordinate related records, must include those specific records in the Add request.

D for Delete, to indicate that the record does appear in the draft NEI public review version, but should not, and that EPA should delete it without replacement. Be aware that a request to delete a specific record (e.g., SUBMITTAL FLAG = D), also means that EPA will delete, if present in the NEI, any related subordinate records.

To replace specific data element values that exist in the draft NEI, a whole record must be submitted containing the revised values. There must always be two records provided in that case - one indicating SUBMITTAL FLAG = RD, for Revise/Delete, and a corresponding record type with SUBMITTAL FLAG = RA, for Revise/Add. The RD / RA pairs must have the same key field values.

RD for Revise/Delete, to indicate a record which exists in the draft NEI public review version and that some portion of it is being revised by including respective record with code = RA.

RA for Revise/ Add, to indicate the revised record of data that supercedes (replaces) that in RD record noted above.

4.4 Biogenic Source File

The NIFV3.0 Biogenic Source file contains the following (2) records with the noted key fields:

<u>Record</u>	<u>(Mandatory*) Key Fields</u>
TR - Transmittal	STATE AND COUNTY FIPS CODE TRIBAL CODE
EM - Emission	STATE AND COUNTY FIPS CODE SCC POLLUTANT CODE START DATE END DATE EMISSION TYPE TRIBAL CODE

* Reporting these key fields are mandatory when submitting non-point criteria and HAP data to the NEI. TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE.

Biogenic emissions are generally estimated using the BEIS model. BEIS results in emissions by SCC. The emissions may be reported on the EM record if requested by EPA for the NEI

NEI Input Format - Biogenic Sources											
Version 3.0 Released April 2003, Revised Nov 2003											
Record: Transmittal											
										If Using MSAccess	
Position	Mandatory / Necessary										Table: tblBiogenicTR
Begin	End	Criteria	Toxics	Data Element	Data Type	Length	Data Definitions	Use Convention Notes See User's Guide for more information	Field Name	Field Type	
1	2	M	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	TR	strRecordType	Text	
3	7	M	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).	strStateCountyFIPS	Text	
8	87	M	M	ORGANIZATION NAME	CHARACTER	80	The name of the organization that is affiliated with a facility or project (i.e., this data submittal).	Name of organization submitting the dataset.	strOrganizationName	Text	
88	89	M	M	TRANSACTION TYPE	CHARACTER	2	Original or Correction (replacement) data set.	Code table - TRANSACTION_TYPES	strTransactionType	Text	
90	93	M	M	INVENTORY YEAR	NUMBER	4	Year of inventory data in dataset.	A four digit year, ie. 1998	intInventoryYear	Integer	
94	103	M	M	INVENTORY TYPE CODE	CHARACTER	10	Indicates that the data set contains criteria data, toxics data, or both.	Code table - INVENTORY_TYPES	strInventoryTypeCode	Text	
104	111	M	M	TRANSACTION CREATION DATE	NUMBER	8	Creation date of transmittal data.	Format: YYYYMMDD	lngTransactionCreationDate	Lng Intgr	
112	115	M	M	INCREMENTAL SUBMISSION NUMBER	NUMBER	4	A unique report number that differentiates this submission from others.	The initial number is 1 and it is incremented by 1 for every submission per transaction type.	intIncrementalSubmissionNumber	Integer	
116	120			RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for overall inventory.	Percent value with 2 decimal places	sngReliabilityIndicator	Single	
121	200			TRANSACTION COMMENTS	CHARACTER	80	General comments regarding transmittal.		strTransactionComments	Text	
201	270	M	M	CONTACT PERSON NAME	CHARACTER	70	The complete name of the contact person, including first name, middle name or initial, and surname. Lead contact for organization transmitting dataset.	EPA's single point of contact for questions that may arise concerning how the data in the file was developed. See also Affiliation Type.	strContactPersonName	Text	
271	285	M	M	CONTACT PHONE NUMBER	CHARACTER	15	The phone number for the contact name.		strContactPhoneNumber	Text	
286	295	M	M	TELEPHONE NUMBER TYPE NAME	CHARACTER	10	The name that describes telephone number type, e.g., the CONTACT PHONE NUMBER. Valid values include: Office, Fax, Mobile, Pager, Home.	Report a voice communication number available during normal work hours, i.e., Office.	strTelephoneNumberTypeName	Text	
296	395	M	M	ELECTRONIC ADDRESS TEXT	CHARACTER	100	A resource address usually consisting of the access protocol, the domain name, and optionally, the path to a file or location.	Report Email.	strElectronicAddressText	Text	
396	405	M	M	ELECTRONIC ADDRESS TYPE NAME	CHARACTER	10	The name that describes the type of electronic address reported. Valid values include: Email, Internet, Intranet, HTTP, FTP, Telnet, and WAIS.	Report Email.	strElectronicAddressTypeName	Text	
406	430	M	M	SOURCE TYPE	CHARACTER	25	Source type = Biogenic.	Code table - SOURCE_TYPES	strSourceType	Text	
431	470	M	M	AFFILIATION TYPE	CHARACTER	40	The name that describes the capacity or function that an organization or individual serves for a facility or project. Report value = Report Certifier.	Code table - AFFILIATION_TYPE. Report Certifier for NEI is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.	strAffiliationType	Text	
471	474	M	M	FORMAT VERSION	DECIMAL	4	Indicates the NEI Input Format version number of the dataset.		sngFormatVersion	Single	
475	477	M	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).	strTribalCode	Text	

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Biogenic Source File
TR - TRANSMITTAL RECORD

The following information is for specific data elements in the TR record and is in addition to the specifications provided in the TR record data dictionary. This information will assist the NIF user in correctly implementing the noted fields. Elements are listed in the order they appear on the TR record.

A Transmittal record (TR) must be included with each source file, e.g., point, area and nonroad mobile, onroad mobile or biogenic file submitted. The information in the Transmittal record is used to describe the entire source file and its origin. One TR record must be included per unique county. This, along with ORGANIZATION NAME will help distinguish and track Local (county) agency submittals separately from the State agency submittals.

TRANSACTION TYPE = 00 (Original) if file is the original or first submittal of a source file type; otherwise = 05 (Replacement) if file is submittal of data corrections in response to scheduled NEI data review cycle. See Code table – TRANSACTION TYPE.

INVENTORY TYPE CODE = indicates whether the data set contains criteria data, toxics data, or both. See Code table - INVENTORY TYPES. Submit only one INVENTORY TYPE at a time. If your source type file contains *any* toxic pollutant data, INVENTORY TYPE = HAP (HAP Inventory) or CRITHAP (Combined Criteria and HAP Inventory).

CONTACT PERSON NAME = one person EFIG can contact, and who may help if there are questions as the data file is processed and iterations must be initiated with the submitting organization. The contact provided should be the Report Certifier as defined in AFFILIATION TYPE.

AFFILIATION TYPE = Report Certifier. This coded field is part of the EPA data standard Contact Information. One of the standard valid code values is relevant to NEI and NIF users – Report Certifier. NIF users must report Affiliation Type = Report Certifier to confirm that the CONTACT PERSON NAME reported is EPA's point of contact to either answer questions or identify whom to forward EPA program questions concerning the data content in the file.

FORMAT VERSION = version of the NIF that used to format and submit data files. It is mandatory that the format version be specified, as EFIG may be supporting two versions at any given time, which need to be processed differently.

TRIBAL CODE = TRIBAL CODE is a conditional key field that may be reported by a tribal entity in place of STATE AND COUNTY FIPS CODE. NIF users must complete either the STATE AND COUNTY FIPS CODE or the TRIBAL CODE. Whichever is provided will be used as the key geocode field. If a NIF user reports both valid STATE AND COUNTY FIPS CODE *and* TRIBAL CODE, the data will be processed as a source on Tribal Land and designated in the NEI as a Tribal Emissions Source.

NEI Input Format - Biogenic Sources										
Version 3.0 Released April 2003, Revised Nov 2003										
Table: Emission								If Using MSAccess		
Position		Mandatory / Necessary	Data Element	Data Type	Length	Data Definitions	User Convention Notes	Table: tblBiogenicEM	Field Name	Field Type
Begin	End									
1	2	M	RECORD TYPE	CHARACTER	2	A code that identifies the type of Record	EM		strRecordType	Text
3	7	M	STATE AND COUNTY FIPS CODE	CHARACTER	5	The FIPS code for the state and county.	Code table - STATE_AND_COUNTY_FIPS_CODE. Also see notes for Tribal Code. If State and County FIPS code does not apply, enter value = 0000 (e.g., 5 zeroes).		strStateCountyFIPS	Text
8	17	M	SCC	CHARACTER	10	EPA Source Category Code for Area and Mobile Sources.	Obtain current list of valid SCCs on http://www.epa.gov/ttn/chief/codes/index.html		strSCC	Text
18	26	M	POLLUTANT CODE	CHARACTER	9	Pollutant Code	Code table - POLLUTANTS		strPollutantCode	Text
27	34	M	START DATE	NUMBER	8	Start date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.		lngStartDate	Lng Integer
35	42	M	END DATE	NUMBER	8	End date of the period in which reported emissions occur.	Format: YYYYMMDD. See User's Guide instruction on how to designate time period for annual or average season day emissions.		lngEndDate	Lng Integer
43	122		EMISSION PROCESS DESCRIPTION	CHARACTER	80	A text description of the Emission Process.			strEmissionProcessDescription	Text
123	132	M	EMISSION NUMERIC VALUE	DECIMAL	10	Numeric value of emission.	Unit for criteria emissions: annual = TON; average season day = LBS.		dblEmissionNumericValue	Double
133	142	M	EMISSION UNIT NUMERATOR	CHARACTER	10	Unit of measure for reported emissions value. If criteria emissions, report unit: annual = TON; average season day = LBS.	Code table - UNITS.		strEmissionUnitNumerator	Text
143	144	M	EMISSION TYPE	CHARACTER	2	Emission type code, i.e., Entire Period, Average Weekday, etc.	Code table - EMISSION_TYPES. See User's Guide instruction on how to designate time period & emission type for annual or average season day emissions.		strEmissionType	Text
145	149		EM RELIABILITY INDICATOR	DECIMAL	5	DARS Numeric (composite) score for SCC level emissions.	Report value with 2 decimal places.		sngEMReliabilityIndicator	Single
150	153		SUBMITTAL FLAG	CHARACTER	4	Submittal status of record when providing data corrections to NEI. Add; Delete; Revise/ Del; or Revise/ Add	See User's guide instruction. Enter applicable code - A; D; RD; or RA.		strSubmittalFlag	Text
154	156	M	TRIBAL CODE	CHARACTER	3	Codes that represent American Indian tribes and Alaskan Native entities.	Key field and Code table implementation. Code table - TRIBAL_CODES. If Tribal Code does not apply, enter value = 000 (e.g., 3 zeroes).		strTribalCode	Text

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Biogenics Source File
EM- EMISSION RECORD

The following information is for specific data elements in the EM record and is in addition to the specifications provided in the EM record data dictionary. This information will assist the NIF user in correctly implementing the noted fields.

The Emission record specifies process-level data by SCC for criteria and HAP emissions, by pollutant, by emission time period, and by emission type.

The **START DATE** and **END DATE** fields in the EM record are key fields as is the field **EMISSION TYPE**. These fields report the time period in which the reported emissions occur and the temporal resolution of the emissions within that period.

EMISSION TYPE = code description of the temporal designation of the emissions reported. See Code table – Emission Type.

Example.....

EMISSION TYPE =

27, for average weekday emissions within the time period designated; or

29, for average day emissions within the time period designated; or

30, for the emissions within total period designated.

Also see at the end of this Section *General Instructions, Reporting Emissions for Specific Time Periods*.

EMISSIONS NUMERIC VALUE = the numeric estimate of the emissions released to the ambient air. The field Emission Numeric Value is a decimal type with length of 10 bytes. The following guidance emphasizes appropriate choice for unit of measure and will enable successful use of the 10-byte field length when reporting criteria or HAP emissions:

For criteria pollutant emissions –

Report annual emissions in unit of measure = TON, and report average day emissions in unit = LB.

Values should include no more than two decimal places to the right.

For the HAP pollutant data –

Report the annual emissions data using a unit of measure that fits the value within the 10-digit field length and allows the precision that is considered adequate. It is expected that the reported HAP data may be fit to the field using one of the NIF valid units of measure such as LB (pounds), G (grams), KG (kilograms) - see NIF code table - UNITS.

The following field in the EM record may be used to report a qualitative indicator of uncertainty for the emission value. The qualitative indicator for the reported emissions value is a numeric score resulting from the Data Attribute Ranking System process known as DARS.

EM RELIABILITY INDICATOR = DARS composite numeric score for the process level, e.g., SCC, emissions. The score should be reported as a number value with 2 decimal places, ex. 1.0; 0.75.

The following field should be used only when submitting to EPA a correction data set in response to a scheduled review cycle of the National Emission Inventory.

SUBMITTAL FLAG = code value A; D; RD; or RA – to indicate corrective action for the record

specified - to Add, Delete, Revise/Delete, or Revise/Add. This field is used only when submitting data corrections to the EPA's National Emission Inventory in response to a scheduled review of the NEI, and indicates the action EPA should take in processing a record correction.

For instruction on how to implement this field within a NIF file, see at the end of this Section Point Source File – *General Instructions, How to Transfer a Data Correction to the NEI.*

Biogenic Source File

GENERAL INSTRUCTIONS

Reporting Emissions in NIF for Specific Time Periods

Though the first priority for the NEI is annual emissions, because the estimate of biogenic emissions is so seasonal and temperature specific, annual emissions are generally not included as part of the NEI. If necessary, the NIF EM record may be used to report annual biogenic emissions if requested by the EPA for the NEI.

Agencies that have more specific locally adjusted seasonal emissions data than may be described by EPA to develop emissions for the NEI, should contact the Emission Factors and Inventory Group to determine the most efficient way to provide that information.

To designate emissions to represent an annual time period, complete the NIF in the following manner indicated by the example below.

Annual Emissions

<u>Record</u>	<u>Data Element</u>	<u>Value</u>
Emission	START DATE	YYYY0101 (YYYY = calendar year)
	END DATE	YYYY1231
	EMISSION TYPE	= 30, for entire period
	EMISSION NUMERIC VALUE	Total emissions for annual time period specified

Responding to NEI Data Review - Submitting Data Corrections in NIF

The Emission Factors and Inventory Group (EFIG) of EPA periodically updates the National Emission Inventory (NEI) by using many data sources, including data from the state, local, and tribal air agencies. The development of NEI may include a scheduled data review period for state, local, and tribal agencies. The NEI criteria and HAP inventories are distributed by EFIG in the NIF for local agency review and comment and agencies are invited to submit data revisions to the EFIG for incorporation into the NEI. Data changes must be provided in the NIF and by record.

As with any NIF submittal, the Transmittal (TR) record must be included in the file. The following indicates how to implement specific fields of the TR record when submitting a NIF file of data corrections:

TRANSACTION TYPE = 05, for Replace, when submitting a data correction to the NEI.

See Code table - TRANSACTION TYPES.

INCREMENTAL SUBMISSION NUMBER = the unique report number that designates each submission made within a data correction scenario. The initial number is 1 and is incremented by 1 if more than one data correction / replacement file is submitted for a source file during the NEI review period.

Data corrections must be provided by submitting whole, not partial, NIF records. If the data correction is a revision of one or two data element values in a record of the draft review version of NEI, the NIF replacement file must include the draft NEI record with the SUBMITTAL FLAG field coded to instruct EFIG how to process the intended correction.

If the data correction is intended to add a record that does not appear in the draft review version of NEI, or delete a record of the draft NEI without adding anything in its place, the SUBMITTAL FLAG field must be coded appropriately to instruct EFIG how to process the intended correction.

The following describes which code values to report in the data field SUBMITTAL FLAG.

SUBMITTAL FLAG =

A for Add, to indicate that the record does not appear in the draft NEI public review version and that EPA should add it to complete the emissions information. A request to add a record (SUBMITTAL FLAG = A) that has subordinate related records, must include those specific records in the Add request.

D for Delete, to indicate that the record does appear in the draft NEI public review version, but should not, and that EPA should delete it without replacement. Be aware that a request to delete a specific record (e.g., SUBMITTAL FLAG = D), also means that EPA will delete, if present in the NEI, any related subordinate records.

To *replace specific data element values that exist in the draft NEI*, a whole record must be submitted containing the revised values. There must always be two records provided in that case - one indicating SUBMITTAL FLAG = RD, for Revise/Delete, and a corresponding record type with SUBMITTAL FLAG = RA, for Revise/Add. *The RD / RA pairs must have the same key field values.*

RD for Revise/Delete, to indicate a record which exists in the draft NEI public review version and that some portion of it is being revised by including respective record with code = RA.

RA for Revise/ Add, to indicate the revised record of data that supercedes (replaces) that in RD record noted above.

Section 5.0 General NIF Data Handling and Quality Control Tips

Data Types and Data Entry

The NIF format specifications discussed previously in this User Guide contain data definitions and user notes on each data element. The following discusses the different data types used in the NIF. The data element types are Character, Number, Decimal, or Date.

Character fields may contain any value.

Number fields must contain only Numeric values. Data elements defined with Data Type NUMBER must be expressed as whole numbers.

Decimal fields may contain whole number or decimal point. Any data elements whose value may be expressed with decimal are indicated as Data Type DECIMAL. Decimal places are not fixed but it is considered that two decimal places to the right is adequate precision for reporting criteria data and more decimal places may be needed to report HAP data as it is typically reported in very small quantities.

Date fields must contain numbers in the format YYYYMMDD.

In terms of entering data into a field, if for any data field there is no data value intended that field must be left blank (filled with spaces).

As all data elements are fixed position, the BEGIN POSITION is the first character of the field, and the END POSITION is the last character of the field.

No delimiters will be used. All text files submitted must be fixed format, i.e., fields determined by their beginning and ending position.

The Key Data Fields in each record are indicated by bold italics in all format descriptions.

As the Point, Area and Nonroad Mobile, Onroad Mobile, and Biogenic source files are received by EPA for processing, they will be sorted to group and relate records based on the key data fields provided. It is very important that the required key fields are implemented correctly so that EPA can successfully process your data for loading into the NEI database(s).

File Organization, Acceptable File Types, and File Naming Convention

For a specific Source Type file, you must submit all of the NIF record types needed to fully report your data in the related data set. For criteria pollutant data, process-level information is required. All record types are required for process-level data reporting. A Control Equipment record however may not be necessary if controls are not applicable to the emissions numeric value reported. Hazardous Air Pollutant (HAP) pollutant data may be submitted at various levels of detail, allowing conditional use of specific records – see previous Section *Using NIF to Report HAP Data*. The record types you must provide for HAP emissions depend on the emissions data level reported.

A Transmittal record(s) (TR) must be included with each source file, e.g., point, area & nonroad, onroad mobile or biogenic file. One TR record must be provided per unique county. The information in the Transmittal record is used to describe the entire source file and its origin. This will help distinguish and

track Local (county) agency submittals separately from the State agency submittals.

The NEI Input Format files should be transferred to the EPA as fixed width text (.txt) files with no delimiters, or may be transferred to EPA as the MS Access file (.mdb).

When saving source type files as (.txt), like records should be sorted and saved together in separate text files. The following naming convention applies for naming (.txt) files:

ssxxrryy.txt, where

ss = state abbreviation (ex. nc);

xx = source type, code values are:

= pt (point); ar (stationary area); nr (nonroad mobile); or (onroad mobile); bi (biogenic)

rr = record type, code values are : tr, si, eu, ep, pe, er, ce, em

yy = year abbreviation for year of data reported

For (.mdb) files, the following naming convention should be used: ssxxyy.mdb

5.1 NIF QC Software

The EPA Emission Factors and Inventory Group publish and maintain a desktop software tool to enable NIF users to check NIF files for proper formatting. The NIF QC Software should be used prior to submitting NIF files to EPA.

The software is intended to check one state and one source type file at a time. To run the software for a point source file, all eight NIF tables are required. If the point source file has no control equipment (CE) records and therefore no CE table, use the empty CE table from the NIF .mdb file.

The software and operating instructions are available for download on

<http://www.epa.gov/ttn/chief/nif/index.html#qa>. The tool was developed in MS Access operates on NIF files in MS Access which contain either criteria and/or HAP data.

Section 6.0 Use of NIF in MS Access

The NIF is available as a MS Access data base 'shell' containing the tables (or records) of the NIF. The data base contains 8 tables for point sources, 5 tables for area sources, 3 tables for mobile sources, and 2 tables for biogenic sources. The MS Access data base is a complete 'shell' of the NIF, it is not a shell of the EPA's NEI Oracle data base(s). The MS Access shell does not contain any data, only empty tables. The MS Access shell does include data element descriptions, and data element validation rules to enforce mandatory data fields, and relationships between the various tables / records of the NIF.

The 'design view' for each table in the MS Access data base has been developed in a manner to reinforce data entry according to the NIF specifications. In addition, an Import Specification has been developed and saved with each table to help ensure that the data imported, and the files exported, from the database adhere to the Format. *To maintain this consistency, do not alter the shell in any way.* After data export, each resulting text file should be checked to confirm that the data file adheres to the NIF Version specifications being implemented.

There are two primary uses for the NIF as a MS Access data base. First, it serves as additional documentation of the NEI Input Format that is also documented in MS Excel. Second, it can be used as part of an export routine to load data from an external State or local system. Data loaded into these tables can be sent to EPA as the .mdb file, or exported to ASCII text files in NIF and sent to EPA.

A third potential use is to use the data base as the preliminary design for a State or local system. It is expected that the NIF data base shell will be updated with any changes made to NIF versions. EPA will assist with implementation of the NEI Input Format in this data base. EPA may not however provide support for State or local agencies that use this tool to build an emission inventory system.

Section 7.0 Transferring Data Files Through EPA's Central Data Exchange (CDX)

The EPA's Central Data Exchange (CDX) facility is used by state, local, and tribal agencies to transfer air emission inventory data (NIF) files electronically to the Emission Factors and Inventory Group (EFIG). The steps for submitting the NIF files electronically through CDX are described on <http://www.epa.gov/ttn/chief/nif/cdx.html>. A technical support helpline is also available to assist users with account registration and successful completion of the transmission process.

Those agencies that have previously submitted data sets through CDX will already have an account and password, otherwise pre-registration will be necessary. The pre-registration steps, a CDX instruction guide, and frequently asked questions are included at the Website location above.

Section 8.0 Use of NIF by EPA as a NEI Distribution Format

While the NIF is used primarily as a data collection format for the NEI, the Emission Factors and Inventory Group (EFIG) of EPA also uses the NIF to distribute the NEI data detail for review by agencies, and for final publication. In the past, the EFIG has at times altered some NIF implementation conventions for the purpose of data distribution in order to describe additional information about how the NEI data was developed.

Beginning with the NIFV3.0, the EFIG expects to discontinue the practice of altering NIF conventions for its own data distribution needs, but instead will define on each NIF record, as needed, a space at the bottom "For EFIG Use Only" to describe the data tracking information considered relevant to NEI data reviewers and users. The format of the "EFIG space" will be explained by EFIG as part of the data distribution information provided.

Attachment 1

The NIF V3.0 Code tables are incorporated here by reference, and are located in their entirety on <http://www.epa.gov/ttn/chief/nif/index.html>.

The following page lists the relevant NIF Code tables that may be obtained on the above Website.

NEI Input Format (NIF) Version 3.0 Code Tables

Notes Changes from NIF V2.0 to NIF V3.0

CODE TABLES

Y = Yes; N = No

		Delete	Add	Revised	Valid V2.0	Valid V3.0
Address Type		Y			Y	N
Affiliation Type	2		Y		N	Y
Contact Type		Y			Y	N
Coordinate Data Source Code	2		Y		N	Y
County FIPS		Y			Y	N
Control Device					Y	Y
Electronic Address Type Name	2		Y		N	Y
Emission Calculation Method					Y	Y
Emission Release Point Type					Y	Y
Emission Type					Y	Y
Facility Category					Y	Y
HAP Emissions Performance Level			Y		N	Y
Horizontal Collection Method Code	2		Y		N	Y
Horizontal Reference Datum Code	2		Y		N	Y
Inventory Type					Y	Y
MACT Code					Y	Y
MACT Compliance Status					Y	Y
Material					Y	Y
Material I/O					Y	Y
NAICS	2			Y		Y
Pollutant Code				Y	Y	Y
Reference Point Code	2		Y		N	Y
Reliability Indicator					Y	Y
Rule Effectiveness Method					Y	Y
Source Category Classification Codes (SCC)	1			Y	Y	Y
Standard Industrial Classification (SIC)	2				Y	Y
Source Type				Y	Y	Y
State FIPS		Y			Y	N
State and County FIPS Code	2		Y		N	Y
Telephone Number Type Name	2		Y		N	Y
Transaction Type					Y	Y
Tribal Code	2		Y		N	Y
Unit Codes					Y	Y
XY Coordinate Type					Y	Y

Footnotes:

1 - Obtain current list of valid SCCs on <http://www.epa.gov/ttn/chief/codes/index.html>

2 - EPA Data Standard code tables as of April 2003.

Current valid values may also be located on [http://oaspub.epa.gov/edr/epastd\\$.startup#1](http://oaspub.epa.gov/edr/epastd$.startup#1)

