2008 National Emissions Inventory

Emissions Inventory System
Implementation Plan

Section 8
Reporting Instructions for
Nonpoint Emissions

Revised

Original: December 22, 2008
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Change Tracking Log

Date of Revision	Description
August 3, 2009	- Updated all date formats to be YYYY-MM-DD - QA Check 614 now applies to Nonpoint. It checks that a valid Emissions Type Code was reported. - Added a note to Figure 8-7 on page 8-19 that a complete Census Tract ID is a combination of the State and County FIPS + the Census Tract ID. - Added Emissions Type Code as an allowable data element in the Location Emissions Process component on page 8-23 to support the reporting of Commercial Marine Vessel emissions. - Updated the control descriptive text on page 8-28.

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Section 8
Reporting Instructions for Nonpoint Emissions

This section provides detailed instructions for reporting nonpoint emissions to the EIS. Nonpoint emissions are emissions from stationary sources for which emissions have not been submitted as point emissions associated with facilities in the EIS Facility Inventory.

For technical information about preparing an EIS submittal using XML, including instructions for the submittal details component, see Section 5, "Submitting XML Data to the EIS."

The box below shows the open windows for submitting activity and emissions data for the 2008 NEI. For more information, see Section 1, "Introduction to the NEI and EIS."

Open Dates for Submitting/Editing 2008 NEI Activity and Emissions Data

Users submit emissions data: *July 1, 2009 - June 1, 2010*

Stakeholders review and comment on draft NEI: *July 19 - October 30, 2010*

Key terms for this section are defined in the box below. Additional terms and acronyms may be found in Appendix 1, "EIS Glossary."

Key Terms

Activity: *A quantifiable action or function used to calculate emissions for a process. Replaces the narrower term "throughput" used in NIF. For nonpoint sources, example activities may include material produced, fuel burned, number of persons or animals, acreage, etc.*

Component: *A group of related elements reported together within the XML document. (Within the XML schema, this is also known as a complex type).*

Data category: *A group of data that share similar EIS reporting requirements. The EIS data categories are: Facility Inventory, Point, Nonpoint, Onroad and Nonroad, and Event.*

Data element: *The smallest reportable piece of information in the EIS that in a database would correspond to a field.*

Data type: *The form with which a data element must be compliant in order to be stored properly in the EIS, such as integer, decimal, or character.*

Dataset: *The entire set of data submitted to the EIS by an S/L/T for an inventory year. An S/L/T nonpoint emissions dataset can have only a single value for a given geographic area, process, reporting period, and pollutant. For example, the North Carolina 2008 dataset may contain only one annual total for a given County, process, and pollutant.*

Emissions process: *An operation or function by an emissions unit that produces emissions, characterized by an SCC.*

Emissions sector: *A group of processes which are related and identified by common shared measures, such as activities, pollutants, and emissions estimation methods. Examples include Residential Wood Combustion and Petroleum Refining.*

Expected pollutant: *A pollutant which EPA has identified as likely to occur from an emissions process and should be reported by the S/L/T. If not reported, EPA will estimate emissions for the missing pollutants and use these values in the published NEI.*

NIF 3.0: *NEI Input Format Version 3.0. The format used to report NEI data in 2002.*

Record: *A group of data that represent a single case or occurrence, along with all dependent data. An emissions record would consist of all data within the Emissions component for a single pollutant.*

Source Classification Code (SCC): *The code that characterizes an emissions process. All emissions in the inventory are associated with an SCC.*

Submittal data block: *Within a single batch submission, certain data elements cannot be submitted individually. For these data elements, the submission must also contain other related components and data elements; this group is called the "submittal data block." Any data element that appears within a submittal data block must be submitted in the batch file along with the rest of its block.*

8.1 The Submission Process for Nonpoint Source Data

Figure 8-1 outlines the process steps to prepare and submit nonpoint emissions data to EPA.

Figure 8-1
Nonpoint Emissions Submission Process

EIS Quality Assurance Environment

Step 1
Prepare nonpoint emissions data

Step 2
Output your data as an XML document

Step 3
Upload your nonpoint XML document to the QA Environment

Step 4
Review your invalid file or feedback report

Repeat steps 1-4 as needed

Submit your quality-assured data to EPA.

EIS Production Environment

Step 5
Submit XML document

Step 6
Review your invalid file or feedback report

Step 7
(if needed)
Resubmit data to correct errors
or
Use the EIS Gateway to correct errors

Step 8
Review your nonpoint submission status summary to identify data gaps

Step 9
Contact your EPA analyst if you have questions

8.1.1 Step 1: Prepare Your Nonpoint Data

As you prepare your data, including performing calculations, determining the processes and pollutants you should report, and making decisions about what should be reported as nonpoint emissions, please note the following guiding principles and concepts:

Scope of nonpoint processes. EPA has identified and published a list of Source Classification Codes (SCCs) which are expected to occur in many, if not all, States. If reporting entities do not report emissions from these processes, then EPA will populate the EIS with emissions generated at EPA. A complete list of SCCs which can be submitted for each data category can be found in Appendix 6, "EIS Code Tables."

Relationship of nonpoint data for inventory cycle to prior inventories. EPA is storing nonpoint locations and processes from previous inventory cycles in the EIS. This information is available to you for quality assurance purposes and to provide the capability to

perform meaningful trends analysis. It is expected that the majority of the processes reported for 2008 will be the same as previous inventory submissions, and this is a preferred result.

Reporting to an integrated inventory. The NEI is a comprehensive and integrated inventory, containing emissions estimates for all significant sources of CAPs and HAPs. For those pollutants whose emissions are based on activity data, you are expected to use the same set of activity data to calculate emissions for all pollutants you calculate and report for a given process. This will ensure that the data contained in the inventory are integrated in a consistent fashion. If you submit using the batch submission method, you must submit these emissions for all your reported pollutants, both CAPs and HAPs, in a single, integrated file with one set of activity data.

Processes, emissions, and activities NOT reported as nonpoint. The following types of emissions should **not** be reported as nonpoint emissions and will be rejected if they are reported in the nonpoint category:

- **Emissions from large industrial sources such as electric generating units and refineries.** These emissions must be reported as point emissions. See Section 6, "Reporting Instructions for Facility Inventory," and Section 7, "Reporting Instructions for Point Emissions."

- **Most mobile sources, including onroad and nonroad sources.** See Section 9, "Reporting Instructions for NMIM Activity Data," and Section 10, "Reporting Instructions for Onroad and Nonroad Emissions."

- **Airports.** No airport activities or emissions should be reported as nonpoint. See Section 7, "Reporting Instruction for Point Emissions," and Section 12, "Reporting Instructions for Airports, Locomotives, and Commercial Marine Vessels."

- **Events.** These include wildfires, wildland use fires, prescribed burns, agricultural burns, natural disaster debris burning, and other significant, reportable air emissions that occur in short episodes or that have varying locations. However, for the 2008 inventory cycle, only wildfires, wildland use fires, prescribed burning, agricultural burning, and Native American land use will be accepted as Events. EPA strongly encourages, but does not require that you report such events using the new format rather than the nonpoint data elements. To report these emissions, see Section 11, "Reporting Instructions for Event Emissions."

- **Natural and biogenic emissions.** EPA is responsible for calculating all natural and biogenic emissions to provide consistency. EIS does not support the reporting by S/L/Ts of biogenic emissions.

Acceptable Pollutants. The list of acceptable pollutants has been modified for 2008. It was reduced so that fewer assumptions and adjustments need to be made about the reported emissions data for downstream uses. Some previously reported variants of pollutants or aggregated pollutants will no longer be accepted. However, for some pollutants, EPA will still accept either a number of individual species or a single aggregate pollutant group. For a given location and process, you may submit either the individual species or the aggregate, but not both. EIS will have to perform some speciation of reported values for downstream modeling users, and will have to perform some aggregations of individual species to report summaries. EPA strongly

recommends that you update the pollutant codes in your local system or calculation tools before generating data. For a complete list of the acceptable pollutant codes, see Appendix 6, "EIS Code Tables."

EPA has identified the suite of CAPs and HAPs which can be submitted for inclusion in the published NEI. If you do not report certain pollutants for a process, EPA may use established methods to estimate emissions during the analysis and preparation phase of inventory development, and may use these supplemented values in the final NEI.

- **CAPs reporting.** For nonpoint emissions, the CERR requires the reporting of **both** activity and CAP emissions for every nonpoint process that emits CAPs. This includes processes for which activity is present but for which emissions are reported as zero.

- **HAPs reporting.** EPA strongly encourages, but does not require, the reporting of HAP emissions. If only activity information is reported, EPA will estimate emissions for the expected HAPs using the activity data supplied for the process and standard emission factors or similar methods.

- **GHG reporting.** For the 2008 inventory cycle, GHG emissions will be accepted for any process. This is done by adding the allowable GHG pollutant codes to existing processes. No additional information, i.e., CO_2 equivalents, is needed to report GHG emissions. EPA has not defined pollutant coverage for specific processes for greenhouse gases. If you would like to report GHGs for a process for which no SCC has been defined, you may request that an SCC be added to the EIS by following the instructions outlined in the section of the EIS Users Manual entitled "How Do I Submit a Support Request?"

Point reporting instead of nonpoint reporting. You are encouraged to submit emissions data for small stationary sources as point source emissions if you collect these data as individually-estimated sources and believe them to be accurate. Nothing in these instructions is intended to suggest that this is not acceptable or preferred, or that individually-identifiable sources below a certain threshold should be aggregated into County or Tribal nonpoint totals for reporting purposes. EPA is interested in receiving the highest quality data that you have available.

Reportable processes. Appendix 6, "EIS Code Table," contains the list of valid SCCs by data category (e.g., point or nonpoint). **It is your responsibility** to ensure that the same emissions are not double-counted in both point and nonpoint categories.

Interpreting zero and null values. The submission of a "zero" emissions value for a process and pollutant will be interpreted in the inventory as an indication that you have calculated the emissions and the result was a zero value. Submit zeros when you intend for the value in the inventory to be zero. A "null" value reported for any data element will be interpreted by the EIS as an absence of data, not that there are zero emissions to report.

Supplemental calculation parameters for fuel combustion. In addition to the standard activity and emission parameters used in estimating emissions, EPA has defined supplemental calculation parameter type codes specific to fuel combustion processes in order to allow the reporting of heat content, sulfur content, and ash content. Only final activity values and emission factors should be reported, not intermediate values that are used in multi-step calculations. In the

future, EPA may define additional supplemental calculation parameters for other emission sectors.

If you report different pollutants or emissions based on different activity in subsequent batch submittals, only the last submittal and its pollutants will be retained. This will be explained in detail in the sections on emissions and activity reporting below. While you are not required to submit HAP emissions, EPA will use established methods to estimate emissions during the analysis and preparation phase of inventory development to ensure complete pollutant coverage and will use these supplemented values in the final NEI.

> **Resubmitting Activity or Emissions**
>
> If you report different pollutants or different activity in subsequent batch submittals, they will overwrite the previous submission and only the most recent submittal and its pollutants will be retained.

> **Data Conversion Tip**
>
> When historic data were loaded into the EIS, SCCs from prior inventory cycles that are no longer valid were converted to the currently acceptable SCCs whenever possible. It is your responsibility to use the new SCCs. See Appendix 6 for old-to-new SCC mapping.

8.1.2 Step 2: Output Your Data as an XML Document

A batch submission of nonpoint emissions data to the EIS must be submitted as an EIS CERS XML document. For technical specifications on preparing these documents, see Section 5, "Submitting XML Data to the EIS."

Transitioning from NIF. Please see Section 2, "Transitioning from NIF to the 2008 NEI," for more information on:

- Mapping NEI Input Format (NIF) Version 3.0 format to the EIS data elements; and

- A transitional tool EPA is providing that assists in generating an EIS CERS XML document.

> *XML Terms*
>
> **XML:** *Extensible Markup Language. A markup language for documents containing structured information. The XML specification defines a standard way to add markup to documents. Its primary purpose is to facilitate the sharing of structured data across different information systems, particularly via the Internet.*
>
> **XML schema:** *A document that defines the structure of an XML document and the set of rules to which it must conform in order to be considered valid.*
>
> **XML document:** *A file containing data organized into a structured document using XML markup.*

Components and data elements for the Nonpoint Submittal Data Block. Data are reported to the EIS as data elements, which are grouped into components and submittal data blocks. All components used for reporting of nonpoint emissions, and their reporting hierarchy, are shown in Figure 8-3. Figure 8-4 is a table describing each of these components. The CERS is used by several programs, and as such, includes components and data elements not needed by

EIS. Components not needed by EIS are indicated according to the CERS Diagram Key in Figure 8-2. For further information on constructing the EIS CERS XML document for submission with the correct hierarchical relationships between the components, see Section 5, "Submitting XML Data to the EIS."

Nonpoint emissions data consist of EIS components that contain the location, emissions process, reporting period, activity data (calculation parameters), and emissions for each pollutant based upon the activity data. Additional components include optional operating details and supplemental parameters.

> **New EIS Data Format Requirement**
>
> Only data which conform to the EIS CERS XML schema can be submitted to the EIS.
>
> Please consult the appropriate information technology personnel to ensure that your data are properly constructed and formatted as specified in Section 5.

This group of components is referred to as the Nonpoint Submittal Data Block. ***For a nonpoint emissions batch submission, the components of this block must be submitted together; no component or data element can be batch-submitted separately.*** Modifications of any group of data smaller than this block must be made by logging onto the EIS website and modifying the data. Use of other components or data elements from other data categories will result in data rejection.

Later in this section you will find, for each component, a table describing its data elements. Some components and data elements are noted as required, while some are optional. Your Nonpoint Submittal Data Block should contain at a minimum all required components and data elements. This applies whether you are submitting data for the first time or resubmitting the data to make additions, corrections, or deletions. It is possible that a critical error in one portion of the Nonpoint Submittal Data Block may result in rejection of the entire block.

Within the Nonpoint Submittal Data Block, there are four distinct groups of components which are reported together and accepted or rejected as a set:

- **Reporting the location.** Whenever you submit emissions for a geographic area, you must define its location using the Location and Excluded Location Parameter components. If there are no excluded locations, the Excluded Location Parameter component is omitted.

- **Reporting the regulations.** This includes the Process Regulation component.

- **Reporting the control approach**. This includes the Process Control Approach component.

- **Reporting the nonpoint emissions.** The activity and emissions data submitted for a process and reporting period is a set of related data and must be submitted together for each reporting period. The primary activity is reported in the Reporting Period component. Related activity data may include operating details (seasonal percentages), and additional supplemental calculation parameters for the fuel combustion emissions sector. This set must be reported together within a single batch submission, whether you are submitting data for the first time or resubmitting the data to make corrections, deletions, or additions. Please note that this entire group will be accepted or rejected as a set. A critical error anywhere in this group may result in rejection of this entire set.

When you report nonpoint emissions for a specific geographic area, the EIS will integrate the data into the EIS data either as new nonpoint emissions -- if emissions data for the location, process, and time period have not been previously reported -- or as replacements for previously submitted data. In the latter case, the EIS will delete the emissions data for the same location, process, and time period, and add the replacement activity and emissions data from the current batch submission.

Example of Processing Resubmissions

Virginia may report only one set of annual emissions and activity data for 2008 emissions in Fairfax County for SCC 2401001000. When the EIS receives emissions data for this SCC for this County for the year 2008, it will first determine whether these emissions have been previously reported. If so, it will delete the previous submission and accept the new values, so that only one set of values submitted by the agency are stored in EIS.

Figure 8-2
CERS Diagram Key
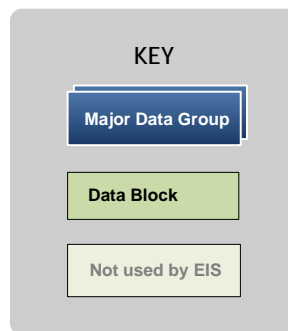
Figure 8-3
Components for Nonpoint Reporting
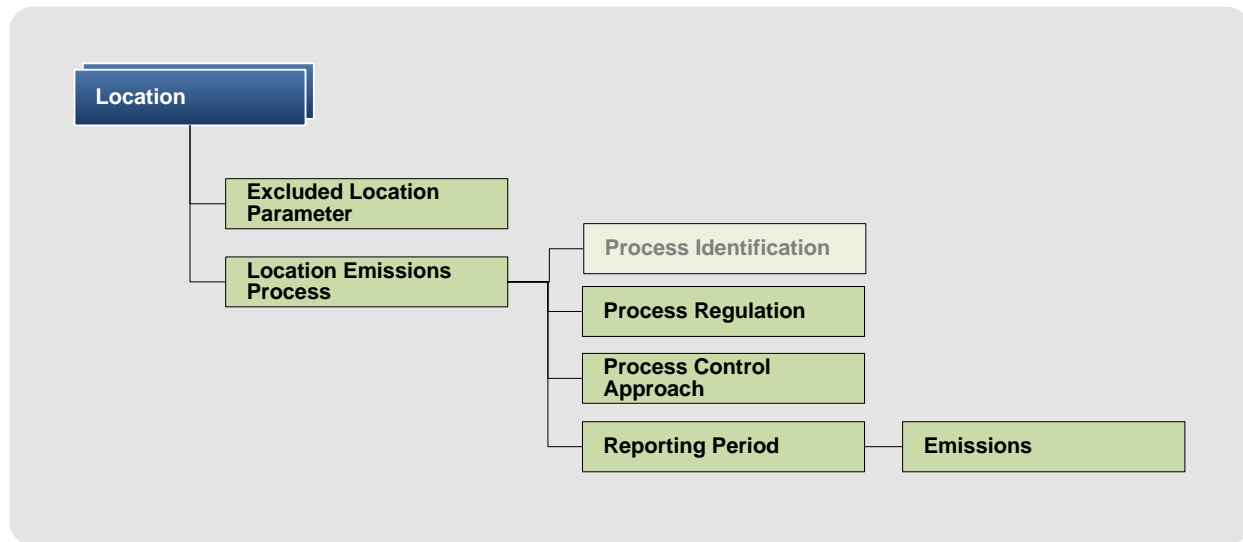
Figure 8-4
Description of Components for Nonpoint Emissions

Component Name	Description
Location	Contains information on the primary geographic area, as well as the State and County or Tribal land associated with the emissions.
ExcludedLocationParameter	Contains information on the geographic location which is excluded from the primary location. There can be multiple excluded locations associated with the primary location. This component is optional.
LocationEmissionsProcess	Contains information on the specific operational activities that produce emissions either directly or indirectly, using SCCs.
ProcessRegulation	Identifies regulatory programs applicable to an emissions process.
ProcessControlApproach	Identifies the overall control approach that has been applied to an emissions process to reduce the amount of pollutants released into the environment.
ReportingPeriod	Contains information on the time period for which emissions and related activity data are submitted.
ProcessIdentification	Identifiers by which the process is known or has been known, and the system associated with the identifier. Used in Facility Inventory only.
Emissions	Contains information on all the pollutants being reported for the location, process, and time period. This component includes the units of measure, methods, emission factors and the amount of emissions as calculated from the reported activity.

8.1.3 Step 3: Upload Your File to the Quality Assurance (QA) Environment

Methods of submission. You must submit your nonpoint emissions data using the EIS CERS XML format and the batch submission process. For more information on batch submissions, see Section 5, "Submitting XML Data to the EIS."

Partial vs. full submissions. Batch submissions may be partial; that is, a file does not necessarily have to contain all emissions data for all processes. For example, you may report emissions for two different processes for the same location in two separate files. You may not, however, submit a partial set of emissions data for a specific process and timeframe. All emissions must be submitted along with all activity data as a complete Nonpoint Submittal Data Block in a single file for a given process. For example, Kansas must report as a single file all pollutants with their total emissions from auto refinishing in Shawnee County.

To check the data you have prepared and formatted for submission to the EIS, you are strongly encouraged to use the EIS Quality Assurance (QA) Environment. The file that you submit to the QA Environment will be stored and tracked only long enough to be evaluated and for you to receive feedback on the results. There will be no permanent record or log of these uploads or the results of the checks. You are encouraged to use this environment as many times as necessary to help you ensure the submission of high-quality data. For more information, see Section 1, "Introduction to the NEI and EIS."

> **Deleting Erroneous Emissions Values**
>
> It is not possible to use a batch submission to delete emissions for a single pollutant.
>
> You should replace the entire Nonpoint Submittal Data Block, which contains all activity and related emissions data, with a corrected block that omits the pollutant.

The QA Environment does not allow you to edit your data or to "promote" your data to the EIS Production Environment. You must make changes to your data in your local system or files and use EPA's Central Data Exchange (CDX) node to submit these data to the EIS.

To use the QA Environment, you must have an EIS user account and your agency must have responsibility for the data contained in your submission. For more information on requesting an EIS account and accessing the EIS Gateway, see the section of the EIS User's manual entitled "How Do I Request Access to the EIS Gateway."

8.1.4 Step 4: Review Your Invalid File or Feedback Report from QA Environment

The checks performed on your data in the QA Environment are the same checks that will be performed on your batch submissions to the Production Environment and on any edits you make to your data using the EIS Gateway.

8.1.4.1 Quality Assurance Checks and Feedback

The quality assurance checks for nonpoint emissions data can be initiated at four points during the process:

(1) In the QA Environment, as a preliminary quality assurance step prior to making a submission to the Production Environment. The QA Environment will apply checks to

your data that ensure file integrity for submission purposes, and will apply checks that may reference data stored in the EIS Production Environment.

Most important, this is the stage of quality assurance that will tell you in advance that certain data will be rejected if they are submitted to the Production Environment. It will provide you an efficient way to improve your data outside of the submission process itself.

EPA strongly encourages you to use this environment as your primary quality assurance practice.

(2) In the Production Environment, as part of the submission. The same checks as those described above would be run on your data during the submission process. The results of these checks will be logged in the EIS.

(3) In the Production Environment, following additions, deletions, or edits, on the limited set of data affected by these actions. This feature would run the checks only associated with or related to the data which have been changed or added, so that you could immediately see the impact of minor additions to your submission. This approach would allow you to determine whether your changes corrected errors identified as "warnings" during the batch submission to the Production Environment.

(4) In the Production Environment, following single record additions, deletions, or edits made to the EIS Facility Inventory data on the EIS Gateway. Single record edits would run checks only associated with data that are being changed or added by the online transaction.

8.1.4.2 Rejection of Data vs. Rejection of the File

The EIS may reject the entire file if it is not a well-formed XML document. See Section 5, "Submitting XML Data to the EIS" for standards for XML integrity and format. EIS may reject data in a batch submission if the data fail to meet the minimum standards to ensure complete and accurate data. See Appendix 5, "Checks and Analysis" for all other checks. Data are rejected so that as little data as possible will be lost. Certain critical errors may result in the entire submission being rejected. Other critical errors may result only in the erroneous data element or component, and all dependent data, being rejected. In this case, the rest of the data are retained and loaded into EIS. All rejected data will be clearly identified in the feedback report. For example, nonpoint emissions data for a pollutant code which is not recognized by the EIS will be rejected. Detailed information about critical errors and the rejection of data appears below within the context of each component used for reporting.

8.1.4.3 Interpreting and Responding to Quality Assurance Results

The submitter is responsible for ensuring the quality of data. It is expected that achieving this quality will be an iterative process. The feedback reports, this documentation, and the detailed information about processes, pollutants, and methodologies are the resources EPA has provided to assist you. You are encouraged to take advantage of these resources and to make changes in your local information system and procedures that will adhere to the standards contained in these materials.

The QA Environment is the first line of quality assurance for the EIS, and allows checks to be run on any or all data prior to submitting to the Production Environment. An alternative approach would be to make a submission of data to the Production Environment, have the EIS execute the checks, and resubmit a limited set of locations designed to correct the identified errors. In addition, you may correct errors which do not result in rejection online using the EIS Gateway (as long as you believe that this is the most efficient way to do so, ensuring that the data in your local information system are also corrected.) Information about the specific checks performed on nonpoint submissions are found later in this section, are available in electronic format through the EIS Gateway, as well as in Appendix 5, "Checks and Analysis."

For more general information on the QA approach within the EIS, see Section 1, "Introduction to the NEI and EIS."

8.1.5 Step 5: Submit Your Data to the Production Environment

> **Official Submissions**
>
> Your "official submission" is comprised of all the emissions-related data in the EIS when the submission window for the inventory cycle closes. This includes data which have been submitted in an EIS CERS XML batch file, and data which you provide through the EIS Gateway.
>
> Until the submission window closes, you may continually update your data in the Production Environment without notifying EPA.

When you are confident that all issues identified in the feedback provided by the QA environment have been resolved, submit your data to the Production environment.

8.1.6 Step 6: Review Feedback Report from Production Environment

The checks performed on your data in the Production Environment are the same that were run in the QA Environment. For more details, see Step 4.

8.1.7 Step 7: Correct Any Errors in Previously Submitted Data

You may correct errors in previously submitted data during the submission period for an inventory cycle in two ways:

(1) Resubmit your emissions and activities with the Nonpoint Submittal Data Block for the location and process in question. This block must include the reporting period, activity and **all** pollutant emissions, and any optionally reported supplemental parameters and operating details, with the updated value(s). The EIS will delete all of these previously reported components and replace them with the resubmitted data. You must resubmit all of these components, even if only one value is changed.

(2) Use the EIS Gateway to add to, modify, or delete previously submitted data. You may delete online all nonpoint emissions data for a selected location and process, or edit a single emissions value for the location and process in question.

8.1.8 Step 8: Review Status of Your Submission

At any time, you may go to the EIS Gateway and view summary information regarding the status of your nonpoint (and other) submissions. Generally within two business days after the submission of your XML document, the EIS will have processed your data and the results will have been posted to the EIS Gateway.

8.1.9 Step 9: Communicate with EPA Analysts

Throughout this process you are encouraged to contact an EPA analyst by submitting a support request through the EIS Gateway. This process is intended to ensure that all questions, issues, and problems are tracked and responded to on a timely basis. For more, see the section of the EIS Users Manual entitled "How Do I Submit a Support Request?"

8.2 User Roles and Responsibilities

The following is a summary of S/L/T submitter and EPA roles and responsibilities during the pre-submission and submission periods for nonpoint emissions:

S/L/T Submitter

- Submit nonpoint emissions data for all nonpoint processes and activities for the inventory year *before the close of the submission period*.

- Use the QA Environment to check emissions data prior to submission to the Production Environment.

- Review and correct nonpoint emissions data in the EIS through the EIS Gateway.

EPA Staff

- Publish reporting instructions and code lists in advance of the inventory submission period.

- Generate emissions estimates for a number of sectors that EPA expects to be present in most if not all States. These emission estimates will be used as default data in the event that S/L/Ts do not submit emissions data for these sectors.

- Provide S/L/T submitters access within the EIS to current and historical inventory data.

- Provide support to S/L/Ts submitters to assist with inventory preparation, quality assurance, and submission.

8.3 Comparing Reported Emissions to Supporting Input Data Elements

The EIS CERS XML schema allows you to report the data elements necessary to calculate emissions. These elements are listed in Figure 8-5. Further information on each of these elements, including instructions, formats, and examples, may be found in the sections on the OperatingDetails, SupplementalCalculationParameters, and ReportingPeriodEmissions components.

If these supporting elements are reported correctly, and the method code indicates that an emission factor was used, the EIS will recalculate nonpoint emissions using the equation on the right and compare the calculated value with the S/L/T-reported emissions. You

Calculating Nonpoint Emissions

The equation relating supporting input data to emissions data is:

$$E = A * EF * [1- (CE/100 * CapE/100 * RE/100 * RP/100)]$$

where each term is as described in Figure 8-5 below.

may receive a warning message if the calculated difference is significantly out of the tolerance range. For more information on calculating nonpoint emissions, please refer to the EPA publication entitled *Introduction to Area Source Emission Inventory Development.*

Note that all percentages in the EIS should be reported without the percent sign; for example, 5.4% should be reported as 5.4.

Figure 8-5
EIS Data Elements Supporting the Calculation of Nonpoint Emissions

Abbreviation	Data Element and Description	Component
E	TotalEmissions This is the total emissions calculated for the time period corresponding to the reported activity.	ReportingPeriod Emissions
A	Calculation Parameter Value The quantifiable action or function used to calculate emissions for a process. Previously known as "throughput" or "activity"	ReportingPeriod
EF	EmissionFactor The average rate of emissions, generally uncontrolled, per unit of activity for a given pollutant. If the emission factor you use and/or report **does** include controls, **it is your responsibility to ensure that the control efficiencies used and/or reported, and any supplementary parameters used and/or reported, are adjusted accordingly. It is the submitter's responsibility to ensure that the data reported do not double-count controls.**	ReportingPeriod Emissions
CE	PercentControlMeasureReductionEfficiency ("Control Efficiency") The percent reduction achieved for the pollutant when all control measures are operating as designed.	ControlPollutant

(cont.)

Figure 8-5
EIS Data Elements Supporting the Calculation of Nonpoint Emissions (cont.)

Abbreviation	Data Element and Description	Component
CapE	PercentControlApproachCaptureEfficiency ("Capture Efficiency") An estimate of that portion of an affected emissions stream that is collected and routed to control devices, reported as a percent.	ControlApproach
RP	PercentControlApproachPenetration ("Rule Penetration") An estimate of that portion of the nonpoint location's activity that is affected by a rule or voluntary approach, expressed as a percent. In previous inventories, the rule penetration was reported in association with specific applicable regulations. This information is now reported as a collective percentage of the impact of all control approaches on the process category.	ControlApproach
RE	PercentControlApproachEffectiveness ("Rule Effectiveness") An estimate of the portion of the reporting period's emissions for which the control system (both capture and control measures) were operating as designed (regardless of whether the control measure is due to a rule or voluntary measure).	ControlApproach

8.4 Overview of Component Tables and Data Elements for Nonpoint Emissions Reporting

The following sections provide detailed information on the components and their data elements that can be reported for nonpoint emissions data. These components are NOT always listed in the correct hierarchy as explained in Section 5, "Submitting XML Data to the EIS." For each component, there is an explanatory table with the following columns:

- **Column 1: Data element.** The name of the data element.

- **Column 2: Description.** Information needed by the inventory developer to understand the content and purpose of the data element.

- **Column 3: Check description.** Information needed by the inventory developer to understand the checks that will be applied to the data element. For more information on quality assurance checks, see Section 1, "Introduction to the NEI and EIS."

- **Column 4: Check type.** Information on the type of check applied to the data element. For more information on quality assurance checks, see Section 1, "Introduction to the NEI and EIS."

- **Column 5: Check level.** The criticality level of the check. "Critical" checks that are failed result in the rejection of the affected data and all dependent data. "Warning" checks produce a warning message to the submitter, but the data are accepted and stored.

For more information on quality assurance checks, see Section 1, "Introduction to the NEI and EIS."

- **Column 6: Check number.** The number of the check. For a complete listing of all quality assurance checks, see Appendix 5, "Quality Assurance Checks."

Significant figures. Significant figures include all of the digits in a measurement that are known with certainty as well as the last digit, which is considered an approximation.	**Rounding.** If a value is reported with greater than the maximum stated significant figures, the EIS will round the submitted value and store the modified value instead. Values will not be truncated. The EIS will provide a warning message to the submitter showing the modified value. If you receive this message, you should either:

The EIS will assume trailing zeros are significant; leading zeros are not.
 	
Examples of numbers with three significant digits include:
 	
    0.00253   4.00
    100   133E-2
    99.9   670
    20.3   104E5
	(a) review the modified value to determine if appropriate, and/or
	
	(b) resubmit within maximum significant figures or decimal places to avoid EIS rounding.

Figure 8-6
Data Types

Data Type	Description	Example
Character (*width*)	String data. *Width* = Maximum allowable width (number of characters).	Data Type: Char (1) Valid: A 1 Invalid: ANNUAL 01
Integer (*width*)	Whole number (no decimal places, preceding zeroes not retained). *Width* = Maximum number of digits allowed, including a negative sign, if present.	Data Type: Int (3) Valid: 2 -15 930 Invalid: 4000 2.7

(cont.)

Figure 8-6
Data Types (cont.)

Data Type	Description	Example
Decimal (*width. scale*)	Decimal number with fixed maximum number of decimal places. *Width* = Maximum allowable width including digits on both sides of the decimal point, the decimal point itself, and a negative sign, if present. *Scale* = Maximum number of decimal places; that is, digits to the right of the decimal point. The EIS will not store decimal places beyond the maximum stated for the data element; it will round off excess decimal places. See the box above for more information on rounding.	Data Type: Dec (5.1) Valid: 100.0 34.6 0.3 0.0 -3.1 Invalid: 99.75 256.45 -483.3
Float (*significant figures*)	Decimal number with floating decimal point; that is, variable number of decimal places. No width is given, as this is variable. Floating decimals may also be represented with scientific notation. *Significant figures* = Maximum number of significant figures reportable (see above). The EIS will not store significant figures beyond the maximum stated for the data element; it will round off excess significant figures. See the boxes above for more information on significant figures and rounding.	Data Type: Float (3) Valid: 0.00845 *or* 8.45E-3 10.6 *or* 1.06E1 5 Invalid: 2,357 *or* 2.357E3 43.50 *or* 4.350E1
Date	YYYY-MM-DD	Data Type: Date Valid: 2008-02-28

8.5 Reporting the Location and Process

The Location component defines the geographic location of the nonpoint emissions. As can be seen in Figure 8-3, it also contains two child components, ExcludedLocationParameter and LocationEmissionsProcess.

A valid geographic location must be reported in order for any related activity or emissions data to be accepted into the EIS. For pre-2008 emissions inventories, nonpoint emissions data have been

Important Process Note

The Nonpoint location block must contain one combination of Tribe; State and County; State, County, and Census Block; State, County, Census Tract and Block; or State and Country.

submitted primarily at the County and Tribal level, and it is expected that this will be true for future inventories. However, the EIS supports census tract, census block, and reporting shapefiles for EPA-defined geospatial areas as well.

8.5.1 Reporting the Location: The Location Component

Figure 8-7
Data Elements for Location Component for Nonpoint Emissions Reporting

Important Process Note

The complete Census Tract ID is comprised of the State and County FIPS + the Census Tract ID.

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
StateAndCounty FIPSCode	The list is from FIPS Counties codes used for the identification of the Counties and County equivalents of the United States, from the code list in Appendix 6.	If reported, must match value in code list.	Code	Critical	23
TribalCode	The code that represents the American Indian Tribe or Alaskan Native entity, from the code list in Appendix 6..	If reported, must match value in code list.	Code	Critical	25
StateAndCountry FIPSCode	The code that represents a state and country for States in Mexico and Provinces in Canada, from the code list in Appendix 6..	If reported, must match value in code list.	Code	Critical	26
CensusBlock Identifier	The identifier that represents the post 2000 census block, which is the smallest geographic entity recognized by the census.	If reported, must match value in code list.	Code	Critical	576

(cont.)

Figure 8-7
Data Elements for Location Component for Nonpoint Emissions Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
CensusTract Identifier	The identifier that represents the post 2000 census tract, which is ideally a neighborhood within a city.	If reported, must match value in code list. The complete Census Tract ID is a concatenation of the State and County FIPS + the Census Tract ID.	Code	Critical	577
ShapeIdentifier	The shapefile identifier issued by EPA for a predefined geospatial shape.	If reported, must match a shapefile identifier that is in the EIS shape library on the EIS Gateway.	Code	Critical	578
Location Comment	Any comments regarding the location.	If reported, maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	298

Figure 8-8
Checks for Location Component

Description	Type	Criti-cality	Number
The nonpoint location block must contain one combination of Tribe; State and County; State, County, and Census Block; State, County, Census Tract and Block; or State and Country.	Conditional	Critical	812

8.5.2 Reporting an Excluded Location: the ExcludedLocationParameter Component

The purpose of this optional component is to define a geographic area within the primary geographic location for which emissions are <u>not</u> included in the related process/activity records. The ExcludedLocationParameter component must be submitted as a child component to its related nonpoint location. The possible levels of specificity for excluded location are limited to: (1) Tribal land; (2) census tract; and (3) census block. These locations may be excluded from any type of primary location that overlaps geographically.

Number of excluded locations. This is an optional component. Each primary geographic location may have zero, one, or more than one excluded nonpoint locations.

> **Granularity of Exclusions**
>
> A state agency does not need to specifically exclude counties if a local agency is reporting for the county. The state agency may simply not report data for that county.

Tribal lands overlapping Counties. If the reported excluded location is located in more than one County, then it is assumed that the intention is to exclude only the portion which overlaps the County and the excluded emissions should reflect this assumption. Census blocks and tracts are always within a single County.

Exclusion of areas defined by geospatial shapefiles. The EIS will maintain a library of shapefiles for areas that cannot be reported as areas with political boundaries. You may report emissions for, or exclude, these areas. Examples of areas identified by shapefiles include locomotive line segments and ports for commercial marine vessels.

New location blocks. If you submit data for a primary location and excluded locations which have not been previously reported, the EIS will add this as a new location combination.

Erroneous excluded locations. If you have submitted a primary location or a primary location with excluded locations which is erroneous and you would like to delete the location combination entirely, submit a support request through the EIS Gateway. You will not be able to delete this information directly, either through a submission or using the EIS Gateway.

Accounting for emissions from an excluded location. EPA expects that the same SCCs and pollutants will be reported at the primary location and its related excluded location. At the appropriate time, the EIS will analyze reported emissions data to determine if this has occurred. An EPA analyst has several options to evaluate and address any discrepancies and may contact you if your data indicates a significant problem relating to SCC or pollutant coverage.

Figure 8-9
Example of Excluded Location

| | Reporting Area: Riverside County |
| | Excluded Area: City of Live Oak (Census Tract 1315) |

You are reporting nonpoint emissions for Riverside County, shown to the left in gray. You wish to exclude the City of Live Oak, which is a census tract that will be reported separately.
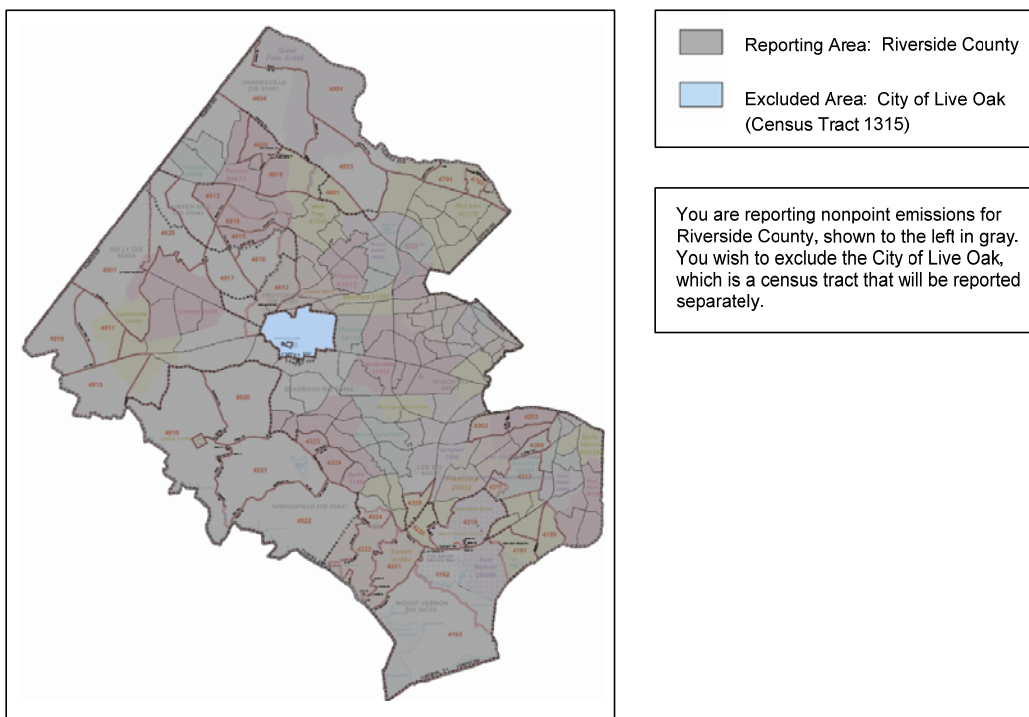
Figure 8-10
Data Elements for ExcludedLocation Component

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
LocationType Code	Identifies the type of code or identifier that is being excluded, from the code list in Appendix 6.	Required when reporting the excluded location parameter component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	1469
		Must match value in code list.	Code	Critical	522
Location Parameter	The code value or the identifier for the location type code. For example, if you are excluding a Census Tract from the county, you would report the code for the Census Tract here. If you excluding a Census Tract, be sure to add the State and County FIPS to the front of the Census Tract ID.	Required when reporting the excluded location parameter component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	1470
		Maximum allowable width of 20 characters. Longer submissions will be rejected.	Format	Critical	1471
Location Comment	Any comments regarding the excluded location.	If reported, maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	526

Figure 8-11
Checks for ExcludedLocation Component

Description	**Type**	**Criti-cality**	**Number**
Excluded Location must be a geographical subset of the primary location.	Present	Critical	528

8.5.3 Reporting the Emissions Process: the LocationEmissionsProcess Component

The LocationEmissionsProcess component is used to identify the process for which emissions are being reported. This component has the shared complex type of Process.

Multiple processes/activities for a nonpoint location. Although not required, you are encouraged to report all SCCs for a given nonpoint location in a single submission. You are also encouraged to report all nonpoint locations for your jurisdiction in a single submittal.

List of acceptable SCCs. EPA has defined a list of SCCs which will be acceptable for nonpoint emissions. Consult the list of nonpoint SCCs available in Appendix 6, "EIS Code Tables." If you would like to request that an SCC be added to the list of acceptable activities/processes for nonpoint emissions reporting, submit a support request through the EIS Gateway.

Completeness. There is no single list of processes and activities that would be applicable to a specific location that can be used as a definitive check of submission completeness.

Alternative SCCs. There are some emission sectors, such as architectural coatings, for which you may submit either general codes (all solvent types), or more specific codes (water-based, solvent-based). You must submit using one or the other approach, not both. For more information on the alternative SCCs for a specific sector, see Appendix 6, "EIS Code Tables."

If you submit emissions data using the general SCC in one submission and then use detailed SCCs in a subsequent submission for the same Counties, the EIS will delete the general SCC and all related emissions and activity data, and accept the detailed SCCs and their emissions. Similarly, EIS will replace the detailed SCCs and related emissions if general SCCs and emissions are received at a later time.

Figure 8-12
Data Elements for LocationEmissionsProcess Component for Reporting Nonpoint Emissions

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Source Classification Code	The emissions process for which point source activity and emissions are being reported, as defined by an EPA Source Classification Code, from code list in Appendix 6.	Required when reporting the emissions process component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	187
		Must match value in code list.	Code	Critical	90
EmissionsType Code	The type of emissions being reported, from code list in Appendix 6.

This data element is only used to support the reporting of emissions from Commercial Marine Vessels. | Must match value in code list. | Code | Critical | 614 |
AircraftEngine TypeCode	Not used for EIS Nonpoint Emissions.				
ProcessType Code	Not used for EIS.				
Process Description	Not used for EIS Nonpoint Emissions.				
LastEmissions Year	Not used for EIS Nonpoint Emissions.				
Process Comment	Comment about the emissions process for which activities/emissions are being reported.	If reported, maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	270

8.6 Reporting Regulations That Apply to a Process: The ProcessRegulation Component

Use the ProcessRegulation component to report that the emissions process is subject to a Federal or State regulation. This component has the shared complex type of Regulation.

Reporting of the ProcessRegulation component is voluntary but strongly encouraged by EPA. Regulatory information was reported in previous inventories only for MACT regulations. The capability has been extended in the EIS to include Federal criteria pollutant regulations and non-Federal regulations. Regulations are reported separately from the control approaches that control emissions. For information on the list of acceptable regulation codes for each nonpoint SCC, see Appendix 6, "EIS Code Tables."

If the regulation is a non-Federal regulation, you should use the AgencyCodeText to provide a description of the regulation. EPA encourages you to use standardized AgencyCodeText descriptions for each regulation within your jurisdiction, perhaps based on regulatory program descriptions or codes used in your local system.

Reporting multiple regulations. You may report one or more regulations to which your emissions process is subject. However, each regulation-process combination must be unique. That is, you cannot submit the same regulation for the same process twice.

> **Example State regulation:**
>
> Regulatory Code = SLT
>
> Agency Code Text = NY Part 238

Regulation affects multiple pollutants. It is assumed that a regulation applied to a process category may be directed at one or more pollutants. The regulated pollutants for the process category are identified in the rules themselves and are not reported.

Applicability timeline or rule effective date. The EIS will record this information for each inventory year for which data are submitted. The effective dates for specific standards and regulations are associated with the rules themselves and are not reported.

Impact of incomplete information or critical errors. If there are critical errors, the data in the component will be rejected.

Figure 8-13
Example Federal Regulation Codes

Code	Description
SIP	State Implementation Plan Control Requirement
87	NSPS for Lead Acid Batteries
1802-1	MACT for Municipal Waste Combustors: Small
ARP	Acid Rain Program
NBP	NO_x Budget Trading Program

Figure 8-14
Data Elements for ProcessRegulation Component for Nonpoint Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Regulatory Code	The Federal, State, or other regulation that applies to the unit or process being reported. For a list of EPA's regulatory codes for point sources, categorized by process, see Appendix 6.	Required when reporting the regulation component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	221
		Must match value in code list.	Code	Critical	110
AgencyCode Text	Text describing the non-Federal regulation applicable to the emissions unit or process.	Required if the regulatory code indicates it is a non Federal or a State program	Conditional	Critical	111
		Maximum allowable width of 100 characters. Longer submissions will be truncated.	Format	Critical	247
RegulatoryStart Year	Not used for EIS Nonpoint Emissions.				
RegulatoryEnd Year	Not used for EIS Nonpoint Emissions.				
Regulation Comment	A comment on the Federal or State regulation.	If reported maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	248

Figure 8-15
Check for Regulation Component

Description	Type	Criti-cality	Number
An active regulation may only be reported once for an emissions process.	Cardinality	Critical	220

8.7 Reporting Emissions Controls: The Controls Components

The group of Control components identifies the overall control system or approach that is applied to the process, including the control measures; their control efficiency on a pollutant basis; and the capture, rule effectiveness, and rule penetration percentages. The control approach represents the combined control measures. The group of Control components consists of one parent component, ControlApproach, and two child components, ControlPollutant and ControlMeasure. These components must be reported together when submitting nonpoint control data.

Figure 8-16
Control Approach Data Block
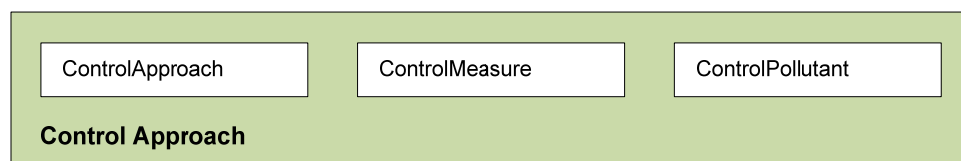
Inventory year. Control information submitted for an inventory cycle is associated with the inventory year identified with a submission file. It is not assumed that the control information you submit is applicable to prior inventory cycles or future inventory cycles. If you report emissions as monthly values, you would only report one Controls group for the inventory year.

Accepting Controls group. For the Control group of components to be accepted in the EIS, at least one valid control approach record, with at least one valid ControlMeasure record and at least one valid ControlPollutant record must be included.

Relationship to Regulation component. Although it is assumed that the regulations identified for the process are the reason why specific control devices or approaches are in place for this geographic location, inventory cycle, and process, EPA does not require that you associate the control information to a specific regulation.

Resubmission of Controls group. You should resubmit these components only if you intend to change any previously submitted data. You must submit the complete Nonpoint Submittal Data Block to include all three Control components together.

Resubmitting a reporting period. If you resubmit the emissions and activity data for a reporting period, but you do not have changes to the previously submitted Control components, it is **not** necessary to resubmit the Control components.

Controls group is optional. For uncontrolled processes, these components do not need to be submitted.

8.7.1   Reporting Overall Characteristics of the Control Approach: The ControlApproach Component

The ControlApproach component is the parent component of the Control group. It consists of the approach's overall characteristics including capture efficiency, effectiveness (i.e., percent of time operating as designed), and penetration (collective impact of all regulations).

If a control approach is being used for a given location, it must be reported. Therefore, for each combination of location, SCC, and reporting period, you should submit zero or one ControlApproach record.

Figure 8-17
Data Elements for ControlApproach Component for Nonpoint Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Control Approach Description	Description of the overall control approach applied to an emissions unit or process.	If reported maximum allowable width of 200 characters. Longer submissions will be truncated.	Format	Warning	239
PercentControl Approach Capture Efficiency	An estimate of that portion of an affected emissions stream that is collected and routed to the control measures, when the capture or collection system is operating as designed, reported as a percent. Use only where downstream control measures are present, not where stream is just vented without control.	Should be greater than or equal to 1.0 and less than or equal to 100.0.	Range	Critical	115
		Should be reported when reporting the control approach component.	Present	Warning	189
		This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	240

(cont.)

Figure 8-17
Data Elements for ControlApproach Component for Nonpoint Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Percent Control Approach Effectiveness	An estimate of the portion of the reporting period's activity for which the overall control system or approach (including both capture and control measures) were operating as designed (regardless of whether the control measure is due to a rule or voluntary measure).	Should be reported when reporting the control approach component.	Present	Warning	190
		Should be greater than or equal to 1.0, and less than or equal to 100.0.	Range	Critical	116
		This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	241
PercentControl Approach Penetration	An estimate of the percent value of the nonpoint activity throughput that is affected by a rule or voluntary approach for the given location. (Nonpoint only.)	Should be reported when reporting the control approach component.	Present	Warning	790
		Must be greater than 1.0 and less than or equal to 100.0.	Range	Critical	549
		This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	534
FirstInventory Year	Not used for EIS Nonpoint Emissions.				
LastInventory Year	Not used for EIS Nonpoint Emissions.				
Control Approach Comment	Comment regarding the control approach.	If reported maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	244

Figure 8-18
Checks for ControlApproach Component for Nonpoint Reporting

Description	Type	Criti-cality	Number
Each Control Approach component must be associated with at least one control measure. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	120
Each Control Approach component must be associated with at least one control pollutant. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	121

8.7.2   Reporting the Control Measures Comprising the Control Approach: The ControlMeasure Component

Use the ControlMeasure component to report the control devices and practices that make up the control approach.

For each ControlApproach record you should report at least one control measure. Multiple control measure records may be reported.

Figure 8-19
Data Elements for ControlMeasure Component for Nonpoint Reporting

Data Element		Check			
Name	Description	Description	Type	Criti-cality	Num-ber
Control Measure Code	The code that identifies the device or practice that is used to reduce one or more pollutants, from code list in Appendix 6.	Required when reporting the control measure component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	227
		Must match value in code list.	Code	Critical	122
		Control Measure codes must be unique within a control approach.	Cardinality	Critical	850
ControlMeasure Sequence	Not used for EIS.				

8.7.3   Reporting the Pollutants Controlled by the ControlApproach: The ControlPollutant Component

Use the ControlPollutant component to report the pollutants that are controlled by the control approach, and the percent reduction in emissions the control approach achieves.

You should report at least one pollutant for each Controls group,. Multiple pollutant records may be reported. For each pollutant controlled, report the associated Percent Control Measure Reduction Efficiency. If you wish to indicate that the same percent reduction was assumed across all VOC-related HAPs, you may simply provide a single percent reduction for pollutant "VOC." Particulates may be similarly handled. If you wish to report a different percent reduction for any VOC-related HAP or particulate, provide a separate ControlPollutant record.

For each pollutant controlled, report the associated Percent Control Measures Reduction Efficiency. This efficiency should reflect the amount of reduction across the entire set of devices or measures applied when they and any capture equipment are operating as designed. This reduction efficiency should not be discounted for the percent of the emissions stream which never reaches the control devices or measures due to less than complete capture, or due to control equipment downtime, malfunctions, or bypassing. Less-than-complete capture, control system downtime, malfunctions, or bypasses should be reflected in the ControlApproach component, as PercentControlApproachCaptureEfficiency and PercentControlApproachEffectiveness, respectively.

Figure 8-20
Data Elements for ControlPollutant Component for Nonpoint Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
PollutantCode	The code for the pollutant which is controlled by the control approach, from code list in Appendix 6. Each reported pollutant must appear on the list of valid pollutant codes.	Required when reporting the control pollutant component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	228
		Must match value in code list.	Code	Critical	124
		Control pollutant codes must be unique within a control approach.	Cardinality	Critical	849
		If there is a PM2.5 control pollutant there must be a PM10 control pollutant.	Conditional	Critical	837
Percent Control Measures Reduction Efficiency	The estimated average reduction achieved for the pollutant when all control measures are operating as designed, including capture, expressed as a percent. For a stream whose captured emissions are reduced to 75% of the incoming pre-control amount, report the amount of the reduction by the control measure, or 25%.	Should be reported when reporting the control pollutant component.	Present	Warning	191
		Should be greater than or equal to 1.0 and less than or equal to 100.	Range	Critical	125
		This element must be reported as a decimal reported with a maximum precision of 6.2.	Format	Critical	236
		If both are reported, PM2.5 percent control measure reduction efficiency cannot be larger than PM10 percent control measure reduction efficiency.	Conditional	Critical	838

8.8 Reporting the Period, Operating Details, Supplemental Parameters, Emissions

To report nonpoint emissions, your Nonpoint Submittal Data Block may include the following components, as was seen in Figure 8-3:

- ReportingPeriod;
- OperatingDetails;
- SupplementalParameters; and
- ReportingPeriodEmissions.

Figure 8-21
Components of Reporting Period for Nonpoint Reporting
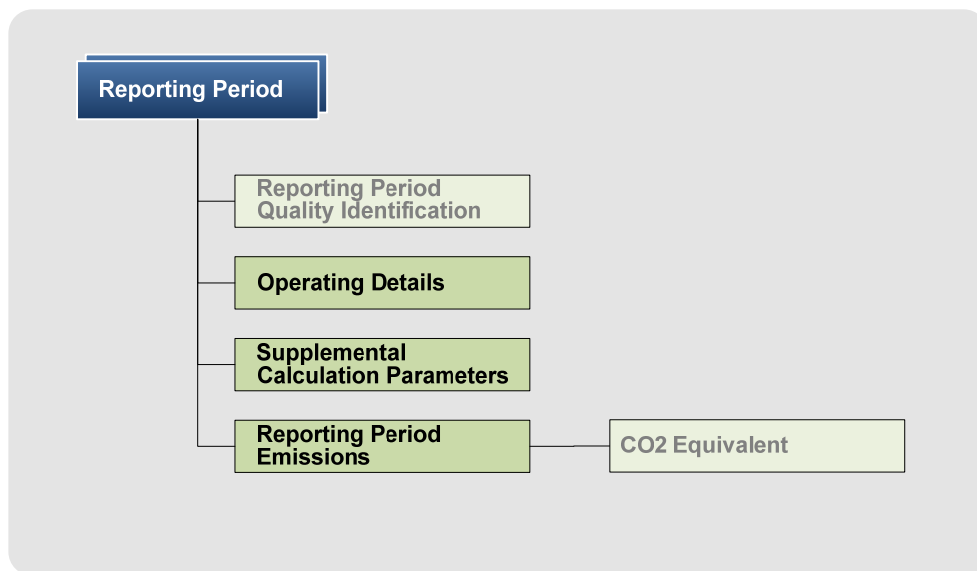
Minimum components. ReportingPeriod and ReportingPeriodEmissions are required components that must be included in your Nonpoint Submittal Data Block when reporting nonpoint emissions. SupplementalCalculationParameters and OperatingDetails are optional components.

Resubmission of the Nonpoint Submittal Data Block. As explained in Section 8.1, you must resubmit an entire Nonpoint Submittal Data Block, including any regulations or controls, if you intend to batch-submit any previously submitted data. The previously submitted data will be automatically overwritten with the new submission.

Impact of critical errors. If critical errors are encountered when processing any of the above data, they, along with the dependent data, may be rejected in the following manner:

- A critical error in the ReportingPeriod component results in rejection of the entire Nonpoint Submittal Data Block.

- Critical errors in the ReportingPeriodEmissions component result in rejection of the emissions for the individual pollutant record only. Reporting period, activity data, and other valid emissions records will be accepted.

8.8.1 Reporting the Time Period: The ReportingPeriod Component

The ReportingPeriod component identifies the time period during which nonpoint emissions and activity occurred. This component is the "parent" component of all emissions data submitted. The activity data are reported as part of the ReportingPeriod component using the calculation parameter data elements.

Consistency with inventory year. The reporting period must occur within the inventory year for which you are reporting. EPA will consider your reported emissions and activity data as your best representation of activity and emissions for the current inventory year. If the activity data you used to calculate emissions for the current inventory cycle originated in an earlier year, indicate that in CalculationDataYear.

Open submission period. The reporting period must be within an inventory year for which there is an open submission period for the reporting entity. Emissions for the previous or future inventory year will be rejected by EIS.

Full year reporting. For nonpoint emissions, a full annual emissions total must be reported, at a minimum, for each location and SCC reported. Additionally, you may also include monthly, five-month ozone season, summer-day, and winter CO season emissions. Specific daily emissions are accepted only for structural fires or episodic fire events for nonpoint sources. There is a specified set of SCCs for which emissions can and should be reported for each of the 12 months.

Monthly reporting. Emissions reported for certain SCCs are highly dependent upon local or seasonal conditions, and rely on established models to estimate those variations. They include animal husbandry and fertilizer application. For these SCCs you should report twelve individual months along with the single annual total.

Linkages between activity and emissions data. Activity data are the basis for estimating all emissions for the location, process and reporting period. For this reason, you are required to submit the activity data as part of the reporting period with all related emissions data in a submission.

Figure 8-22
Data Elements for ReportingPeriod Component for Nonpoint Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Reporting PeriodType Code	The time period type for which emissions are reported, from code list in Appendix 6.	Required when reporting the reporting period component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	1569
		Must match value in code list.	Code	Critical	353
		Five Month Ozone Season code can only be used for NO$_x$ emissions.	Conditional	Critical	359
		Summer Day code can only be used for NO$_x$, VOC, or CO emissions.	Conditional	Critical	360
		Summer Day emissions should not be more than the corresponding annual emissions divided by 300.	Calculation	Warning	361
		Winter code can only be used for carbon monoxide (CO) emissions.	Conditional	Critical	364
		There must be exactly one annual emissions record with emission operating type code of routine for each location, process, and pollutant reported. Additional records with other reporting period type codes may also be reported.	Cardinality	Critical	809
		There must be no more than one episodic emissions record per day for a location, process, and pollutant.	Cardinality	Critical	810

(cont.)

Figure 8-22
Data Elements for ReportingPeriod Component for Nonpoint Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Emissions OperatingType Code	Not used for EIS Nonpoint Emissions.				
StartDate	Not used for EIS Nonpoint Emissions.				
EndDate	Not used for EIS Nonpoint Emissions.				
Calculation ParameterType Code	Code indicating whether the material measured is an input to the process, an output of the process or a static count (not a throughput), from code list in Appendix 6.	Required when reporting the reporting period component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	404
		Must match value in code list.	Code	Critical	403
Calculation ParameterValue	Activity or throughput of the process for a given time period.	Required when reporting the reporting period component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	563
		Must be greater than or equal to zero.	Range	Critical	395
		This element must be reported as a float, reported with a maximum of 10 significant figures.	Format	Critical	394

(cont.)

Figure 8-22
Data Elements for ReportingPeriod Component for Nonpoint Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Calculation ParameterUnit ofMeasure	Code for the unit of measure for calculation parameter value., from code list in Appendix 6.	Required when reporting the reporting period component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	564
		Must match value in code list.	Code	Critical	397
Calculation MaterialCode	Code for material or fuel processed, from code list in Appendix 6.	Required when reporting the reporting period component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	402
		Must match value in code list.	Code	Critical	566
Calculation DataYear	The actual year represented by the data if it is different from the emissions year.	If reported, this element must be reported as an integer, reported with a maximum of 4 digits.	Format	Critical	407
		Must be between 1900 and 2050.	Range	Critical	408
Calculation DataSource	The source of the data used.	If reported, maximum allowable width of 100 characters. Longer submissions will be truncated.	Format	Warning	411
Reporting Period Comment	Any comments regarding the reporting period.	If reported maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	382

Figure 8-23
Checks for ReportingPeriod Component for Nonpoint Reporting

Description	Type	Criti-cality	Number
Both Calculation Parameter Values and Emissions are required when reporting the ReportingPeriod component.	Present	Critical	383
All 12 months must be submitted together.	Present	Critical	550

8.8.2 Reporting Operating Details: The OperatingDetails Component

This component is used to indicate the amount of actual operating time during the reporting period for which the reported process is active at the location. These data elements are for informational purposes only; they are not used by the EIS in comparing calculated reported emissions.

This is an optional component; the EIS will assume continuous operation if not reported.

Figure 8-24
Data Elements for OperatingDetails Component

Data Element		Check			
Name	Description	Description	Type	Criti-cality	Num-ber
ActualHours PerPeriod	Not used for EIS Nonpoint Emissions.				
ActualDays PerWeek	Not used for EIS Nonpoint Emissions.				
AverageHours PerDay	Not used for EIS Nonpoint Emissions.				
AverageWeeks PerPeriod	Not used for EIS Nonpoint Emissions.				
PercentWinter Activity	The percentage of the annual activity that occurred during the Winter months (December, January, February).	This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	423
		Must be a value between zero and 100, inclusive.	Range	Critical	424

(cont.)

Figure 8-24
Data Elements for OperatingDetails Component (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
PercentSpring Activity	The percentage of the annual activity that occurred during the Spring months (March, April, May).	This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	425
		Must be a value between zero and 100, inclusive.	Range	Critical	426
PercentSummer Activity	The percentage of the annual activity that occurred during the Summer months (June, July, August).	This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	427
		Must be value between zero and 100, inclusive.	Range	Critical	429
PercentFall Activity	The percentage of the annual activity that occurred during the Fall months (September, October, November).	This element must be reported as a decimal, reported with a maximum precision of 5.1.	Format	Critical	430
		Must be value between zero and 100, inclusive.	Range	Critical	431

Figure 8-25
Checks for OperatingDetails Component for Nonpoint Emissions Reporting

Description	Type	Criti-cality	Number
The seasonal percentages must either all be reported or none be reported.	Conditional	Critical	449
The seasonal percentages must total 100 +/- 0.5.	Calculation	Critical	567

8.8.3   Reporting Supplemental Parameters: The SupplementalCalculationParameters Component

For nonpoint emissions, you have the option to provide additional input parameters specific to commonly used calculation methodologies for fuel combustion emission sectors. EPA encourages, but does not require, the reporting of these supplemental parameters.

   Optional reporting. Use of the SupplementalCalculationParameters component is not required.

   Selection of data elements to report. The data elements in this component may be used, as appropriate, to report additional parameters used in your calculation of emissions for the process. Currently, EIS will accept supplemental parameters for heat content, percent sulfur content, and percent ash content, see figure 8-26 for acceptable values. If you would like to report additional parameters for which values have not yet been defined, submit your request to EPA through a support request in the EIS Gateway.

Figure 8-26
Values Accepted for EIS for SupplementalCalculationParameterType

Value	Description
Heat Content	The heat content for the fuel combusted.
Percent Sulfur Content	The percent of sulfur content for the fuel combusted.
Percent Ash Content	The percent of ash content for the fuel combusted.

Figure 8-27
Data Elements for SupplementalCalculationParameters Component
for Nonpoint Emissions Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Supplemental Calculation ParameterType	Name of the parameter that describes the type of activity, throughput or input used in the calculation.	Required when reporting the supplemental calculation parameter component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	1473
		Must match value in EIS list in Figure 8-26.	Comparison	Critical	1472

(cont.)

Figure 8-27
Data Elements for SupplementalCalculationParameters Component
for Nonpoint Emissions Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Supplemental Calculation ParameterValue	The value of the parameter.	Required when reporting supplemental calculation parameter component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	1474
		This element must be reported as a float, reported with a maximum precision of 5.2.	Format	Critical	450
		Must be greater than zero.	Range	Critical	451
Supplemental Calculation Parameter NumeratorUnit ofMeasureCode	The numerator unit of measure for the parameter, from code list in Appendix 6.	Combined with supplemental calculation parameter denominator unit of measure code must match value in calculation parameter unit of measure code list.	Code	Critical	1475
Supplemental Calculation Parameter Denominator UnitofMeasure Code	The denominator unit of measure for the parameter, from code list in Appendix 6.	Combined with supplemental calculation parameter numerator unit of measure code must match value in calculation parameter unit of measure code list.	Code	Critical	1475
Supplemental Calculation ParameterData Year	The year represented by the supplemental data if it is different from the emissions year.	If reported this element must be reported as an integer, reported with a maximum of 4 digits.	Format	Critical	1476
		Must be between 1900 and 2050.	Range	Critical	1477

(cont.)

Figure 8-27
Data Elements for SupplementalCalculationParameters Component
for Nonpoint Emissions Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
Supplemental Calculation ParameterData Source	The source of the supplemental parameter data used.	If reported maximum allowable width of 100 characters. Longer submissions will be truncated.	Format	Warning	1478
Supplemental Calculation Parameter Comment	Any comments regarding the parameter.	If reported maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	458

Figure 8-28
Checks for SupplementalParameters Component
for Nonpoint Emissions Reporting

Description	Type	Criti-cality	Number
The Supplemental Calculations Parameter component must be associated with a fuel combustion SCC.	Conditional	Critical	460

8.8.4 Reporting Emissions: The ReportingPeriodEmissions Component

The ReportingPeriodEmissions component is used to report emissions values for an SCC, pollutant, and reporting period. This component has the shared complex type of Emissions. More detail on emissions reporting is found in Section 8.1.1, "Step 1: Prepare Your Nonpoint Emissions Data."

Calculation methods. EPA is requiring the reporting of the emissions calculation method and has defined the list of acceptable emissions calculation method codes. For information on these codes, please see Appendix 6, "EIS Code Tables." To request that a code be added to the list, submit a support request through the EIS Gateway.

Pollutants to report. See Section 8.1.2, "Step 1: Prepare Your Nonpoint Emissions Data."

Correcting or deleting a single pollutant. As described earlier, there is no batch method to resubmit, correct, or delete emissions associated with a single pollutant except by resubmitting the complete Nonpoint Submittal Data Block. An individual pollutant record can, however, be modified through the EIS Gateway.

Figure 8-29
Data Elements for the Emissions Component for Nonpoint Reporting

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
PollutantCode	Code identifying the pollutant for which emissions are reported, from code list in Appendix 6.	Required when reporting the Emissions component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	471
		Must match value in code list.	Code	Critical	470
		Emissions should be reported for pollutants referenced in the applicable control approach.	Present	Warning	491
		If PM2.5 Primary and PM10 Primary are both reported pollutants, then PM2.5 Primary should not exceed PM10 Primary for the same reporting period.	Conditional	Warning	832
		If PM2.5 Filterable and PM10 Filterable are both reported pollutants, then PM2.5 Filterable should not exceed PM10 Filterable for the same reporting period.	Conditional	Warning	835
		If PM2.5 is reported, then PM10 should be reported.	Conditional	Warning	836
		If PM Condensable is reported, then PM2.5 and PM10 Filterable should be reported.	Conditional	Warning	839

(cont.)

Figure 8-29
Data Elements for the Emissions Component for Nonpoint Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
TotalEmissions	Total calculated or estimated amount of the pollutant.	Required when reporting the Emissions component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	473
		Must be inside the critical outlier range.	Range	Critical	474
		Should be inside the moderate outlier range.	Range	Warning	475
		Emissions should be reported for pollutants reported in the Control Pollutants component.	Present	Warning	491
		This element must be reported as a float, reported with a maximum of 4 significant figures.	Format	Critical	569
EmissionsUnit ofMeasureCode	Unit of measure code for reported emissions, from code list in Appendix 6.	Required when reporting the Emissions component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	479
		Must match value in code list.	Code	Critical	476
EmissionFactor	The emission factor used for the emissions value if a calculated value was provided.	If reported, this element must be reported as a float, reported with a maximum of 4 significant figures.	Format	Critical	480
		Must be greater than zero.	Range	Critical	611
EmissionFactor NumeratorUnit ofMeasureCode	The numerator for the unit of measure of the reported emission factor, from code list in Appendix 6.	Must match value in code list.	Code	Critical	482
		If the emission factor is reported, then the emission factor numerator unit of measure is required.	Conditional	Critical	570

(cont.)

Figure 8-29
Data Elements for the Emissions Component for Nonpoint Reporting (cont.)

Data Element		Check			
Name	**Description**	**Description**	**Type**	**Criti-cality**	**Num-ber**
EmissionFactor Denominator UnitofMeasure Code	The denominator for the unit of measure of the reported emission factor, from code list in Appendix 6.	Must match value in code list.	Code	Critical	483
		If the emission factor is reported, then the emission factor denominator unit of measure is required.	Conditional	Critical	571
EmissionFactor FormulaCode	Not used for EIS Nonpoint Emissions.				
EmissionFactor Text	Explanation for emission factor.	If reported, maximum allowable width of 100 characters. Longer submissions will be truncated.	Format	Warning	484
Emission Calculation MethodCode	Code that defines the method used to calculate emissions, from code list in Appendix 6.	Required when reporting the Emissions component. The component and all dependent data will not be stored if there are missing required data.	Present	Critical	486
		Must match value in code list.	Code	Critical	485
EmissionFactor ReferenceText	Not used for EIS Nonpoint Emissions.				
Algorithm FormulaText	Not used for EIS Nonpoint Emissions.				
Algorithm Comment	Not used for EIS Nonpoint Emissions.				
Calculation Method Accuracy Assessment Code	Not used for EIS Nonpoint Emissions.				
EmissionsDe MinimisStatus	Not used for EIS Nonpoint Emissions.				
Emissions Comment	Any comments regarding the emissions, method of calculation, or emission factor.	If reported maximum allowable width of 400 characters. Longer submissions will be truncated.	Format	Warning	487