NEI Point Inventory

May 15, 2018 RTP, NC

Today's Agenda

- NEI and EIS Background Intro
- EIS Gateway
- Facility Inventory
- Submitting Your Data to EIS
- Lunch 12:45-1:45
- Point Emissions
- EPA Augmentation and Selection
- EIS Data Reports

Components of the NEI

- Five Emissions data categories
 - Point Emissions (attached to Facility Inventory)
 - Nonpoint Emissions
 - Onroad Emissions
 - Nonroad Emissions
 - Event Emissions (wildfires and prescribed fires)

 No biogenic emissions, although these are part of EPA's modeling files



Uses of the NEI

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



POINT - S/L/T Reporting Requirement

- Air Emissions Reporting Rule (AERR)
 https://www.epa.gov/air-emissions-inventories/air-emissions-reporting-requirements-aerr
- Complete criteria pollutant inventory every 3 years (all data categories)
 - All point sources with PTE > 100 Ton/year
 - 2017 Emissions due 12/31/2018
 - Annual reporting for Type A facilities
 - SO2, NOx, CO with PTE > 2,500 Ton/year
 - VOC, PM, NH3 with PTE > 250 Ton/year
 - Pb with <u>Actual</u> Emissions > a Half Ton/year
 - HAPs are submitted voluntarily by many S/L/Ts and are encouraged as part of an integrated report



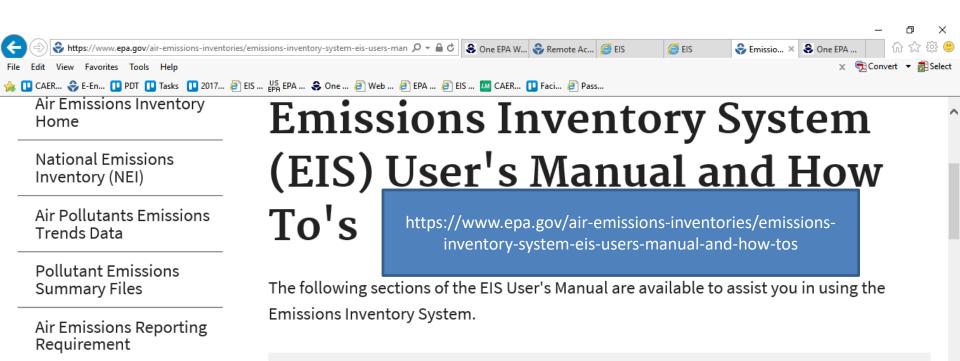
Terminology - EIS or NEI?

- Emission Inventory System (EIS)
 - Data repository for air emissions data used to create the NEI
 - Contains State, Local, Tribal and EPA-submitted data
 - Can be multiple emissions values for the same unit/process
 - Annual, monthly, ozone season, and daily data
 - EIS Gateway interface https://eis.epa.gov/eis-system-web/welcome.html
- National Emission Inventory (NEI)
 - Snapshot in time from EIS
 - Inventory version shared with the public
 - One emissions value per process selected
 - Annual emissions values



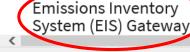
EIS Gateway





You may need Adobe Reader to view files on this page. See EPA's About PDF page to learn more.

How Do I Request Access to EIS Gateway (PDF) (27 pp, 2 MB)









Emissions Inventory

Air Emissions Sources

Tools

























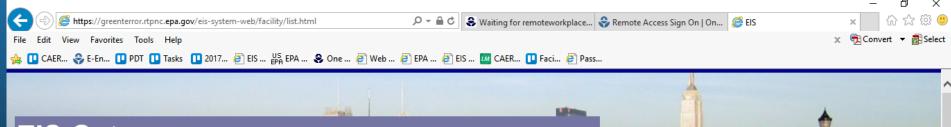












EIS Gateway

Jk Miller; North Carolina Department of Environment and Natural Resources; Authenticated Role, S/L/T User Role

VIEW/ADD/EDIT

- » Facility Inventory and Point Emissions
- » Potential Duplicate Facilities
- » Nonpoint/ Onroad/ **Nonroad Emissions**
- » Event Emissions
- » NCD Activity Data
- » CDB Activity Data

REPORTS

- » Request Reports
- » Report Downloads
- » Large File Download
- " Foodbook Doporto

Facility	Invent	ory a	and F	Point	Emi	ssions
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Match OAII OAny of the criteria.

EIS Facility IDs:

Show me exact matches only:

Agency IDs (displayed IDs, alternative IDs):

Show me exact matches only:

Name (facility name, company name, alternate name):

Show me exact matches only:

NAICS Code:

Show me exact matches only:

Add a Facility Site

































































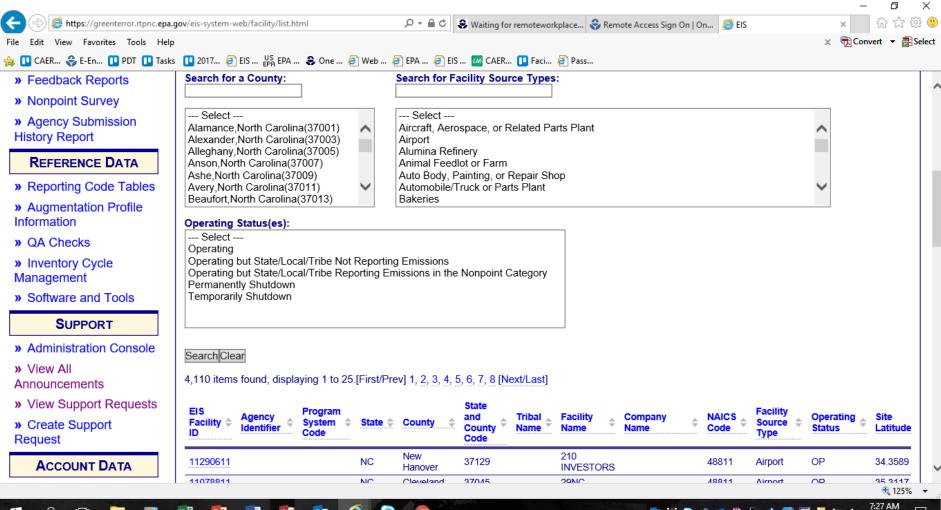






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CAER... SE-En... PDT Task

» Create Support Request

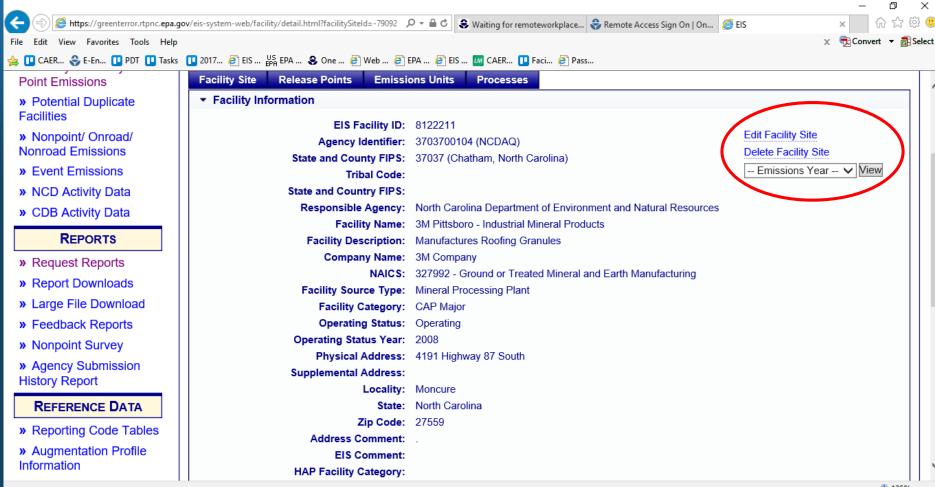
ACCOUNT DATA

- » My Account
- » My Agency
- » Logout

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EIS Facility \$ ID	Agency Identifier	Program System \$ Code	State \$	County \$	and County Code	Tribal Name	Facility Name	Company Name	NAICS Code	Facility Source \$ Type	Operating \$	Site Latitude
11290611			NC	New Hanover	37129		210 INVESTORS		48811	Airport	OP	34.3589
11078811			NC	Cleveland	37045		29NC		48811	Airport	OP	35.3117
8297111	3709700121	NCDAQ	NC	Iredell	37097		3A Composites USA, Inc.	Nevamar Company	322220		OP	35.8083
17040511	37 19500226	NCDAQ	NC	Wilson	37195		3C Store Fixtures, Inc.	3C Store Fixtrures, Inc.	33711		ONRE	35.7397
8122211	3703700104	ICDAQ	NC	Chatham	37037		3M Pittsboro - Industrial Mineral Products	3M Company	327992	Mineral Processing Plant	OP	35.6609
13441311	3705700273	NCDAQ	NC	Davidson	37057		A. M. Haire Body Company	A. M. Haire Manufacturing & Service Corporation	336211		ONRE	35.8919
15054911	3715700167	NCDAQ	NC	Rockingham	37157		A.C. Furniture Company, Inc.	A.C. Furniture Company, Inc.	337127		OP	36.5103
7787111	3700100201	NCDAQ	NC	Alamance	37001		A.O. Smith Corporation	Na	335312		PS	36.0849
8150211	3716100178	NCDAQ	NC	Rutherford	37161		Aallied Die Casting Co Of Nc	Na	331523		ONRE	35.3555
17031211	3719100265	NCDAQ	NC	Wayne	37191		AAR Corporation- Goldsboro	AAR Corporation- Goldsboro	332439		ONRE	35.3686
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- » Facility Inventory and **Point Emissions**
- » Potential Duplicate **Facilities**
- » Nonpoint/ Onroad/ Nonroad Emissions
- » Event Emissions
- » NCD Activity Data
- » CDB Activity Data

REPORTS

- » Request Reports
- » Report Downloads
- » Large File Download
- » Feedback Reports
- » Nonpoint Survey
- » Agency Submission **History Report**

REFERENCE DATA

» Reporting Code Tables

Facility Site Facility Site

Release Points

Emissions Units

Processes

▼ Facility Information

EIS Facility ID: 10616211

Agency Identifier: 3700700050 (NCDAQ)

State and County FIPS: 37007 (Anson, North Carolina)

Tribal Code:

State and Country FIPS:

Responsible Agency: North Carolina Department of Environment and Natural Resources

Facility Name: NCEMC - Anson Plant

Facility Description: Electrical Generation by Fossil Fuels

Company Name: North Carolina Electric Membership Corporation

NAICS: 221112 - Fossil Fuel Electric Power Generation

Facility Source Type: Electricity Generation via Combustion

Facility Category: CAP Major Operating Status: Operating

Operating Status Year:

Physical Address: 749 Blewett Falls Road

Supplemental Address:

Locality: Lilesville

State: North Carolina

Zip Code: 28091

Address Comment:

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Edit Facility Site

Delete Facility Site

-- Emissions Year -- 🗸 View



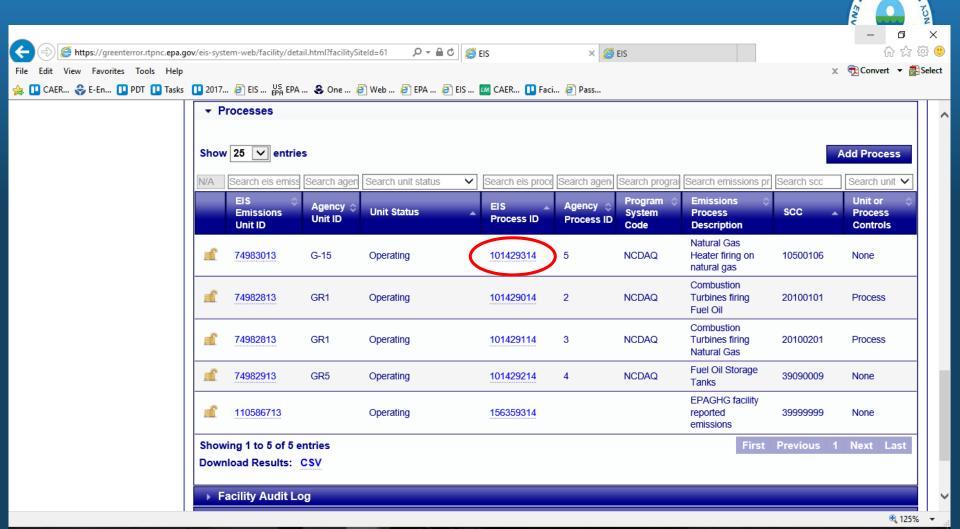






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Edit Emissions Process

Delete Emission Process

View Emissions





- » Nonpoint/ Onroad/ Nonroad Emissions
- » Event Emissions
- » NCD Activity Data
- » CDB Activity Data

REPORTS

- » Request Reports
- » Report Downloads
- » Large File Download
- » Feedback Reports
- » Nonpoint Survey
- » Agency Submission History Report

REFERENCE DATA

- » Reporting Code Tables
- » Augmentation Profile Information
- » QA Checks
- » Inventory Cycle

EIS Process ID: 101429314

▼ Emissions Process

Agency Process ID: 5

Program System Code: NCDAQ

EPA Process ID:

EPA Program System Code:

SCC: 10500106

Aircraft Engine Type Code:

Emissions Process Description: Natural Gas Heater firing on natural gas

> SCC Level One: External Combustion

SCC Level Two: Space Heaters

SCC Level Three: Industrial

SCC Level Four: Natural Gas

Last Inventory Year:

Comment:

Last updated from: Jonathan Miller

Last updated by agency: EIS

Last updated on: 2017-01-14 10:52 PM

- **Control Approaches**
- **Release Point Apportionment**
- **Applicable Regulations**
- **Emissions Process Audit Log**





















































- » NCD Activity Data
- » CDB Activity Data
- » Inventory Selection
- » Schedule Augmentation
- » Data Tagging

REPORTS

- » Request Reports
- » Report Downloads
- » Large File Download
- » Feedback Reports
- » Agency Submission History Report
- » Data Tagging Administration Report

REFERENCE DATA

- » Reporting Code Tables
- » Augmentation Profile Information
- » QA Checks
- » View Dataset Identifiers
- » Inventory Cycle

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DataSet	Inventory \$ Year	Reporting Period 💠 Type	Emissions Operating Type Code	Start Date 💠	End Date ≎
North Carolina Department of Environment and Natural Resources	2010	Annual	Routine	2010-01-01	2010-12-31
North Carolina Department of Environment and Natural Resources	2015	Annual	Routine	2015-01-01	2015-12-31
North Carolina Department of Environment and Natural Resources	2014	Annual	Routine	2014-01-01	2014-12-31
North Carolina Department of Environment and Natural Resources	2008	Annual	Routine	2008-01-01	2008-12-31
North Carolina Department of Environment and Natural Resources	2012	Annual	Routine	2012-01-01	2012-12-31
North Carolina Department of Environment and Natural Resources	2009	Annual	Routine	2009-01-01	2009-12-31
North Carolina Department of Environment and Natural Resources	2011	Annual	Routine	2011-01-01	2011-12-31
North Carolina Department of Environment and Natural Resources	2013	Annual	Routine	2013-01-01	2013-12-31
2011 NEI V2	2011	Annual	Routine	2011-01-01	2011-12-31
2014 Responsible Agency Data	2014	Annual	Routine	2014-01-01	2014-12-31
2013 NEI V1 (Point Only)	2013	Annual	Routine	2013-01-01	2013-12-31
2008 NEI V3	2008	Annual	Routine	2008-01-01	2008-12-31
2014 NEI Draft V1	2014	Annual	Routine	2014-01-01	2014-12-31
2012 NEI (Point Only)	2012	Annual	Routine	2012-01-01	2012-12-31
2014 NEI Draft V2	2014	Annual	Routine	2014-01-01	2014-12-31
2014 NEI Final V1	2014	Annual	Routine	2014-01-01	2014-12-31























































Announcements

- » View Support Requests
- » Create Support Request

ACCOUNT DATA

- » My Account
- » My Agency
- » Account List
- » Current Users List
- » Account Request List
- » Agency Organizations

CONTENT MANAGEMENT

- » Messages
- » Application Configuration
- » Create Announcement
- » Transmission to **Envirofacts**
- » Logout

Pollutant 4	Pollutant \$ Code	Pollutant \$	North Carolina Department of Environment and Natural Resources 2014 Annual Routine	≎ DataTag	2014 NEI Final V1 ‡ 2014 Annual Routine	≎ DataTag	North Carolina () Department of Environment and Natural Resources 2011 Annual Routine	C DataTa
CAP	voc	Volatile Organic Compounds	0.0200000 TON		0.0200000 TON		0.0100000 TON	
CAP	7439921	Lead	0.000230000 LB		0.000230000 LB			
CAP	NOX	Nitrogen Oxides	0.0300000 TON	Δ	0.0300000 TON	\triangle	0.0200000 TON	Δ
CAP	СО	Carbon Monoxide	0.0300000 TON		0.0300000 TON		0.0200000 TON	
HAP	7440417	Beryllium	0.0000100000 LB		0.0000100000 LB			
HAP	7440382	Arsenic	0.0000900000 LB		0.0000900000 LB			
HAP	7439965	Manganese	0.000170000 LB		0.000170000 LB			
HAP	91203	Naphthalene	0.000280000 LB		0.000280000 LB			
HAP	130498292	PAH, total	0.000320000 LB		0.000320000 LB			
HAP	50000	Formaldehyde	0.0343700 LB		0.0343700 LB			
HAP	7439976	Mercury	0.000120000 LB		0.000120000 LB			
HAP	108883	Toluene	0.00156000 LB		0.00156000 LB			
HAP	7738945	Chromic Acid (VI)	0.000640000 LB		0.000640000 LB			
HAP	71432	Benzene	0.000960000 LB		0.000960000 LB			
HAP	7440020	Nickel	0.000960000 LB		0.000960000 LB			
HAP	7440439	Cadmium	0.000500000 LB		0.000500000 LB			























































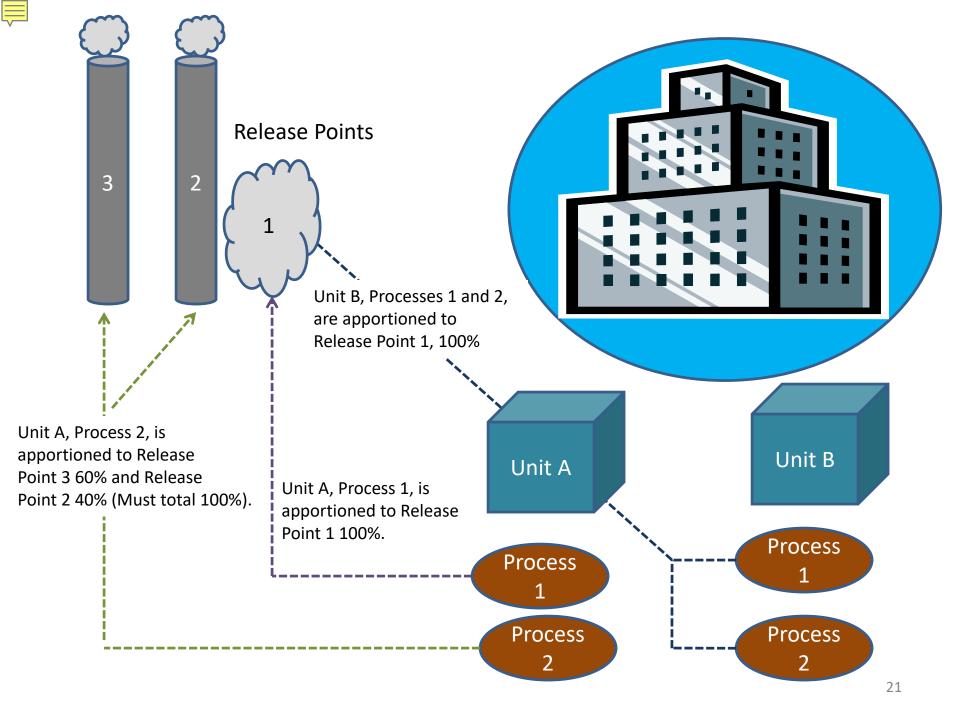


The Facility Inventory



The Facility Inventory

- Information on the physical facility, as opposed to the annual throughputs and emissions. Provides the static framework to which point emissions can be reported each year.
 - Site-level information and location
 - Release point parameters and locations
 - Emission unit information (unit type, design capacity)
 - Emission process information (SCC)
 - Control devices or measures
 - Regulations
- Only changes or additions from year to year need to be reported.
 - EIS will recognize what the changes are if you maintain consistent facility/unit/process/release point IDs each year
- The Facility Inventory provides the common framework between your Agency's data system and USEPA's for inventories





Site-level Info Required for New Facility

- State and County FIPS or Tribal Code
- Facility Site Identifier (your Agency's ID)
- Facility Site Identifier Program System Code
- Facility Site Name
- Facility Site Status Code (and Status Year if not="OP")
- NAICS
- 4 Physical Address Fields : Street, City, State, Zip
- Site-level Latitude and Longitude
 - must be **Decimal Degrees** (NOT Degrees.MinuteSecond)



Exceptions for Portable Facilities and Off-Shore Platforms

Portable Facilities

- State FIPS + 777
- Use "Portable Facility" for Facility Site Description
- Geographic Coordinates and Physical Address can not be reported.

Off-shore Platforms in State Waters

- Provide the 5-digit FIPS
- Use "Offshore Facility" for Facility Site Description
- Provide the Site-level Geographic Coordinates
- Use "N/A" for Physical Street Address and City
- Provide State Abbreviation
- Use "99999" for Zip Code

Off-shore Platforms in Federal Waters

- State and County FIPS = 85000
- USEPA loads emissions estimated by Dept of Interior to EIS



Airports

- Prior to 2008 NEI, reported by USEPA as nonpoint county sums
- EPA has created 21,000 airport facilities in EIS. ALL airports, helipads, seaplane bases now in Facility/Point
 - EPA provides estimates for LTOs and aircraft-related emissions, so only improved or missing local data need be reported
- Nonpoint or nonroad emissions NOT accepted for aircraft engine exhaust, auxiliary power units or ground support equipment, even though NONROAD model calculates APU and GSE
 - aviation gas distribution and filling emissions continue to be reported as nonpoint county sums
- IF S/L/Ts report, use the existing EPA unit and process ID framework to place emissions at same processes as USEPA
 - Units are aircraft types (military, commercial, general aviation, etc)
 - Processes are aircraft make and engine type, indicated by aircraft engine type code. This is a required field
 - Combinations of SCC plus aircraft engine type code that duplicate existing processes will NOT be accepted as new processes

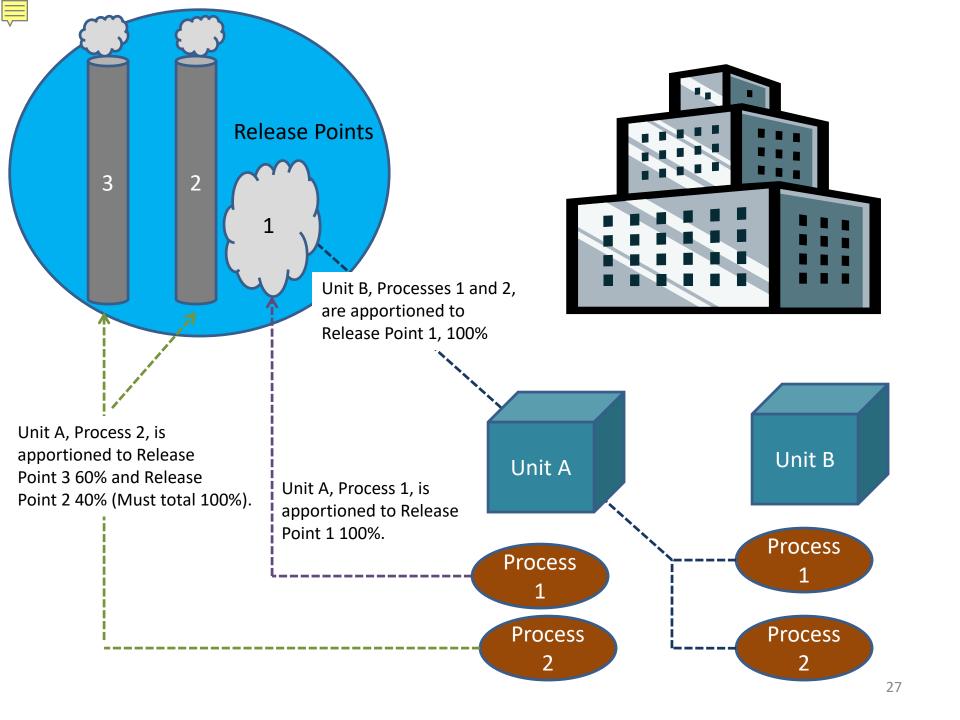


Rail Yards

- EPA has added 1240 largest facilities to EIS
- There may be smaller rail yards.
 - S/L/Ts may add these as Facility/Point or report in nonpoint
 - Check Facility Inventory for duplication
- Emissions from yard locomotives only.
- Emissions from locomotives on rail lines are reported in nonpoint using line segment shapefiles









Info Required for New Release Point

- State and County FIPS or Tribal Code
- Facility Site Identifier and Program System Code
- Release Point Identifier (your Agency's ID)
- Release Point Identifier Program System Code
- Operating Status (and Status Year if not="OP")
 - OP, PS, TS
- Release Point Type Code
 - 1 Fugitive
 - 2 Vertical
 - 3 Horizontal
 - 4 Goose Neck
 - 5 Vertical with Rain Cap
 - 6 Downward-Facing Vent



Required if Release Point is a Stack

- Height & Unit of Measure (FT)
- Diameter & Unit of Measure (FT)
- Exit Gas Velocity & Unit of Measure (FPS or FPM)
 AND/OR Exit Gas Flow Rate & Unit of Measure (ACFS or ACFM) or both
 - Error 192 consistency of Diameter, Velocity, and Flow
- Exit Gas Temperature (in Degrees F)
- Optional : Release Point Lat-Lon Coordinates
 - must be **Decimal Degrees** (NOT Degrees.MinuteSecond)



Fugitive Releases

- Fugitive parameters are optional
- Height and Unit of Measure (FT)
- Width and Unit of Measure (FT)
- Length and Unit of Measure (FT)
- Angle tilted from true North (in Degrees)

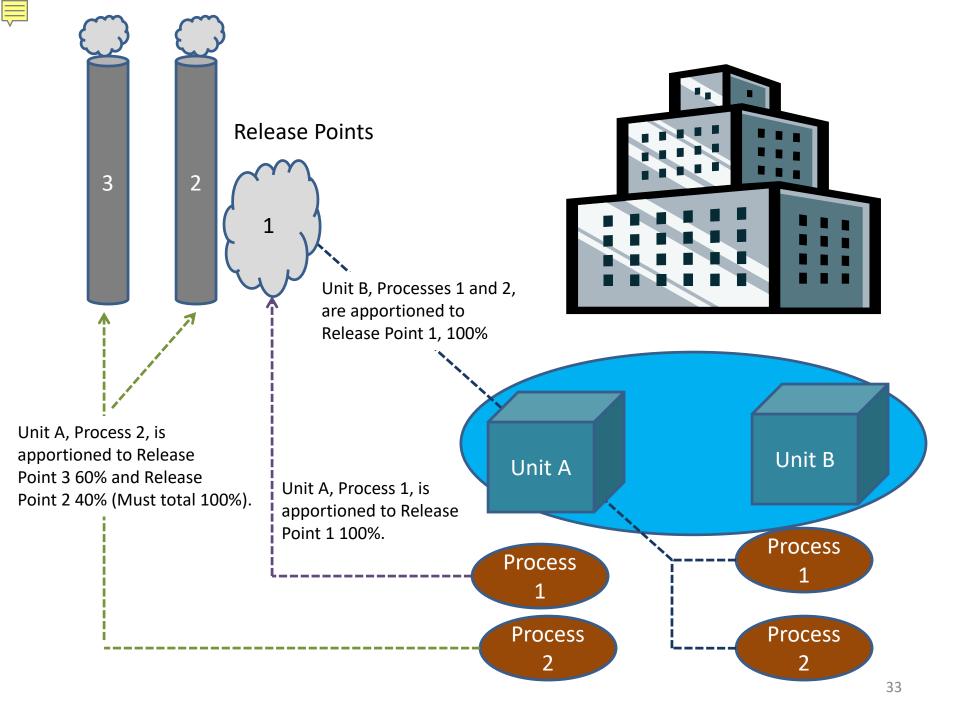


Geo Coordinates - Lat & Lon

- Required at Site Level
- Optional at Release Point Level
- Unless you have actual release point coordinates for some of your larger facilities, we suggest reporting Site level only
 - Modeling files will use Site coords for any missing Release Point coords
 - Site center or main emitting point coords preferred
 - Use the Geo Reference Point Code to indicate that your measurement is the entrance or site center or other
- Be careful with any conversions from your system's data
 - Decimal Degrees (NOT Degrees.MinuteSecond)
 - Sum Longitude whole degrees and decimal portion correctly
 - UTM zone errors



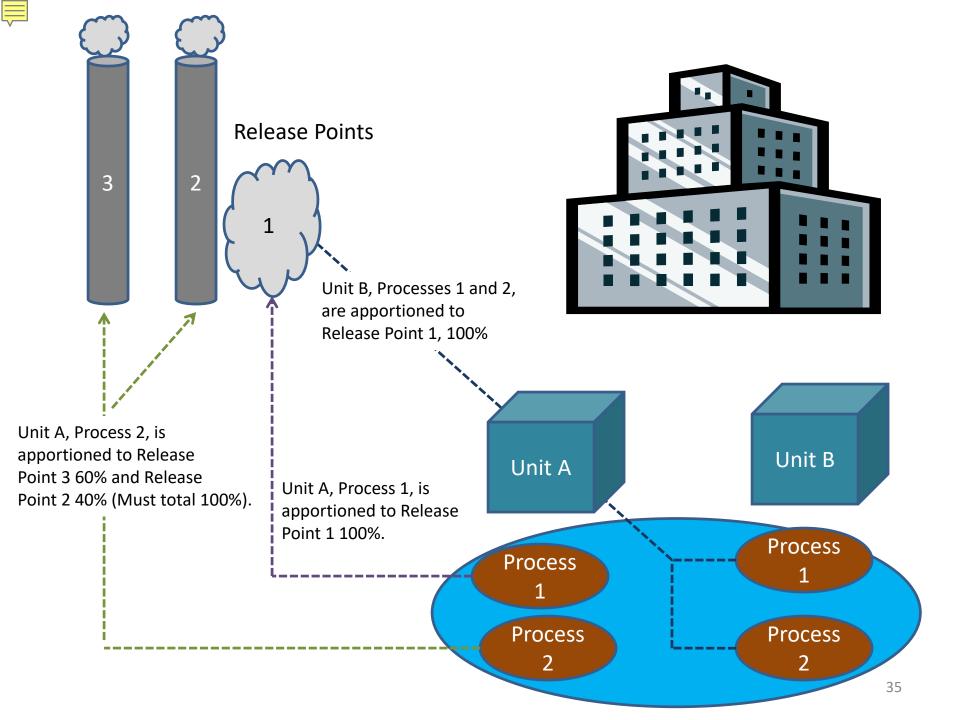






Info Required for New Emission Unit

- State and County FIPS or Tribal Code
- Facility Site Identifier and Program System Code
- Unit Identifier (your Agency's ID)
- Unit Identifier Program System Code
- Operating Status (and Status Year if not="OP")
 - OP, PS, TS
- Unit Type Code
 - 999 = "Miscellaneous" is available if necessary. Don't include this for existing units to avoid overwriting all with 999
- Design Capacity & Unit of Measure is requested for boilers, turbines, engines, heaters, and is a warning check





Info Required for New Emission Process

- State and County FIPS or Tribal Code
- Facility Site Identifier and Program System Code
- Unit Identifier and Program System Code
- Emissions Process Identifier (your Agency's ID)
- Emissions Process Identifier Program System Code
- Aircraft Engine Type Code –Required for aircraft SCCs
- One or more Release Point Apportionments
- Source Classification Code
 - Avoid using non-specific codes such as 399999xx if possible
 - Now available as a web service for your system.
 https://ofmpub.epa.gov/sccwebservices/sccsearch/



Release Point Apportionment

- State and County FIPS or Tribal Code
- Facility Site Identifier and Program System Code
- Unit Identifier and Program System Code
- Emissions Process Identifier (your Agency's ID) and Program System Code
- Release Point Identifier (your Agency's ID)
- Release Point Identifier Program System Code
- Percent of process venting to release point
- A process may be vented to one or more release points
- Total percentages must equal 100







Controls

- Controls are required by AERR to be reported if they exist
 - No uncontrolled code
- Either unit **OR** process level
- Only one control approach may be active at any given time any new controls submitted replaces the existing controls in EIS
- Three components must be reported together :
 - Control Approach Component
 - The "parent" of the control group
 - non-pollutant specific percentages capture, effectiveness
 - Control Measure Component
 - control device codes that make up the control approach
 - Control Pollutant Component
 - Pollutants controlled by the all devices in the overall approach
 - Percent Reduction Efficiency for each pollutant, if available



Control Approach Component

- Facility Site Identifier and Program System Code
- Unit Identifier and Program System Code
- Emissions Process Identifier and Program System Code
 - Reported only if the control approach is at the process level
- First Inventory Year
- Percent Control Approach Capture Efficiency
- Percent Control Approach Effectiveness



Control Measure Component

- Facility Site Identifier and Program System Code
- Unit Identifier and Program System Code
- Emissions Process Identifier and Program System
 Code
 - Reported only if the control approach is at the process level
- Control Measure Code(s) at least one required



Control Pollutant

- Facility Site Identifier and Program System Code
- Unit Identifier and Program System Code
- Emissions Process Identifier and Program System Code
 - Reported only if the control approach is at the process level
- Pollutant Code(s) at least one required
- Optional, and desirable, per pollutant: % reduction achieved by the combination of all control measures
- If reported, Percent Control Measures Reduction Efficiency cannot be 100% unless there is a ban in use.



Maintaining Identifiers Across Years

- You may submit data to EIS using EITHER your Agency's IDs OR the EIS IDs
- Unique and recognized IDs for Sites, Units, Emission Processes and Release Points
- If a Site ID is not recognized by EIS, it checks existing for Potential Duplicate site.
- No duplicate checking below Site Level
 - New emission units for EGUs may create duplicated emissions



If You Must Revise Your IDs

- Individually via EIS Gateway
- Or large batch
 - Must use EIS Identifiers
 - Provide New ID under Agency ID data fields (facility, unit, process and release point)
 - EIS will automatically place an end date on the current identifier and replace it with the new identifier.





Submitting your data to EIS



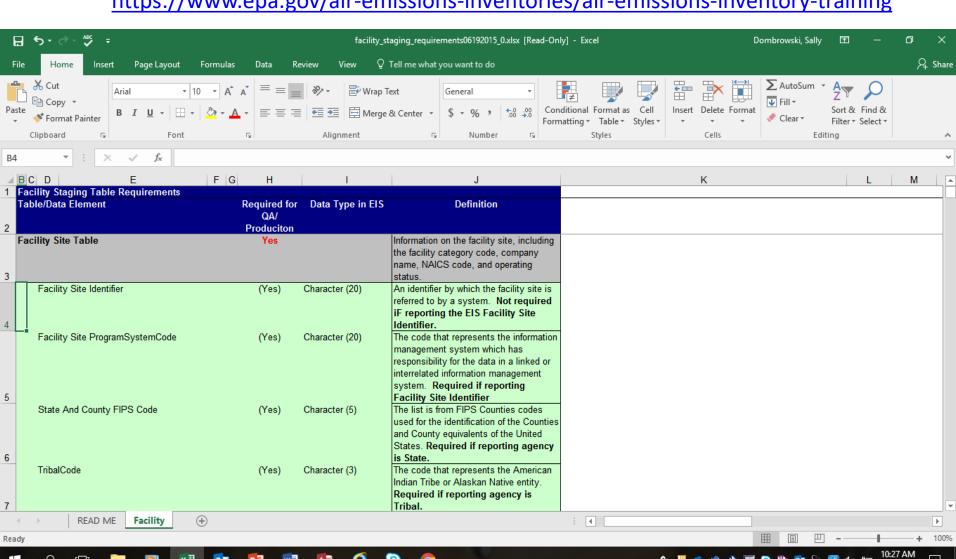
Submittal Process

- Must be an XML file in EIS CERS schema format
 - https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-training
- Submit zipped XML file to EPA CDX Node
- QA or Production Environment
 - QA is always open to check your data. Does not change anything in the EIS
 - Same QA checks are applied in either environment
 - Production submission will update the EIS



Requirements Spreadsheet

https://www.epa.gov/air-emissions-inventories/air-emissions-inventory-training





How do I create an XML file

- Direct Export Feature in your SLT system
 - Mainframes or desktop software packages

or

- Get your updated data into the EIS Bridge Tool
 - https://www.epa.gov/air-emissions-inventories/airemissions-inventory-tools



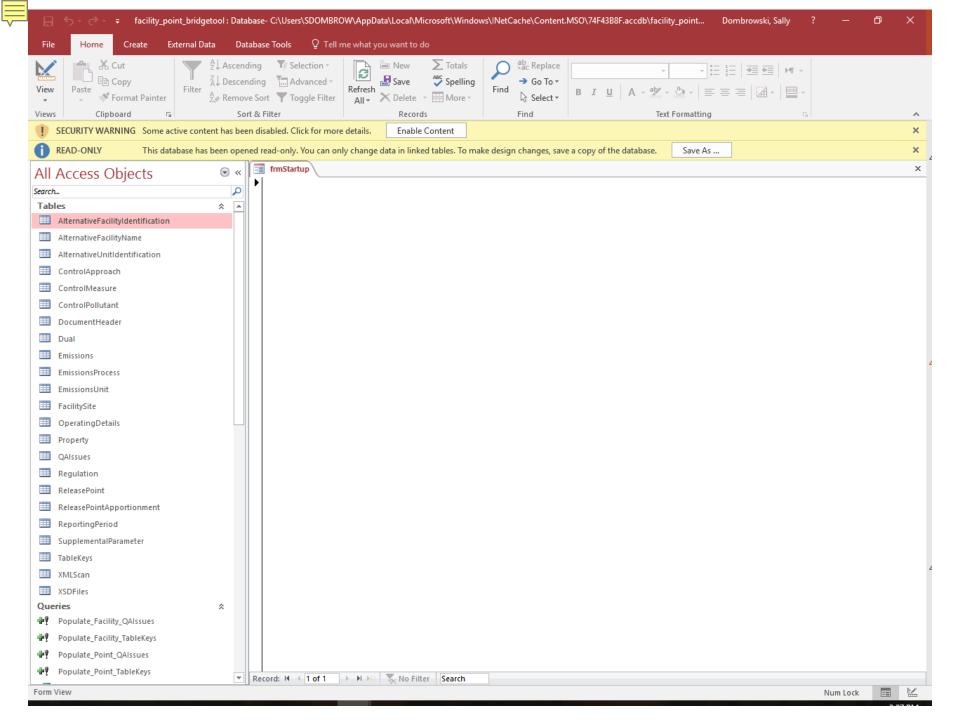
Send XML to EPA CDX Node

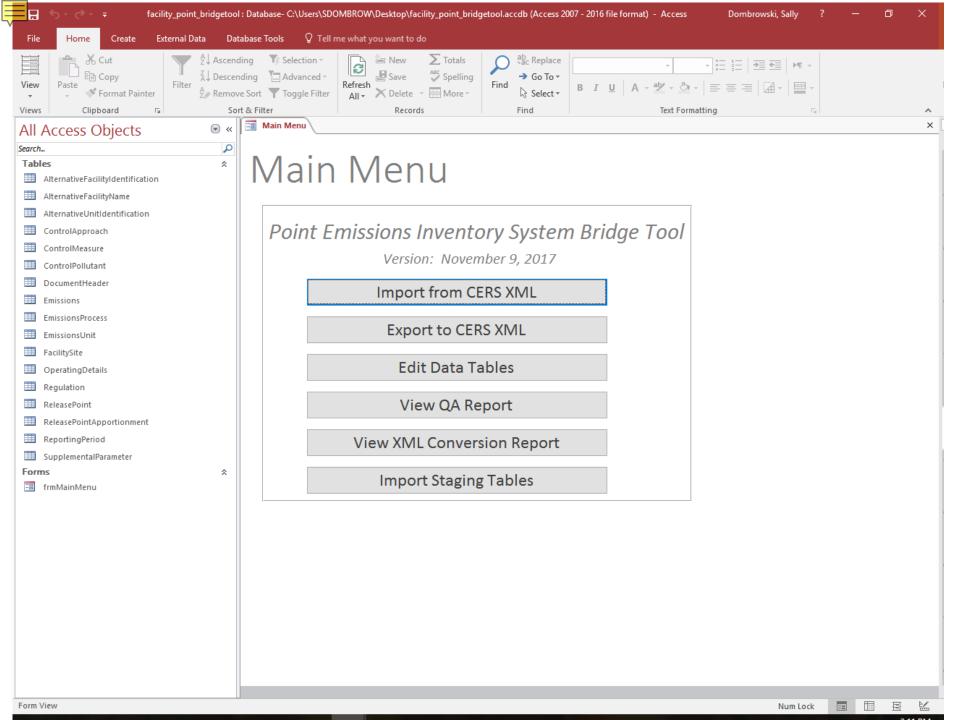
Node-to-node transfer

or

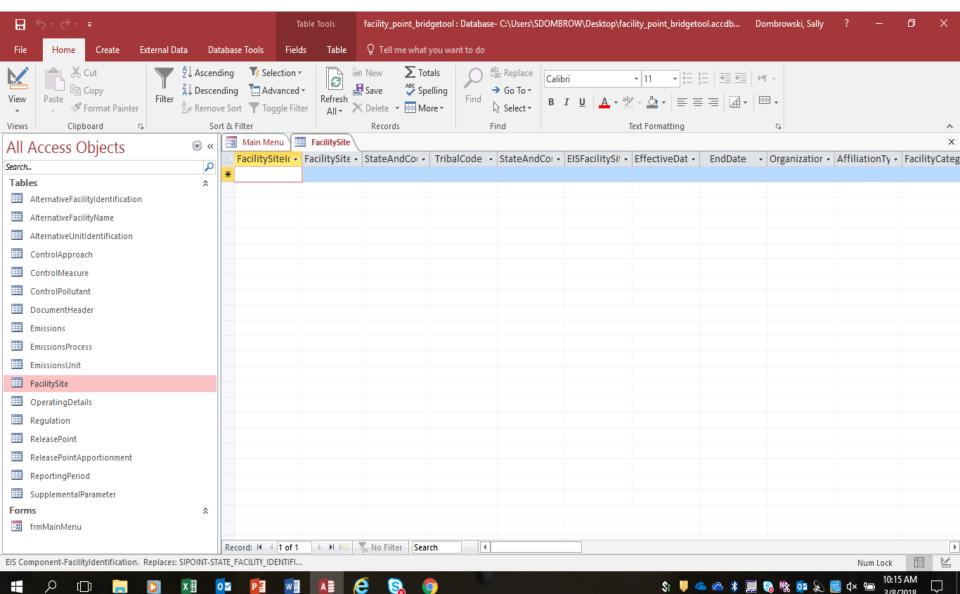
- -CDX web client
 - https://nodewebrss.epa.gov/user/Login.aspx
 - Use Gateway login and password

THE EIS BRIDGE TOOL







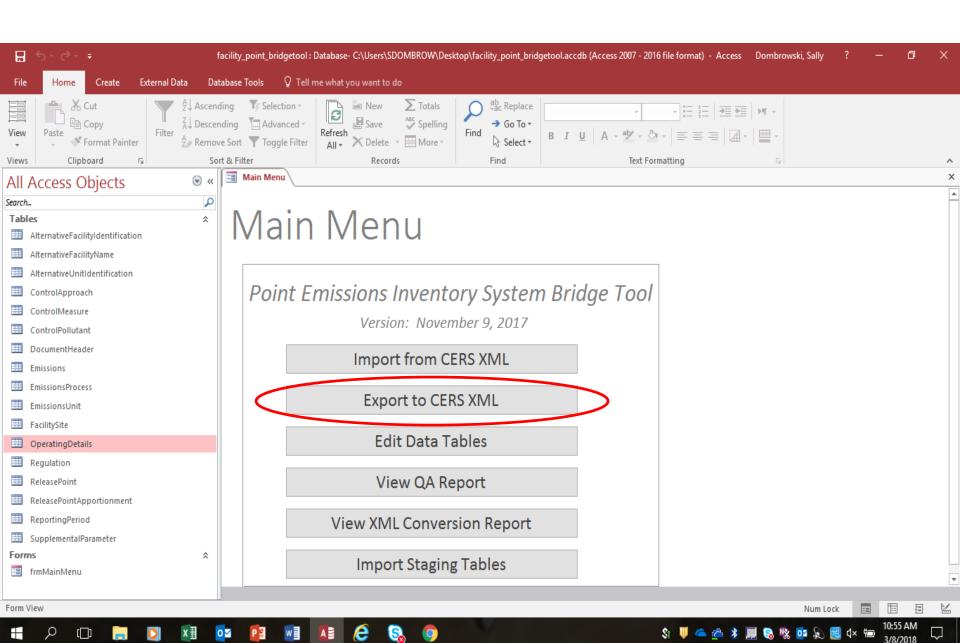




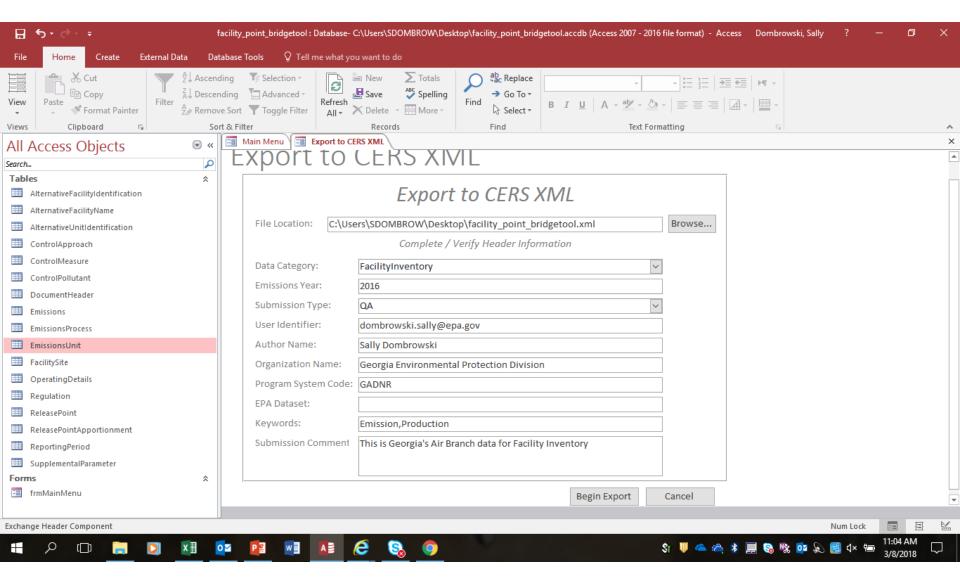
Facility Inventory Tables

- Document Header
- Facility Site
 - Unit Identifier
 - Emissions Process
 - » Release Point Apportionment
 - Release Point
- Optional Control Approach (under unit or process)
 - Control Measures
 - Control Pollutant
- Optional Regulations (under unit or process)

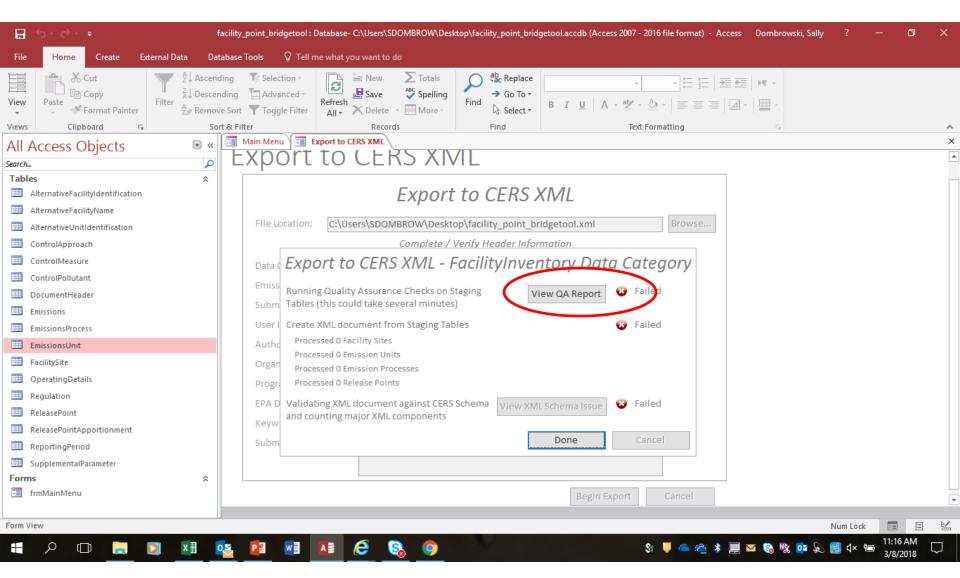




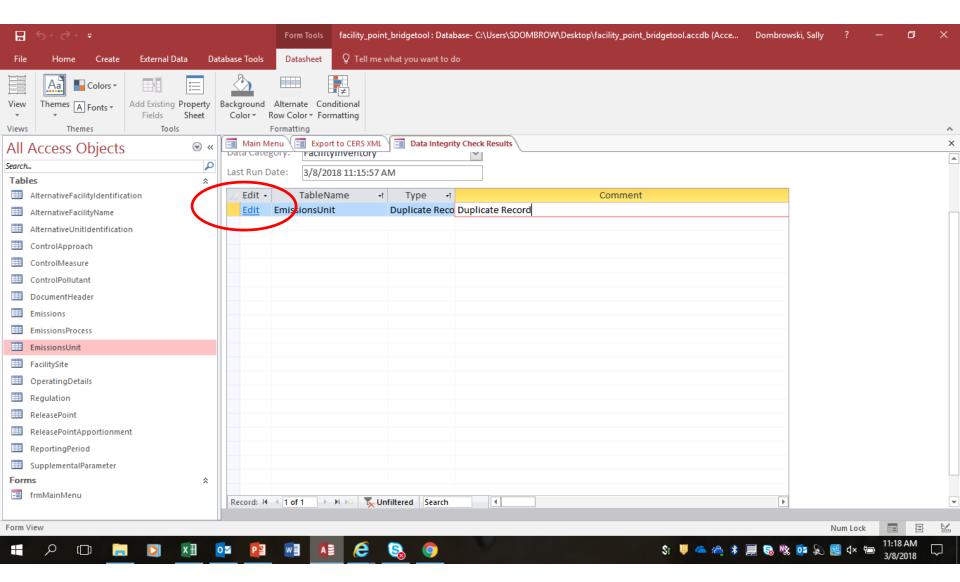




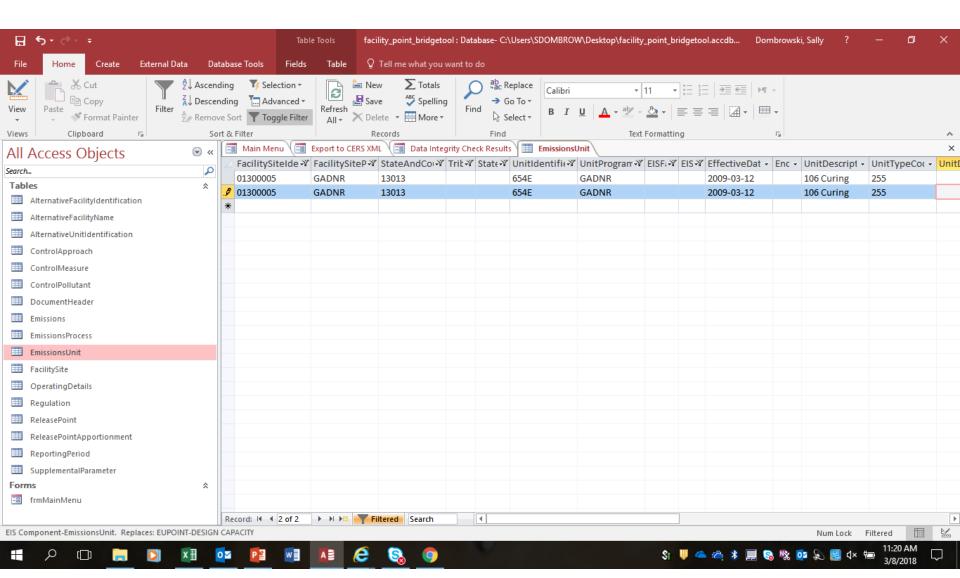




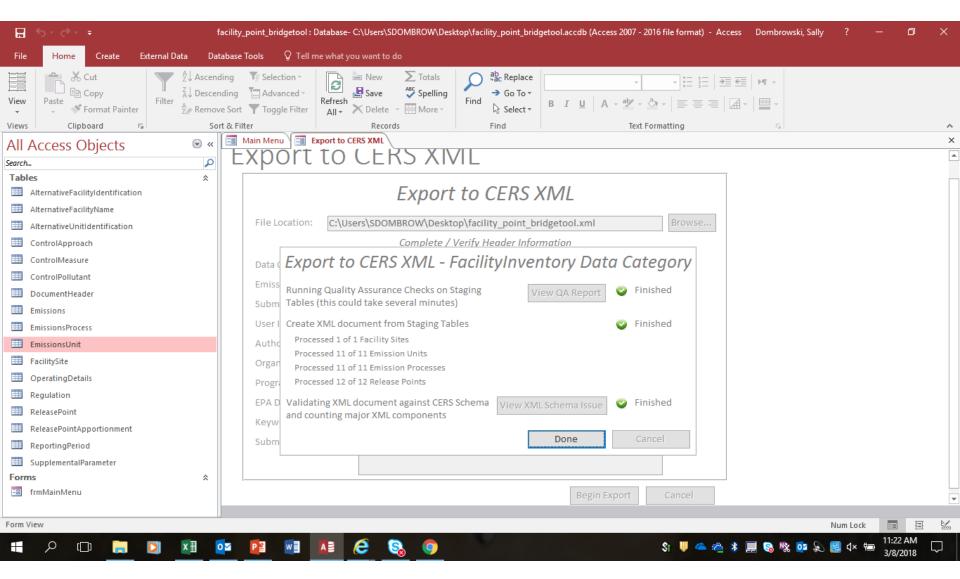


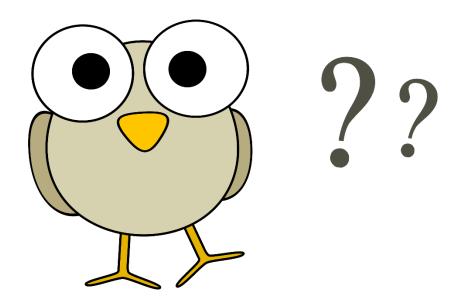


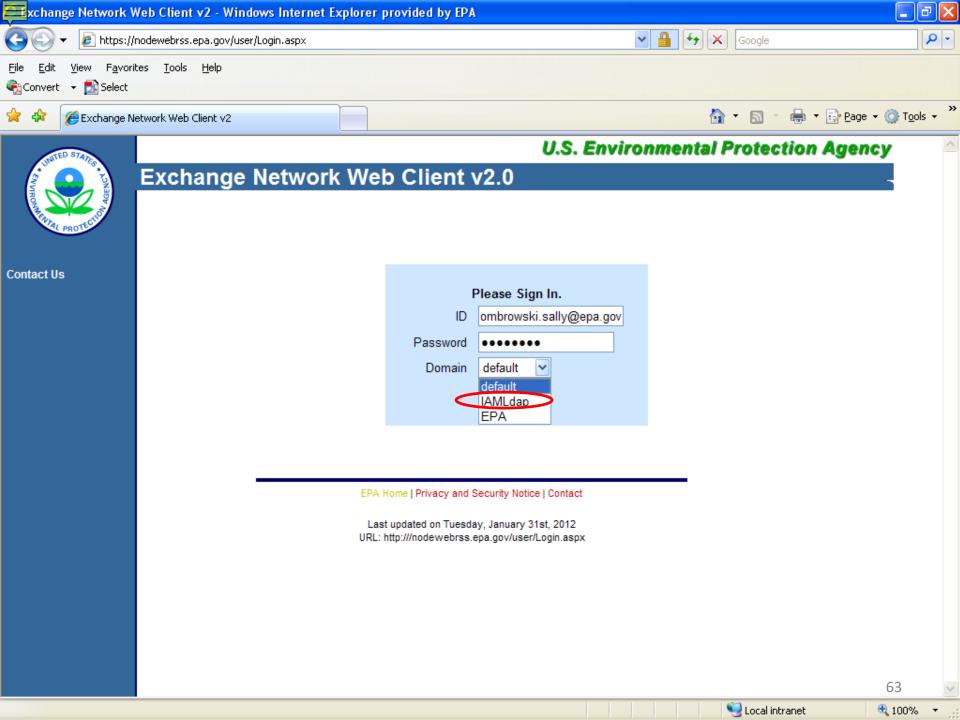


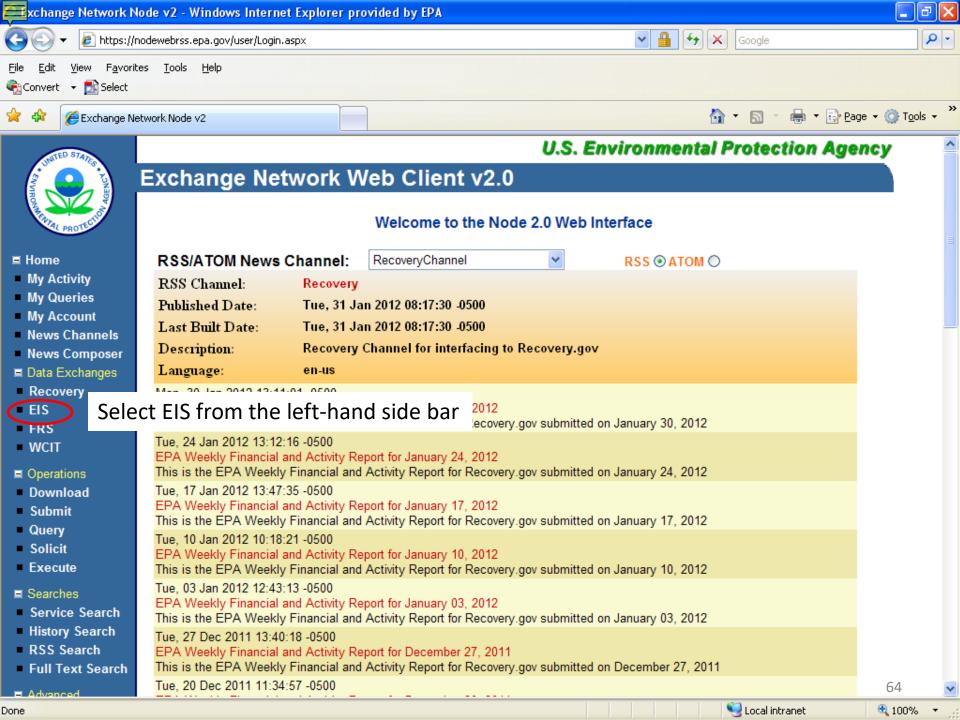


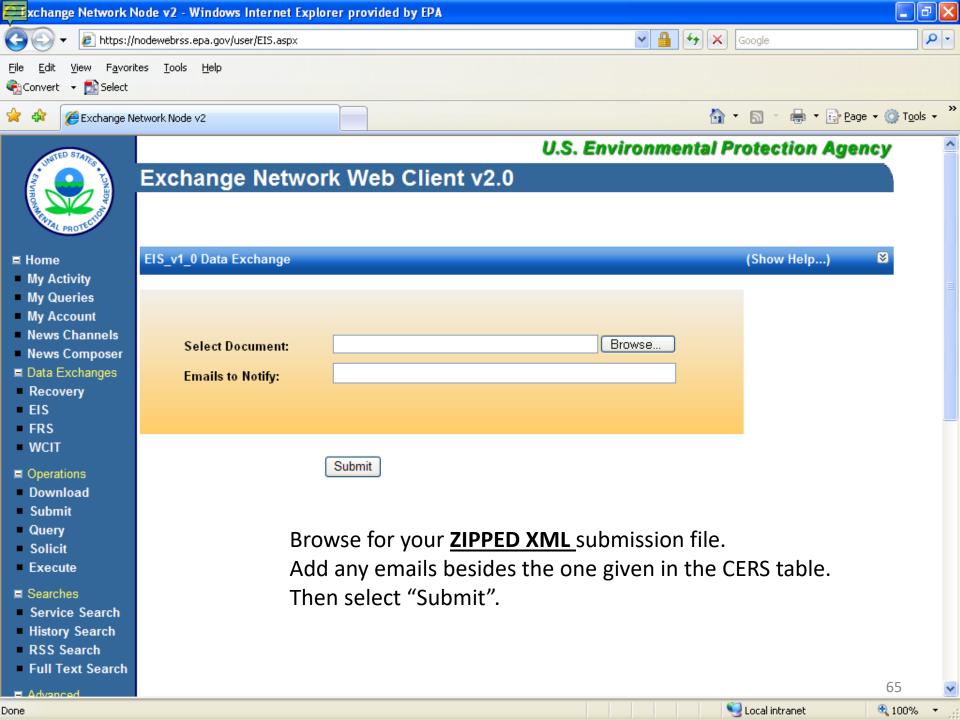












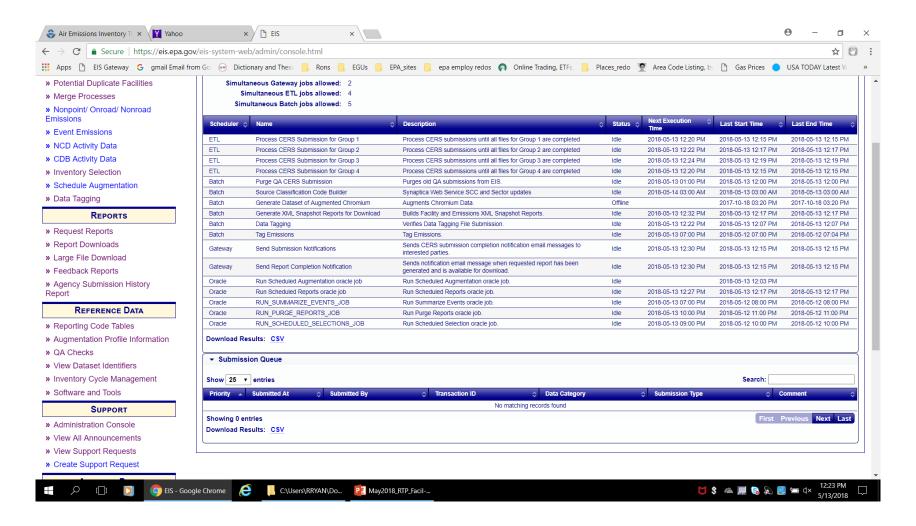


Email Notifications

- First email, from "CDXNotification", immediate
 - Transaction Status: Pending
- Second email, also from "CDXNotification", when EIS completes processing
 - Transaction Status: Completed. Feedback report is available at EIS Gateway
- Third email, from "noreply" (EIS Gateway), on quarter hours
 - Status : Completed or Failed
 - Wrong file submission error Usually a zipped Access file is submitted instead of the xml file
 - Window closed error "User, agency, submission year not authorized"
 - Completed might be for an XML file containing no data
- Go to EIS Gateway and read the Feedback Report and resolve any critical errors and Potential Duplicates
- DO NOT SUBMIT A POINT EMISSIONS FILE IMMEDIATELY FOLLOWING A FACILITY SUBMISSION



The Queue – Where is my submission?





The Submittal Feedback Report

- compare the add and update counts in Statistics tab versus your staging tables
 - Be wary of too many adds you are mostly updating existing EIS facilities
- All critical errors (except protected lat-lon) should be addressed prior to your Production submission
 - Except Error 1989 : release point ID in apportionment must exist
- Check and resolve the potential duplicates
- Review the warning messages too



Feedback Report Statistics

Component	Added	Updated
FacilitySite	1	32
FacilityIdentification	1	32
AlternativeFacilityName	0	0
EmissionsUnit	72	2602
Regulation	0	0
ControlApproach	0	0
AlternativeUnitIdentification	72	2602
EmissionsProcess	115	3576
ReleasePoint	2605	1206
Total	2866	10050



Protected Lat-Lon Coordinates

- Have been verified using Google Earth for accuracy
- Mostly from S/L/T responses to EPA review package in Summer 2011. Some due to later identified discrepancies
- Cannot be overwritten or edited until unprotected by EPA
- Does NOT prevent other data edits to the site or release point
- Errors 1230 and 1231 "... geographic coordinates are protected, the data will not be stored..."
 - Appear as a separate worksheet in the feedback report
 - Use config reports or Gateway main site list to get coords





EIS Gateway Beth Hatter, North Carolina Department of Environment and Natural Resources, Authenticated Role, S/L/T User Role

VIEW/ADD/EDIT

- » Facility Inventory and Point Emissions
- » Potential Duplicate Facilities
- » Nonpoint/ Oproad/ Nonroal Emissions
- » Event Emissions
- » NCD Activity Data
- » CDB Activity Data

REPORTS

- » Request Reports
- » Report Downloads
- » Large File Download
- » Feedback Reports
- » Nonpoint Survey
- » Agency Submission History Report

REFERENCE DATA

- » Reporting Code Tables
- » Augmentation Profile Information
- » QA Checks
- » Inventory Cycle Management
- » Software and Tools

SUPPORT

- » Administration Console
- » View All Announcements







VIEW/ADD/EDIT

- » Facility Inventory and Point Emissions
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SUPPORT

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Potential Duplicate Facility Pair Details

▼ Potential Duplicate Facility Information



	Your Requested Addition	Existing EIS Facility
EIS Facility ID		110111
Agency Identifier	3702700101 (NCDAQ)	3702700027 (NCDAQ)
State and County FIPS Code	37027 (Caldwell, North Carolina)	37027 (Caldwell, North Carolina)
Tribal Code		
State and Country FIPS		
Facility Name	Thomasville Furniture Industries Inc - Lenoir Plt	Thomasville Furniture Industries Inc - Lenoir Plt
Facility Description	Automotive Parts	Wood Furniture
Company Name	Na	Na
NAICS Code	337122	337122
Facility Source Type Code	Dry Cleaner - Petroleum Solvent/laundries	Landfill
Facility Category Code	HAP Major	HAP Major
Operating Status Code	Operating	Operating
Operating Status Year	2008	2008
Physical Address	601 Hibriten Drive Sw	315 Elizabeth Street Nw
Supplemental Address		
Locality	Lenoir	Lenoir
Tip Code	28645	28645
EIS Comment		
Latitude	35.88299	35.93339
Longitude	-81.5294	-81.5408
Last updated from	John J Feminella	John J Feminella
Last updated by agency	EIS	EIS
Last updated on	2017-08-11 01:23 AM	2017-02-17 12:00 AM

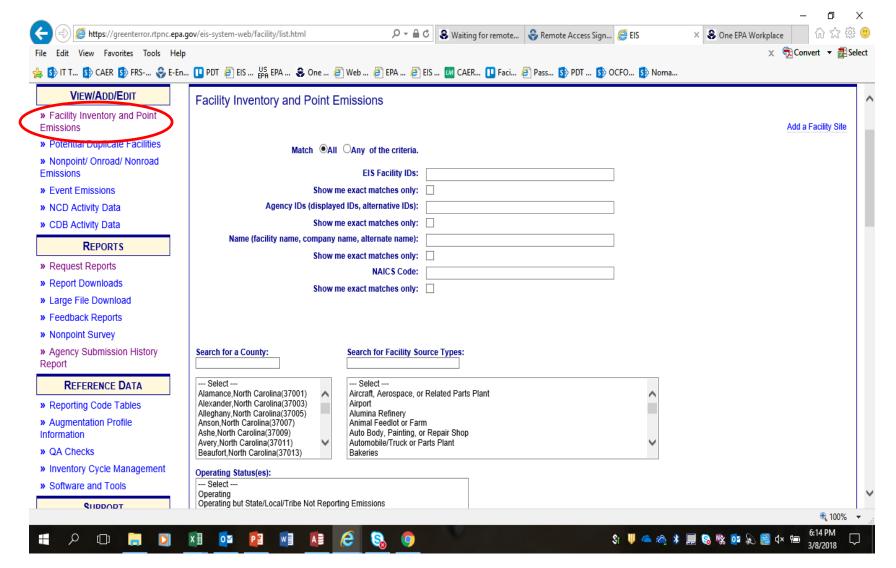
When will my data show up in EIS?

Immediately

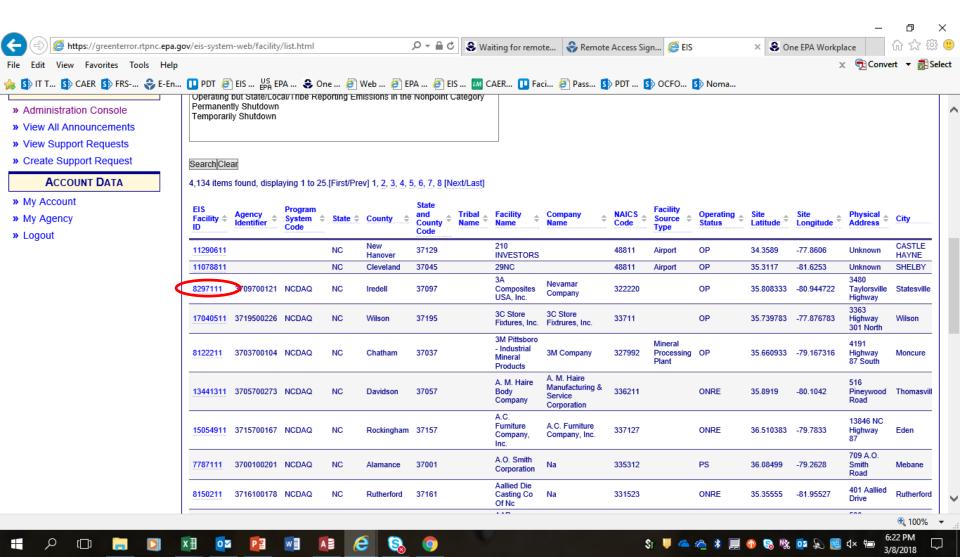
- Facility Inventory data will show in the Gateway view screens and in the Facility Configuration Reports immediately
- Individual Emissions values at the process level will show in the Gateway screens and reports immediately
- Any Emissions Sums (Facility, Unit, RelPt sums on Gateway or Reports) immediately
- XML Snapshots updated facility or point snapshots can be requested as reports immediately



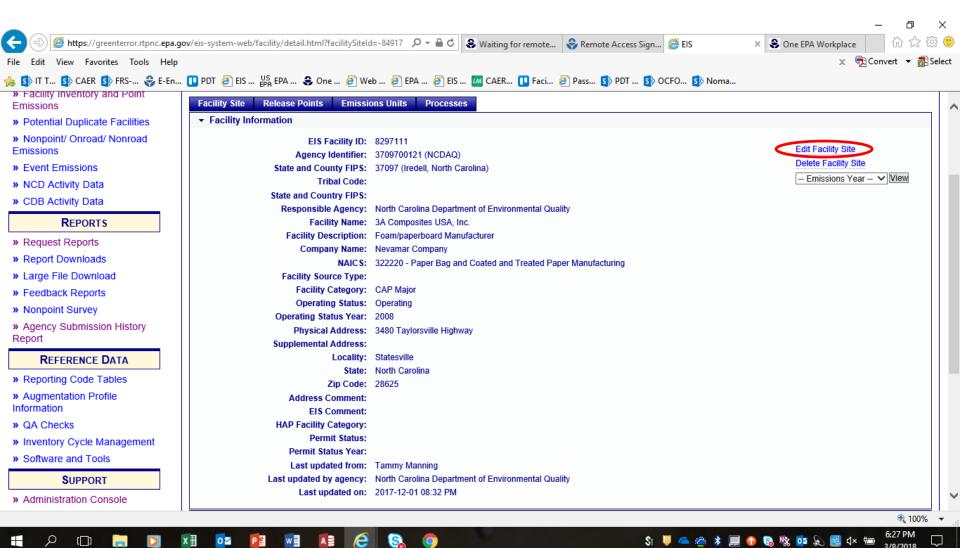
Correcting Data in EIS



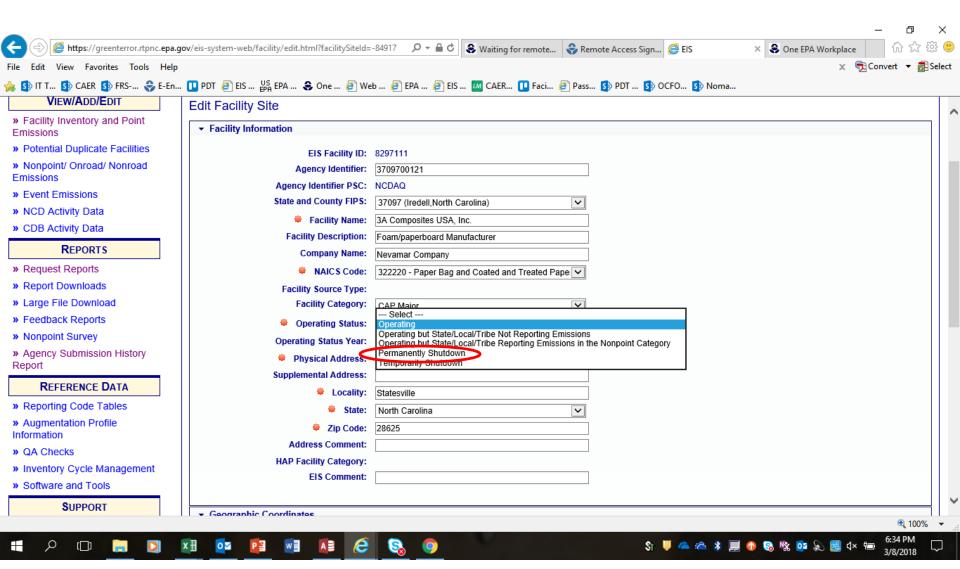
















What is the Point Inventory?

- Emissions estimates for the facility inventory
 - By pollutant
 - By process
 - By inventory year/reporting period (e.g., 2017 / annual)
- In addition to emissions, point data may include
 - Throughput (by process and inventory/year reporting period)
 - Operating details
 - Supplemental parameters



Important Concepts (1)

- Update your Facility inventory prior to submitting Point emissions
 - Emissions may only be reported for an existing process
 - Existing process cannot have a LastEmissionsYear less than the inventory year
 - SCC code for process must still be valid and active
 - Emission Unit and Facility must be OPerating for the inventory year (can't be PS or TS Status with Status Year = inventory year)



Important Concepts (2)

- Can use LB, TON or metric to submit emissions
 - EIS reports show HAPs in LB and CAPs in TON
- Report controlled emissions, not uncontrolled –even if you don't report controls or %s
- All pollutants for a given process must be reported together
 - Each submittal overwrites the last for a given process
 - You can submit different facilities or different processes at a facility in separate submittals



Important Concepts (3)

- Report Process-level, not facility level
- If you report any pollutants at the facility-level, emissions could cause potential double counting and other problems –



Point Emissions Tables – Bridge Tool

- Document Header Required
 - DataFlowName EIS_v1_0
 - Property-SubmissionType either QA or Production
 - Property-DataCategory Point
 - UserIdentifier your EIS registered acct ID (email)
 - ProgramSystemCode your Agency's PSC
 - EmissionsYear 2017
- Emissions Required
- Reporting Period Optional
- Operating Details Optional
- Supplemental Parameters Optional



Emissions Table

- Emissions Required
 - Site, Unit, and Process Identifiers
 - EIS or your Agency's IDs (w/PSC)
 - State/County FIPS or Tribal Code if your Agency's IDs
 - Pollutant Code
 - Total Emissions and UOM
 - Reporting Period Type Code "A" (annual) at minimum
 - Emissions Operating Type Code "R" (routine) at minimum
 - Emission Calculation Method Code
- Optional but desired
 - Emission Factor, EF Numerator and Denominator, Factor Text
 - Emissions Comment



Reporting Period Table

- Required fields, IF you report this table
 - Site, Unit, and Process Identifiers
 - EIS or your Agency's IDs (w/PSC)
 - State/County FIPS or Tribal Code if your Agency's IDs
 - Reporting Period Type Code "A" (annual) at minimum
 - Emissions Operating Type Code "R" (routine) at minimum
- Optional additional fields
 - Start Date / End Date for <u>episodic reporting only</u>
 - Activity (e.g., throughput) fields— if you provide, must have these all 4 together (1) Calculation parameter value, (2) Calculation Material Code, (3) Calculation Parameter Type Code, (4) Calculation UOM
 - Optional Activity fields -- Data Year, Data Source
 - Reporting Period Comment



Operating Details Table

- Required fields, IF you report this table
 - Site, Unit, and Process Identifiers
 - EIS or your Agency's IDs (w/PSC)
 - State/County FIPS or Tribal Code if your Agency's IDs
 - Reporting Period Type Code "A" (annual) at minimum
 - Emissions Operating Type Code "R" (routine) at minimum
- Optional additional fields
 - Actual Hours Per Period, Average Days Per Week, Average
 Weeks Per Period
 - Seasonal Throughputs Must equal 100



Supplemental Parameters Table

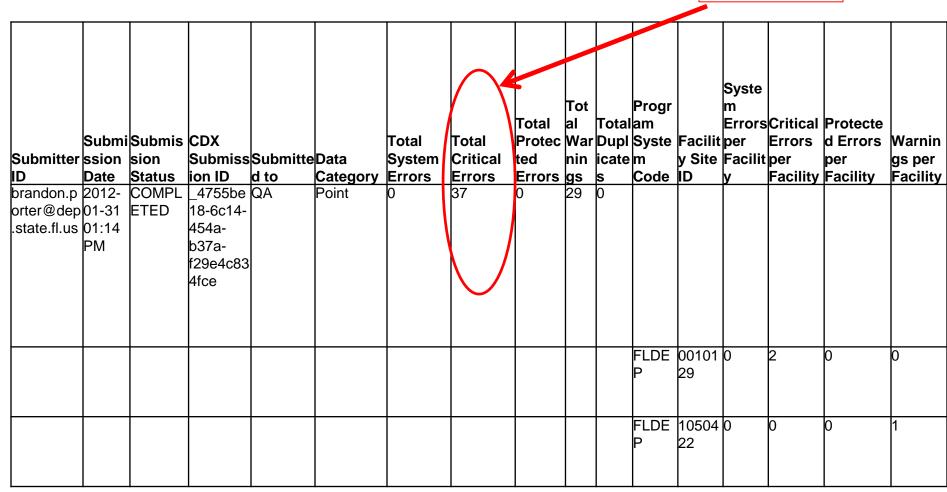
- Required fields, IF you report this table
 - Site, Unit, and Process Identifiers
 - EIS or your Agency's IDs (w/PSC)
 - State/County FIPS or Tribal Code if your Agency's IDs
 - Reporting Period Type Code "A" (annual) at minimum
 - Emissions Operating Type Code R for routine
- Optional additional fields
 - Supplemental Calculation Parameter Type
 - Heat Content, Percent Sulfur Content, or Percent Ash Content only
 - Supplemental Calculation Parameter Value
 - Supplemental Calculation Parameter Numerator and Denominator
 - Heat Content must be BTU or E6BTU
 - Supplemental Calculation Parameter Data year
 - Supplemental Calculation Parameter Data Source
 - Supplemental Calculation Parameter Comment





The Feedback Report Summary Tab

Look here first





Feedback Report Statistics Tab

Nothing was really added for a QA submittal, but it is for a Production submittal

Component	Added	Updated
ReportingPeriod	1157	0
OperatingDetails	1157	0
SupplementalCalculationParameter	437	0
Emissions	4077	0
Total	6828	0

If all went well, this should match the number of records in your emissions table. If it is less, then you had critical errors. Don't correct just those errors and resubmit because whenever you submit emissions for a process, if you don't submit all pollutants they will get wiped out.



Feedback Report-Critical Errors

						Repor							Associated	
FIPS/Tr	Facilit	Emissi	Releas	Proc		ting	Pollut	Critic	Critical		Resolutio	Associated	Data	Associated
ibal	y Site	ons	e Point	ess	process	Period	ant	al	Error	Critical Error	n	Data	Component	Data
Code	ID	Unit ID	ID				Code	Error			Message	Component	ID	Element
06011	EIS-	EIS-		EIS-	5956301	Α		1930	Cardinal	When reporting		Reporting		
	76611	519482		5956	4				ity	emissions, a pollutant		Period		
		13		3014						may not reported				
										multiple times under a				
										single reporting period.				
	EIS-	EIS-		EIS-	5956291	Α		1930	Cardinal	When reporting		Reporting		
	76611	519483		5956	4				ity	emissions, a pollutant		Period		
		13		2914						may not reported				
										multiple times under a				
										single reporting period.				
1	EIS-	EIS-		EIS-	5956261	Α		1930	Cardinal	When reporting		Reporting		
	76611	519486		5956	4				ity	emissions, a pollutant		Period		
		13		2614						may not reported				
										multiple times under a				
										single reporting period.				

Common Critical Errors

- Error 1770 Process ID does not exist.
 - Might be occurring if you submit your Point right after your facility inventory and you did not resolve critical errors or the Potential Duplicate Facilities error
- Error 2319 Emissions Year must not be greater than Last Inventory Year

Error 486 - Emission calculation method code is required



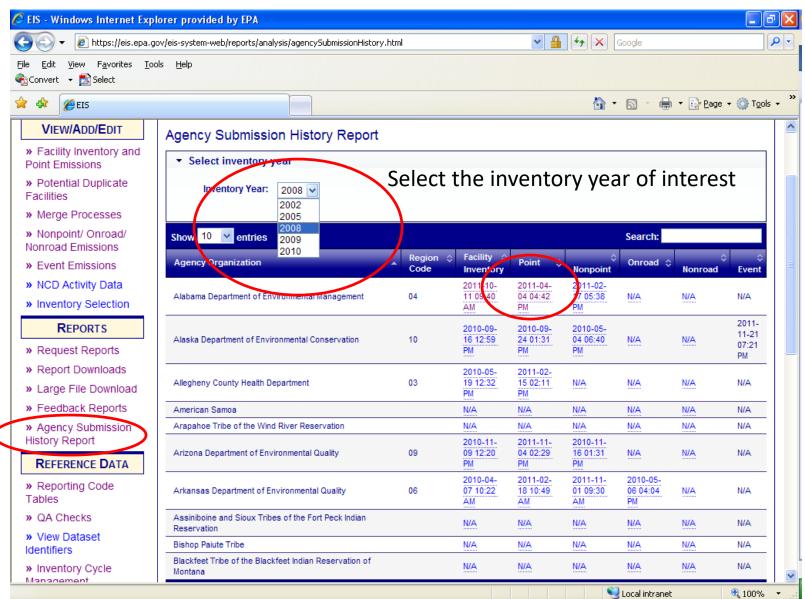
Checking Your Data

 Completeness: Are there facilities that are operating but do not have emissions?

 Emissions Values: Run an emissions summary report to compare what is in the system with your data

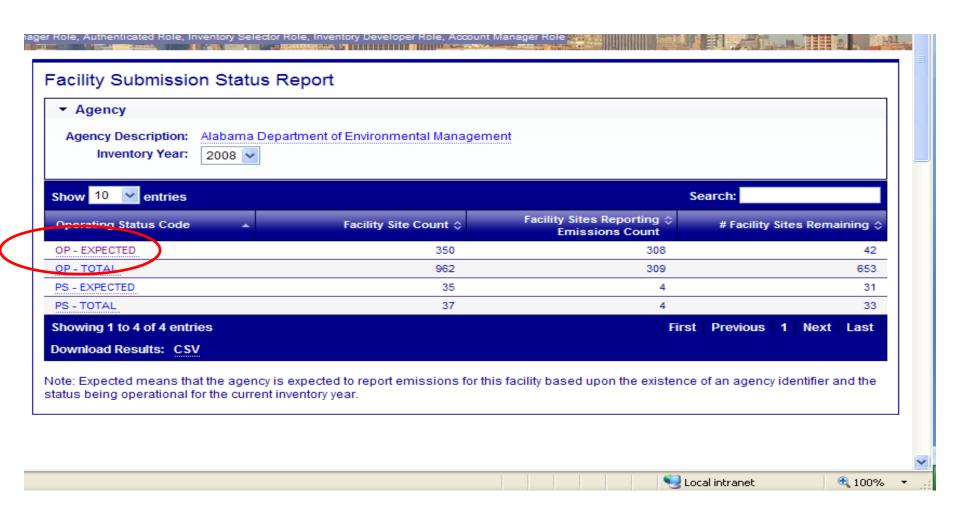


Agency Submission History Report





Agency Submission History Report





List of facilities for which emissions were expected but no emissions reported



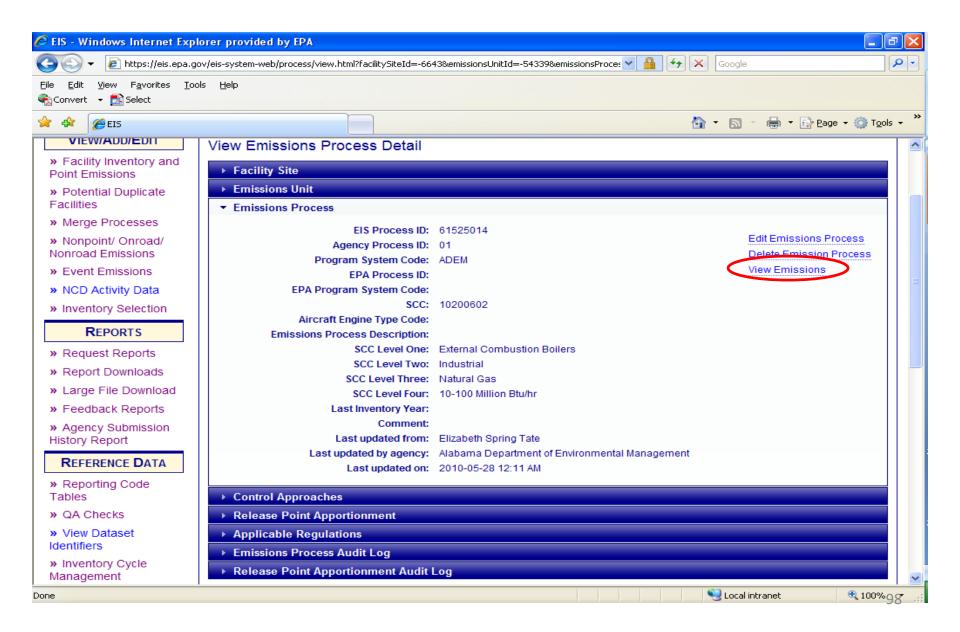


How do I edit an emissions value?

- Edit emissions values by
 - XML Batch (Staging Tables)
 - Remember to include all pollutants previously reported, not just the pollutant to be changed
 - Gateway
 - Easiest and safest if you only have a few changes

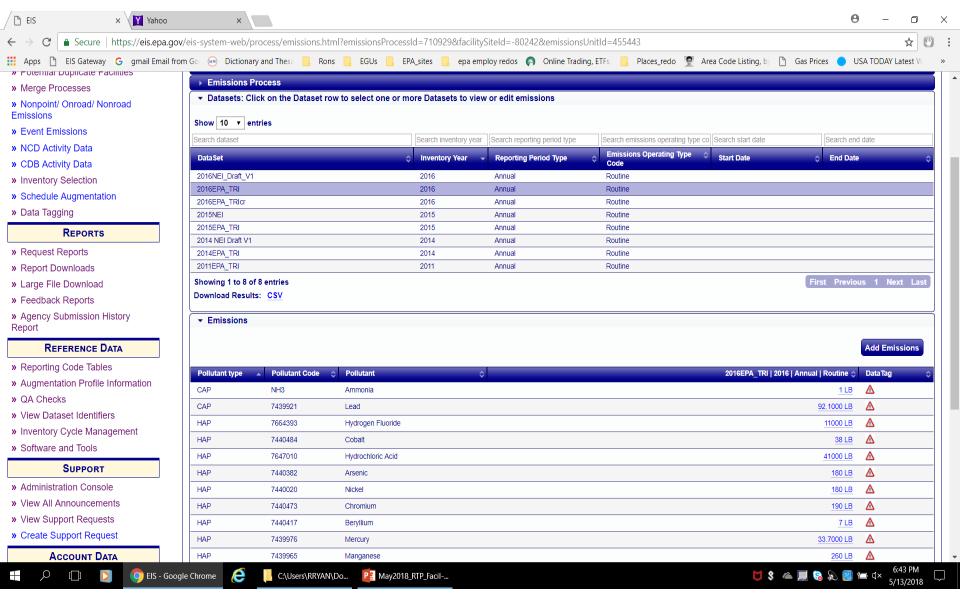


Editing Emissions on the Gateway (1)





Editing Emissions on the Gateway (2)



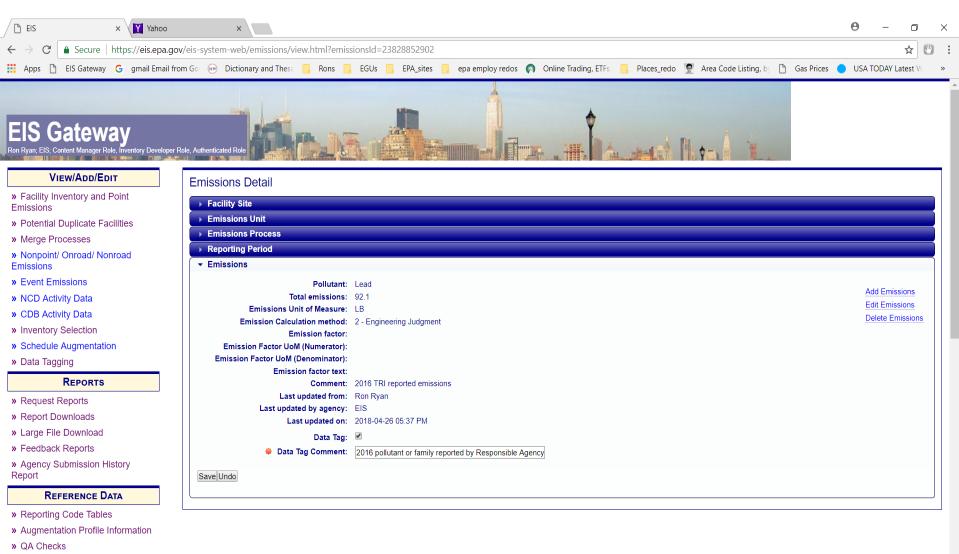


EIS - Google Chrome

C:\Users\RRYAN\Do...

Pacil-... May2018_RTP_Facil-...

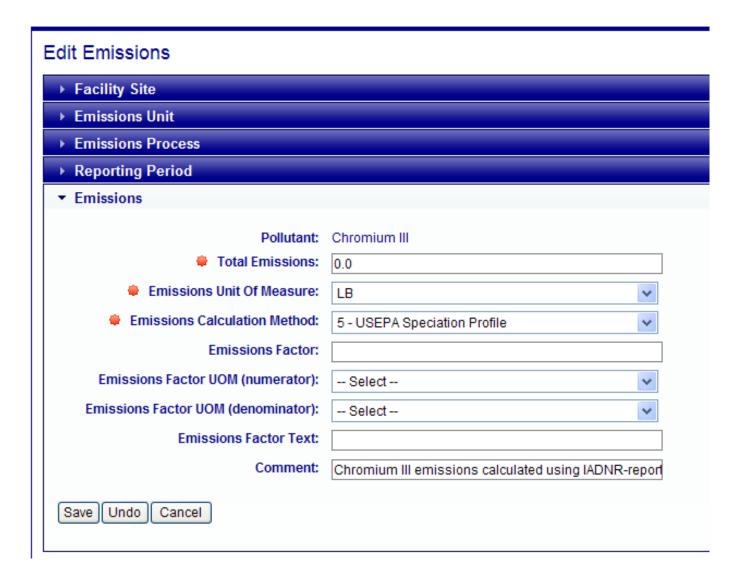
Editing Emissions on the Gateway(3)



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Editing Emissions on the Gateway (4)







Aircraft LTOs are Point Sources

- Includes aircraft engines exhaust, auxiliary power units and ground support equipment (GSE). Excludes aviation gas distribution (nonpoint)
- Although NONROAD model calculates GSE, those SCCs must be reported at the airport, and are not allowed in a nonroad submittal
- Aircraft exhaust units are aircraft types by SCC (military, commercial, general aviation, etc). Processes are aircraft make and engine type, indicated by aircraftenginetype code
- Submitters should not create new units and processes without first confirming you have SCC and aircraft-engine combinations that are not represented at the existing EIS airport. EIS will not accept new submittals that duplicate units or processes.



Rail Yards

- EPA has developed facilities for 1240 large yards. Nonpoint yard emissions are also allowed, but submitters should first look for facility yards to avoid double counting, before reporting as nonpoint.
- All yards are not yet in EIS, thus additional facilities are desired.
- Rails lines are reported in nonpoint

EGUs

- SLT responsible for reporting emissions
- USEPA also estimates emissions for most units, based on facility reported heat inputs to CAMD (w/SO2 and NOx CEMS)
- We use the SLT values in the NEI if available. Rare cases where we will use CAMD SO2 or NOx values if very different
- The ORIS Facility and ORIS Unit IDs used for CEM reporting are stored in EIS as Alternate Unit IDs. If you re-arrange the way you report EGU Units, or need to change your Agency IDs, please let us know.



Species of PM

- Filterable: PM10-FIL; PM25-FIL
- Condensable: PM-CON
- Primary: PM10-PRI; PM25-PRI
- Please report FIL species and PM-CON. Report Primary species if you don't have anything else.
- Most important thing is to use the codes correctly Don't call it PRI if it only includes the FIL portion
- If you don't report all 5 flavors, EPA will gap fill based on the values of the PM species you do report PM Augmentation

QA Checks for PM

Critical Checks - ALL pollutants for emissions process will be rejected IF:

- PM25-FIL > PM25-PRI
- PM10-FIL > PM10-PRI
- PM-CON > either PRI
- PM25-FIL > PM10-FIL
- PM25-PRI > PM10-PRI

Warning Check

Sum of FIL + CON not equal to PRI

The Types of HAPs

- Listed HAPs reported as individual pollutants
- Metals reported as a single pollutant code
- Listed HAPs that can be reported as either individual pollutants or as a single aggregate pollutant
- Special Cases

HAPs Reported as Individual Pollutants

- Easiest HAPs to report
- One pollutant code per HAP: E.G.; benzene, 1,3 butadiene, hydrochloric acid, and about 160 others
- Pollutant code is chemical abstract system # (no dashes)
- Still need to be aware of synonyms
 - Perchloroethylene = tetrachlorethylene
 - Methylene chloride = dichloromethane
 - 1,2 –dibromoethane = ethylene dibromide
 - 1,2-dichloroethane = ethylene dichloride



"Metal and compounds" reported as single aggregated Element

- Includes:
 - Antimony, Arsenic , Beryllium
 - Cadmium, Cobalt, Lead
 - Manganese, Mercury, Selenium
- Can only use one code (CAS # of the metal)
- Spreadsheet tool provides instructions for converting compounds into single aggregate pollutant:
 https://www.epa.gov/sites/production/files/2015-09/pollutant code conversion spreadsheet05012012
 0.xls



HAPs that can be Reported as either Single species or aggregate group

- Cresols: p-cresol, m-cresol, o-cresol and cresols (Includes o,m &p)
- Fine Mineral Fibers: "Fine Mineral Fibers" and the following 4 specific ones:
 Ceramic Fibers (Man-Made Fibers), Glasswool (Man-Made Fibers), Slagwool (Man-Made Fibers), Rockwool (Man-Made Fibers)
- Glycol Ethers: Glycol Ethers and 52 specific glycol ether compounds
- PCBs: Polychlorinated Biphenyls and 10 specific PCBs
- POM/PAHs: "PAH, total", "PAH/POM Unspecified", "coal tar", EOM and 50 specific PAHs
- Xylenes: "Xylenes (Mixed Isomers)" and the 3 xylene isomers: o-xylene, m-xylene
 and p-xylene
- Radionuclides: "Radionuclides (Including Radon)" and 10 specific ones
- Dioxins/Furans: three aggregate pollutants (e.g. "dioxins/furans as 2,3,7,8-TCDD TEQs-I/98") and 17 specific ones

CRITICAL Error if the grouped pollutant and any of the specific members reported at same process. ALL pollutants for that process rejected.

Special Cases

- Chromium
- Nickel
- Cyanide



Chromium

Allowable Pollutant Codes

Pollutant Code	Description
1333820	Chromium Trioxide
16065831	Chromium III
18540299	Chromium (VI)
7440473	Chromium
7738945	Chromic Acid (VI)

- Chromium VI (and chromium trioxide and chromic acid) are high risk HAPs.
- Chromium (7440473) is not speciated, and could be a mix of chromium VI and non-high risk forms of chromium
- If you have a chromium compound other than the ones listed, use the spreadsheet tool to convert to Chromium III or Chromium VI.
- ► DO NOT REPORT CHROMIUM and hex or tri at the same process CRITICAL QA check will reject all emissions for that process

In the 2008 NEI, EPA developed a speciated chromium dataset that contained hex and tri based on speciated SLT chromium. Documentation is on CHIEF



Nickel

Allowable Pollutant Codes

	Pollutant Code	Description
•	12035722	Nickel Subsulfide
	1313991	Nickel Oxide
	604	Nickel Refinery Dust
	7440020	Nickel
		-

- If you have a nickel compound other than the ones listed, use the spreadsheet tool to convert to nickel.
- ▶ Ok to report nickel with any of the other flavors. Just know that any risk will be additive



Cyanide

Allowable Pollutant Codes

	Pollutant Code	Description
•	57125	Cyanide
	74908	Hydrogen Cyanide

- Can report cyanide or hydrogen cyanide
- Spreadsheet tool provides instructions/data for converting other cyanide compounds (such as Potassium cyanide) to a valid pollutant.





EPA Review, Augmentation, Selection



EPA Review of Your data

- Completeness
- Outliers
- Comparison to Earlier Years and other data sets
 - At Facility Level
 - Filtered for largest % plus absolute deltas
 - CAMD and TRI data sets used in addition to previous NEI



Tagging and Augmentation

- EPA will not change your emissions data
 - But we may "tag out" outliers if not resolved
- EPA will Augment to build a complete inventory
 - Chrome speciation
 - PM Augmentation
 - TRI, CAMD-EGUs, Landfills, GHGRP
 - HAP Augmentation



Putting it all Together- the "Selection"

- Preference is to use the S/L/T data first in the hierarchy
- Other data sources used lower in hierarchy
 - Chrome speciation
 - PM Augmentation
 - TRI, EGU
 - HAP Augmentation
- Data sources that may be used above S/L/T
 - Some rule data
- Draft release for SLT review



Timeline

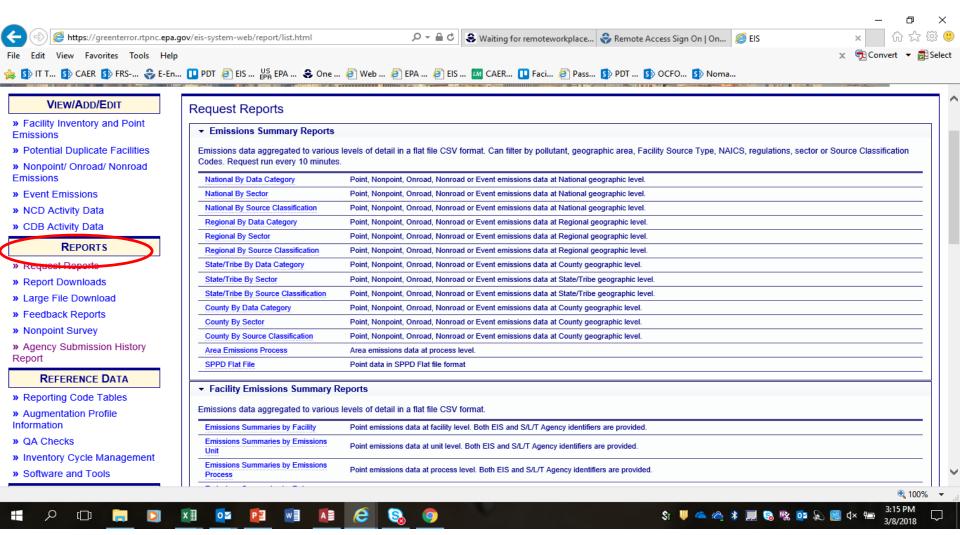
- S/L/T submittals for 2017 Inventory due Dec-31-2018
 - Grace period for Facility Inventory Jan 7, 2019
 - Grace period for Point Emissions Jan 15, 2019
- EPA sends out comparison file (xls) Feb 22, 2019
- All EPA Augmentation datasets by April 1, 2019
- S/L/Ts make edits to their data by May 15, 2019
- Draft selection of NEI v1 Point Inventory in EIS for review June 15, 2019
- Final NEI v1 Point Inventory in EIS July 1, 2019



Reports



How do I get data out of EIS?



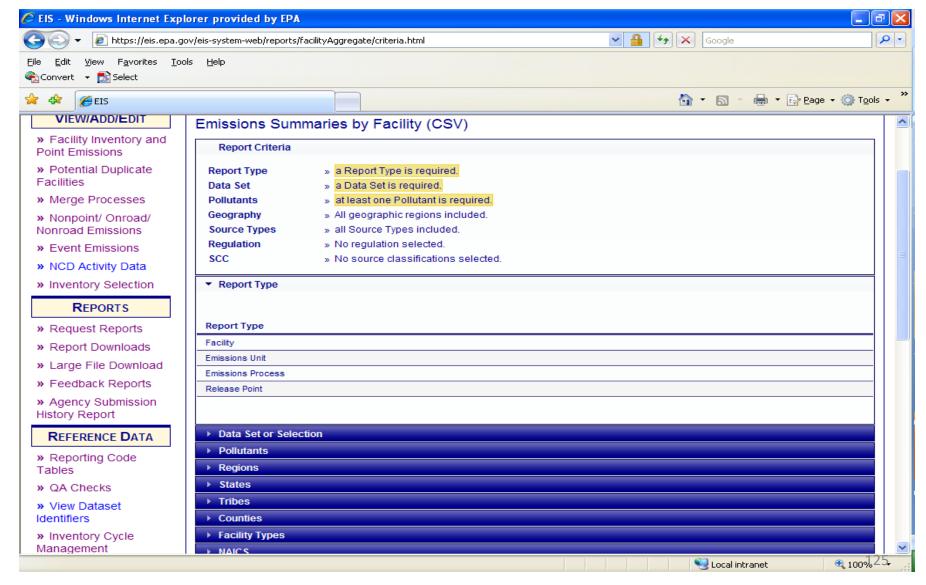


Reports

- Emissions Summaries by Geography
 - National, State/Tribe, or County
 - Data Category, Sector, or SCC
- Emissions Summaries by Facility
 - Facility, Unit, Process or Release Pt Level
- Configuration Reports (CSV flat files)
- Snapshots (XML files in CERS Schema)
- SMOKE Flat Files (csv modeling format)
- Comparison Reports (multiple data sets)
- Data Tagging

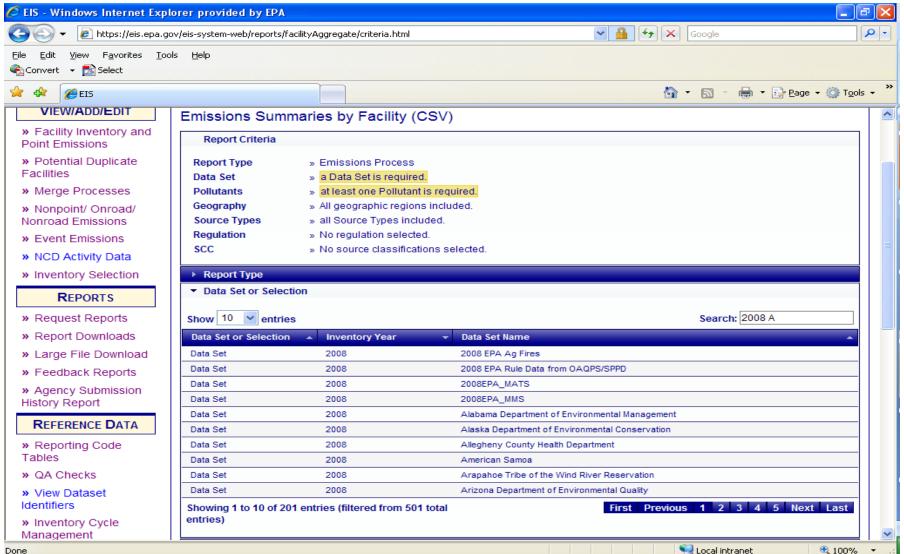


Emissions Summary by Facility (1)





Emissions Summary by Facility (select a dataset)



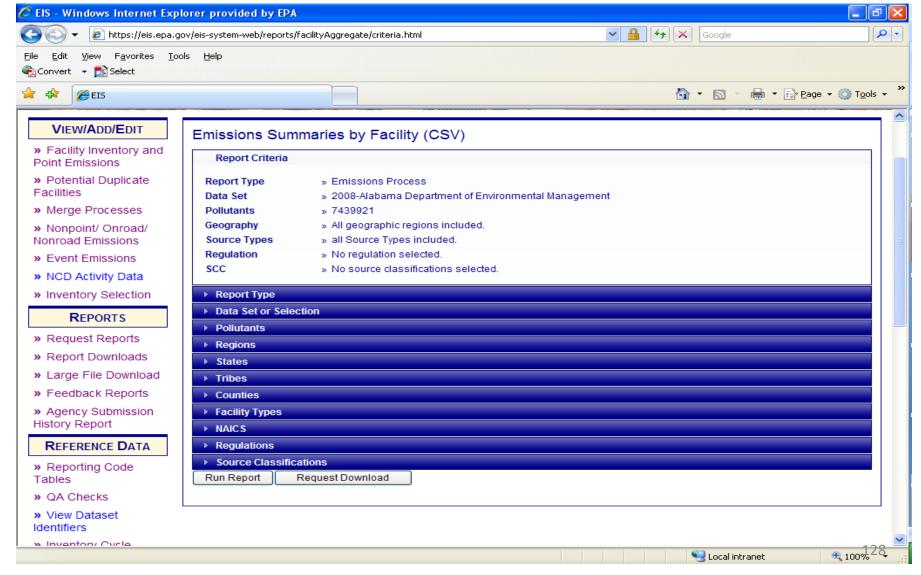


Emissions Summary by Facility (select pollutants)



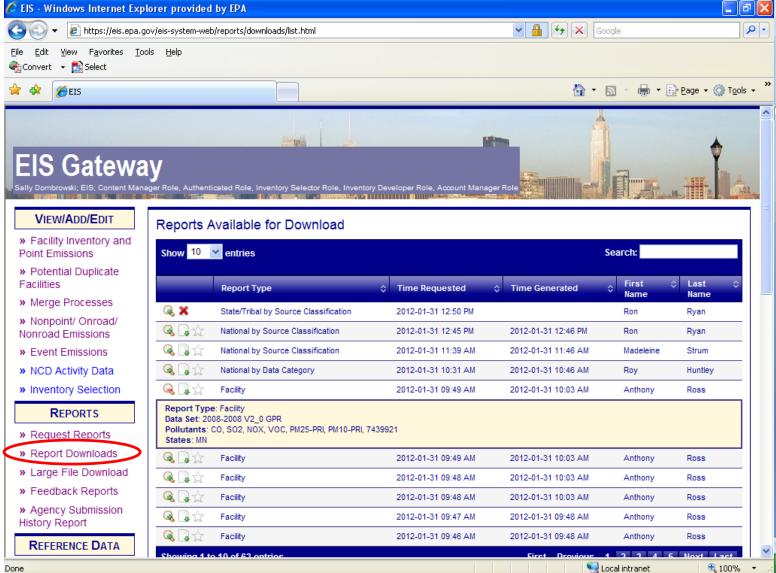


Emissions Summary by Facility (optional filters)



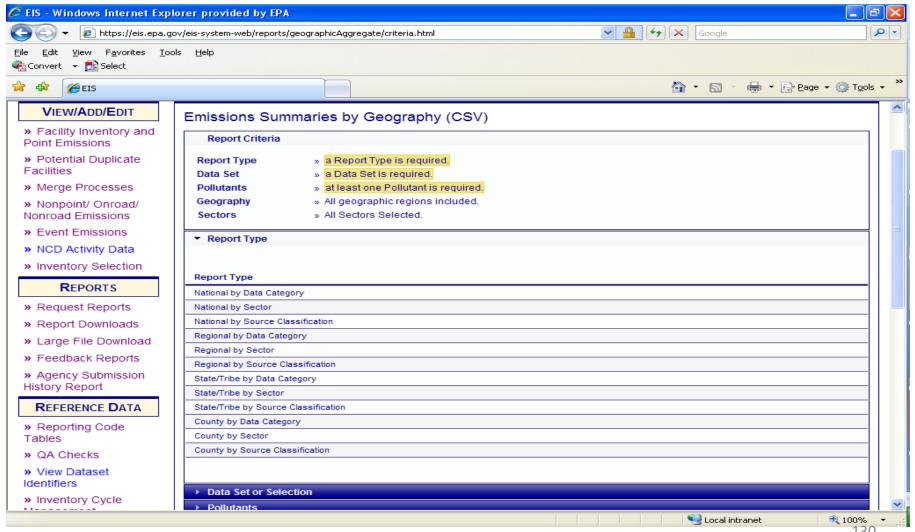


Report Downloads





Emission Summary by Geography (1)



130

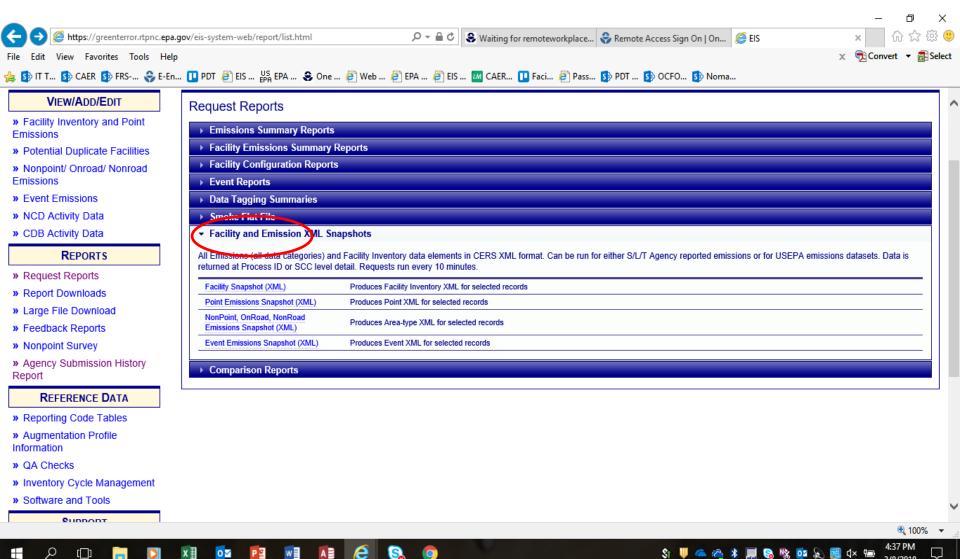


Emission Summary by Geography (2)



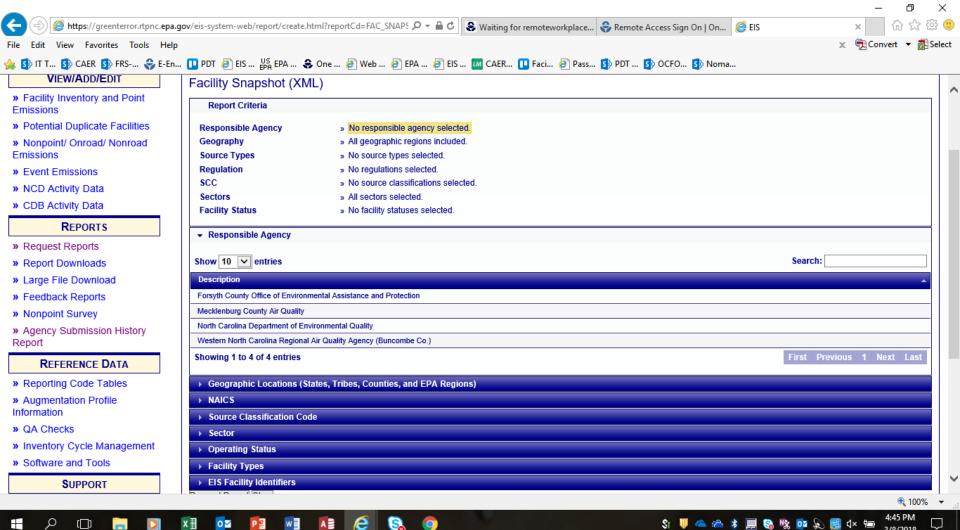


Reports - Snapshots





Reports - Snapshots





Reports – of note

- Process Level Data Source column (selection reviews)
- Comparison Reports (selection review, your QA, etc)
- Custom Choice of Columns/Data Fields
- Email now sent to you when report is ready
- Geographic filters are not a drill-down all levels chosen are "anded" together.





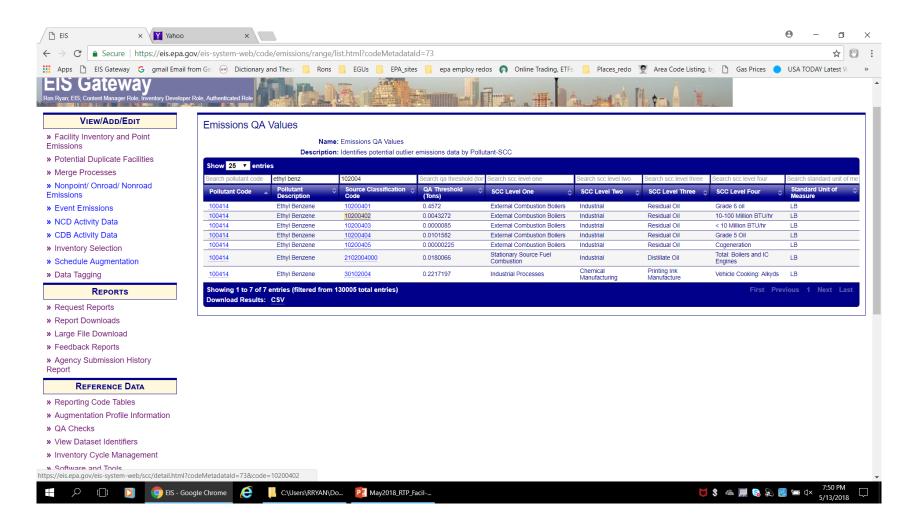
Where do I find Codes?

REPORTS	Calculation Parameter Unit of Measure Code	Code for the unit of measure for calculation parameter value.
REPORTS	Control Measure Code	Code that identifies the piece of equipment or practice that is used to reduce one or more pollutants.
Request Reports	Coordinate Data Source Code	The code that represents the party responsible for providing the latitude and longitude coordinates. See www.epa.gov/oei/ for more information of the proper usage of this code set.
Report Downloads	Emission Calculation Method Code	Code that defines the method used to calculate emissions.
arge File Download	Emission Factor Denominator Unit of Measure Code	The denominator for the unit of measure of the reported emission factor.
eedback Reports	Emission Factor Numerator Unit of Measure Code	The numerator for the unit of measure of the reported emission factor.
	Emission Operating Type Code	Table of codes that identify the operating state for the emissions being reported.
gency Submission History port	Emission Reduction Technique Code	Code identifying the method used for reducing emissions from prescribed fires, agricultural fires, Native American Fires and Wildland Use fires emissions.
REFERENCE DATA	Lissions Type Code	Defines the type of emissions produced by Onroad and Nonroad sources (e.g., exhaust, evaporative and tire wear) and mode types for commercial marine vessels (e.g., cruise and reduced speed zone).
Reporting Code Tables	For assions Unit of Measure Code	Unit of measure for reported emissions.
QA Checks	Event Classification Code	Table of codes that identify the classification of a fire.
/iew Dataset Identifiers	Event Size Source Code	Table of codes that identify methods used to determine the size of an event.
	Event Stage Code	Identifies whether emissions reported are due to flaming, smoldering, or both.
ventory Cycle	Facility Category Code	Code that identifies the Clean Air Act Stationary Source designation. Examples include major, minor, and synthetic minor.
agement	Facility Site Status Code	Code that identifies the operating status of the facility site.
S Bridge	Facility Source Type Code	Category or source type of a facility for EIS classification.
Cuppopt	Fuel Configuration Code	The predominant configuration of the fuel burned (i.e., pile, windrow, broadcast or natural).
SUPPORT	Fuel Consumption And Emissions Model Code	Code that identifies the unit of measure for the amount of fuel consumed.
dministration Console	Fuel Loading Unit of Measure Code	Code that identifies the numerator of the unit of measure for the fuel loading.
ew All Announcements	Fuel Selection Code	The method used (on-site survey vs. GIS overlay) to select the appropriate fuel beds (e.g., red spruce, chaparral, sawgrass, or logging slash).
	Fuel Type Model Code	The fuel model used to characterize available fuel beds (e.g., FCCS or NFDRS).
ew Support Requests reate Support Request	Geographic Reference Point Code	The code that represents the place for which geographic coordinates were established. See www.epa.gov/oei/ for more information on the proper usage of this code set.
ACCOUNT DATA	Geometric Type Code	The code that represents the geometric entity represented by one point or a sequence of latitude and longitude points. See www.epa.gov/oei/ formore information on the proper usage of this code set.
	Ground Based Data Source Code	Indicates whether ground-based data were included and if so, identifies their source.
/ Account	Heat Release Unit Of Measure Code	Code that identifies the unit of measure for heat release.
y Agency count List	Horizontal Collection Method Code	The code that identifies the method used to determine the latitude and longitude coordinates for a point on the earth. See www.epa.gov/oei/ for more information on the proper usage of this code set.
urrent Users List	Horizontal Reference Datum Code	The code that represents the reference datum used in determining latitude and longitude coordinates. See www.epa.gov/oei/ for more information the proper usage of this code set.
count Request List	Ignition Location Code	The location and distribution of the ignition points within the burn area (e.g., center or multiple).
•	Ignition Method Code	The method used to ignite the fire (i.e., DAID, helitorch, or driptorch).
ency Organizations	Ignition Orientation Code	The technique used to direct the orientation of the fire's movement with respect to the wind (i.e., backing, strip-heading, or flanking).
CONTENT MANAGEMENT	Location Address State Code	The alphabetic codes that represent the name of the principal administrative subdivision of the United States, Canada, or Mexico.
	Location Type Code	Identifies the type of code or identifier that is being excluded.
essages	NAICS Code	The code that represents a subdivision of an industry that accommodates user needs in the United States.
oplication Configuration	Pollutant Code	The code for the pollutant which is controlled by the control measure.
	Port Identifiers	The code that identifies a shapefile of type port.

Pollutant codes-example See what is retired and what is not



Emissions QA Values – Warning Check # 474



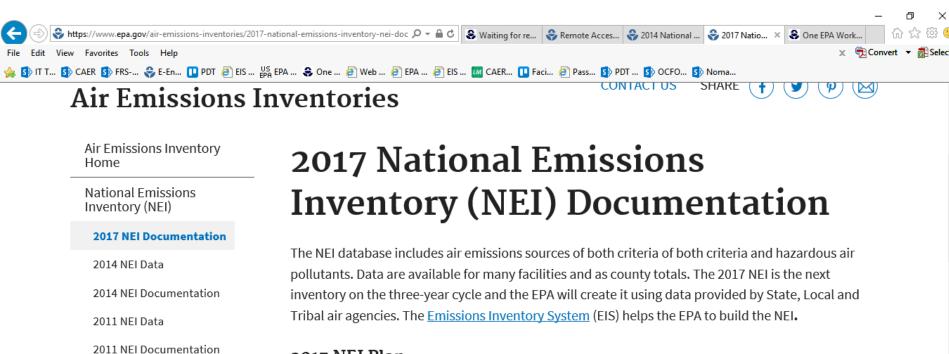


Web Resources

- One pagers
 - How to gain access to the Gateway
 - How to change your password
 - How to submit data using the Web Client

http://www.epa.gov/ttn/chief/eis/index.html

- 2017 specific information http://www.epa.gov/ttn/chief/net/2017inventory.html
- 2017 NEI/EIS Implementation Plan <u>https://www.epa.gov/air-emissions-inventory-inventories/2017-national-emissions-inventory-nei-documentation</u>



- 2017 NEI Plan
- 2017 NEI Plan

2008 NEI Data

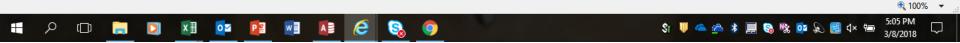
Trends Data

2008 NEI Documentation

Air Pollutants Emissions

Pollutant Emissions Summary Files

- Appendix 1 Suggested SLT Timeline and QA Checks (2 pp, 29 K)
- Appendix 2 2017 NEI Plan Code Changes (1 pg, 107 K)
- Appendix 3 Draft Schedule for Potential Point SCC Revisions (1 pg, 32 K)
- Appendix 4 2017 Nonpoint Proposed OptionGroup-OptionSet (1 pg, 66 K)



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Help us Improve!

You will receive an email with a link to a survey to review the course(s) you attend at the Emissions Inventory Training Workshop.

Please take a few moments to let us know about your experience this week.

We welcome your feedback!

