

POINT SOURCE EMISSION INVENTORY TRAINING

Presented by Jing Wang
Data & Modeling Unit
Planning & Support Program
Air Protection Branch
Georgia Environmental Protection Division

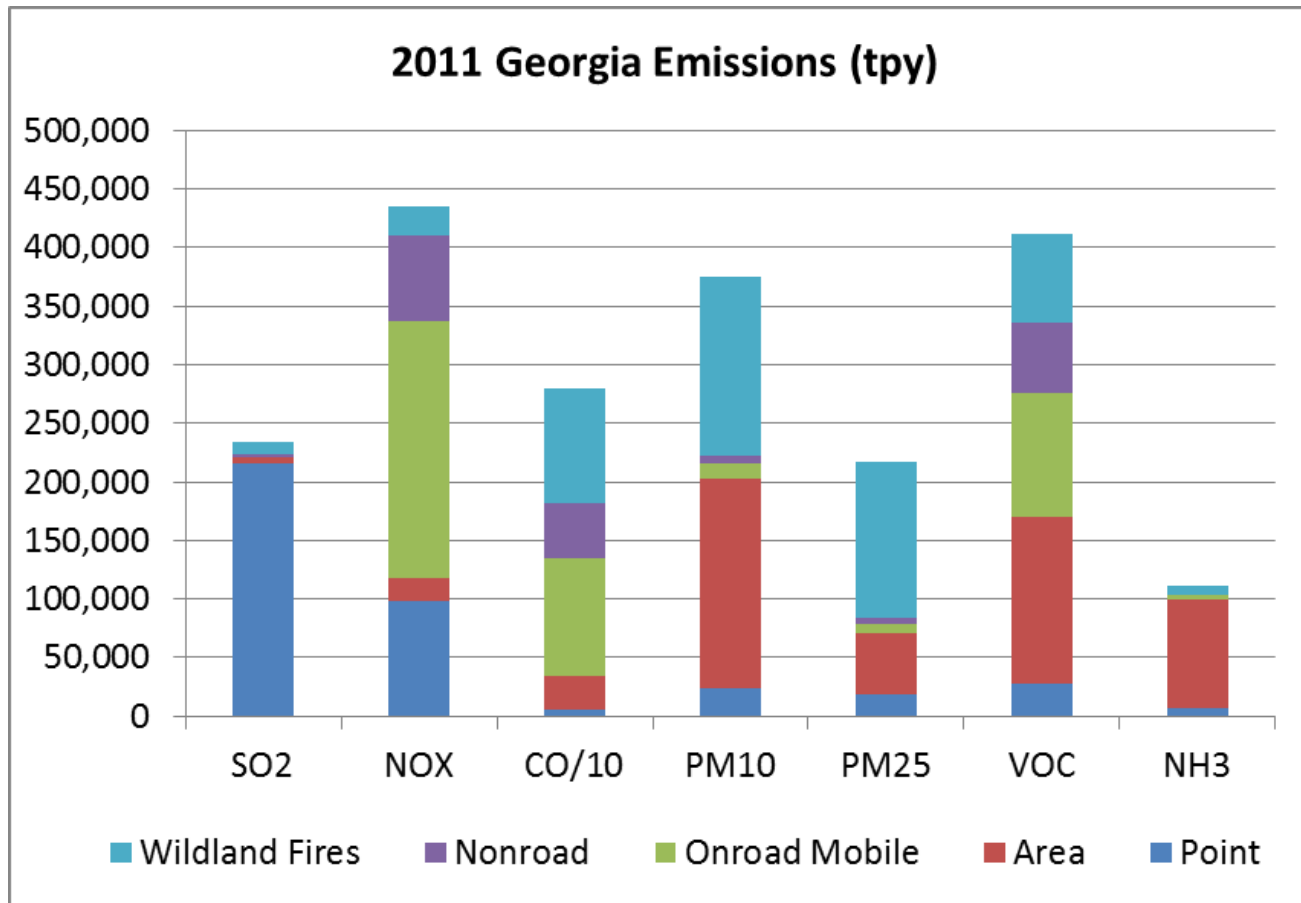
July 21, 2015

Training Outline

- NEI History
- Acronyms
- Collecting Georgia point source emission inventory
 - Georgia Environmental Connections Online (GECO) EIS system (<http://geco.georgiaair.org/EIS/>)
 - Participation, pollutants, and thresholds
 - EIS design concepts
 - Facility Inventory Component
 - Emission Inventory Component
- Changes for 2014 EIS data collection
- Example facility submittal

NEI – National Emissions Inventory

- All source categories collected every three years
- Large point sources collected every year



What is the NEI data used for?

- Attainment/nonattainment designations for criteria air pollutants
- State Implementation Plans (SIPs) for attainment and maintenance of the NAAQS
 - Regional photochemical grid modeling
- Rule Development
- PSD permit reviews
 - Local dispersion modeling



Acronyms

- EIS – Emission Inventory System
- FI – Facility Inventory
 - Refers to the information pertaining to the facility equipment and operation (e.g., emission units, release points, and processes)
 - FI does not change from year to year
- EI – Emission Inventory
 - Refers to the information that changes from year to year (e.g., annual emissions, throughputs, and process operating details).

NEI Regulatory History

- 40 CFR Part 51
 - Consolidated Emissions Reporting Rule (CERR) published on June 10, 2002.
 - Replaced the old CERR rule with the Air Emissions Reporting Requirements (AERR) rule issued on December 17, 2008.
 - New revisions to AERR rule was issued on February 6, 2015.
- GA EPD collects the inventory under authority of Georgia Rule 391-3-1-.02(6)(b)(1)

2014 EI Participation

- All Part 70 Major Sources are subject.
- Exceptions
 - Permitted but not constructed
 - Federally Enforceable Permit Limit
 - e.g., Synthetic Minor (SM) sources or Major HAP sources
 - Shutdown during the Calendar Year

Potential To Emit (PTE)

- Best PTE Resources
 - Title V Permit Application or Permit Narrative
- PTE Procedures
 - <http://www.georgiaair.org/airpermit/html/otherforms/pteguide.htm>

The screenshot shows a web browser window with the address bar displaying www.georgiaair.org/airpermit/html/otherforms/pteguide.htm. The page header includes the Georgia Department of Natural Resources logo and contact information for the Environmental Protection Division, Air Protection Branch. The main content area is titled "Procedure to Determine a Facility's Potential to Emit (PTE) & Its Classification" and states that the 1994 PTE determination procedures have been updated and replaced by the August 2008 version. A link is provided to "Download the August 2008 PTE Procedures (pdf)". The left sidebar contains a navigation menu with links for "GECO Login", "Hot Topics", "Services and Resources", "Air Quality Rules", "Public Meetings & Hearings", "Public Affairs & Outreach", "Permits & Title V Applications", "Search GeorgiaAir.org", "Browse By Program", "Ambient Monitoring", "Mobile and Area Sources", "Planning & Support", "Stationary Source Compliance", "Stationary Source Permitting", "Source Monitoring & Testing", "Other Resources", "Emissions Credits & Banking", and "Title V Software & Other info". The footer includes links for "State of Georgia", "Georgia Department of Natural Resources", "Georgia EPD", and "Contact us".

Georgia Department of Natural Resources
Environmental Protection Division, Air Protection Branch
4244 International Parkway, Suite 120
Atlanta, Georgia 30354
(404) 363-7000 • Fax: (404) 363-7100

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Directions to the Air Protection Branch

**Procedure to Determine a Facility's
Potential to Emit (PTE) & Its Classification**

The 1994 PTE determination procedures have been updated and replaced by the August 2008 version.
Please refer to the August 2008 version for all future determinations.

[Download the August 2008 PTE Procedures \(pdf\)](#)

[State of Georgia](#) [Georgia Department of Natural Resources](#) [Georgia EPD](#) [Contact us](#)

GECO Login
Hot Topics
Services and Resources
Air Quality Rules
Public Meetings & Hearings
Public Affairs & Outreach
Permits & Title V Applications
Search GeorgiaAir.org
Browse By Program
Ambient Monitoring
Mobile and Area Sources
Planning & Support
Stationary Source Compliance
Stationary Source Permitting
Source Monitoring & Testing
Other Resources
Emissions Credits & Banking
Title V Software & Other info

EI Pollutants Reported

- Ammonia (NH₃)
- Carbon Monoxide (CO)
- Lead (Pb)
- Nitrogen Oxides (NO_x)
- Sulfur Dioxide (SO₂)
- Volatile Organic Compounds (VOCs)
- PM Condensable
- PM₁₀ Filterable
- PM_{2.5} Filterable
- PM₁₀ Primary (Filterable + Condensable)
- PM_{2.5} Primary (Filterable + Condensable)

Particulate Matter

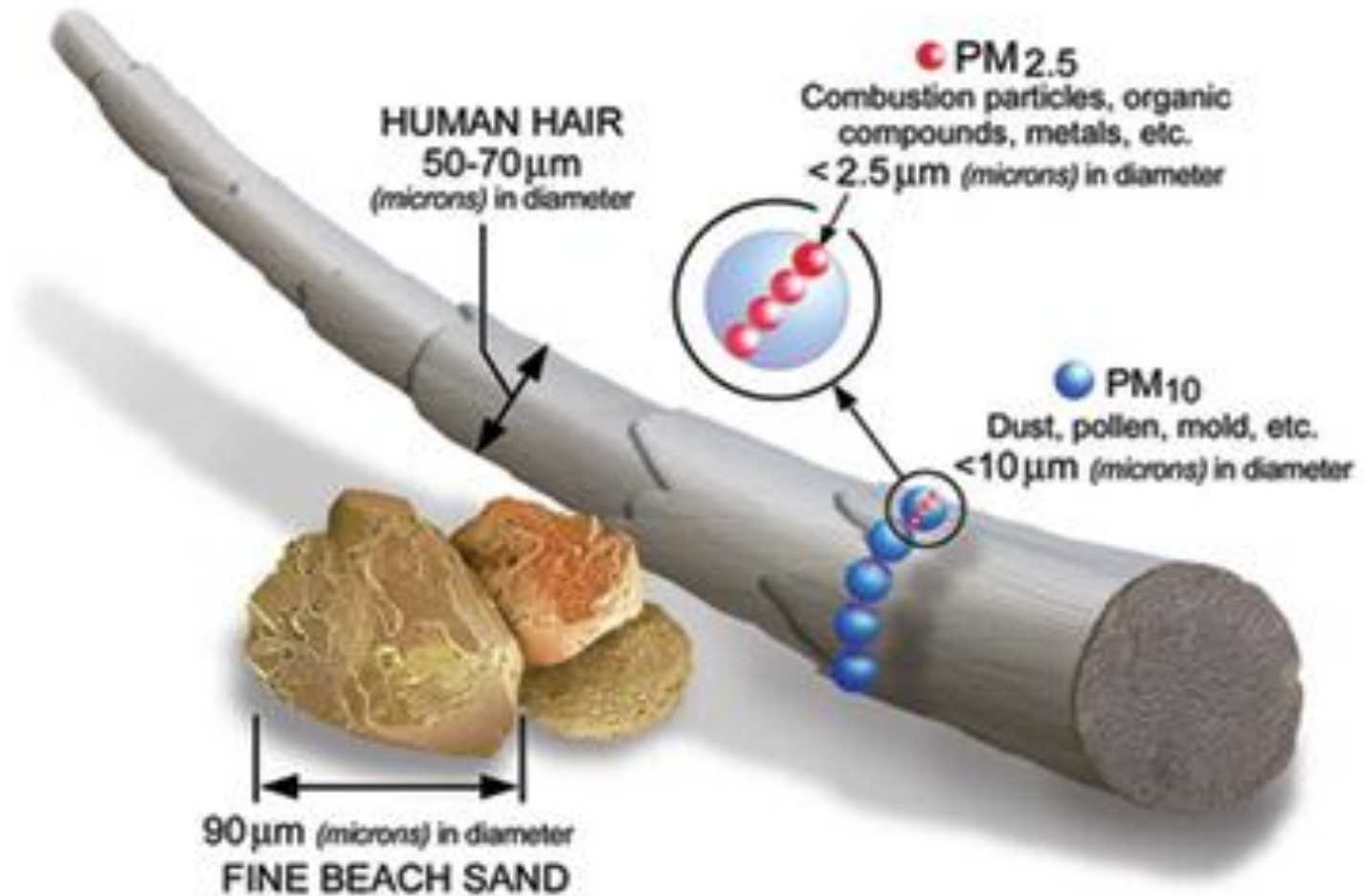
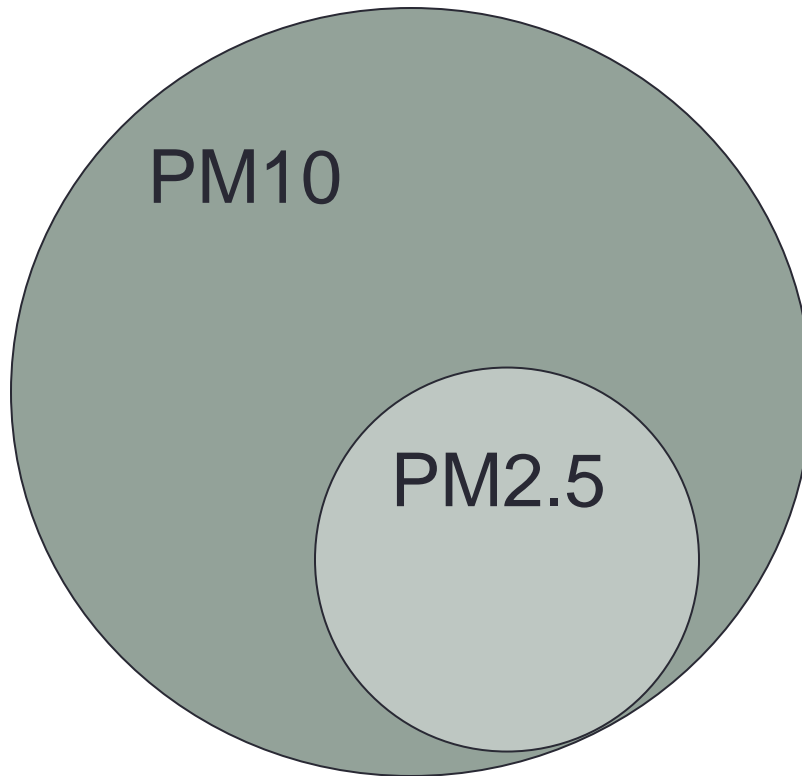


Image courtesy of the U.S. EPA

PM Discussion



PM₁₀ - Particles less than 10 micrometers in diameter.

PM_{2.5} - Particles less than 2.5 micrometers in diameter.

Particle Reporting Distinction

1. Primary (PRI) – Primary particles emitted directly into the air from a source.
 - Includes filterable and condensable components.
2. Filterable (FIL) – Filterable particles include any particulate matter that may be physically captured on a filter during sampling.
3. Condensable (CON) – The matter in the gas phase which condenses to sub-micron particles after cooling.
 - All condensable PM is smaller than 2.5 microns in diameter, so PM-CON represents condensable matter for PM, PM10, and PM2.5.

PM Discussion

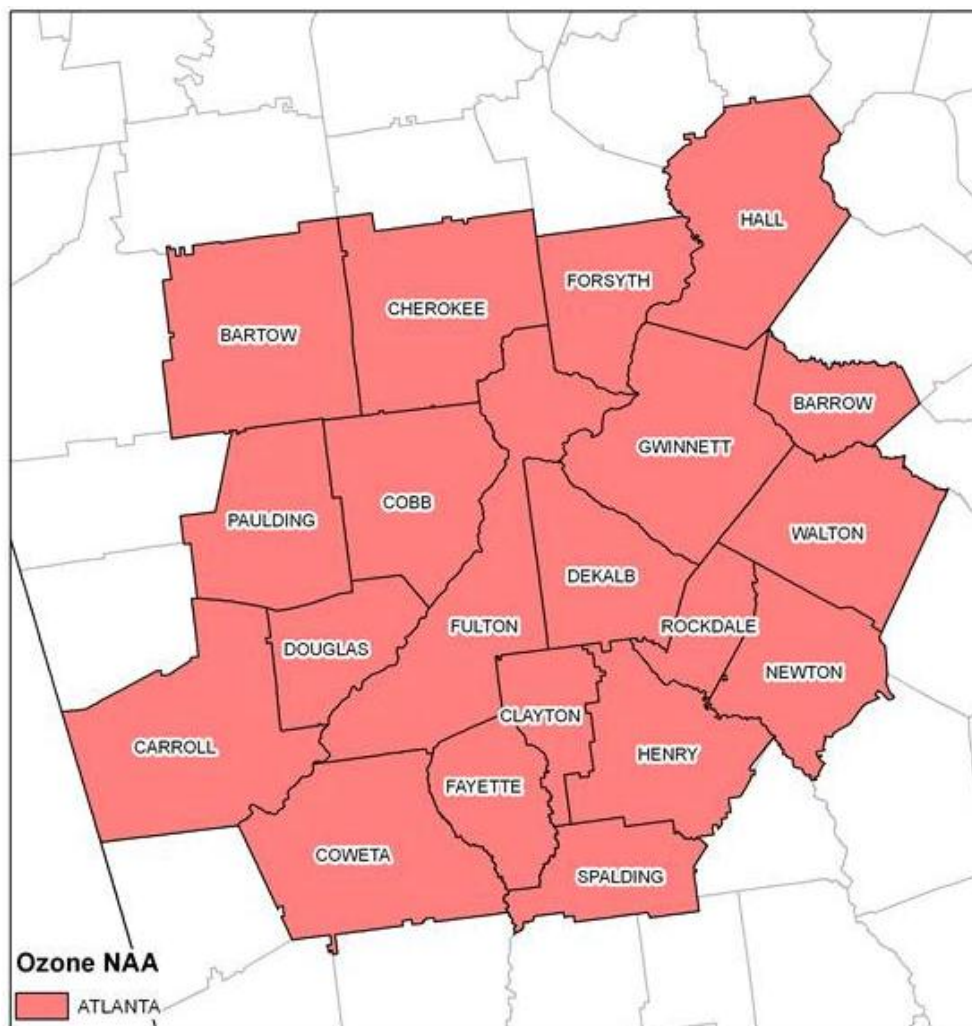
- PM2.5 is a subset of PM10, therefore PM2.5 can never be greater than PM10
 - $PM_{10-PRI} \geq PM_{25-PRI}$
 - $PM_{10-FIL} \geq PM_{25-FIL}$
- Primary PM = Filterable PM + Condensable PM
 - $PM_{10-PRI} = PM_{10-FIL} + PM-CON (\pm 1 \text{ Ton})$
 - $PM_{25-PRI} = PM_{25-FIL} + PM-CON (\pm 1 \text{ Ton})$
 - $PM_{10-PRI} \geq PM_{10-FIL}$
 - $PM_{25-PRI} \geq PM_{25-FIL}$
 - $PM_{10-PRI} \geq PM-CON$
 - $PM_{25-PRI} \geq PM-CON$

2014 EI Thresholds

Pollutant	Thresholds (potential tons per year)	Facilities in Metro Atlanta Nonattainment areas (potential tons per year)
VOC	≥100	≥25
SO2	≥100	≥100
NOx	≥100	≥100
CO	≥1000	≥100
Lead	≥0.5(actual)	≥0.5(actual)
PM10_Primary	≥100	≥100
PM2.5_Primary	≥100	≥100
NH3	≥100	≥100

Metro Atlanta Ozone Nonattainment areas

The Atlanta ozone nonattainment area includes the following counties: Barrow, Bartow, Carroll, Cherokee, Clayton, Cobb, Coweta, DeKalb, Douglas, Fayette, Forsyth, Fulton, Gwinnett, Hall, Henry, Newton, Paulding, Rockdale, Spalding, and Walton.



2015 and 2016 EI Thresholds

Pollutant	Thresholds (potential tons per year)	Facilities in Metro Atlanta Nonattainment areas (potential tons per year)
VOC	≥250	≥250
SO ₂	≥2500	≥2500
NO _x	≥2500	≥2500
CO	≥2500	≥2500
Lead	Not Applicable	Not Applicable
PM _{10_Primary}	≥250	≥250
PM _{2.5_Primary}	≥250	≥250
NH ₃	≥250	≥250

EIS Summaries

- Provide simple lists of EIS information

Release Point Summary - GEC... x +

geco.georgiaair.org/EIS/releasepoint_summary.aspx

emissions inventory

Air Protection Branch

Welcome, Jing Wang | Airs No.:G3900001
Facility: Durango-Georgia Paper Company

Facility Home My Home **Training** Contact Us Sign Out

Home

- Facility Inventory
 - Facility & Contact Info
 - Release Points
 - Emission Units
 - Processes
- Emission Inventory
 - Emissions Reporting
 - Process Bulk Entry
 - Pollutant Bulk Entry
 - Submit EI
- Reset EI Data
- Help & Reports
 - Facility Inventory Help
 - Emission Inventory Help
 - Reports

EIS Change Log

Active Fugitive Release Points

Fugitive ID	Fugitive Description	Operating Status	Last EPA Submittal
999TES	DSFS	Operating	
99TEST	test	Operating	
CV01E	Fugitive from conveyors	Operating	
FUG100	test fugitive	Operating	
FUGBG	TEST	Operating	
FUGNEW	Test Fug	Operating	
FUGSTK	test	Operating	
ST999	Desc	Operating	
STTEST	Desc	Operating	
TESTFW	desc	Operating	
TESTIN	description	Operating	

Active Stack Release Points

Stack ID	Stack Description	Release Point Type	Stack Height (feet)	Gas Flow Rate (ACFS)	Operating Status	Last EPA Submittal
501A	Kiln No. 1 Stack Test	Vertical	200	0.1	Operating	6/2/2010
501B	Kiln No. 2 Stack	Vertical	102	55	Operating	6/2/2010
501D	deduplicated description	Vertical	35	36.7	Operating	

geco.georgiaair.org/EIS/rp_process_bulk.aspx

EIS Details

- Provide details about specific EIS info and how it relates to the FI and EI

Fugitive Details - GEICO Facility ...

gco.georgiaair.org/EIS/fugitive_details.aspx?fug=999TES

emissions inventory

Air Protection Branch

Welcome, Jing Wang | Air No.: 02900001
Facility: Dunage-Georgia Paper Company

Facility Home My Home **Training** Contact Us Sign Out

Home
Facility Inventory
Facility & Contact Info
Release Points
Emission Units
Processes
Emission Inventory
Emissions Reporting
Process Bulk Entry
Pollutant Bulk Entry
Submit EI
Reset EI Data
Help & Reports
Facility Inventory Help
Emission Inventory Help
Reports

EIS Change Log

Fugitive Release Point Details

Summary

Fugitive Release Point

Add Duplicate Edit

Fugitive ID:	999TES
Fugitive Description:	DSFS
Fugitive Operating Status:	Operating as reported in 2013
Fence Line Distance (ft):	5
Fugitive Height (ft):	6
Fugitive Width (ft):	4
Fugitive Length (ft):	5
Fugitive Angle (0 - 179):	47
Comment:	
Last Submitted to EPA:	Never submitted
Last Updated On:	01/28/2015 04:25pm by Jing Wang

Fugitive Geographic Coordinate Information:

gco.georgiaair.org/EIS/rp_summary.aspx

EIS Edits

- Allows information on the Details pages to be Edited.
 - Note some Details pages have multiple Edit options.

The screenshot shows a web browser window with the URL `geco.georgiaair.org/EIS/fugitive_edit.aspx?Fug=99TEST`. The page is titled "Air Protection Branch" and includes a navigation menu on the left with links like "Home", "Facility Inventory", "Release Points", "Emission Units", "Processes", "Emission Inventory", "Emissions Reporting", "Process Bulk Entry", "Pollutant Bulk Entry", "Submit EI", "Reset EI Data", "Help & Reports", "Facility Inventory Help", "Emission Inventory Help", and "Reports". The main content area is titled "Edit Fugitive Release Point Details" and contains a form for editing a fugitive release point. The form includes fields for "Fugitive ID:" (99TEST), "Fugitive Description:" (test), "Fugitive Operating Status:" (Operating), "Fence Line Distance (ft):" (OPTIONAL), "Fugitive Height Measure (ft):" (OPTIONAL), "Fugitive Width Measure (ft):" (OPTIONAL), "Fugitive Length Measure (ft):" (OPTIONAL), "Fugitive Angle Measure (θ = 179):" (OPTIONAL), and "Comment:". There are "Save" and "Return to Details" buttons at the bottom right of the form. Below the form, there is a section titled "Release Point Apportionments" with a note: "The Release Point is not used in any Process Release Point Apportionments and can be deleted on the Edit page." The browser's address bar shows the URL `geco.georgiaair.org/EIS/rp_process_bulk.aspx`.

Air Protection Branch
Welcome: Jing Wang | Air No.: 02900001
Facility: Durango-Georgia Paper Company

Home
Facility Inventory
Facility & Contact Info
Release Points
Emission Units
Processes
Emission Inventory
Emissions Reporting
Process Bulk Entry
Pollutant Bulk Entry
Submit EI
Reset EI Data
Help & Reports
Facility Inventory Help
Emission Inventory Help
Reports

[EIS Change Log](#)

Edit Fugitive Release Point Details [Summary](#)

Fugitive Release Point

[Save](#) [Return to Details](#)

Fugitive ID: 99TEST

Fugitive Description: test

Fugitive Operating Status: Operating

Fence Line Distance (ft): OPTIONAL

Fugitive Height Measure (ft): OPTIONAL

Fugitive Width Measure (ft): OPTIONAL

Fugitive Length Measure (ft): OPTIONAL

Fugitive Angle Measure (θ = 179): OPTIONAL

Comment:

Release Point Apportionments
The Release Point is not used in any Process Release Point Apportionments and can be deleted on the Edit page.

`geco.georgiaair.org/EIS/rp_process_bulk.aspx`

EIS Pre-Populate

- EI can be pre-populated from past years that are in the EIS system, currently that is 2011 - 2013.
- Annual process throughput and emissions values (annual or summer-day) are not pre-populated.

The screenshot shows a web browser window with the URL `http://geco.geo...rp_prepop.aspx`. The page title is "Air Protection Branch". The user is logged in as "Jing Wang" with "Airs No.:03900001" and is at the "Facility: Durango-Georgia Paper Company". The navigation bar includes "Facility Home", "My Home", "Training", and "Co". The left sidebar has links for "Home", "Help & Reports", "Facility Inventory Help", "Emission Inventory Help", "Reports", and "EIS Change Log". The main content area is titled "Emission Inventory Prepopulation" and contains the following text: "The facility will be participating in the Emissions Inventory process." and "You may choose to have the Emissions Inventory prepopulated with data from a previous year. If you wish to skip this option and begin with blank forms, choose 'Do not prepopulate' in the list and click 'Continue.'". Below this text is a section titled "What would you like to do?" with a dropdown menu labeled "Choose the year: -Make Selection-" and a "Continue" button.

EIS FI Access and EI Access

- The FI is always available except during the EPA Submittal.
- The EI is only available for editing during specific Reporting Period Event.

The screenshot shows the GEICO Emission Inventory System web application. The browser address bar displays "geco.georgiaair.org/EIS/default.aspx". The page header is blue and contains the text "Air Protection Branch" and "Welcome, Jing Wang | Airs No.:03900001 Facility: Durango-Georgia Paper Company". Navigation links include "Facility Home", "My Home", "Training", "Contact Us", and "Sign Out". A left sidebar menu lists options: "Home", "Facility Inventory", "Release Points", "Emission Units", "Processes", "Emission Inventory", "Emissions Reporting", "Process Bulk Entry", "Pollutant Bulk Entry", "Submit EI", "Reset EI Data", "Help & Reports", and "EIS Change Log". The main content area is titled "Emission Inventory System" and includes a welcome message, key features, and a large green box for the "2014 Emission Inventory - In Progress".

Air Protection Branch
Welcome, Jing Wang | Airs No.:03900001
Facility: Durango-Georgia Paper Company

Emission Inventory System
Welcome to the Georgia Emission Inventory System. Due to recent changes in the regulatory requirements for the national emission inventories, the method of collecting the annual emission inventories has changed.

Key features - change in applicability definitions and the concept of a facility inventory and an emissions inventory.

- Applicability changed to require that facilities whose potential emissions exceed the thresholds must report their actual emissions.
- The Facility Inventory (FI) will remain open all year and can be updated at any time. The Facility Inventory contains the following components: Facility Site Details, Emission Units, Stacks, and Processes.
- The Emission Inventory (EI) is only available for data submittal during the specified submittal periods. The Emission Inventory contains the following components: Process Reporting Period Details and Reporting Period Emissions.

2014 Emission Inventory - In Progress
Facility Home

The facility is currently in the process of completing the Emission Inventory for the 2014 calendar year. Use the menu on the left to continue working on the EI. At any time during the EI process you may choose to reset the EI data and start again from the beginning of the process. The reset process cannot be undone.

Facility Name: Durango-Georgia Paper Company
Facility AIRS No: 03900001
Status: In progress

EIS Status Tracking

- The EIS Home Page Status area will provide details about what areas are available.

The screenshot shows a web browser window with the address bar displaying `geico.georgiaair.org/FacilityHome.aspx?facility=8M/IXwDBGyGBNQoVCjJAOHCPmhiJbFb`. The page header features the Georgia EPD logo and the text "Air Protection Branch Environmental Protection Division". Below this, a welcome message for "Jing Wang" is displayed, along with the facility name "Blue Sky Biomass Georgia LLC" and the AIRS number "07500001". A navigation menu includes links for "Applications", "Training", "My Home", "Contact Us", and "Sign Out".

The main content area is titled "Online Application Status" and contains a table with the following data:

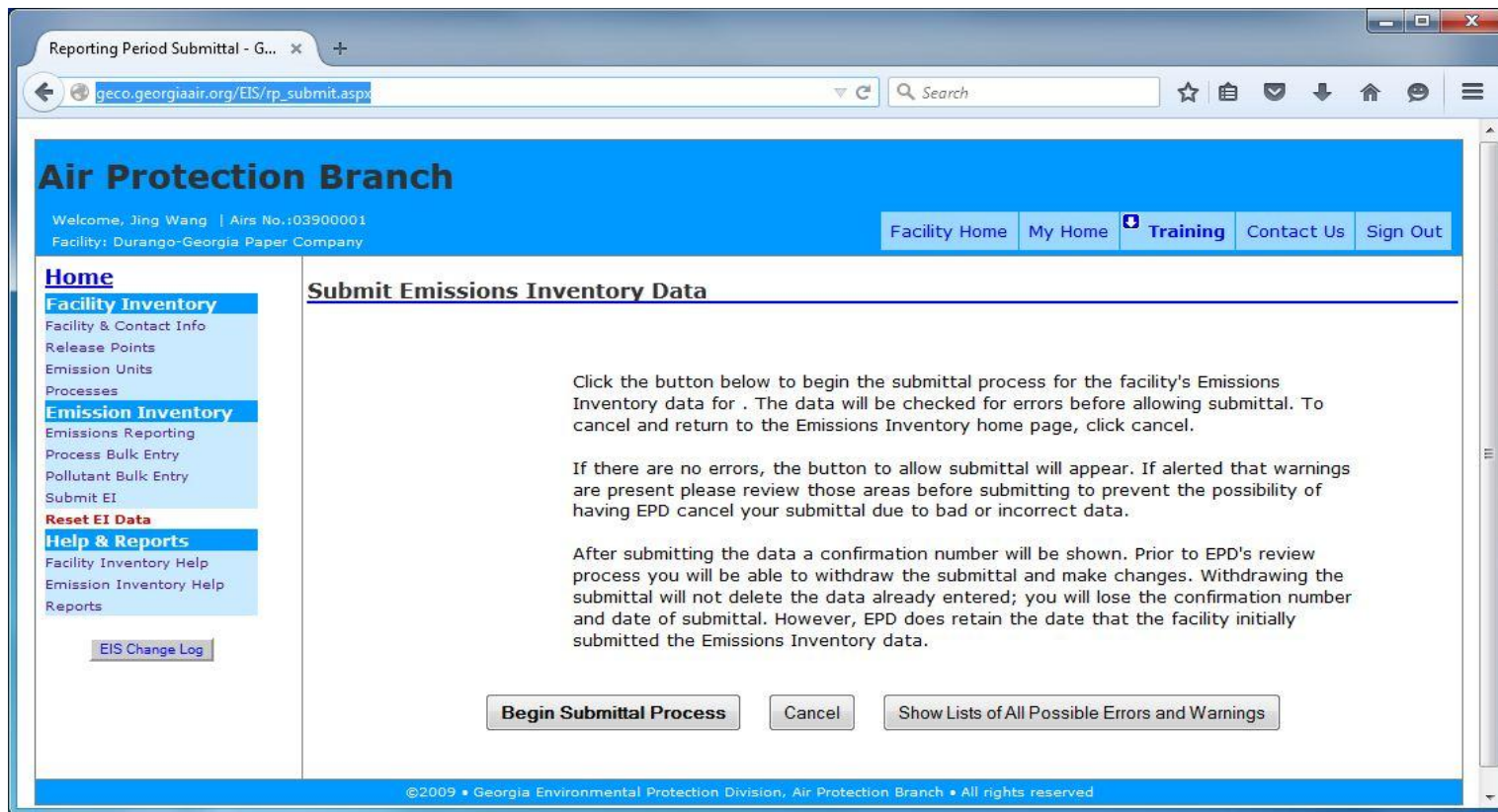
Application	Current Status	Deadline	Current Contact
Emission Fees	Potentially Subject to Fees for 2014	9/2/2015	Katherine Fry
Emissions Inventory	Applicable - not started	8/3/2015	Katherine Fry

Facility Home Options:

- Facility Summary - Displays GA APB information specific to your facility. Some of this

EIS Submittal Checks - Errors

- Errors are required to be fixed before final submission.



EIS Submittal Checks - Warnings

- A “warning” refers to data that may need to be addressed, but not required to be fixed.

The screenshot shows a web browser window with the URL geco.georgiaair.org/EIS/rp_submit.aspx. The page is titled "Air Protection Branch" and includes a navigation menu on the left with links such as "Home", "Facility Inventory", "Emission Inventory", and "Help & Reports". The main content area is titled "Submit Emissions Inventory Data" and "Emissions Inventory Submittal Check Results". It contains a message stating: "Errors were found in the Emissions Inventory data for the facility. The errors are listed below and need to be addressed and fixed prior to submittal being allowed." Below this message, there are two buttons: "Go to EI Home Page" and "Show Lists of All Possible Errors and Warnings". The "Error List" section shows two errors: "E09 - Multiple Fugitive release points have the same geographic coordinates." and "E20 - Emission units operating but not in Reporting Period." The "E09" error is expanded, showing a table with columns "Fugitive ID", "Description", "Latitude", and "Longitude". The "E20" error is also expanded, showing a table with columns "Emission Unit ID" and "Description".

Home
Facility Inventory
Facility & Contact Info
Release Points
Emission Units
Processes
Emission Inventory
Emissions Reporting
Process Bulk Entry
Pollutant Bulk Entry
Submit EI
Reset EI Data
Help & Reports
Facility Inventory Help
Emission Inventory Help
Reports
[EIS Change Log](#)

Submit Emissions Inventory Data
Emissions Inventory Submittal Check Results

Errors were found in the Emissions Inventory data for the facility. The errors are listed below and need to be addressed and fixed prior to submittal being allowed.

If any warnings are indicated it is strongly suggested to review those areas to avoid the possibility of having EPD cancel your submittal due to bad or incorrect data.

Print this page to have the list available while reviewing the data.

Errors and/or warnings were found in the data. Address the errors and warnings and submit again.

[Go to EI Home Page](#) [Show Lists of All Possible Errors and Warnings](#)

Error List (...Hide Errors)

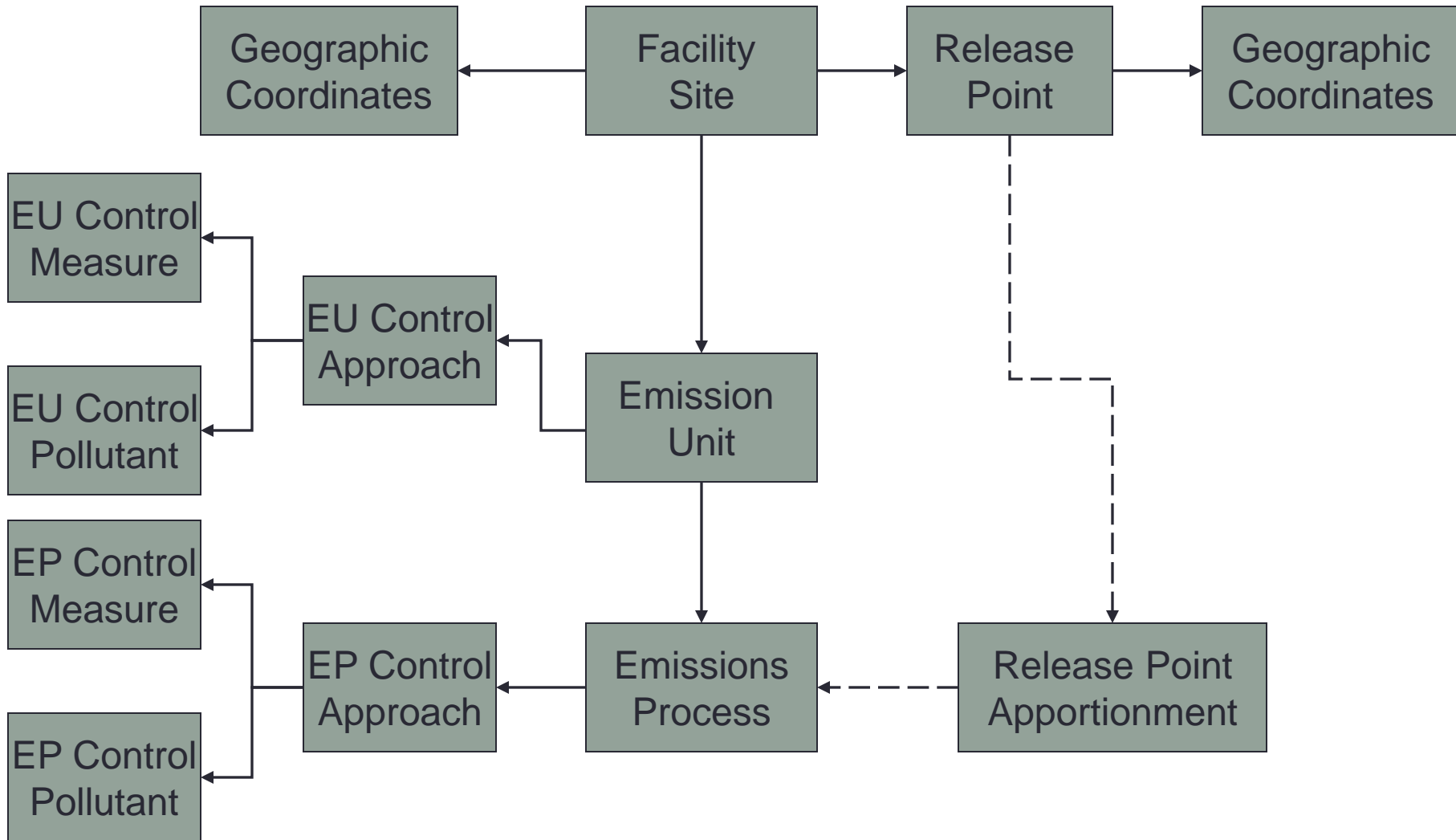
E09 - Multiple Fugitive release points have the same geographic coordinates.

Fugitive ID	Description	Latitude	Longitude
99TEST	test	30.73401	-81.54132
SITEST	Desc	30.73401	-81.54132

E20 - Emission units operating but not in Reporting Period.

Emission Unit ID	Description
500C	Kiln No. 3
998DF	dffdff
999EU	Desc
ADD46	temp 2
ANODA	Desc
B010	Small Boiler Augusta
CV01	Coneyor

EIS Facility Inventory (FI)



Facility Inventory

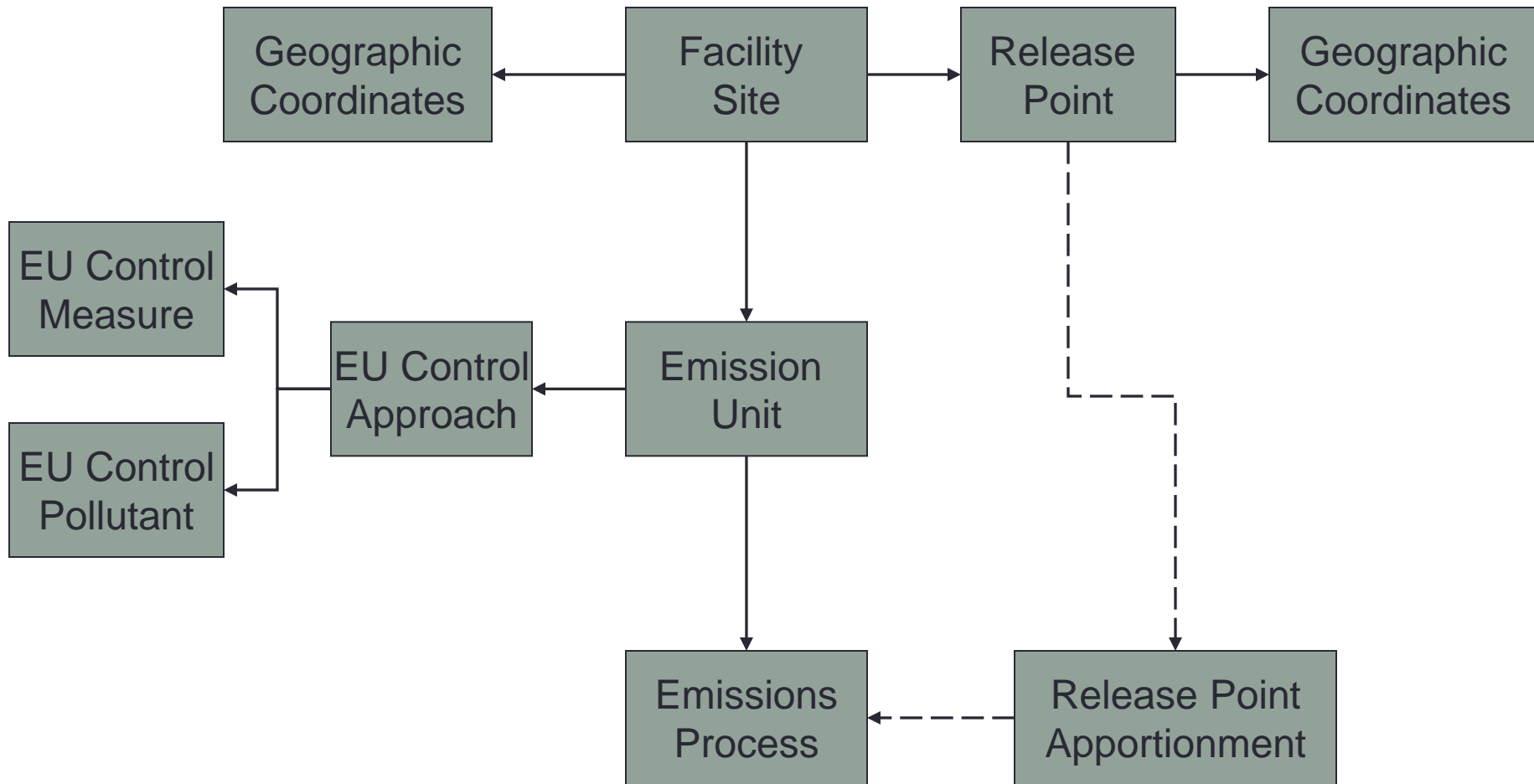
- Physical assets of the Facility
 - Release Points - Two types
 - Stacks - single emission release point site
 - Fugitives- release point area (e.g. tank or conveyors)
 - Emissions Units
- Operational Assets of the Facility
 - Processes
 - Control Approaches
 - Control Measures
 - Control Pollutants

Emission Units

- Physical pieces of equipment, usually a Title V Significant Emission Unit.
- FI does not readily allow for Emission Unit Groups
- Emission Unit Control Approach

The screenshot shows a web browser window with the address bar displaying `geico.georgiaair.org/EIS/emissionunit_details.aspx?eu=500A`. The page title is "Emission Unit Details - GEICO F...". The left sidebar contains a navigation menu with the following items: Home, Facility Inventory (with sub-items: Facility & Contact Info, Release Points, Emission Units, Processes), Emission Inventory (with sub-items: Emissions Reporting, Process Bulk Entry, Pollutant Bulk Entry, Submit EI), Reset EI Data, Help & Reports (with sub-items: Facility Inventory Help, Emission Inventory Help, Reports), and EIS Change Log. The main content area is titled "Emission Unit Details" and has a "Summary" button in the top right corner. Below the title is a section for "Emission Unit" with fields for: Emission Unit ID (500A), Emission Unit Description (Kiln No. 1), Unit Type (Mixer), Operating Status (Operating), Unit Placed In Operation (12/01/2012), Comment (This is a comment.TETEEteetet j), Last Submitted to EPA (06/02/2010), and Last Updated on (04/13/2015 10:46am by Jing Wang). There are "Add", "Duplicate", and "Edit" buttons to the right of the "Emission Unit" section. Below this is a section for "Emission Unit Control Approach" with an "Edit" button in the top right corner. It contains fields for: Control Approach Description (Mixer Control), Percent Control Approach Capture Efficiency, Percent Control Approach Effectiveness, First Inventory Year, Last Inventory Year, Control Approach Comment, and Last Updated on (04/13/2015 10:47am by Jing Wang). At the bottom is a section for "Emissions Unit Control Measures" with a table that has two columns: "Control Device" and "Last EPA Submittal".

FI with Unit Control Approach



Emission Processes

- Still using Source Classification Codes (SCC)
 - Added a Cascading-dropdown for SCC selection
- Release Point Apportionment
- Process Control Approaches

The screenshot shows a web browser window with the title "Process Details - GEICO Facility ...". The address bar shows the URL "geco.georgiaair.org/EIS/process_details.aspx?eu=500A&ep=1". The left sidebar contains a navigation menu with the following items: Facility & Contact Info, Release Points, Emission Units, Processes, Emission Inventory (highlighted), Emissions Reporting, Process Bulk Entry, Pollutant Bulk Entry, Submit EIS, Reset EIS Data, Help & Reports, Facility Inventory Help, Emission Inventory Help, Reports, and EIS Change Log. The main content area is titled "Process" and contains the following information:

Process

Emission Unit ID: 500A
Emission Unit Status: Operating
Emission Unit Description: Kiln No. 1
Process ID: 1
Process Description: Lumber dried
Source Classification Code: 30901007
Process Comment:
Last Submitted to EPA: 12/20/2012
Last Updated On: 03/01/2013 12:51pm by Noel DoHarris

Release Point Apportionment Information

Release Point ID	Release Point Description	Release Point Type	Apportionment %	Last Submission to EPA
501B	Kiln No. 2 Stack	Vertical	100%	

Process Control Approach
An Emission Unit Control Approach exists, no Process Control Approach can be added.

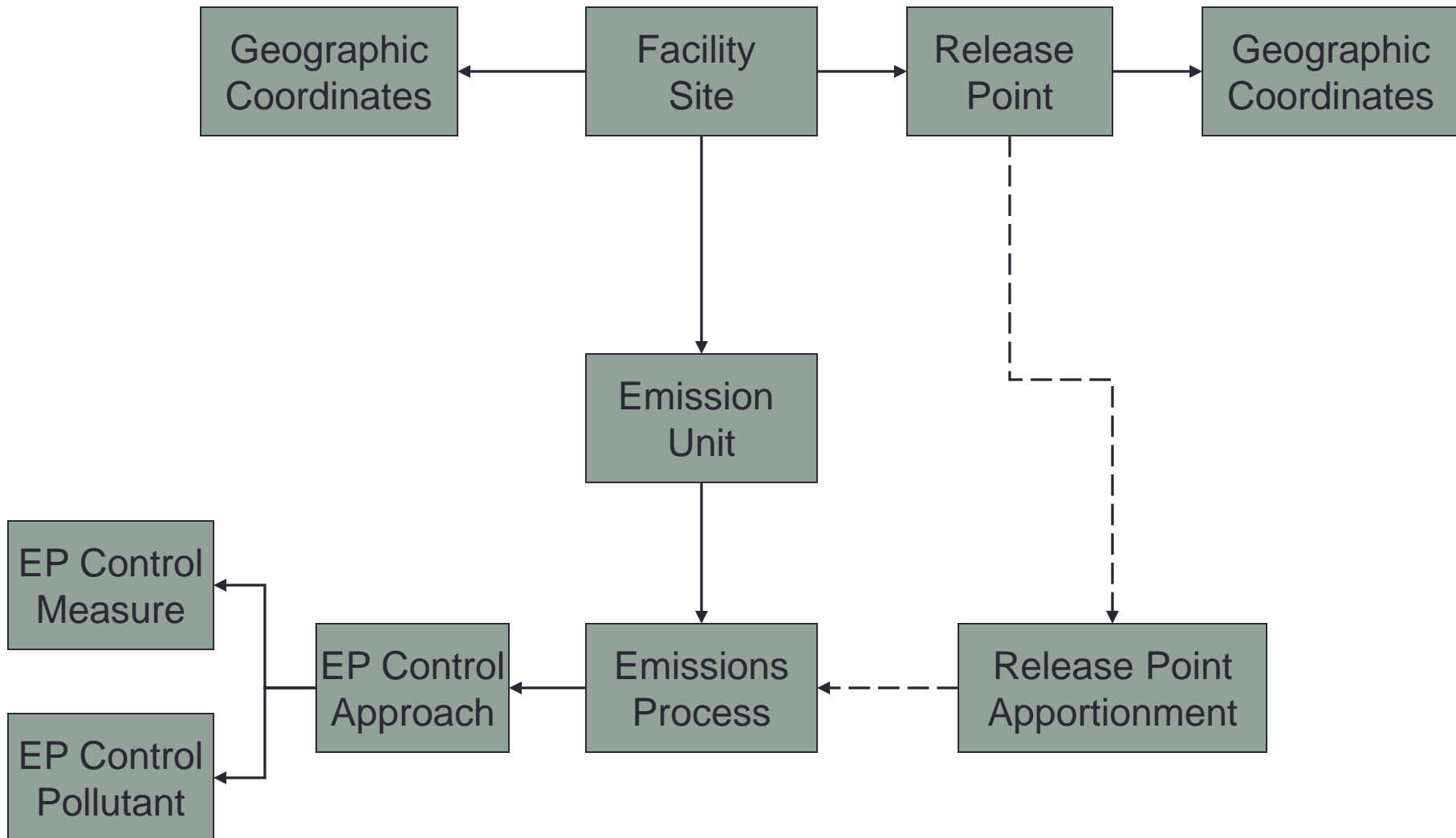
Annual Reporting Period Emissions

Pollutant	Reporting Period Type	2014	2013	2012	2011	2010
Volatile Organic Compounds	Annual	No Data	No Data	12.5	No Data	5

Summary

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FI with Process Control Approach



Release Point Apportionment

- Allows for multiple Release Points to be added to a Process
- Based on a **Percentage**, a process can be directed to multiple Release Points
- By default, all processes are required to have one release point with 100% of the emissions going to that release point
- From the Process Details page, additional Apportionments can be added

Control Approach

- Control Approach describes the method in which pollutants are controlled by defined measures for an emission unit or a process
 - Control Measure
 - List of control devices or technologies used in a control approach
 - Control Pollutant
 - List of pollutants controlled by a control approach

Control Approach (cont'd)

- An Emission Unit Control Approach applies to all Processes including the emission unit
- A Process Unit Control Approach applies to only the single Process
- An Emission Unit can NOT have both a process and an emission unit control approach

Control Approach Parameters

- **Capture Efficiency**

- The percentage of air emission that is directed to the control equipment, or 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.

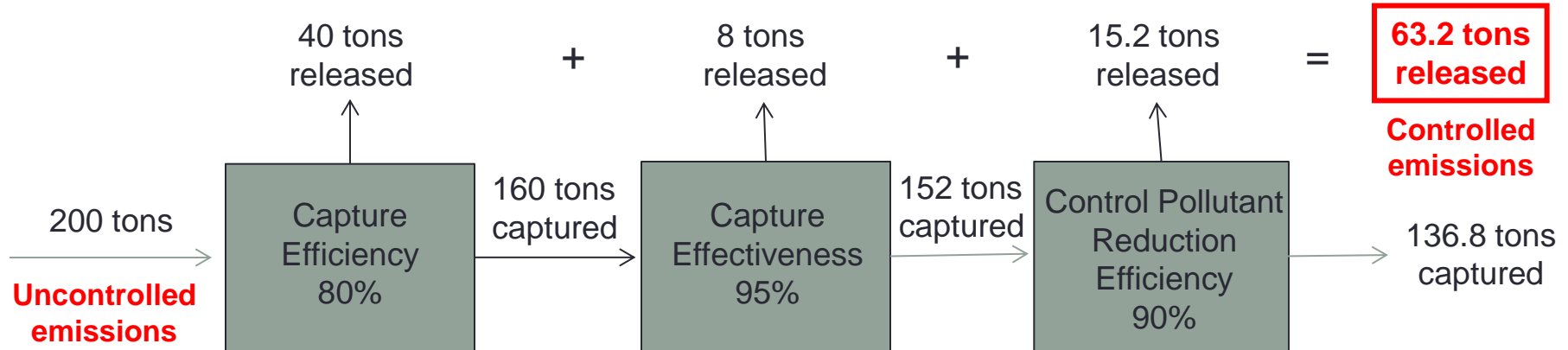
- **Capture Effectiveness**

- The amount of time, expressed as a percentage, that the captured air emissions were directed to the operating control scenario or uptime. The effectiveness should reflect control equipment downtime and maintenance degradation.

- **Control Pollutant Reduction Efficiency**

- The estimated average percent reduction achieved for the captured pollutant when all control measures are operating as designed.

Control Approach Diagram

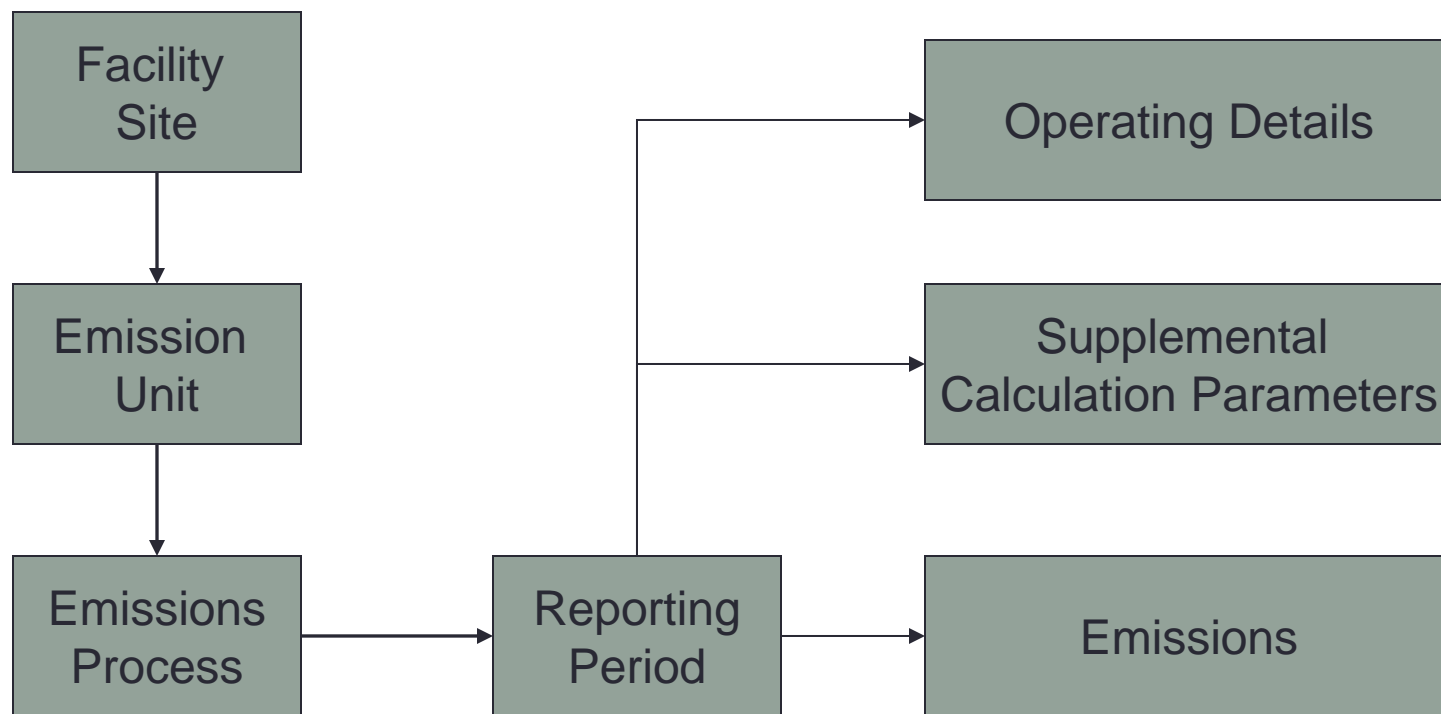


Capture Effectiveness = 95% = $(2000 - 100) / (2000)$

- Emissions Process or Unit ran for 2000 hours
- The Control Scenario was operationally down for 100 hours.

Controlled emissions = Uncontrolled emissions x (1 – [Capture Efficiency x Capture Effectiveness x Control Pollutant Reduction Efficiency])

EIS Emission Inventory (EI)



Emission Inventory (EI)

- The EI is the submission of process and emission information for a given reporting period (e.g., calendar year, summer day emissions).
- All emission information is associated with a process from the FI.
- Components
 - Participation Process
 - Reporting Period Operating Details
 - Reporting Period Emissions
 - Annual Submittal

EI Participation

- Basic Facility Information must be checked
- Operating Status information must be confirmed
- PTE Information
- Comments section on Participation

The screenshot shows a web browser window with the URL `geco.georgiaair.org/EIS/rp_facilitystatus.aspx`. The page title is "Air Protection Branch". The user is logged in as "Jing Wang" with "Airs No.: 03900001" and "Facility: Durango-Georgia Paper Company". The navigation bar includes "Facility Home", "My Home", "Training", "Contact Us", and "Sign". The left sidebar has a "Home" link and a "Help & Reports" section with links for "Facility Inventory Help", "Emission Inventory Help", and "Reports". There is also an "EIS Change Log" link. The main content area is titled "Facility Operational Status" and contains a form with the following elements:

- A question: "Did the facility operate at any time during calendar year 2014?" with radio buttons for "Yes" (selected) and "No".
- A dropdown menu for "Current Facility Status?" set to "Operating".
- A text input field with the placeholder "Type optional comments here".
- A note: "If the facility did not operate during 2014 the facility will not participate in the Emissions Inventory process."
- A "Continue" button at the bottom.

EI Emissions Reporting

- Summary page that lists all processes in the FI not in the Reporting Period and all processes in the EI Reporting Period

The screenshot shows a web browser window with the URL `geco.georgiaair.org/EIS/rp_summary.aspx`. The page title is "Reporting Period Summary - G...". The header is blue and contains the text "Air Protection Branch" and "Welcome, Jing Wang | Airs No.:03900001 Facility: Durango-Georgia Paper Company". There are navigation links: "Facility Home", "My Home", "Training", "Contact Us", and "Sign Out".

The main content area is titled "Process Reporting Period Summary". It is divided into two sections:

Processes in the 2014 Reporting Period

Emission Unit ID	Process ID	Process Description	Control Approach	Last EPA Submittal	
500A	1	Lumber dried	Unit	Not Submitted	Remove
500A	2	test	Unit	Not Submitted	Remove

Processes NOT in the 2014 Reporting Period

Emission Unit ID	Process ID	Process Description	Control Approach	Last EPA Submittal		
500A	10	Kiln - Oil	Unit	Not Submitted	Add	Prepopulate
500A	1A	test	Unit	Not Submitted	Add	Prepopulate

On the left side of the page, there is a sidebar with the following links:

- [Home](#)
- [Facility Inventory](#)
- Facility & Contact Info
- Release Points
- Emission Units
- Processes
- [Emission Inventory](#)
- Emissions Reporting
- Process Bulk Entry
- Pollutant Bulk Entry
- Submit EI
- [Reset EI Data](#)
- [Help & Reports](#)
- Facility Inventory Help
- Emission Inventory Help
- Reports

At the bottom of the sidebar, there is a link: [EIS Change Log](#).

- New processes added to the FI for the first time, will have to be added to the Reporting Period individually.

El Reporting Period Operating Details

- Process Operating Details
 - Calculation Parameter Type
 - Migration Default is Existing
 - Actual Annual/Throughput Activity
 - Material Processed or Fuel Used
- Daily, Weekly, Annual Information
 - No Changes
- Seasonal Operational Percentages
 - No Changes
- Fuel Burning Information
 - No Changes

El Emissions Edit

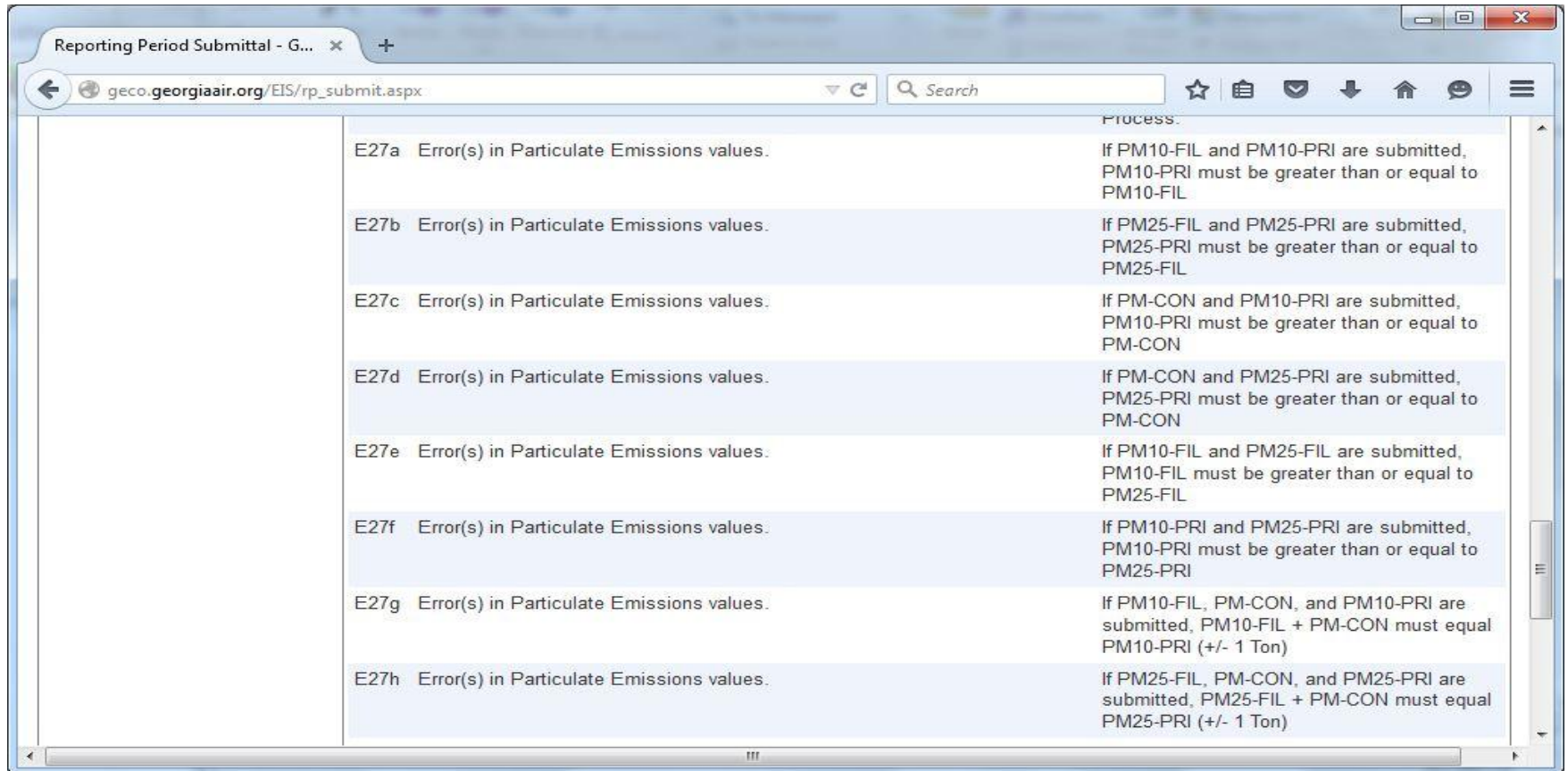
- Summer-Day Emissions added for facilities in the 20-county Non-Attainment Area that emit NOx and VOC
 - Summer Day emissions are the average daily emissions of VOC or NOx during the period May 1 through September 30
- Additional Emission Calculation Methods
 - Only those that indicate emission factor require the emission factor information
- Emission Factor Resource
 - EPA webFIRE: <http://cfpub.epa.gov/webfire/>
 - Need a valid SCC to search

Recent Changes in the EIS

- **Defined VOC and NOx Summer-Day Emissions for Metro-NAA as the average daily emissions of VOC or NOx for the period May 1 through September 30 (153 days)**
 - If process operated every day during this period, the average daily emissions = (total emissions for May 1 – September 30)/(153 days).
 - If a process operates less than every day during this period, the average daily emissions = (total emissions for May 1 – September 30)/(number of operating days from May 1 – September 30).
- **Emissions Edit Page**
 - A warning will appear on the Emissions Edit page if the summer day emission entered is greater than 1/300 of the annual amount.
 - An error results if the amount entered is less than 0.001 TPD.
- **Submittal Checks for Summer day emissions**
 - If a process operates during the summer months and emits VOC or NOx and does not report summer day emissions an error will be reported.
- **Lookup Table Values – Source Classification Codes (SCC) and Control Measures**
- **Facility, Emission Unit, and Release Point Operating Status Management**

Changes in the EIS for 2014 EIS

- New Error check E27 for the PM values



	Process:
E27a Error(s) in Particulate Emissions values.	If PM10-FIL and PM10-PRI are submitted, PM10-PRI must be greater than or equal to PM10-FIL
E27b Error(s) in Particulate Emissions values.	If PM25-FIL and PM25-PRI are submitted, PM25-PRI must be greater than or equal to PM25-FIL
E27c Error(s) in Particulate Emissions values.	If PM-CON and PM10-PRI are submitted, PM10-PRI must be greater than or equal to PM-CON
E27d Error(s) in Particulate Emissions values.	If PM-CON and PM25-PRI are submitted, PM25-PRI must be greater than or equal to PM-CON
E27e Error(s) in Particulate Emissions values.	If PM10-FIL and PM25-FIL are submitted, PM10-FIL must be greater than or equal to PM25-FIL
E27f Error(s) in Particulate Emissions values.	If PM10-PRI and PM25-PRI are submitted, PM10-PRI must be greater than or equal to PM25-PRI
E27g Error(s) in Particulate Emissions values.	If PM10-FIL, PM-CON, and PM10-PRI are submitted, PM10-FIL + PM-CON must equal PM10-PRI (+/- 1 Ton)
E27h Error(s) in Particulate Emissions values.	If PM25-FIL, PM-CON, and PM25-PRI are submitted, PM25-FIL + PM-CON must equal PM25-PRI (+/- 1 Ton)

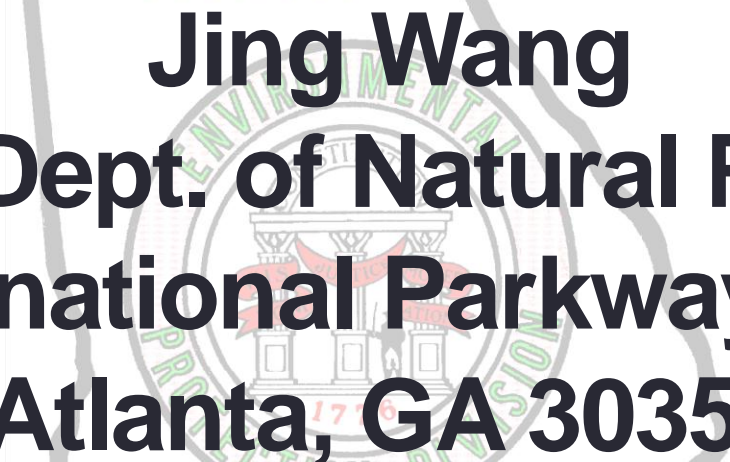
AERR Summary

- Emission Thresholds
 - Threshold values stayed the same
 - Threshold values are now based on Potential emissions for all pollutants, except Lead
 - Continue to report Actual controlled emissions
- Reporting Time Frame
 - States are required to report to EPA on December 31 of the following calendar year.
 - 2014 CY emissions will be reported to EPA by December 31, 2015.
 - **Facilities must report emission to GA EPD by August 3, 2015!**

Questions

- Emission Groups/Grouping for insignificant units?
 - **Answer:** FI does not readily allow for EU groups.
 - Insignificant emissions < 0.001 tons/year
- If a facility is in for one pollutant is it in for all pollutants?
 - **Answer:** Yes.
- Any other questions?

Contact Information



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