SLEIS Walkthrough Guide

Jacquelyn Cuneo
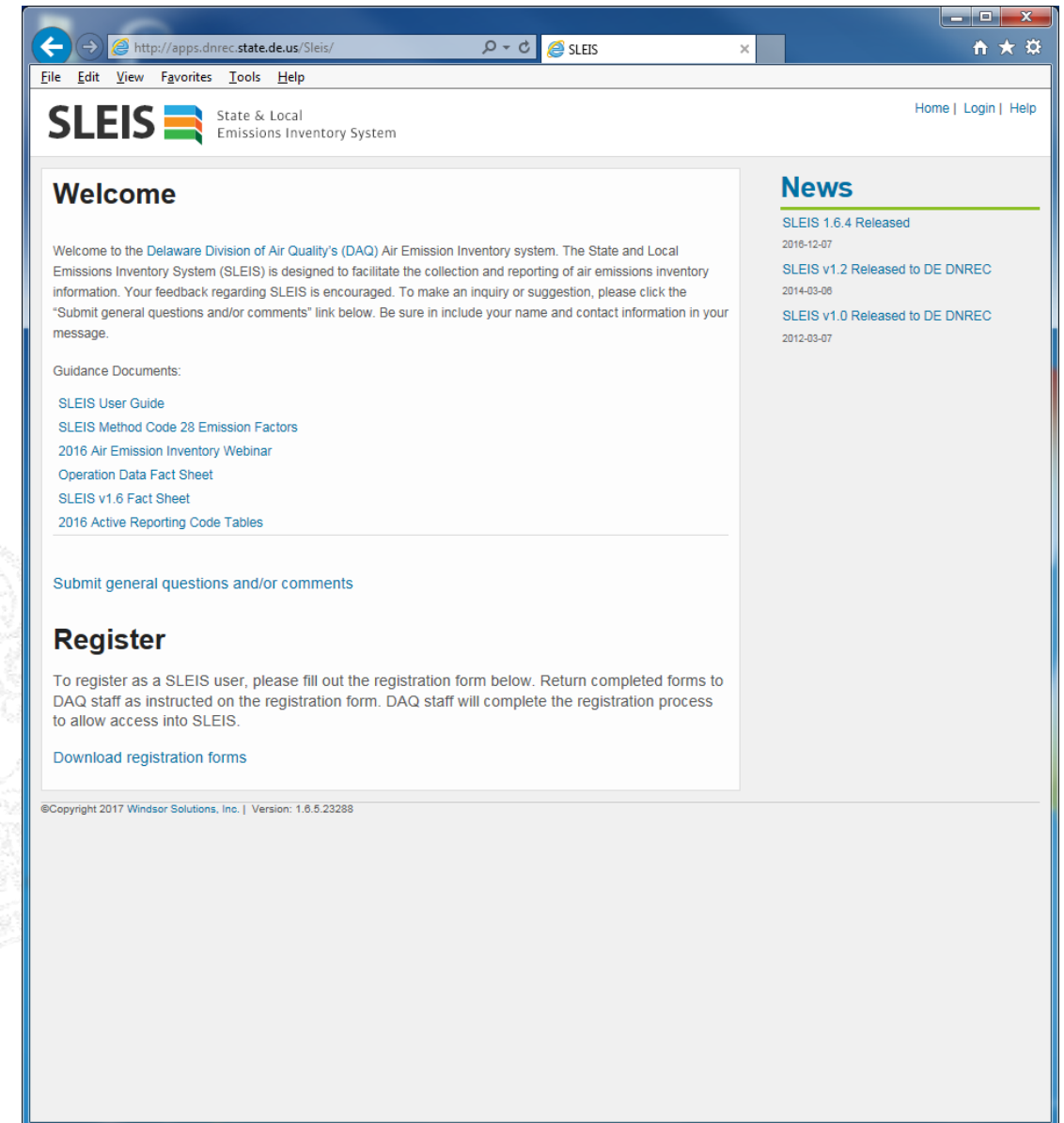
DNREC Division of Air Quality

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SLEIS Home Page

- ■ Web address:
  http://apps.dnrec.state.de.us/sleis/

- ■ Welcome
  - ☐ Application overview
  - ☐ Guidance Documents
  - ☐ Comments

- ■ Register
  - ☐ Registration Forms

- ■ News

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Registration:
New Users

- Download Registration Form from SLEIS Home Page

- Fill out form with SLEIS user information

- Assign SLEIS user roles:
  - ☐ Administrator
  - ☐ Submitter
  - ☐ Editor or Viewer

- Return form to jacquelyn.cuneo@state.de.us
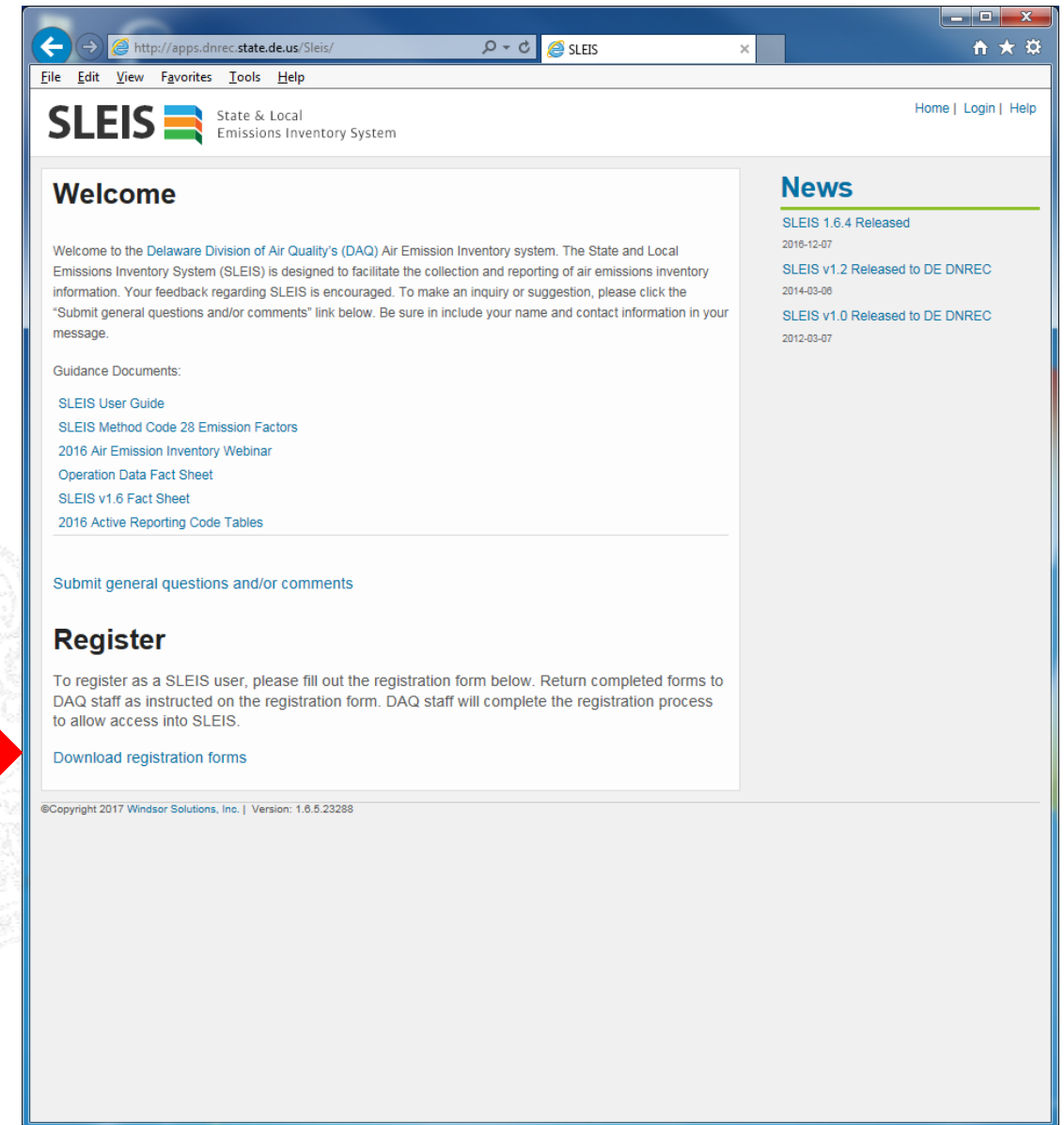
Logging In:
New Users

- DAQ staff will create new user accounts

- New users will receive an email from the "State of Delaware DNREC"

- Follow link in email to create initial account password
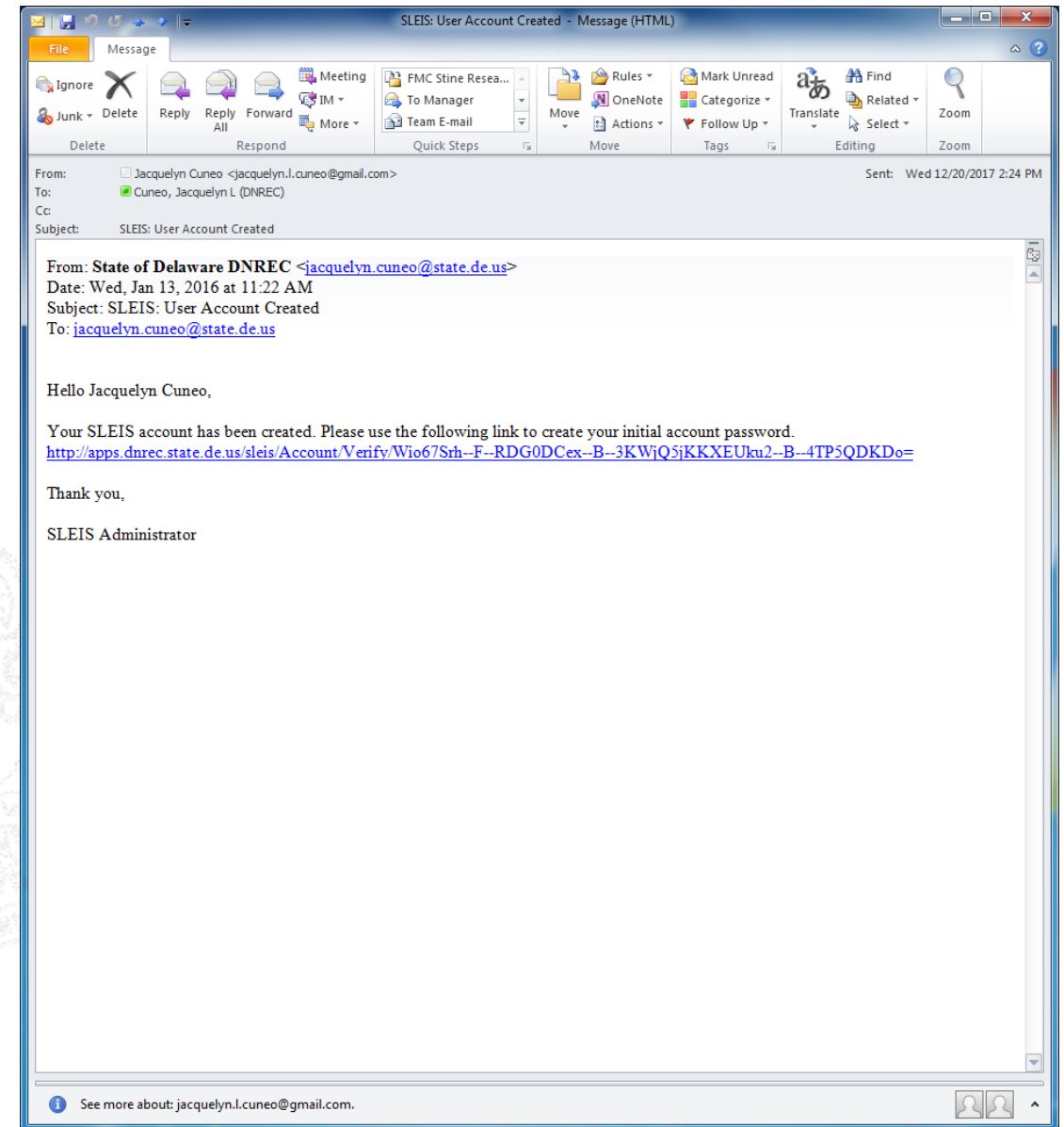
Logging In:
New Users

- ■ Create a new password

- ■ Password must
  - ☐ be at least 8 characters and no more than 30 characters
  - ☐ include at least one upper case letter
  - ☐ include at least one lower case letter
  - ☐ include one numeric digit
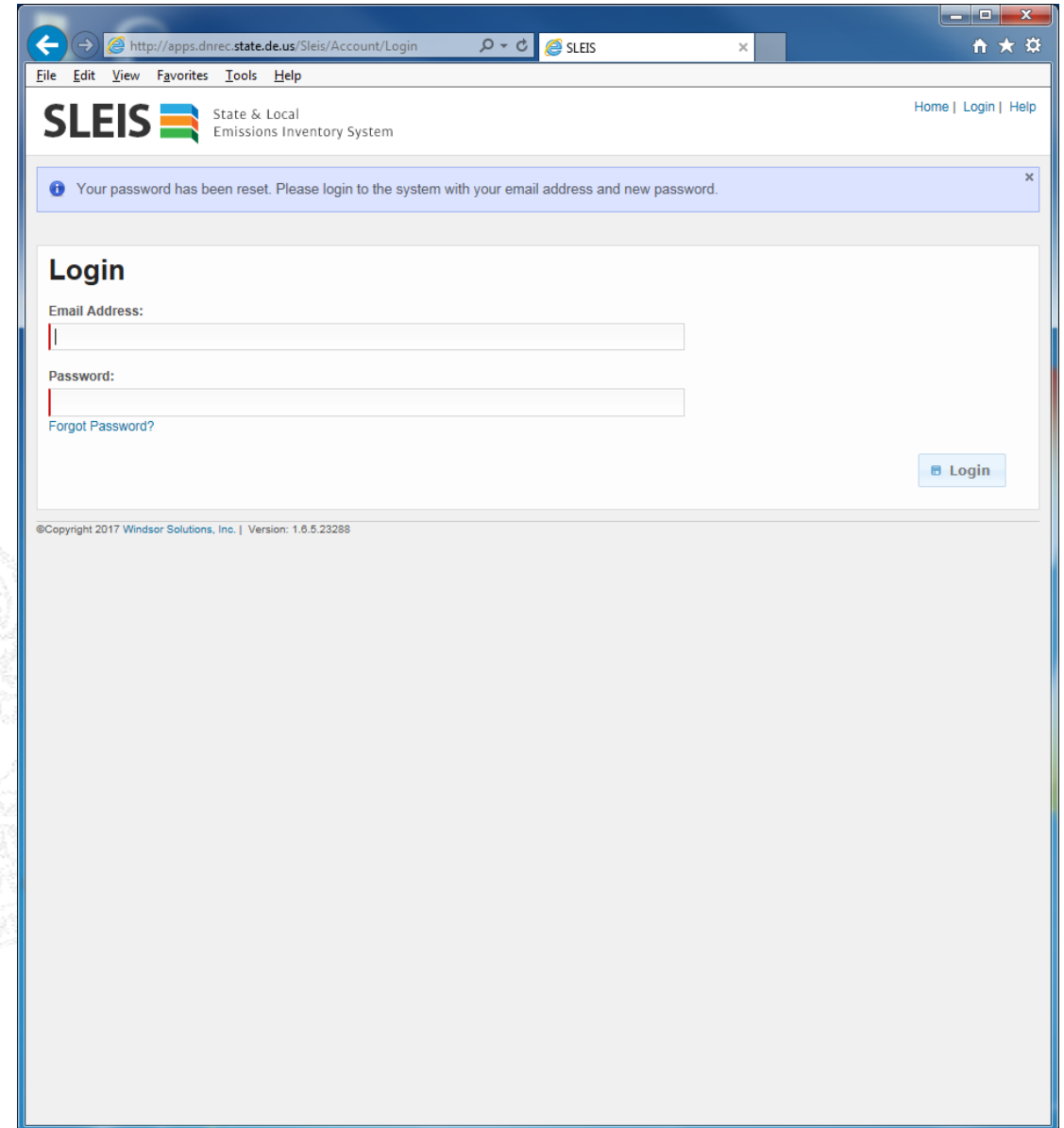
Logging In:
New Users

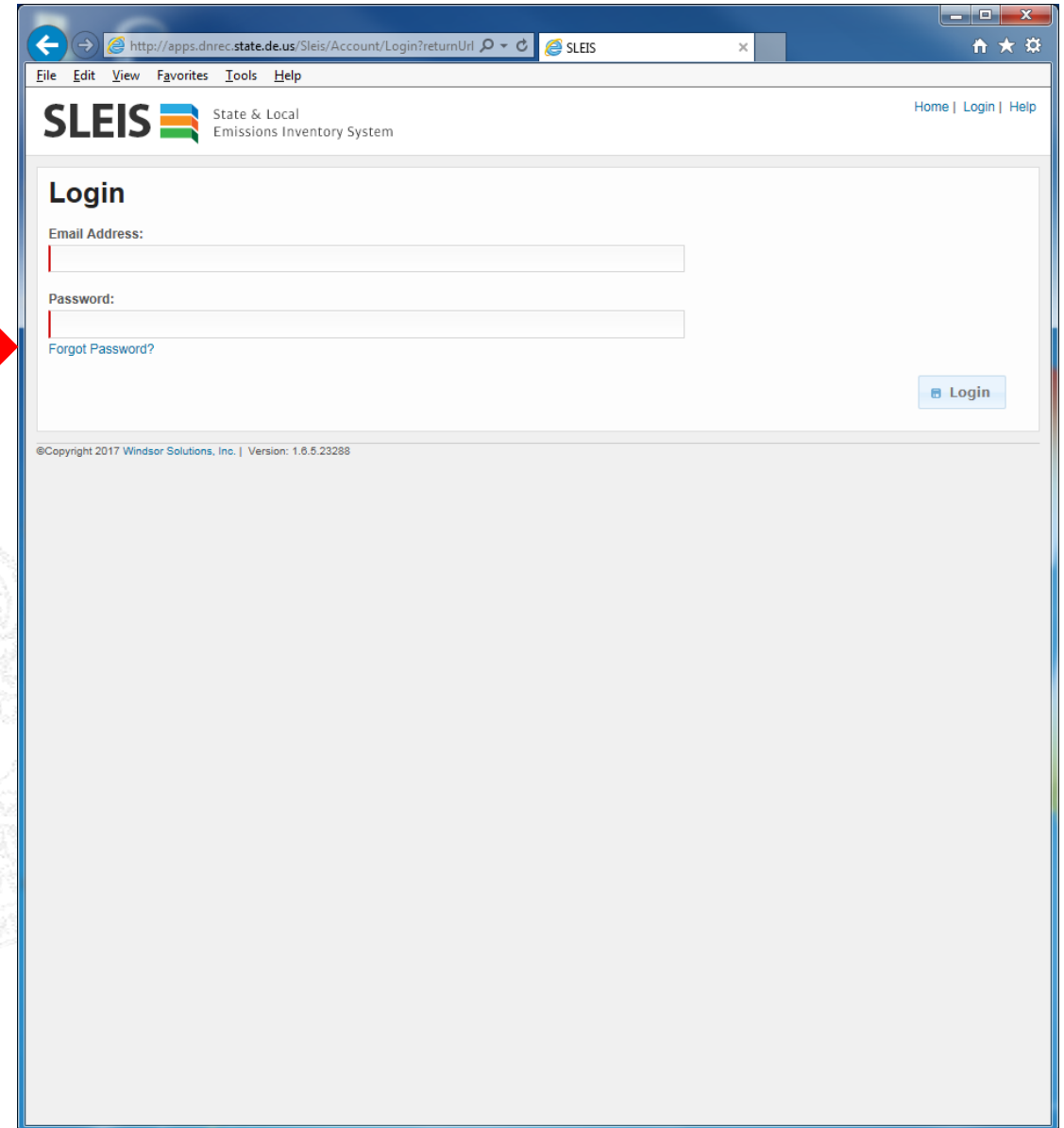■ After initial password has been set, log in using email address and password

Logging In:
Returning Users

- Click "Login" in upper right corner of SLEIS home page

- Log in using email address and password

Logging In:
Forgotten Password

- Click "Forgot Password?"

- Enter email address and click "Submit"

- You will receive an email from the "State of Delaware DNREC"

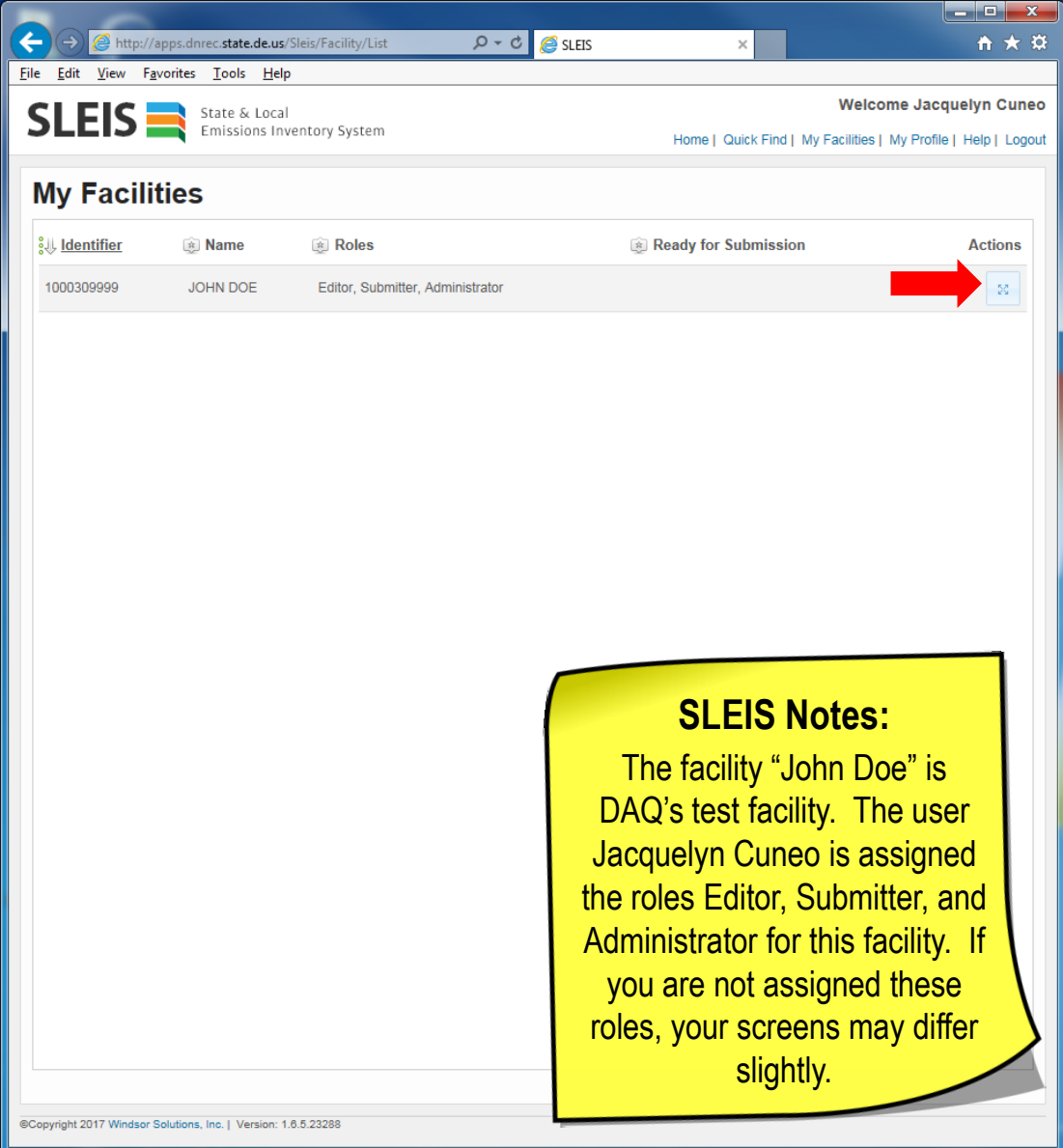- Follow link in email to create new account password

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SLEIS:
My Facilities

- Once logged in to SLEIS, you will be brought to "My Facilities" page

- To view emissions inventory reports for a facility that you are assigned to, click the "Open" button under the Actions title

SLEIS Notes:

The facility "John Doe" is DAQ's test facility. The user Jacquelyn Cuneo is assigned the roles Editor, Submitter, and Administrator for this facility. If you are not assigned these roles, your screens may differ slightly.

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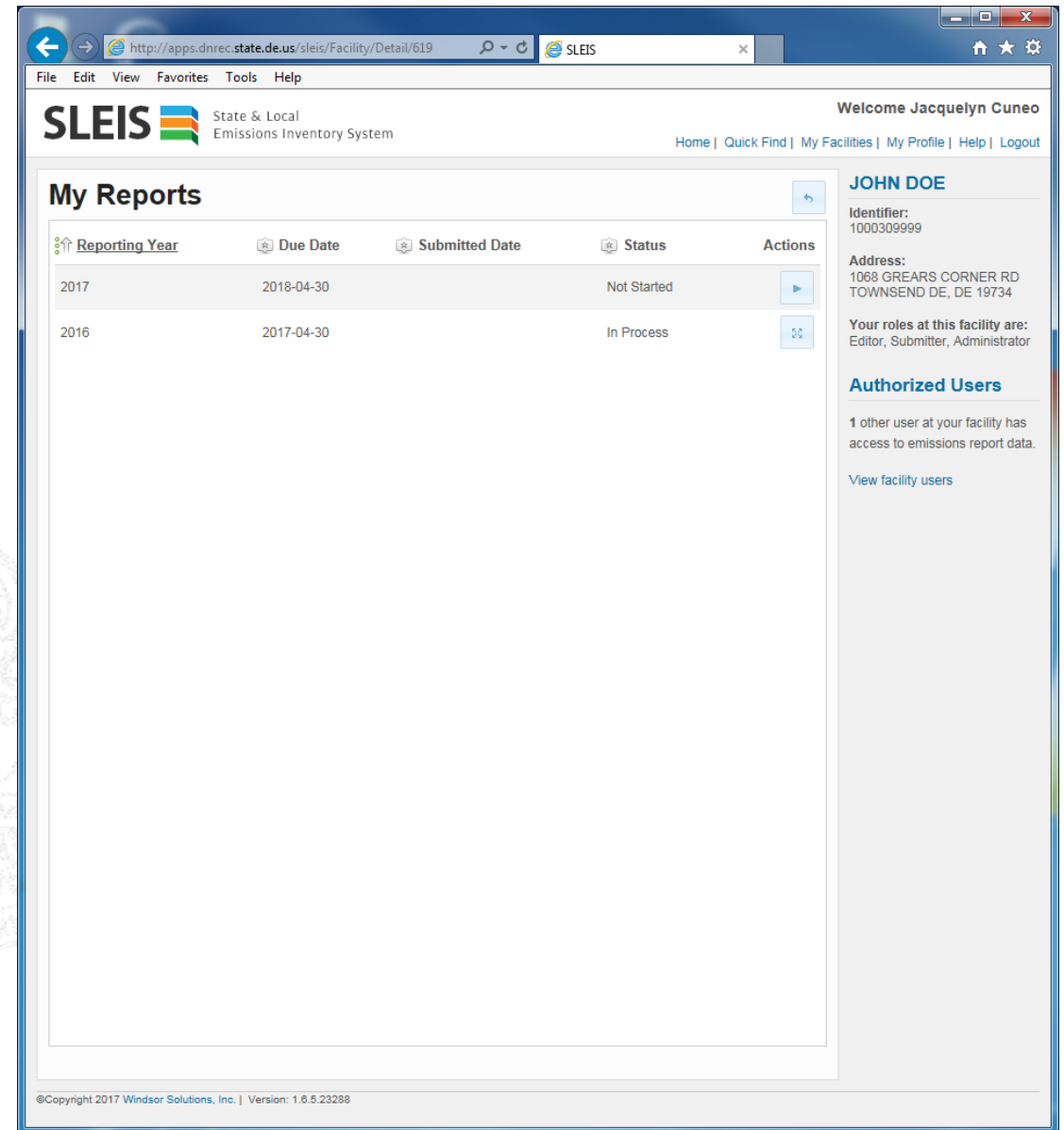
SLEIS:
My Reports

- Reports are organized by Reporting Year
- Status
  - ☐ Not Started
  - ☐ In Process
  - ☐ Submitted
- Actions
  - ☐ Start
  - ☐ Open

SLEIS:
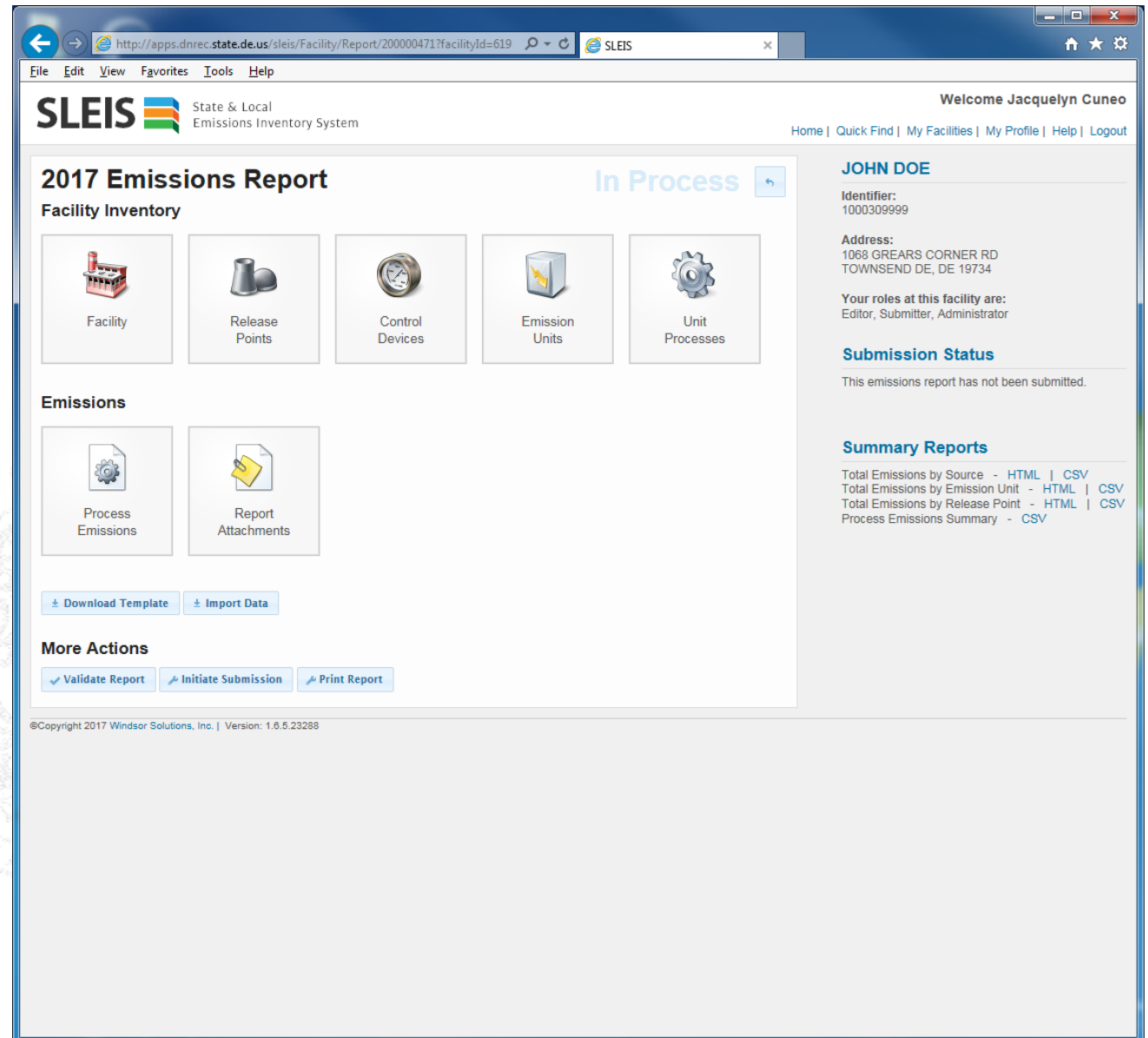## Starting the 2017 Report

- Click the "Start" ▶ button under the Actions title

- You will be brought to the "2017 Emissions Report" main page
  - Facility Inventory Modules (Facility, Release Points, Control Devices, Emission Units, and Unit Processes)
  - Emissions Modules (Process Emissions and Report Attachments)
  - More Actions

Emissions Report Main Page:
Facility Inventory

- For facilities who have reported to SLEIS in previous years:
  - The information in these five modules is carried over from most recent report
- For facilities that have never reported in SLEIS:
  - The information in these five modules will be entered by DAQ staff from the facility's air permit prior to the reporting cycle
- Confirm that the information reflects current facility equipment and operations
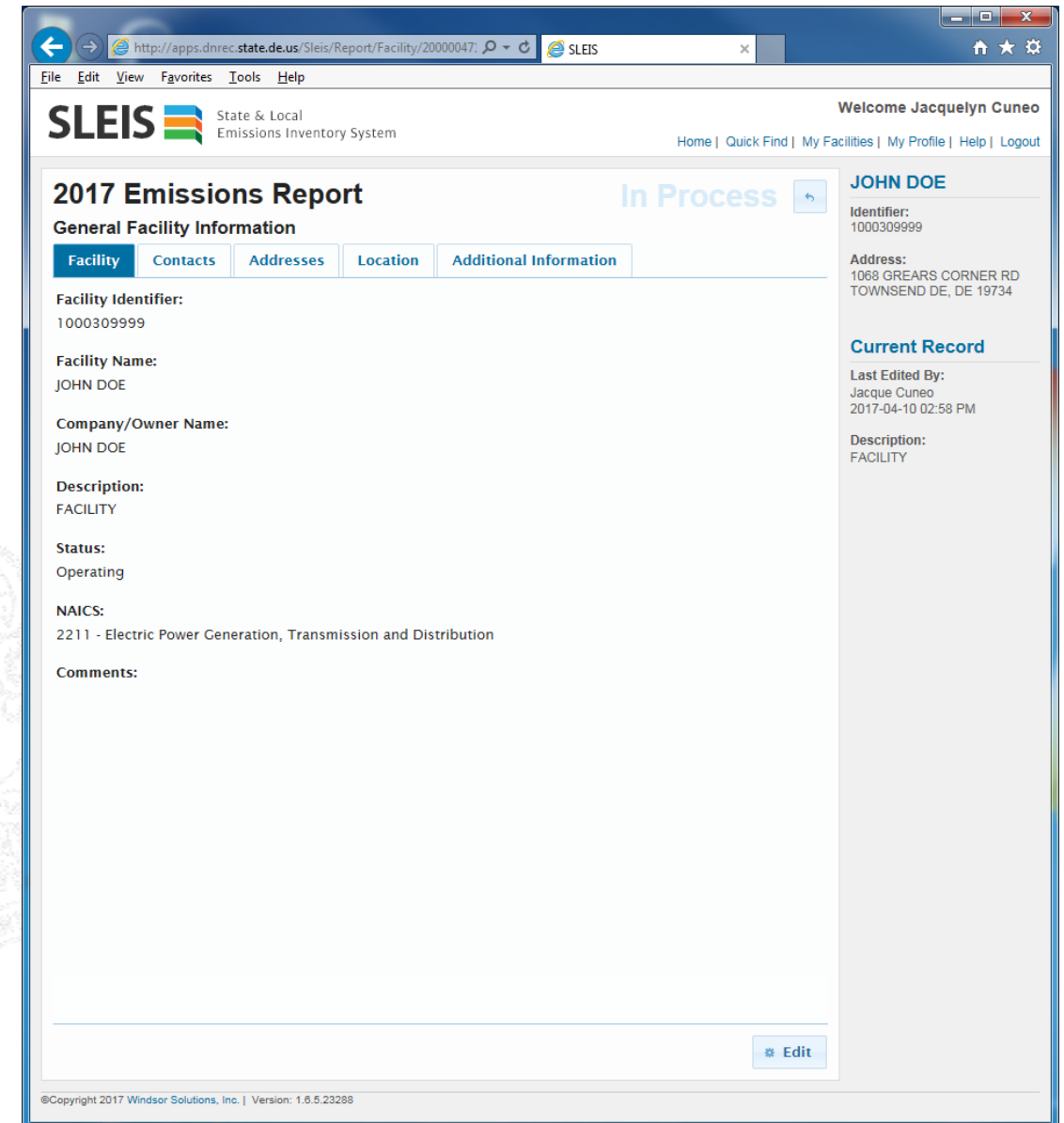
Facility Inventory:
Facility Information

Facility

- **Please verify information under all tabs**
  - ☐ Facility
  - ☐ Contacts
  - ☐ Addresses
  - ☐ Location
  - ☐ Additional Information

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Facility Inventory:
Facility Information

Facility

- To navigate back to the Emission Report Main Page, click the "Back" ⤺ button

- Do not use the "Back" ⬅ button on your web browser

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Facility Inventory:
Emission Unit
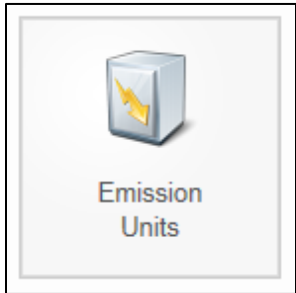
Emission Units

- Emission Units are organized by Identifier, Type, and Status

- Actions
  - ☐ View 🔍
  - ☐ Edit ⚙ (this action will only be available if you are assigned Editor role)

Facility Inventory:
Emission Unit

- Emission Unit Identifier: IDs should be numbered in numerical order starting with 001, continuing to 002, 003, etc.
  - Once an Emission Unit is created and saved, the identifier field cannot be revised in the SLEIS application (please contact DAQ if an ID revision is needed)

- Emission Unit Type: Choose type from drop-down menu

- Status:
  - Operating
  - Permanently Shutdown
  - Temporarily Shutdown

SLEIS Notes:

Fields that have a red stripe are required. Fields that do not have a red stripe are optional.

Click the ? button for data field definitions.

Facility Inventory:
Control Devices

Control Devices

- Control Devices are organized by Identifier, Control Measure, and Status

- Actions
  - ☐ View 🔍
  - ☐ Edit ⚙ (this action will only be available if you are assigned Editor role)
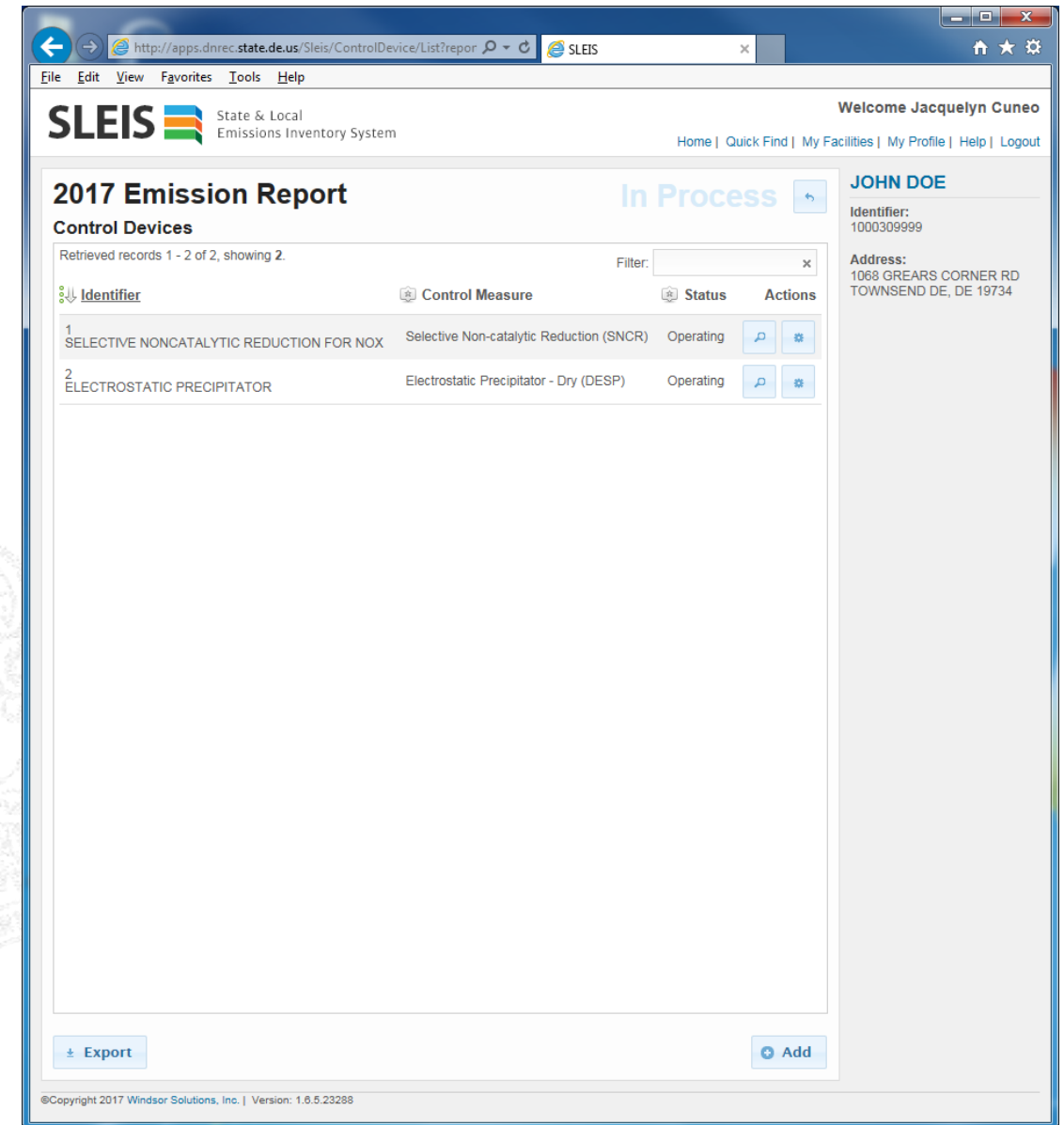
SLEIS — State & Local Emissions Inventory System

Welcome Jacquelyn Cuneo

Home | Quick Find | My Facilities | My Profile | Help | Logout

2017 Emission Report — In Process

Control Devices

JOHN DOE
Identifier: 1000309999
Address: 1068 GREARS CORNER RD TOWNSEND DE, DE 19734

Retrieved records 1 - 2 of 2, showing 2.   Filter: [ ] ✕

Identifier	Control Measure	Status	Actions
1 SELECTIVE NONCATALYTIC REDUCTION FOR NOX	Selective Non-catalytic Reduction (SNCR)	Operating	🔍 ⚙
2 ELECTROSTATIC PRECIPITATOR	Electrostatic Precipitator - Dry (DESP)	Operating	🔍 ⚙

± Export   ● Add

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Facility Inventory:
Control Devices

- Control Device Identifier: IDs should be numbered in numerical order starting with 1 and continuing onto 2, 3, etc.
  - Once a Control Device is created and saved, the identifier field cannot be revised in the SLEIS application (please contact DAQ if an ID revision is needed)
- Status:
  - Operating
  - Permanently Shutdown
  - Temporarily Shutdown
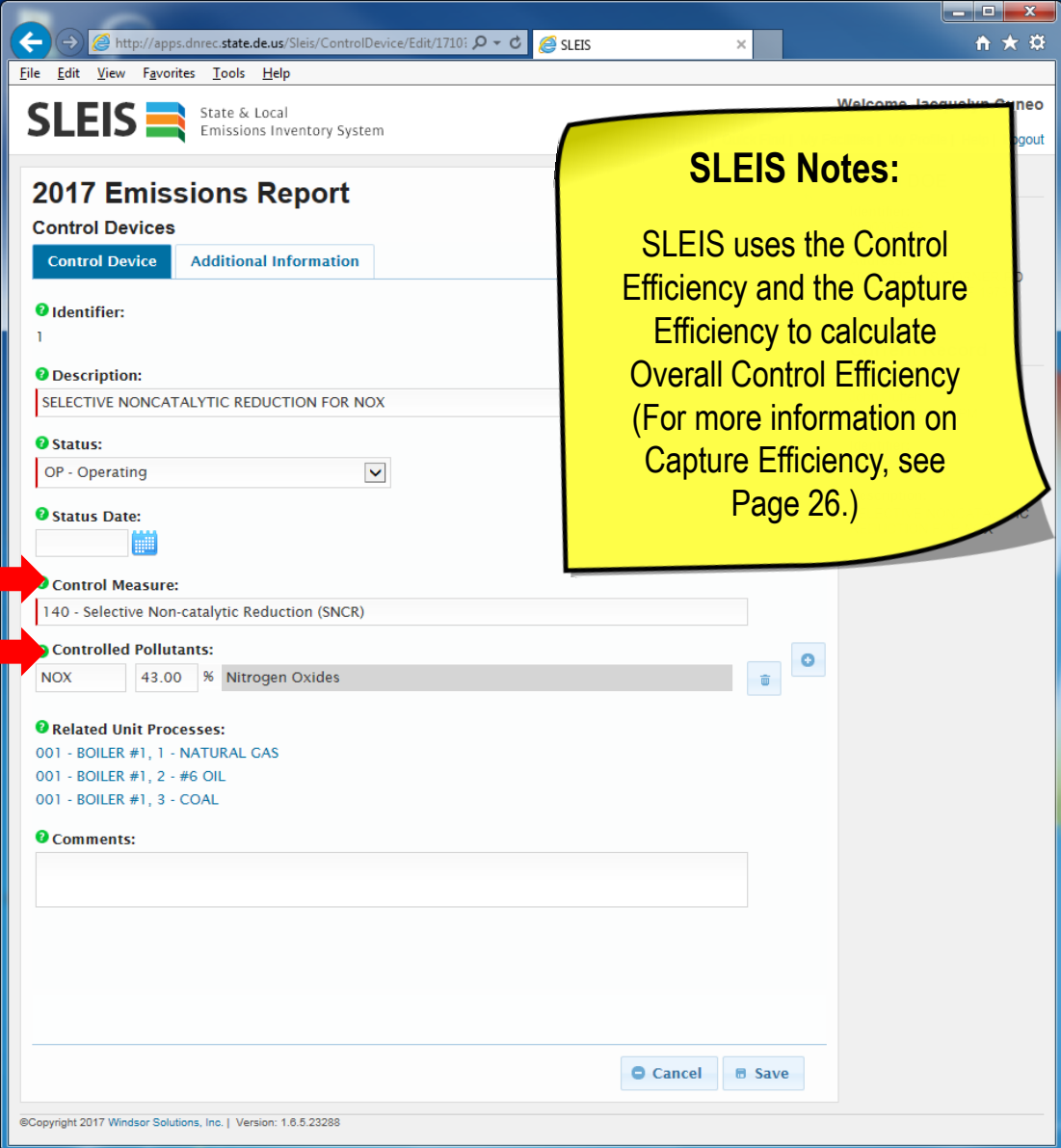
Facility Inventory:
Control Devices

- Control Measure: Begin typing control device or practice for pre-loaded control measure options

- Consider the pollutants that are controlled by the device and the average control efficiency (percentage of the pollutant emissions reduced by the control device)

- To add controlled pollutants and control efficiencies, use the "Add" button

Facility Inventory:
Release Points

Release Points

- **Release Points are organized by Identifier, Type, and Status**
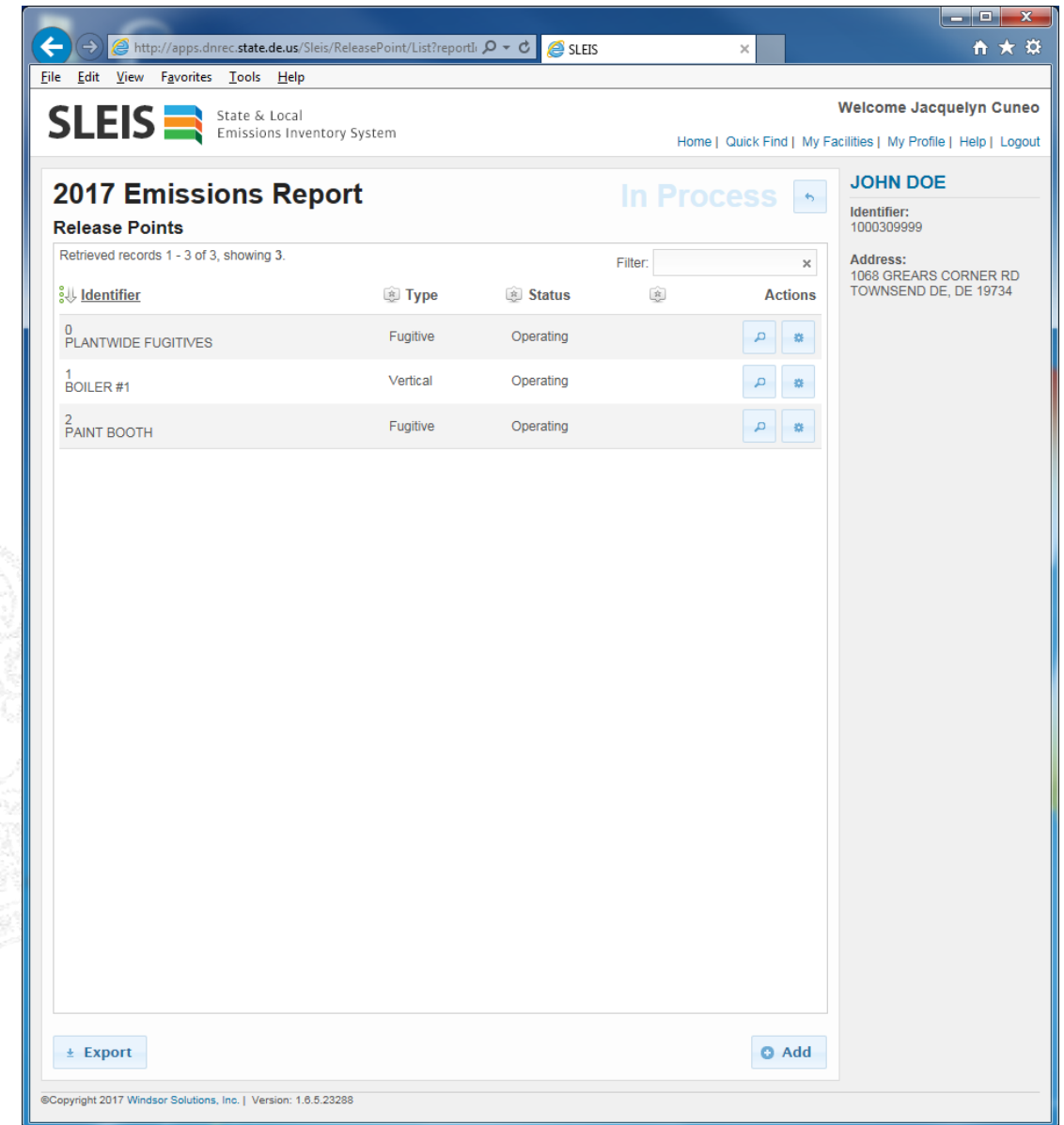
- **Actions**
  - ☐ View   🔍
  - ☐ Edit   ⚙   (this action will only be available if you are assigned Editor role)

SLEIS — State & Local Emissions Inventory System

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2017 Emissions Report — In Process
Release Points

JOHN DOE
Identifier: 1000309999
Address: 1068 GREARS CORNER RD TOWNSEND DE, DE 19734

Retrieved records 1 - 3 of 3, showing 3.   Filter:

Identifier	Type	Status	Actions
0 PLANTWIDE FUGITIVES	Fugitive	Operating	🔍 ⚙
1 BOILER #1	Vertical	Operating	🔍 ⚙
2 PAINT BOOTH	Fugitive	Operating	🔍 ⚙

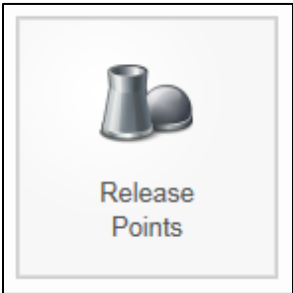± Export   ⊕ Add

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Facility Inventory:
Release Points

- Release Point Identifier: IDs should be numbered in numerical order starting with 1 and continuing onto 2, 3, etc.
  - Once a Release Point is created and saved, the identifier field cannot be revised in the SLEIS application (please contact DAQ if an ID revision is needed)

- Status:
  - Operating
  - Permanently Shutdown
  - Temporarily Shutdown

Facility Inventory:
Release Points

- Type: Choose type from drop down menu
  - Vertical (or vertical with rain cap)
  - Horizontal
  - Goose Neck
  - Downward-facing
  - Fugitive

- Stack Parameters: Height, Shape, & Diameter

- Exit Gas Parameters: Temperature and Flow or Velocity
  - If Stack Diameter and Exit Gas Flow rate are entered, SLEIS will automatically calculate Exit Gas Velocity

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Facility Inventory:
Release Points

- If the location of the release point is known, answer "No" to "Release point utilizes facility coordinates", and enter coordinates of the release point

- If the location of the release point is unknown, answer "Yes" to "Release point utilizes facility coordinates"

    □ Latitude and Longitude coordinates do not need to be entered

    □ SLEIS will automatically use coordinates from the Facility module

Facility Inventory:
Unit Processes

Unit Processes

- Unit Processes are organized by Emission Unit Identifier, Process Identifier, and SCC
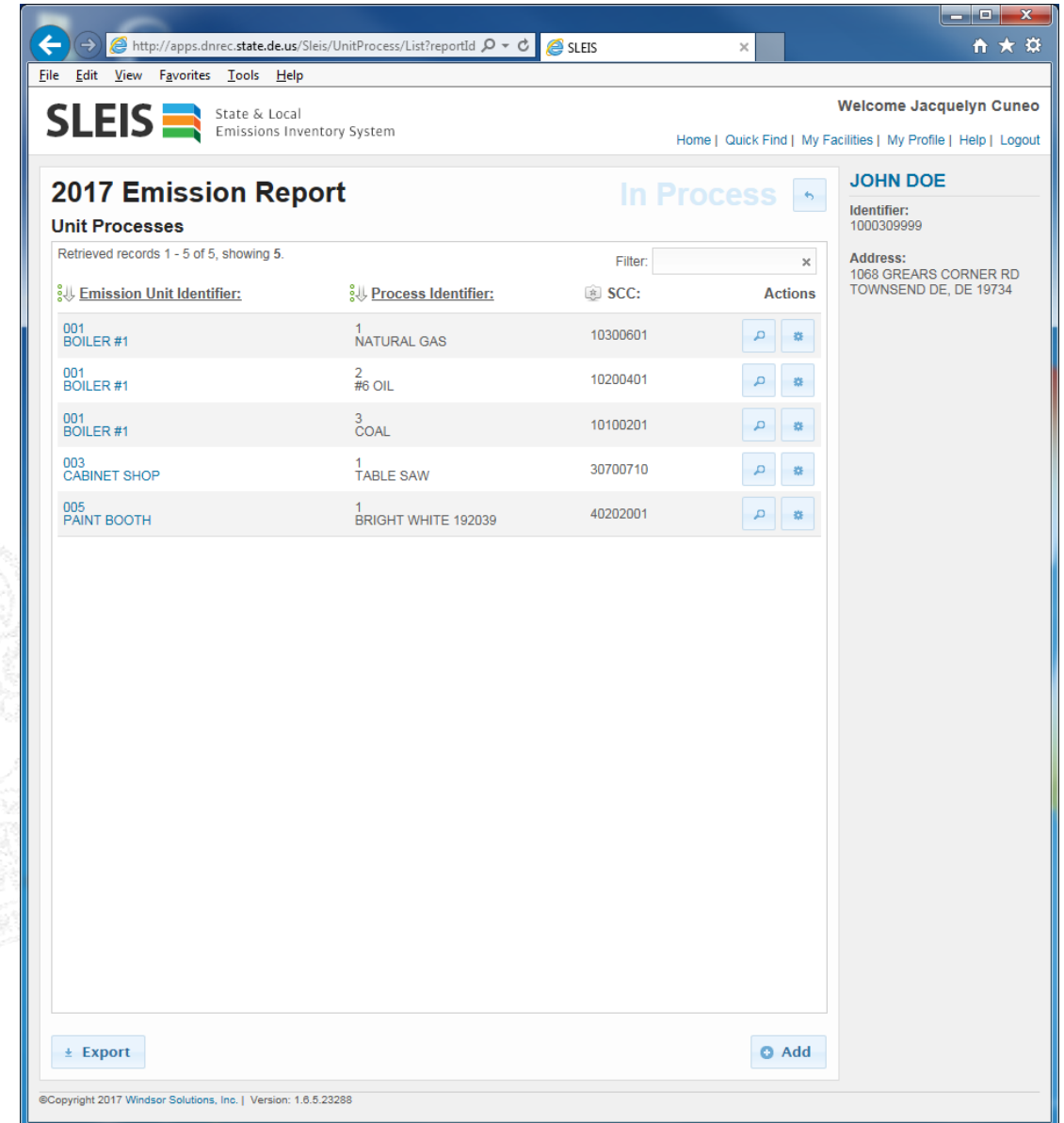
- Actions
  - □ View
  - □ Edit (this action will only be available if you are assigned Editor role)

Facility Inventory:
Unit Processes

- Unit Process Identifier: Should be numbered in numerical order based on the number of processes for a given emission unit
  - Once a Unit Process is created and saved, the identifier field cannot be revised in the SLEIS application (please contact DAQ if an ID revision is needed)
- SCC: Choose Source Classification Code from drop down menu
  - Once an SCC is chosen, this field cannot be revised in the SLEIS application

Facility Inventory:
Unit Processes

- Control Approach: If this process is not controlled, check the "Not Controlled?" box

- Capture Efficiency: The effective percentage of emission stream that flows into the control equipment, as opposed to the amount that does not flow into the control equipment due to leaks, lack of enclosure, etc.

- Control Device(s): If the process is controlled, choose from drop down menu

Facility Inventory:
Unit Processes

- Release Point: Choose process release point from drop down menu

- Release Point Apportionment: Enter the average percentage of emissions from the process that vent through that release point

Emissions Report Main Page: Emissions

- Year specific emissions inventory data will be entered under in these two modules

Emissions:
Process Emissions

Process Emissions

- Unit Processes are listed and organized by Emission Unit and Process ID

- Actions
  - ☐ View
  - ☐ Edit (this action will only be available if you are assigned Editor role)

2017 Emissions Report — Process Emissions

Emission Unit Identifier:	Identifier:	SCC:	Annual Throughput:	Actions
001 BOILER #1	1 NATURAL GAS	10300601	MILLION CUBIC FEET (Natural Gas) (Input)	
001 BOILER #1	2 #6 OIL	10200401	1000 GALLONS (Residual Oil (No. 6)) (Input)	
001 BOILER #1	3 COAL	10100201	TONS (Bituminous Coal) (Input)	
003 CABINET SHOP	1 TABLE SAW	30700710	TONS (Product) (Output)	
005 PAINT BOOTH	1 BRIGHT WHITE 192039	40202001	GALLONS (Coating) (Input)	

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Emissions:
Process Emissions – Process Tab

■ **Process is Reported?**
  - □ By default this box is checked
  - □ Uncheck this box if the process did not operate, and therefore no emissions were created

■ Throughput: The amount of material used, fuel burned, or amount of product produced by the process
  - □ Annual: This field is automatically calculated from the sum of the monthly throughput values
  - □ Monthly: These fields are to be entered individually. If monthly throughput is unknown and only annual is available, estimate monthly throughput based on knowledge of the process such as process run time or production output.

Emissions:

Process Emissions – Process Tab

- **Throughput Unit of Measure:** Choose from drop down menu
  - If you plan on using an emission factor to calculate emissions, the throughput unit of measure must match the emission factor denominator unit of measure

- **Throughput Type:** Choose from drop down menu
  - E – Existing
  - I – Input
  - O - Output

- **Throughput Material:** Begin typing throughput material for pre-loaded options

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Emissions:

Process Emissions – Process Tab

- Make sure to scroll down in the Process tab to see "Supplemental Calculation Parameters" and "Comments"

- Supplemental Calculation Parameters: These fields should be filled in for combustion-related processes
  - Ash% (not necessary for natural gas or propane)
  - Sulfur% (not necessary for natural gas or propane)
  - Heat Content

- Comments: Enter any process related comments here

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Emissions:
Process Emissions – Operation Tab

- Typical Operating Schedule: Use integers to enter a typical operating schedule for
  - Hours per day
  - Days per week
  - Weeks per year
- Actual Hours
  - Automatically calculated from entered Hours per day, Days per week, and Weeks per year
  - This field can be overwritten if Actual Hours is known

Emissions:
Process Emissions – Operation Tab

- **Seasonal Operations**
  - Automatically calculated based on manually entered Monthly Throughputs (in Process Tab)
  - These fields can be overwritten, if necessary

- **Total Ozone Season Days**
  - Count the days this process operated during the ozone season months
  - Ozone season months: May through September
  - Maximum value of 153

- **Total Summer Season Days**
  - Count the days this process operated during the summer season months
  - Summer season months: June through August
  - Maximum value of 92

Emissions:
Process Emissions – Emissions Tab

- If you have reported to SLEIS in previous years, the list of pollutants reported and calculation method will be pre-loaded into the current year report

- If you have not reported in SLEIS in previous years, or if you would like to add a new pollutant, click the "Add" button at the bottom of the page.

Emissions:

Process Emissions – Emissions Tab

- All facilities are required to report emissions of:
  - □ Criteria Air Pollutants (CAPs) and their precursors
    - CO, NH_3, NOx, SO_2, PM_{10}, $PM_{2.5}$, VOC, and Lead (reported with pollutant code 7439921)
  - □ Hazardous Air Pollutants (HAPs):
    - List of HAPs as defined under the Clean Air Act of 1990 and its modifications can be found on the EPA website
    - https://www.epa.gov/haps/initial-list-hazardous-air-pollutants-modifications#mods
  - □ Greenhouse Gases (GHGs)
    - CO_2, CH_4, and N_2O
- Begin typing the pollutant name or CAS# for pre-loaded pollutant look up table

SLEIS Notes:

To view the full list of pollutants in the SLEIS look up table, download the "Active Reporting Code Tables" from the SLEIS Home Page.

Emissions:
Process Emissions – Emissions Tab

- Reporting Particulate Matter Emissions

- Report on at least 4 of the 5 PM_x pollutants
  - PM10-Filterable (PM10-FIL)
  - PM2.5-Filterable (PM25-FIL)
  - PM-Condensable (PM-CON)
  - PM10-Primary (PM10-PRI)
  - PM2.5-Primary (PM25-PRI)

- The following PM relationships must be followed
  - PM2.5-FIL ≤ PM10-FIL
  - PM2.5-PRI ≤ PM10-PRI
  - PM2.5-FIL + PM-CON = PM2.5-PRI
  - PM10-FIL + PM-CON = PM10-PRI

SLEIS Notes:

PM Relationships are now enforced by SLEIS, with a new validation rule in SLEIS v1.6. To learn more about enhancements, download the "SLEIS v1.6 Fact Sheet" from the SLEIS Home Page.

Emissions:

Process Emissions – Emissions Tab

- Choose the emissions calculation method from the drop down menu
  - ☐ 19 different emission calculation methods
- Choose the emission calculation method using the best available information for your facility
  - ☐ If available, use site specific calculation methods (1 - CEM, 4 - Stack Test, 30 - Site Specific EF) instead of standard emission factors (28 - USEPA EF)
- If using a calculation method other than standard emission factors, please provide notes in the comment field

Emissions:

Process Emissions – Emissions Tab

- **Emission Factor populated by SLEIS**
  - Calculation Method MC-28
  - SLEIS will populate Emission Factor and its units, Estimated Emissions, and Overall Control Efficiency (if process is controlled)

- **Emission Factor Entered by User**
  - Calculation Method MC-8, -9, -10, -11, -12, -13, -29, -30, -31, -32, -33
  - User will enter Emission Factor and its units
  - SLEIS will populate Estimated Emissions and Overall Control Efficiency (if process is controlled)

- **Emissions Calculated by User**
  - Calculation Method MC-1, -2, -3, -4, -5, -6, -7
  - User will enter Estimated Emissions

SLEIS Notes:

To view the look-up table for MC-28 emission factors by SCC and pollutant, download the "SLEIS Method Code 28 Emission Factors" spreadsheet from the SLEIS Home Page.

SLEIS Notes:

If an emission factor calculation method is chosen, make sure the emission factor denominator units match the throughput units as selected in the "Process" tab.

Emissions:
Process Emissions – Emissions Tab

- If you chose an emission factor-based calculation method
  - Add all pollutants and choose calculation method
  - Click the "Calculate All" button at the bottom of the page
- If you did not choose an emission factor-based calculation method, you will need to manually enter estimated emissions
- Remember to click the "Save" button at the bottom of the page!

Emissions:
Report Attachments

Report Attachments
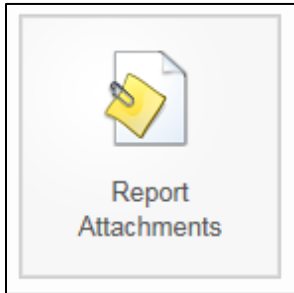
- Add any supporting documentation that may help DAQ during the report review process

- Click the "Add" button at the bottom of the page, browse for your document, then click save
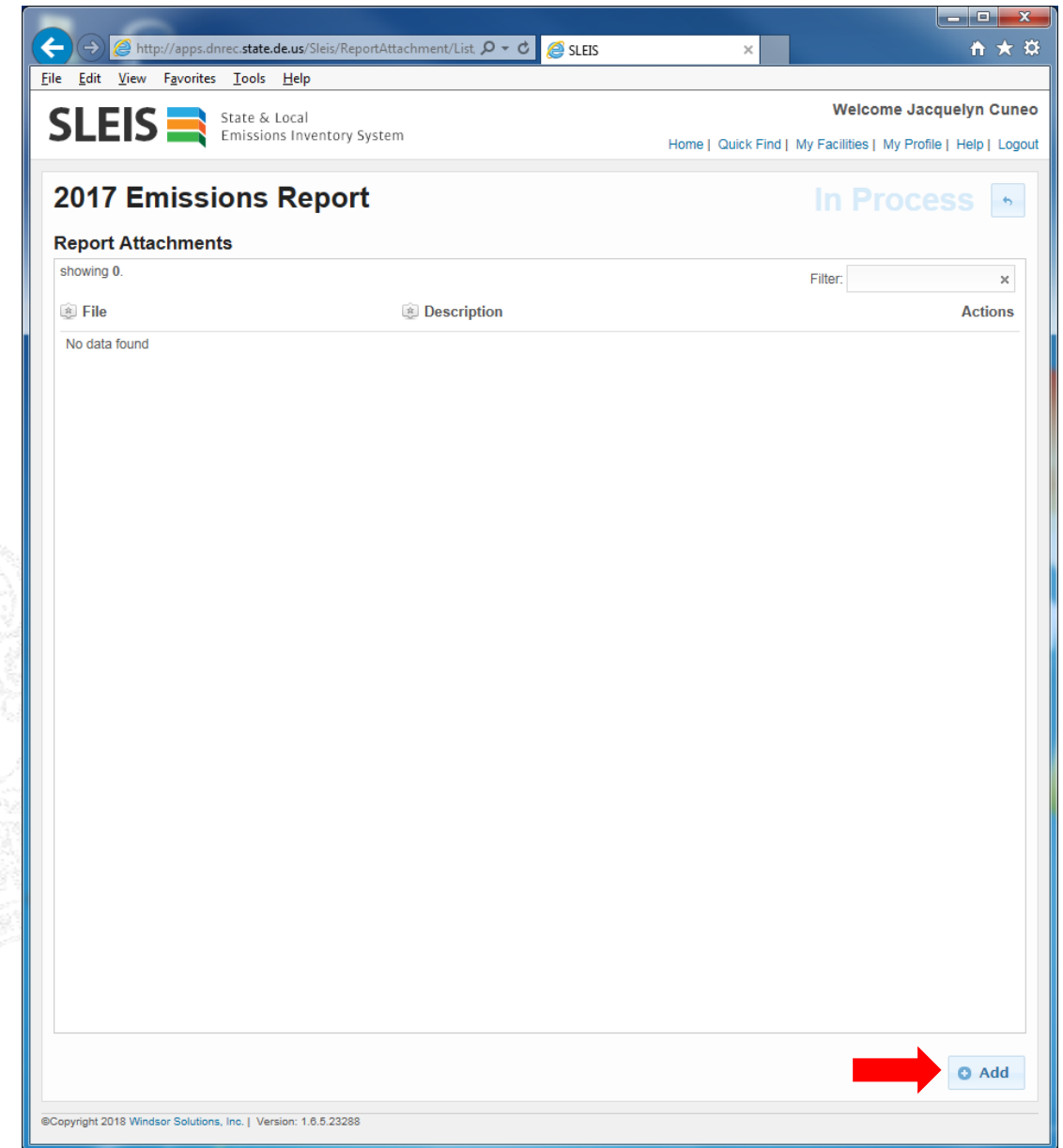
Emissions Report Main Page:
Submitting a Report

- After all emissions data is entered into the Process Emissions module, and supporting documentation has been uploaded to the Report Attachment module, the report is ready for submission

- Begin the submission process by clicking the "Validate Report" button under "More Action"

Submitting a Report:
Validate Report

- If errors were encountered during the validation process, you will be instructed to download the error report file

Submitting a Report:
Validate Report

■ Address any potential errors, then click "Validate Report"

■ Once all errors have been addressed, you will be instructed to mark the report as "Ready for Submission" by checking the box in the right margin

■ After checking the box, return to the Emission Report Main page with the ⤺ "Back" arrow button
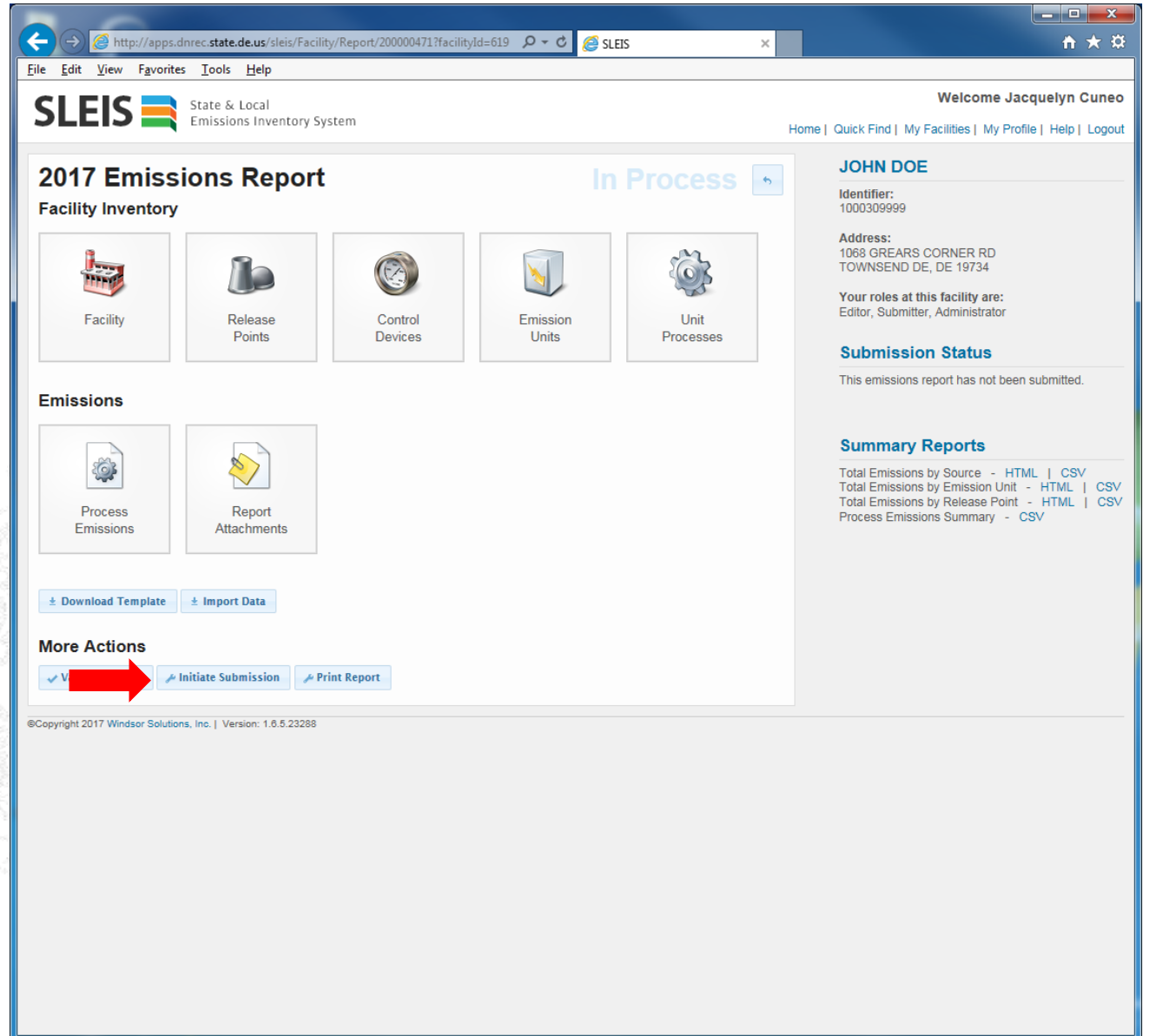
Emissions Report Main Page:
Initiate Submission

■ A user who is assigned the "Submitter" role may now click the "Initiate Submission" button under "More Actions"

Emissions Report Main Page:
Submitting a Report

- In order to continue, the submitter must view the electronic document

- After the electronic document has been viewed, the "Continue" button will be activated
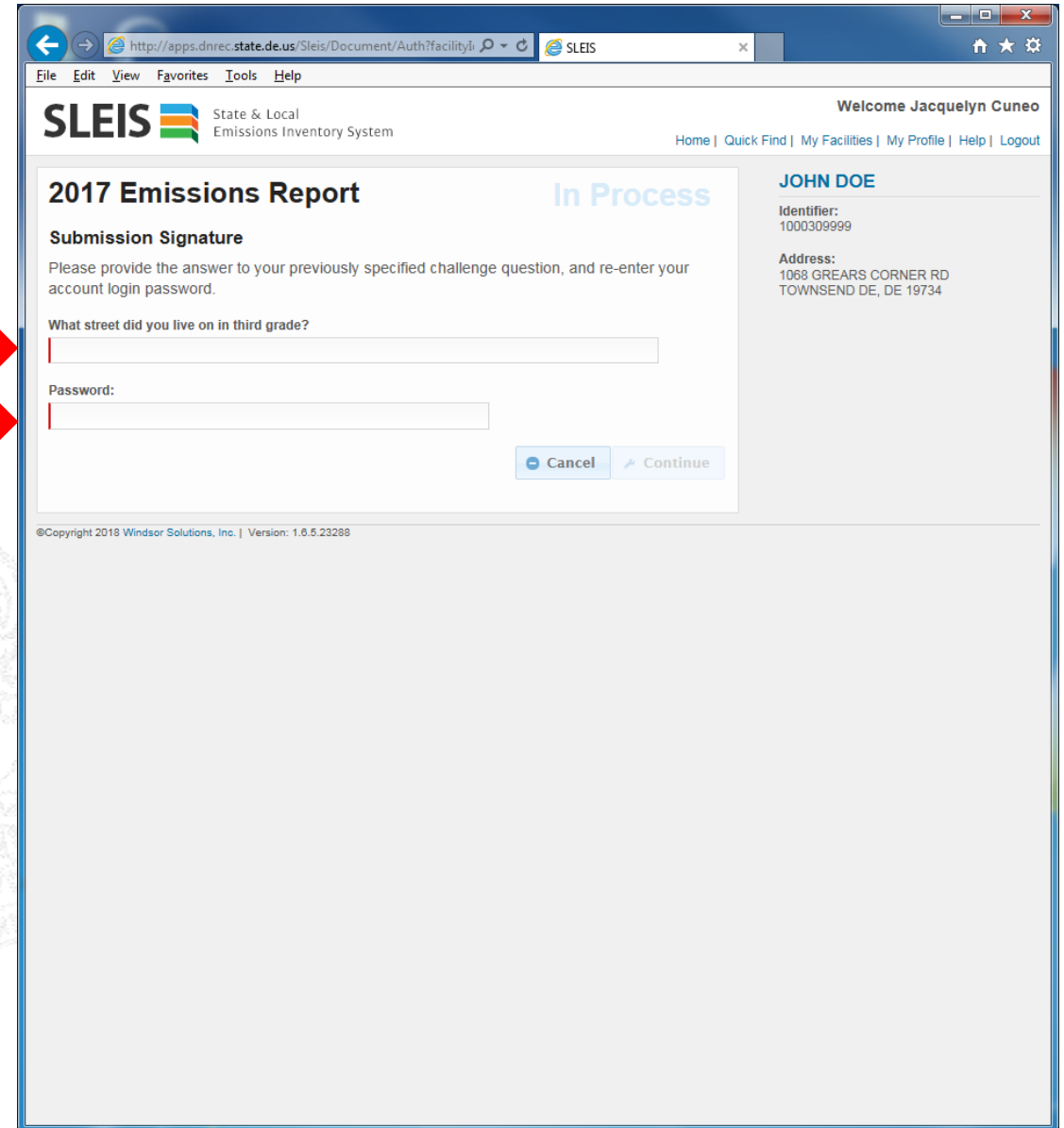
- Click "Continue"

Submitting a Report:
Submission Agreements

- In order to continue, the submitter must check the boxes next to the Submission Agreements

- After the submission agreement boxes are checked, the "Continue" button will be activated

- Click "Continue"

Submitting a Report:
Submission Signature

- In order to continue, the submitter must
  - ☐ Answer their challenge question
  - ☐ Enter password (same password as SLEIS login)
- Click "Continue"

Submitting a Report:
Submission Confirmation

- You may View and Save the Official Copy of Record for the facility's record

- You will receive an email from the "State of Delaware DNREC" after successful submission
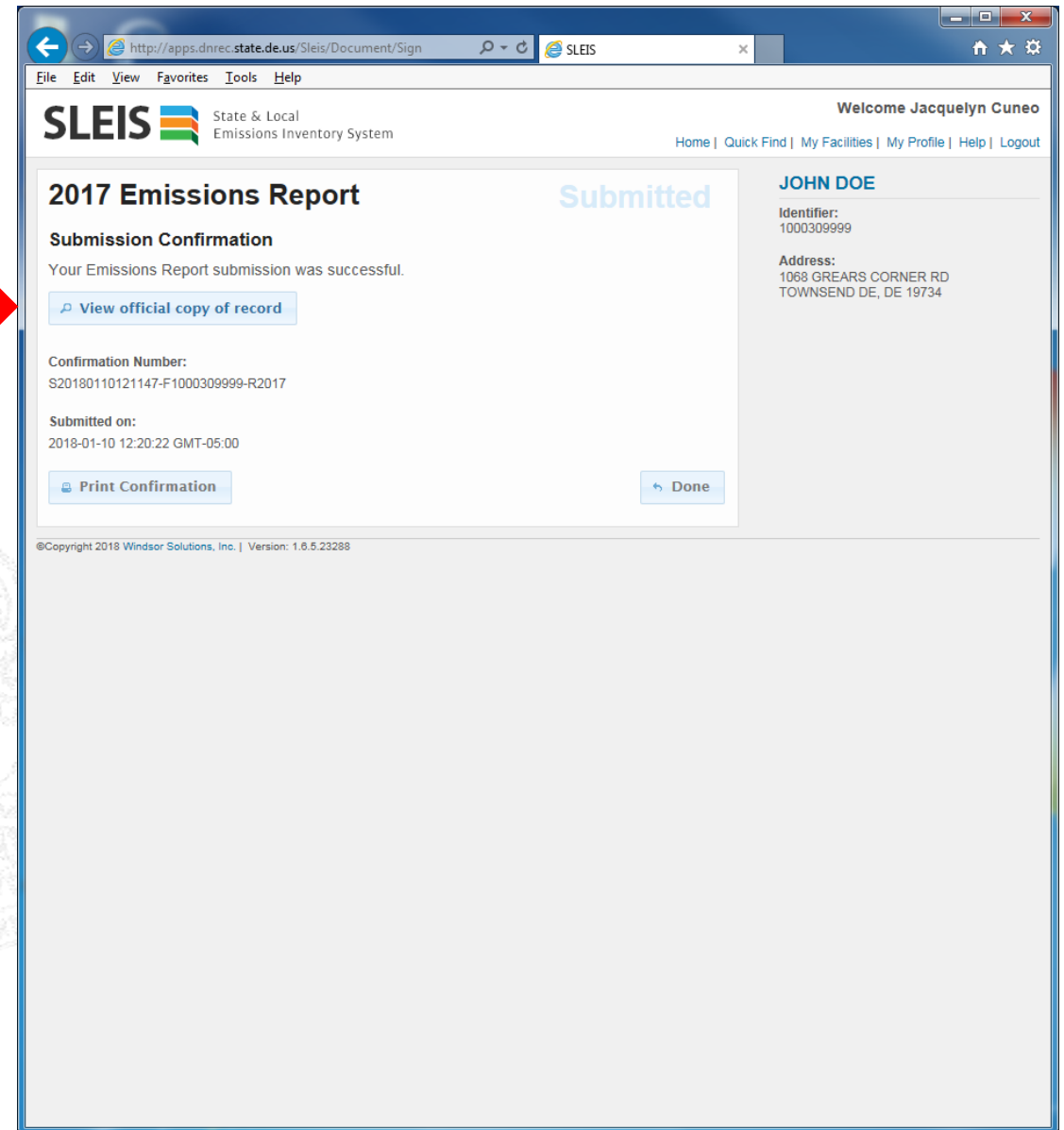
What's Next?
Emission Statement

- DAQ will review the report, create an emissions statement, and send to the facility's main contact via email

- The facility contact will review the emission statement, the facility's responsible official will sign the statement, and the facility will return the signed statement to DAQ
  - ☐ DAQ does not require a hard copy of the signed emission statement
  - ☐ The signed statement can be returned via email (preferred method) or postal mail

What's Next?
Amending a Report

- During DAQ review, we may identify an error or omission in the SLEIS report

- If identified, DAQ will notify the facility that an amendment is needed

- Facility must "Request Amendment" on Emission Report main page

What's Next?
Amending a Report

- Enter brief description of reason for amendment

- DAQ will approve and unlock report page

- Facility can make necessary changes and resubmit

Contact Information

Jacquelyn Cuneo

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phone: (302) 739-9402

address: DNREC, Division of Air Quality

     Attn: Airshed Planning and Inventory Program

     State Street Commons

     100 W. Water Street, Suite 6A

     Dover, Delaware 19904

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