Combined Air Emissions Reporting System (CAERS)

Welcome to CAERS

for Idaho

Preparers and Certifiers

12/08/2022

Goal of Training

Provide new CAERS users with an understanding of:

- What is CAERS?
- User Roles
- System Requirements
- TRI-bound HAPS Data
- Timing of Submissions
- Registration Process
- Highlights of CAERS Features – Live Demo
- Help and Resources

A copy of this power point presentation will be available for distribution after the training.

Disclaimer

This presentation is intended for instructional purposes only. Any data or facility information shown in the training, is illustrative only, and should not be confused with a facility's live report for any given inventory year.

What is CAERS?

Combined Air Emissions Reporting System (CAERS): an application that allows industry from subscribed State, Local, or Tribal authorities (or SLTs) to report their air emissions so you can:

- Meet SLT-specific air emissions reporting requirements (Idaho for annual Title V emissions registration
- Report annually for the Air Emissions Reporting Rule (AERR per 40 Code of Federal Regulations or CFR, Part 51) via your SLT
- Optionally, get a head start on Toxics Release Inventory (TRI) air toxics emissions (per 40 CFR, Part 372), to be finished in TRI-MEweb

System Requirements

To use CAERS, you will need:

- A recent version of any internet browser such as Chrome, Explorer, Edge, or Firefox. Your internet connectivity will determine how fast data can be uploaded.
- Microsoft Excel: Bulk uploads will be in “XLSX”.
- In future we hope to offer reporters an option to upload reports in JSON.

CAER User Roles - Preparer

Authorized to prepare an emissions report for that facility (e.g., consultant, staff person working for the facility).

- May have more than one per facility (each with an account associated with the facility). If submitting HAPs data for TRI within CAERS, this could include the TRI preparer.
- May have a single preparer for more than one facility (with an account associated with several facilities).
- Cannot fulfill the same role as the Certifier, not authorized to certify and submit the report on behalf of the facility.

Idaho facilities should be familiar with this role as the EI Contact for each facility.

CAERS User Roles - Certifier

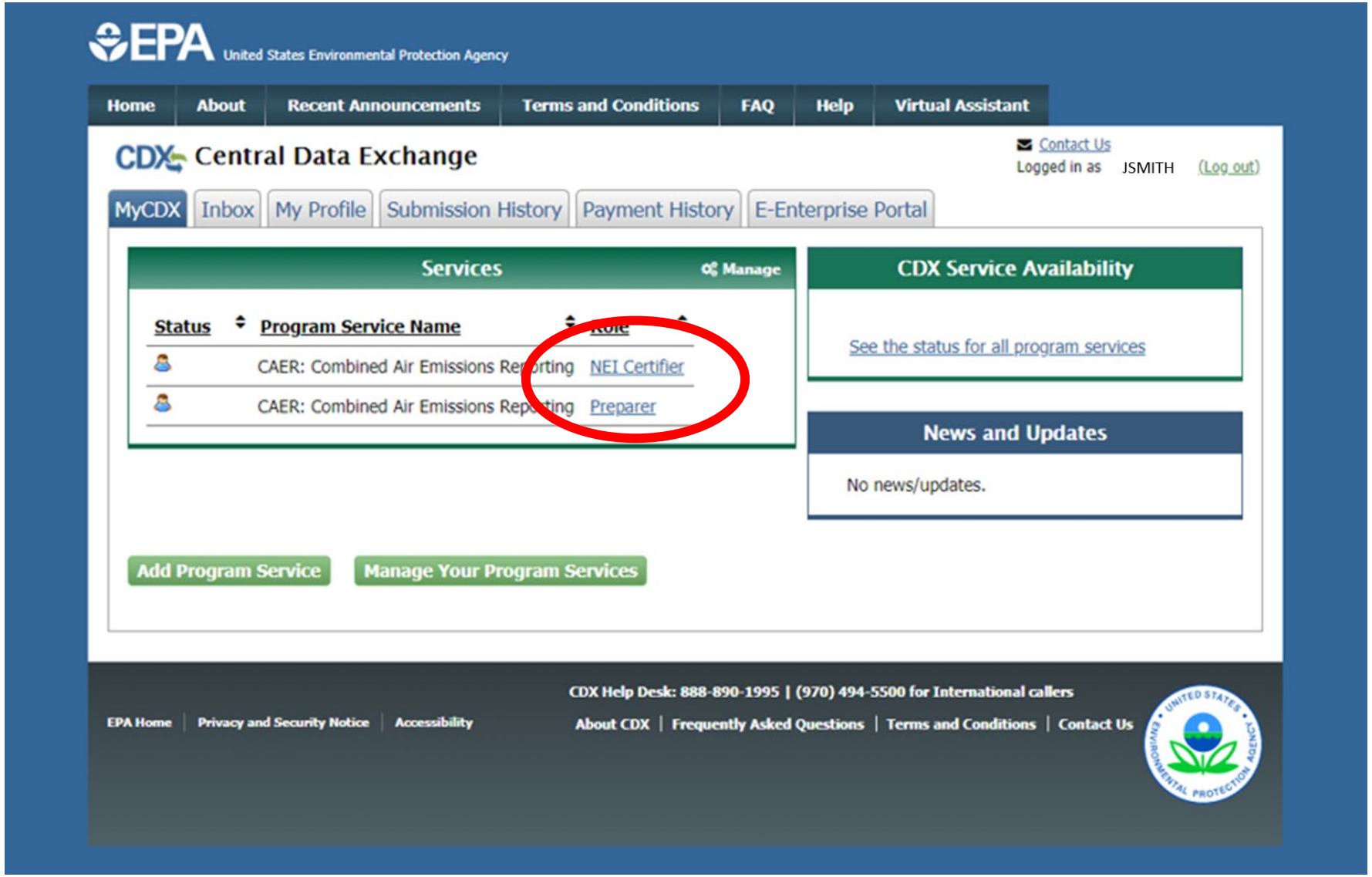
Can prepare the emissions report and is also authorized to certify the emissions report to meet your legal obligation for reporting to your SLT.

- May have only *one* Certifier for a facility.
- May have a single Certifier for more than one facility (multiple facilities associated with the certifier account).
- May also be the preparer (only one CAERS account needed).

Idaho facilities are familiar with this role as the EI Responsible Official. Many are familiar with the multiple role options as well as we do the same in POSST.

Total toxics air emissions are made available for TRI-MEweb once the facility has certified the report in CAERS. Certification of the report signals to CAERS that the report is complete, but it is not a certification of the TRI submission. Toxics air data is certified in TRI-MEweb, not CAERS.

Preparer and NEI Certifier in MyCDX Page



Establishing Preparer/Certifier Roles for Idaho

- Certifiers (formerly EI Responsible Officials) are required to sign and submit a paper form (original ink signature) in order to become a certifier. The certifier form does NOT need to be notarized.
- Reporting roles in CAERS will initially be based on what is in POSST. Any authorized user there will be allowed to access that facility in CAERS.
- You should reach out to Gary Reinbold if you are:
  - New facility needing to establish roles
  - New staff to an existing facility and need to be added
  - Have questions about this process.

Please don't try to register in CDX until you've communicated with your SLT about roles, to avoid further delays.

More on Roles

- **What if I don’t know who will certify yet?** Preparers will be able to begin the report, but you won’t be able to send it to your SLT for review. As soon as you know who your certifier will be, let your SLT know, and then the new certifier should go to CDX to register.

- **What if our preparer or certifier leaves the company?** Let your SLT know of the staff change. Then the new staff person should register in CDX per the above steps. The SLT will remove the old preparer/certifier in CAERS and your new staff should reach out to the SLT if the old preparer/certifier has not been removed within a reasonable amount of time.

TRI – bound HAPs Data

Optional feature in TRI-MEweb: CAERS adds shared pollutant data up to the facility totals, ready for pre-population in TRI-MEweb.

How does this help facilities?

- Enter data into CAERS directly vs. separate workbooks for calculations then entered to TRI-MEweb.
- SLT review of your criteria pollutant data *before* your data gets to TRI-MEweb gives you the opportunity to correct any related toxics data before it is available in TRI-MEweb.
  - E.g., SLT finds throughput error for a unit/process affecting CO and NOX, that is also affecting your VOC calculations. As you correct that throughput, all affected emissions are corrected.
- We encourage facilities to submit HAPS data at process level in CAERS.
  - If HAPS aren't reported, EPA does HAP augmentation on your data which could be inaccurate.
  - By submitting their own HAPs emissions at process level in CAERS, facilities take ownership of their data.

Reach out and coordinate with the TRI reporter for your facility.

Timing of Submissions

- TRI-MEweb submission deadline is July 1st
  - NEI/TRI facilities should certify their NEI forms *before* you start a TRI-MEweb submission because data is pushed from CAERS to TRI-MEweb.
  - Early data submittal and SLT review allows us to keep data consistent across NEI and TRI programs.
- **Idaho's deadline** for submissions of Annual or Triennial reports: **March 31, 2023.**
- Leave time for questions and resolution of issues and in case we need to address bugs.

Registrations: Include or delete registered Preparers and Certifiers **no later than two weeks after opening CAERS (**CAERS V4 will reopen February 6th).

Reporting: Start no later than **one month before** and **submit no less than 2 weeks before** the SLT deadline.

We want to avoid last minute submissions. Submit your data early!

Registration Process

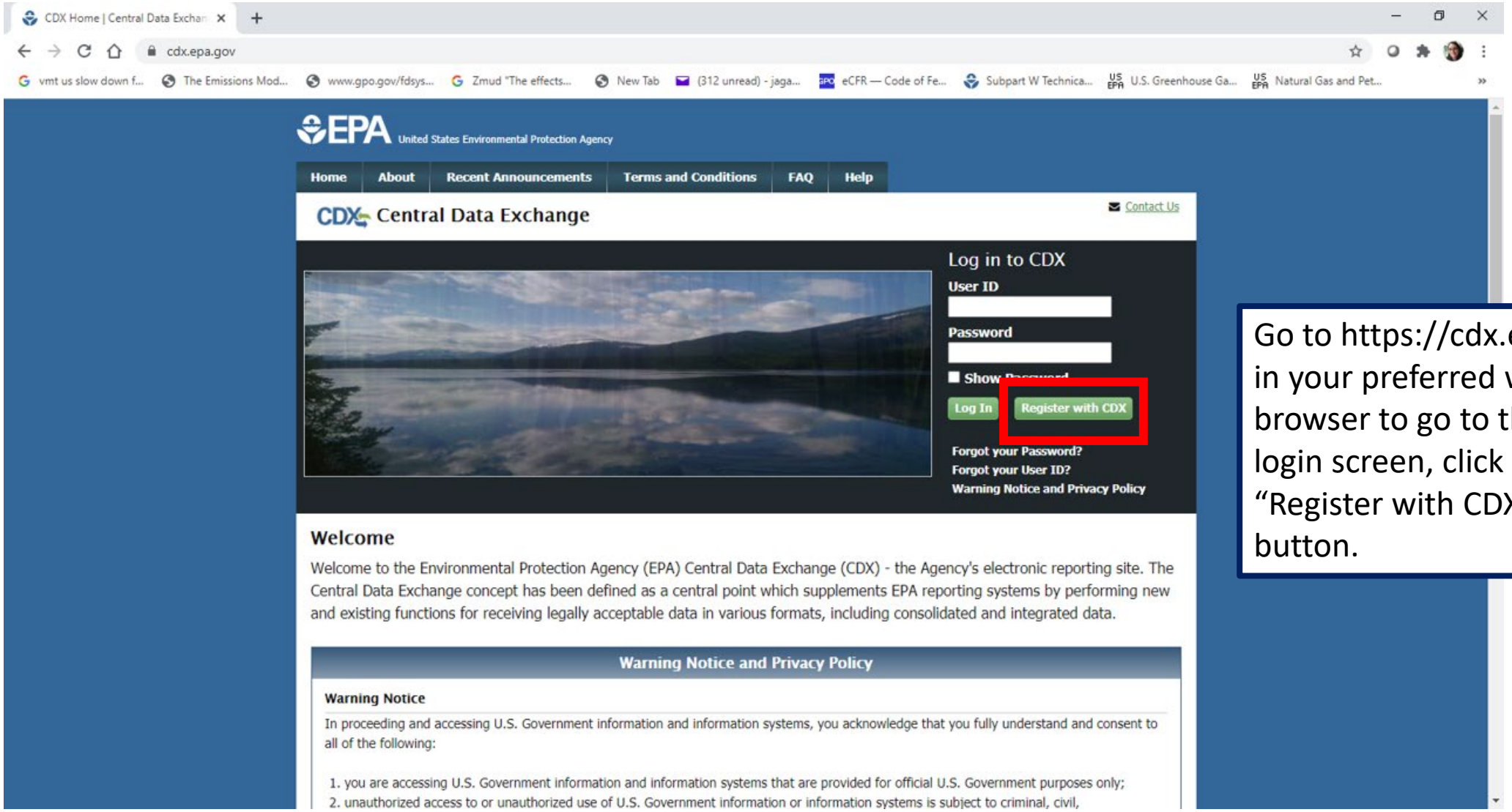
Four major steps:

1. Establish reporting roles with Idaho (described above).
2. Register in CDX, if you are new to CDX (get access email)
3. Set up CAERS in CDX (if you did not report previously through CAERS)
4. Your SLT recognizes you and grants you entry to your facility in CAERS

1. Register in CDX

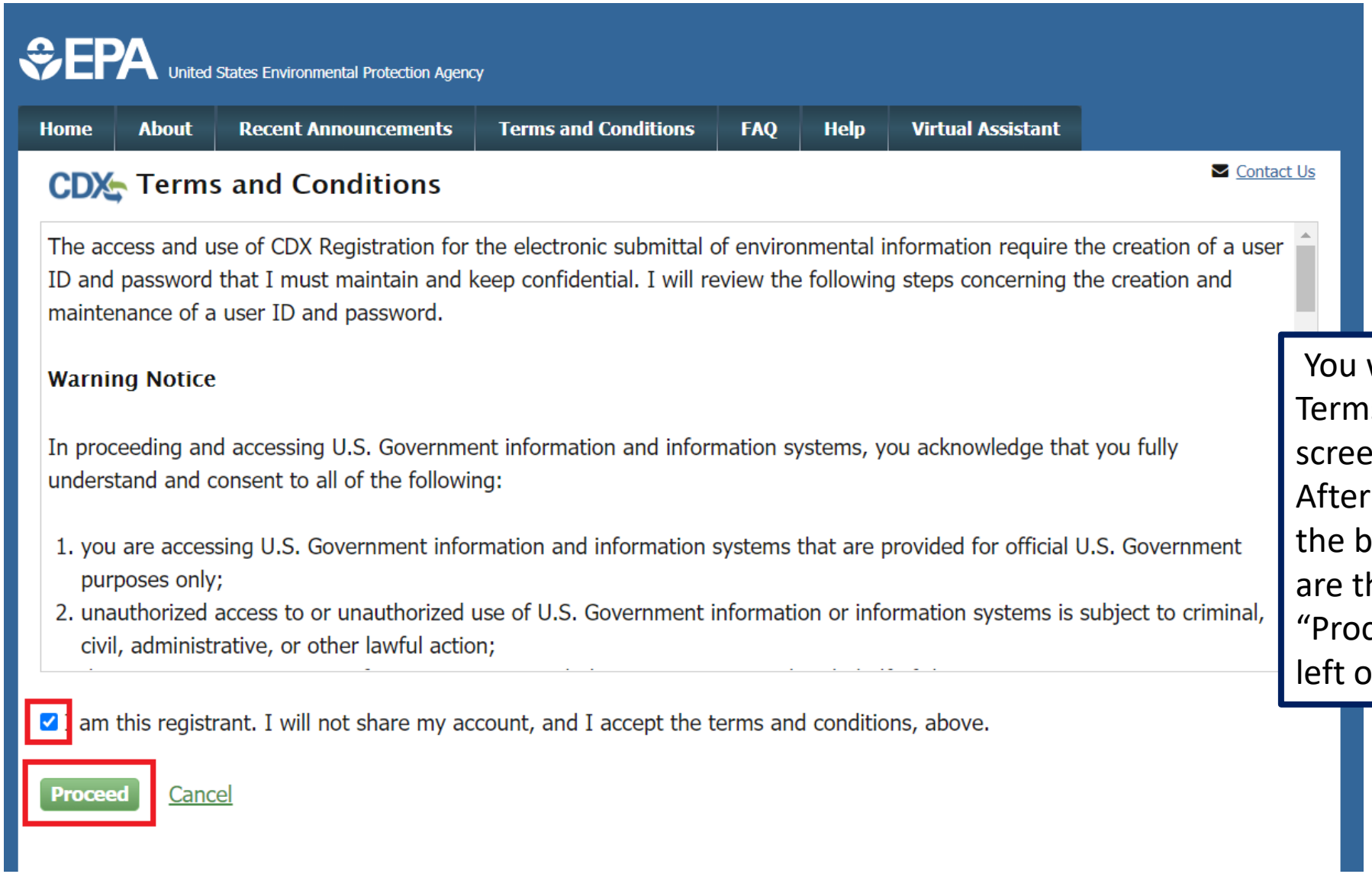
- If you already have a CDX account, you have already completed this part of the process and can move to “Step 2. Set up CAERS in CDX”. You may be able to use the same Electronic Signature Agreement (ESA) in CDX that you use for other programs/systems in CDX. You may need additional ESAs for additional organizations you are associated with. You should reach out to the CDX help desk if you have questions about this.

CDX Login Page



Go to https://cdx.epa.gov/ in your preferred web browser to go to the CDX login screen, click the “Register with CDX” button.

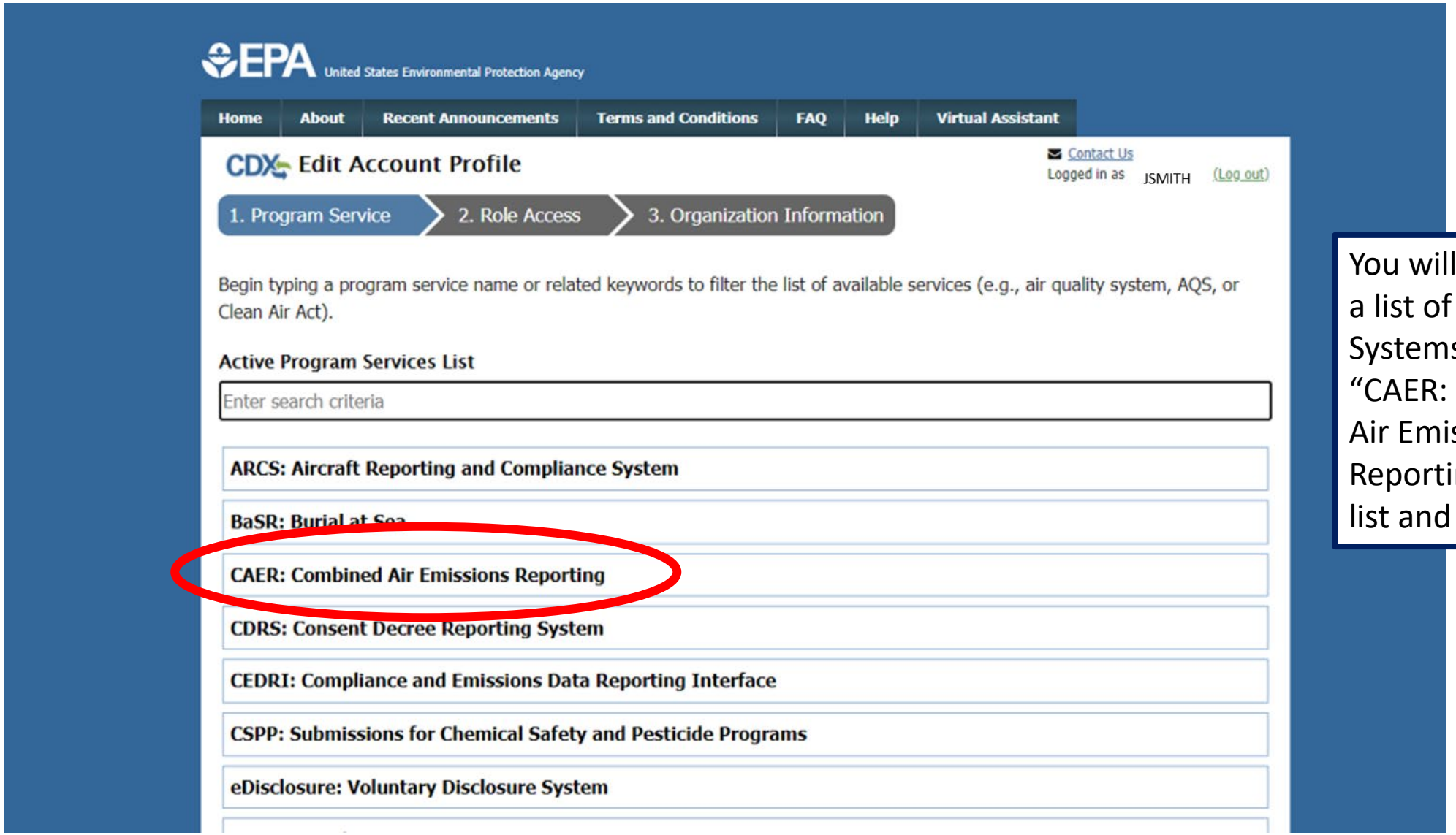
CDX Terms and Conditions



You will be directed to the Terms and Conditions screen for CDX registration. After reading these, check the box confirming that you are the registrant and click “Proceed” at the bottom left of your screen.

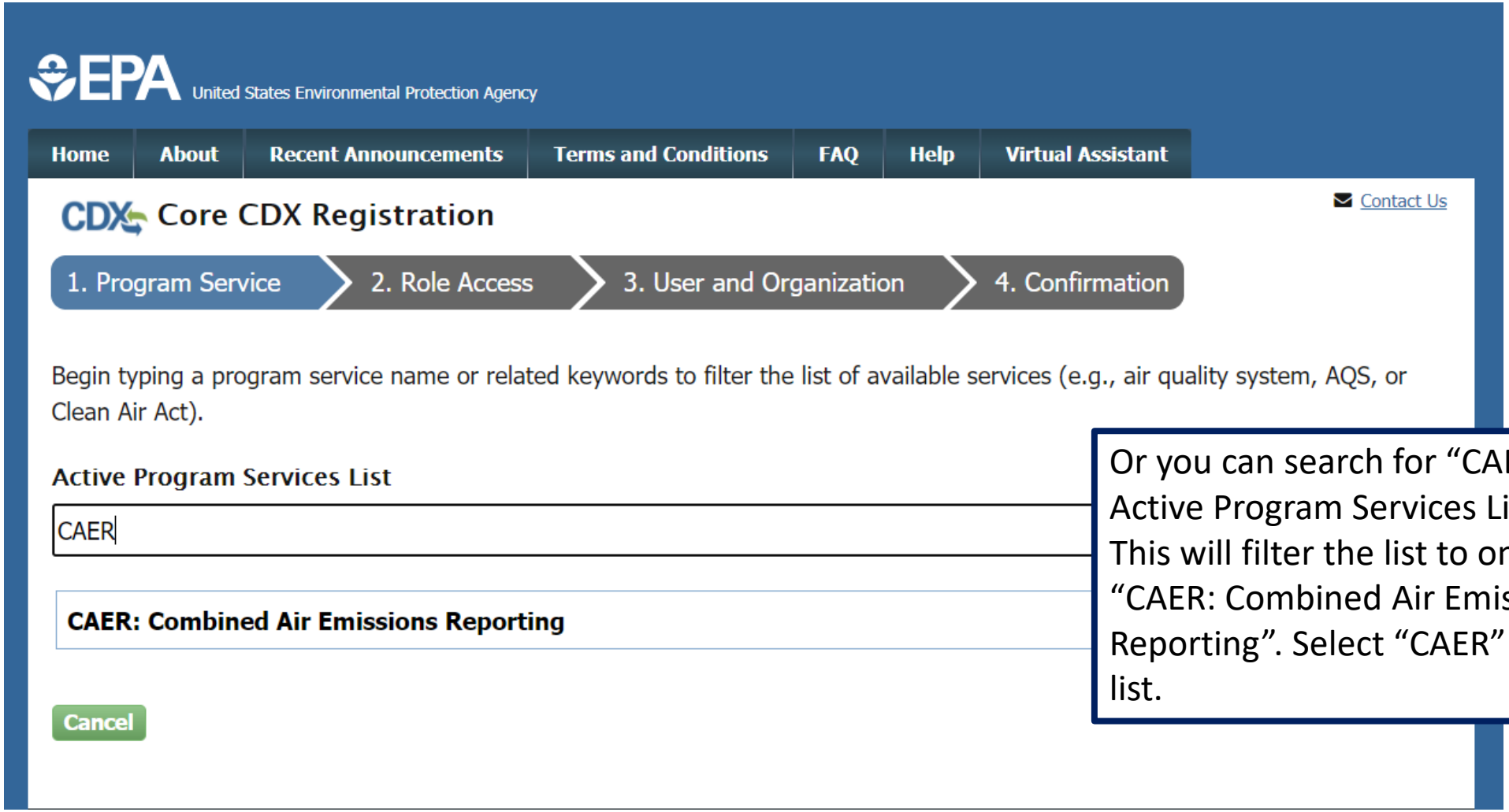
2. Set up CAERS in CDX

CDX CAERS Program Service Selection



You will be taken to a list of EPA Systems. Find "CAER: combined Air Emissions Reporting" in that list and click on it.

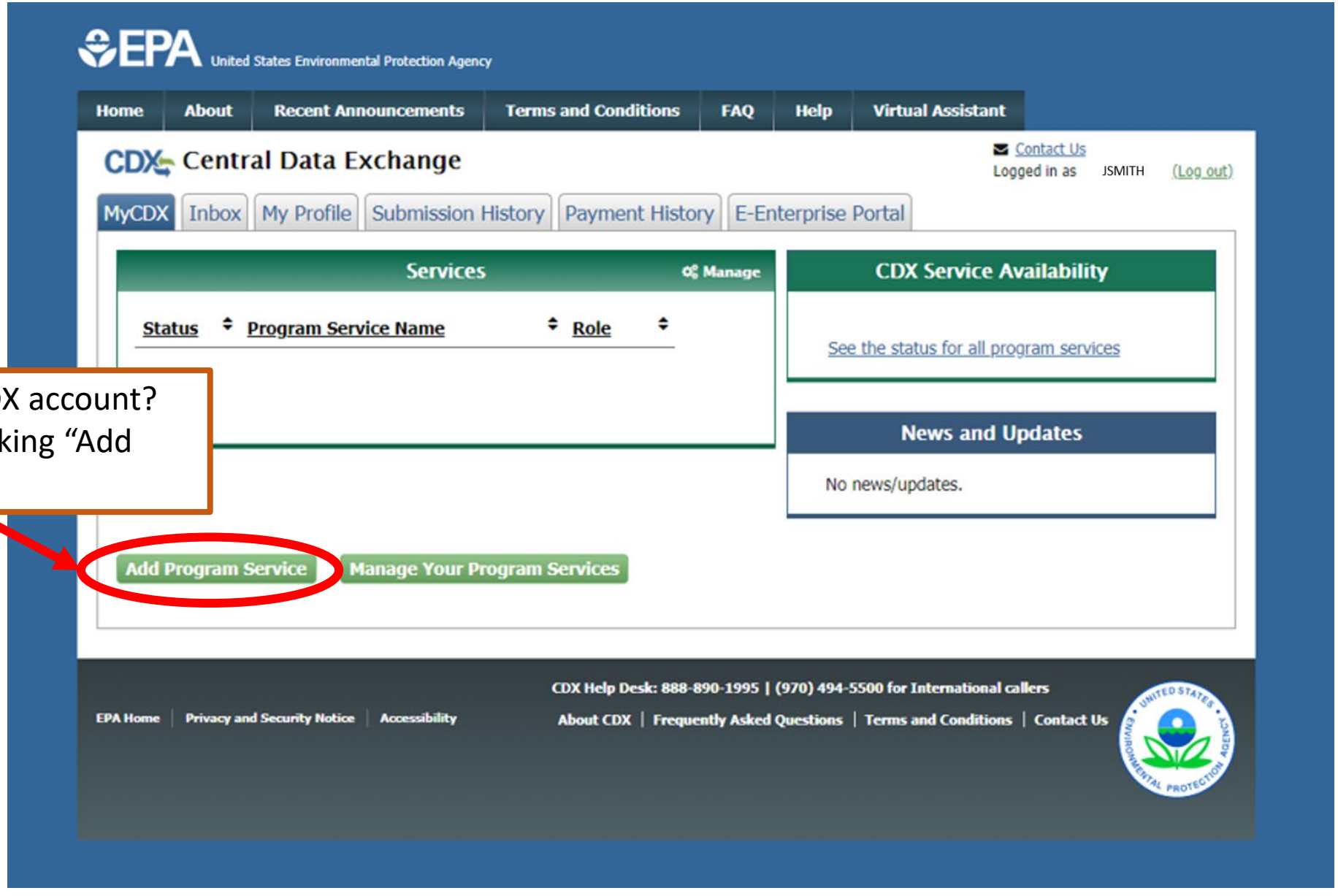
CDX Program Service Search



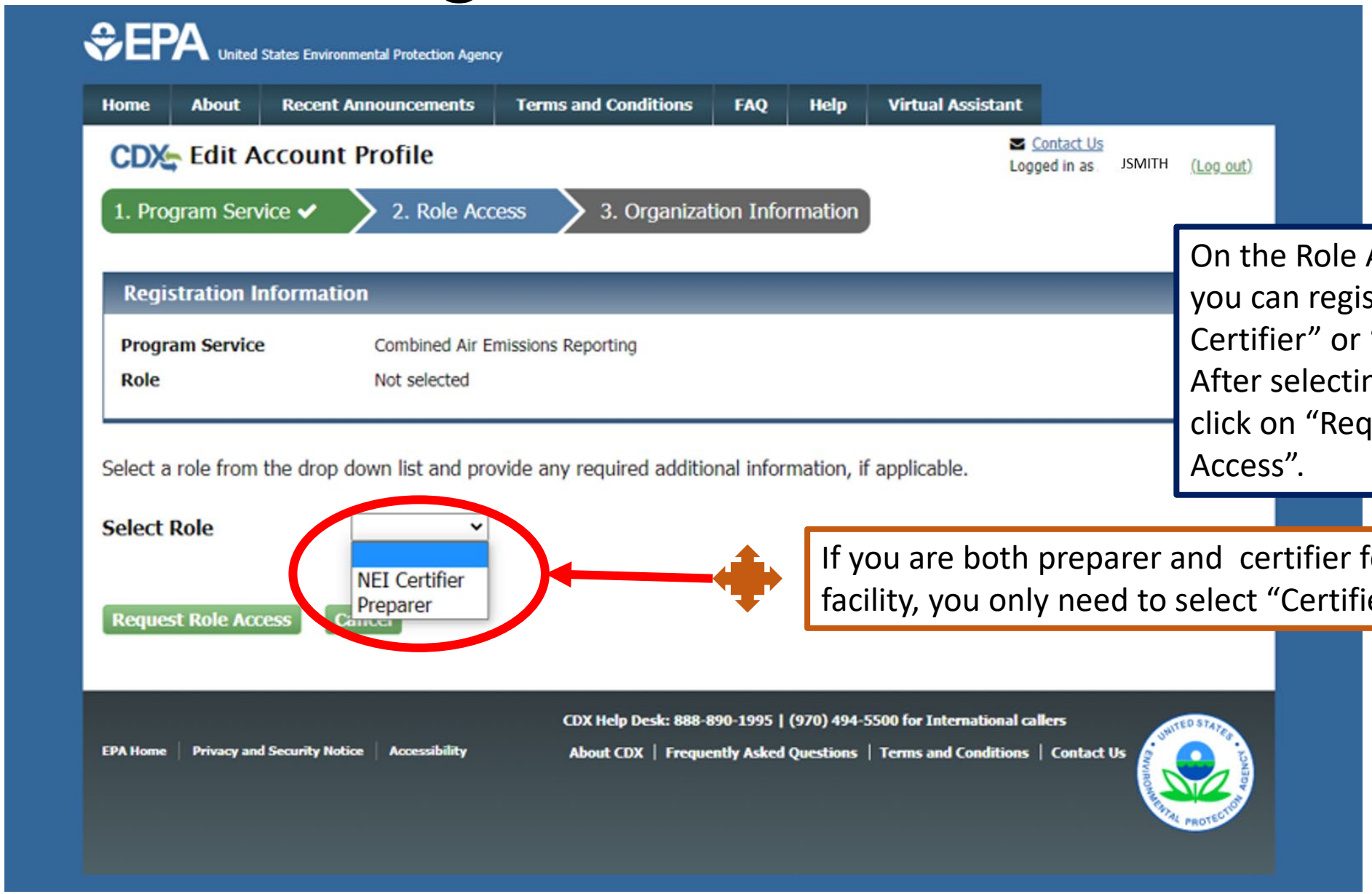
Or you can search for “CAER” in the Active Program Services List field. This will filter the list to only include “CAER: Combined Air Emissions Reporting”. Select “CAER” from the list.

CDX Adding a Program Service

Already have a CDX account? Add CAERS by clicking “Add Program Service”.



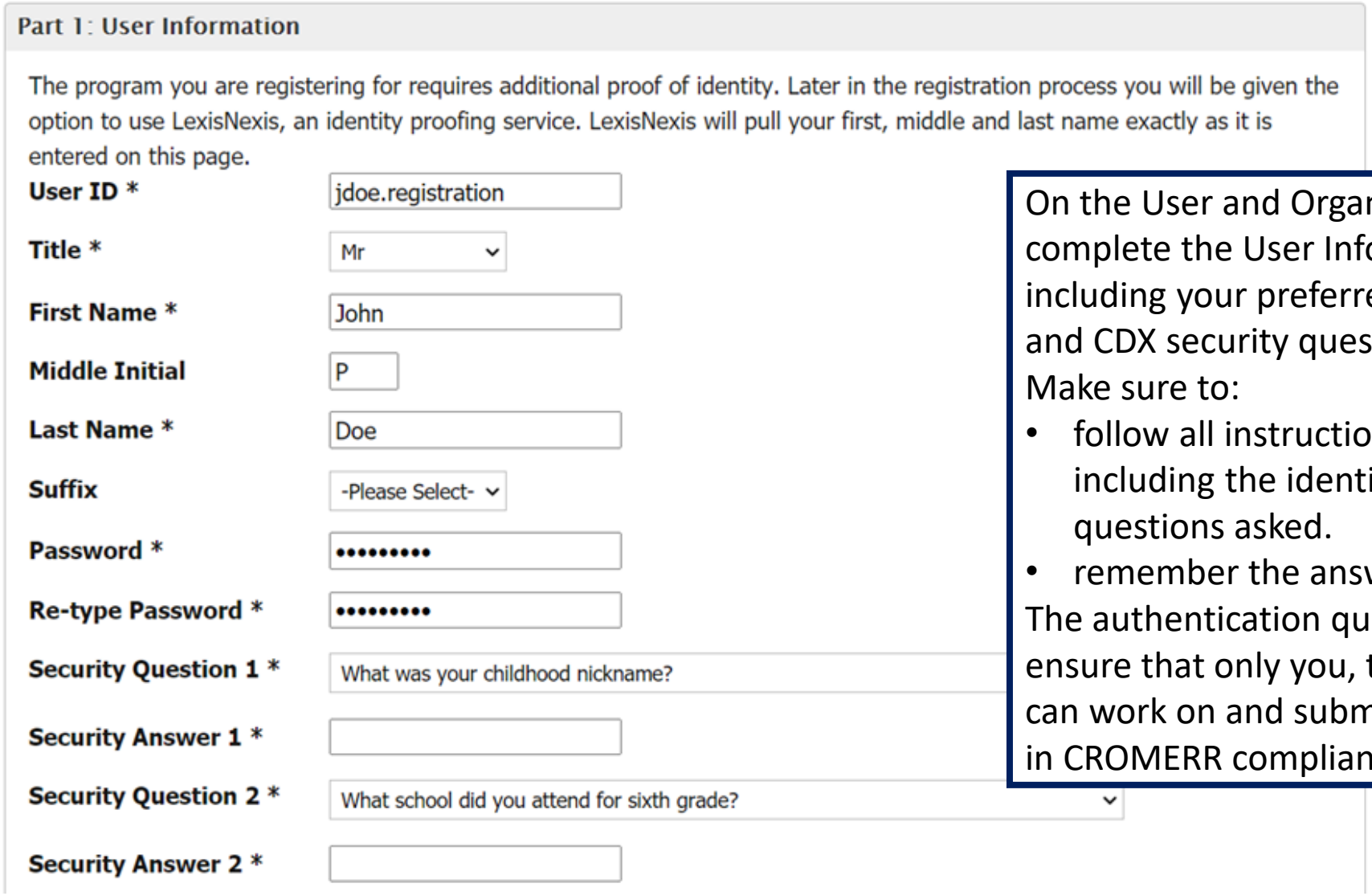
CDX Selecting a Role



On the Role Access screen you can register as “NEI Certifier” or “Preparer”. After selecting your role click on “Request Role Access”.

If you are both preparer and certifier for a facility, you only need to select “Certifier”.

CDX Entry of User Information

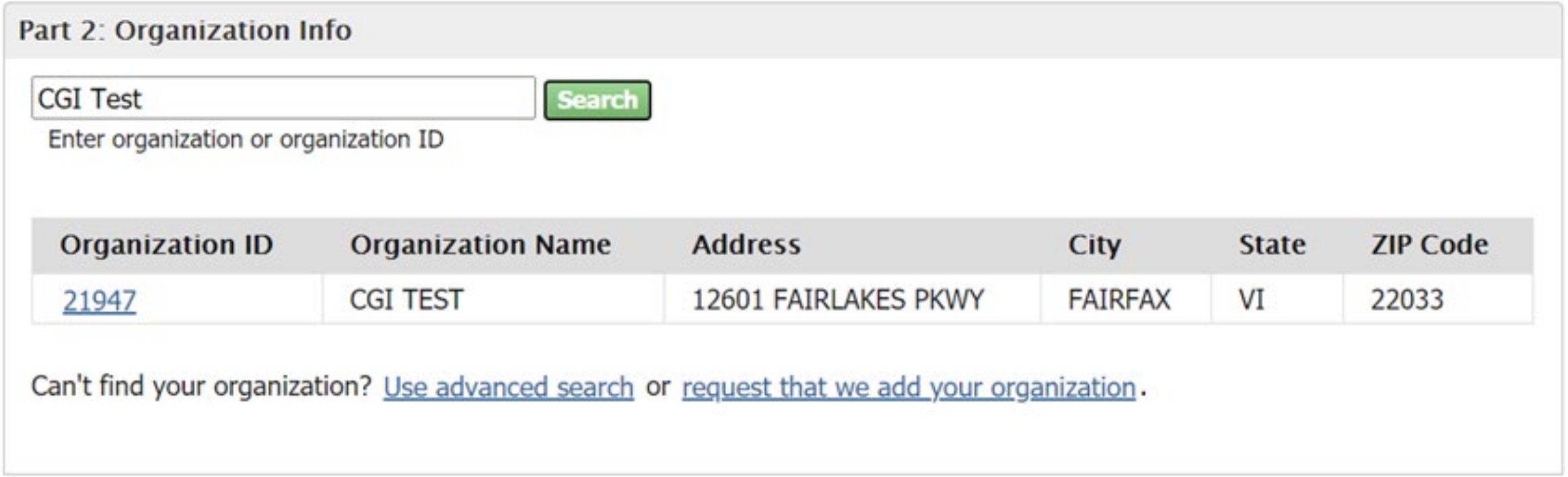


On the User and Organization screens complete the User Information section, including your preferred User ID, password, and CDX security questions and answers.
Make sure to:

- follow all instructions that are provided, including the identity authentication questions asked.
- remember the answers to those.

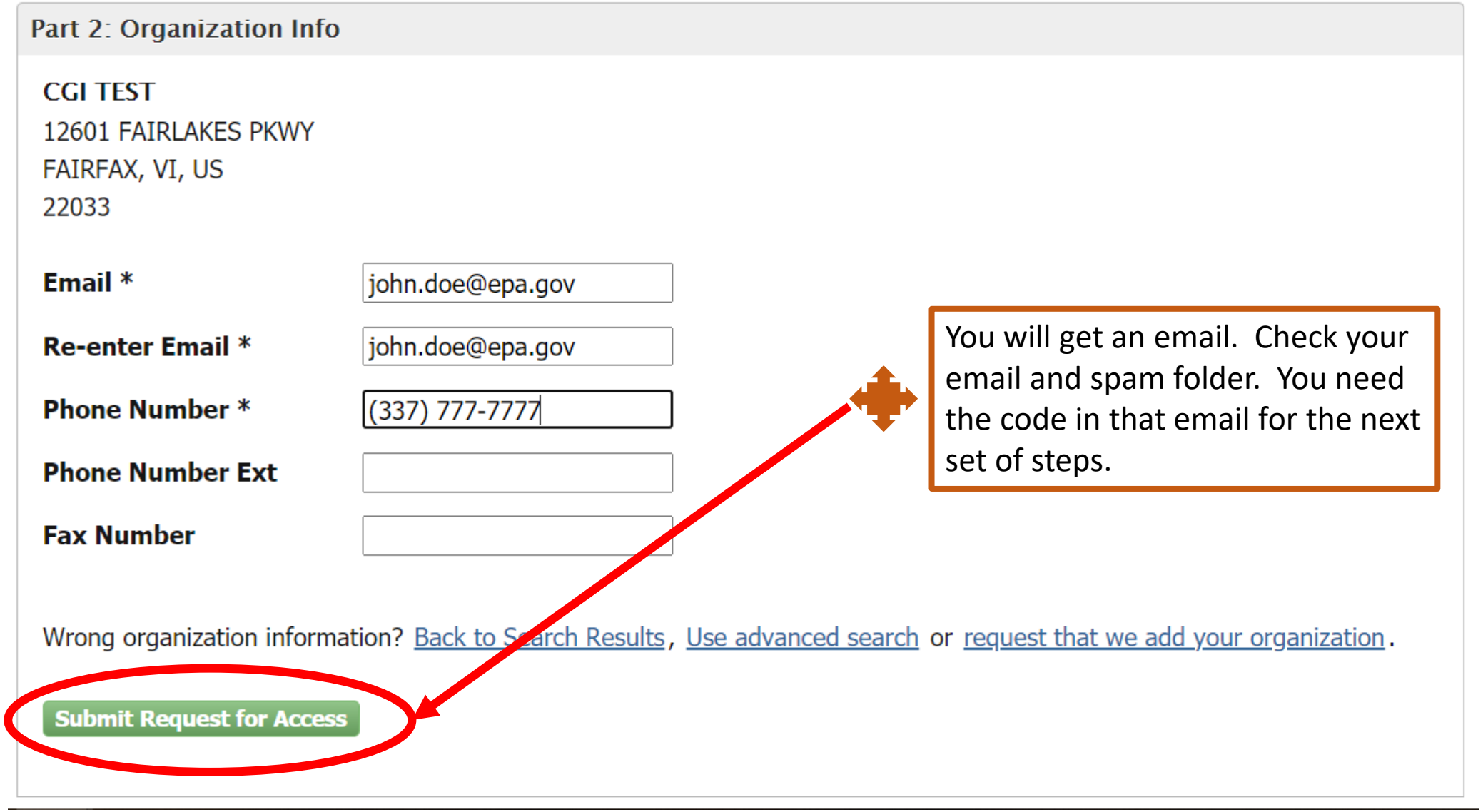
The authentication questions is needed to ensure that only you, the authorized person, can work on and submit the report, and to be in CROMERR compliance.

CDX Entry of Organization Information

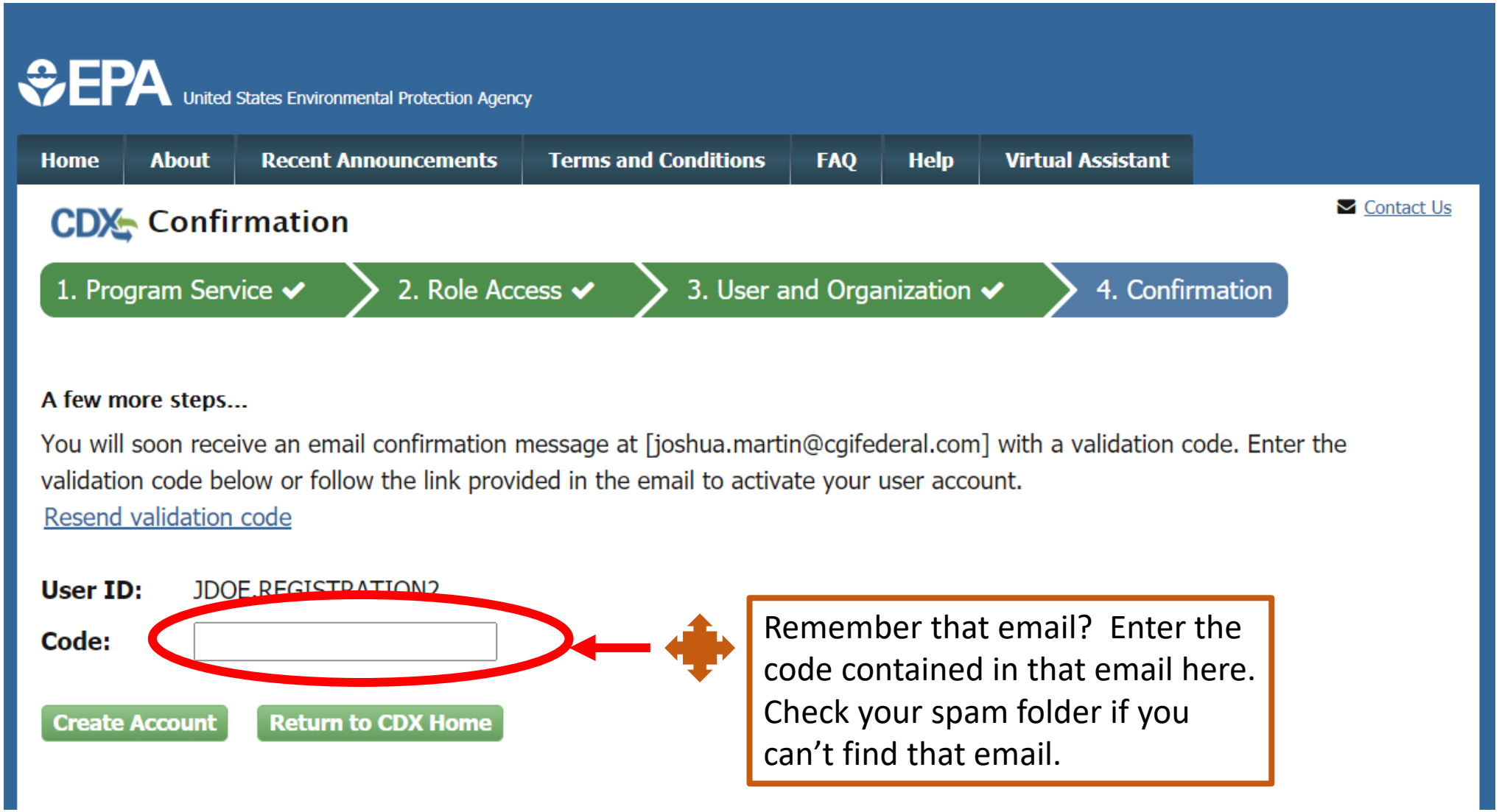


After entering user information, scroll to the bottom of the screen and enter Organization Information in that field. If multiple individuals work for a company, they should all register for the same company in CDX. After you search for an organization click on an Organization ID link to select the respective organization.

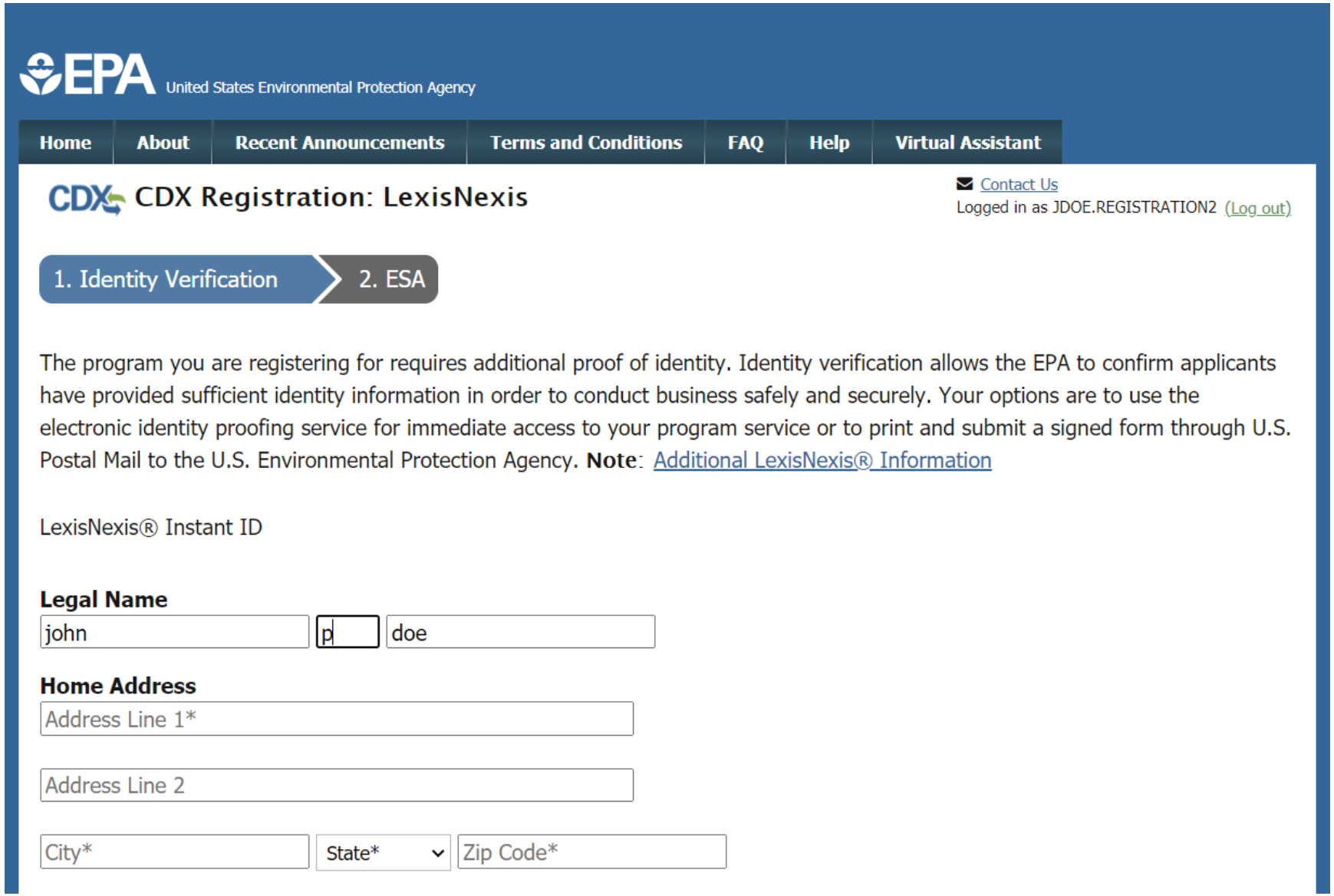
CDX Entry of Organization Contact



CDX Entry of User Code

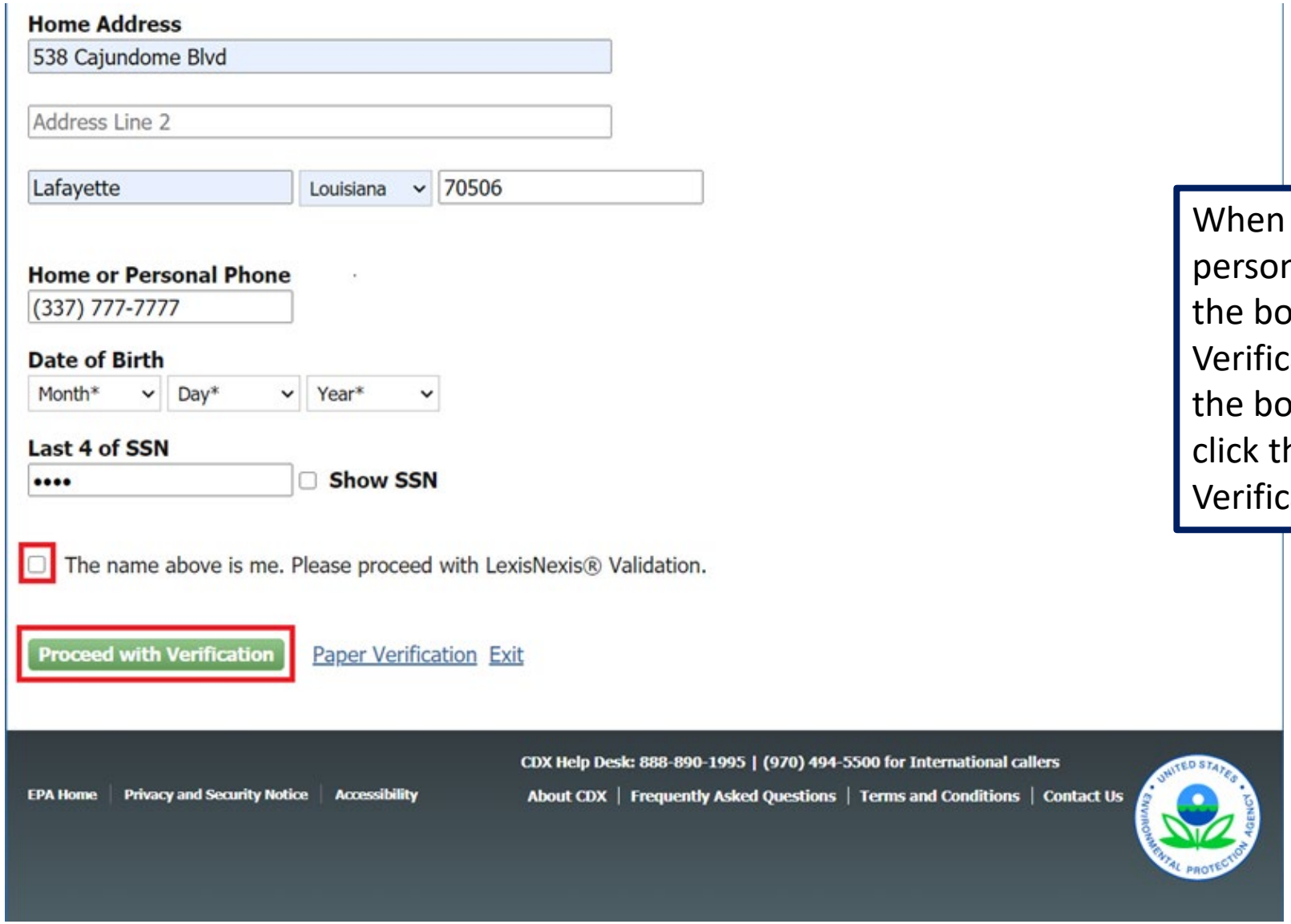


CDX LexisNexis Identity Verification



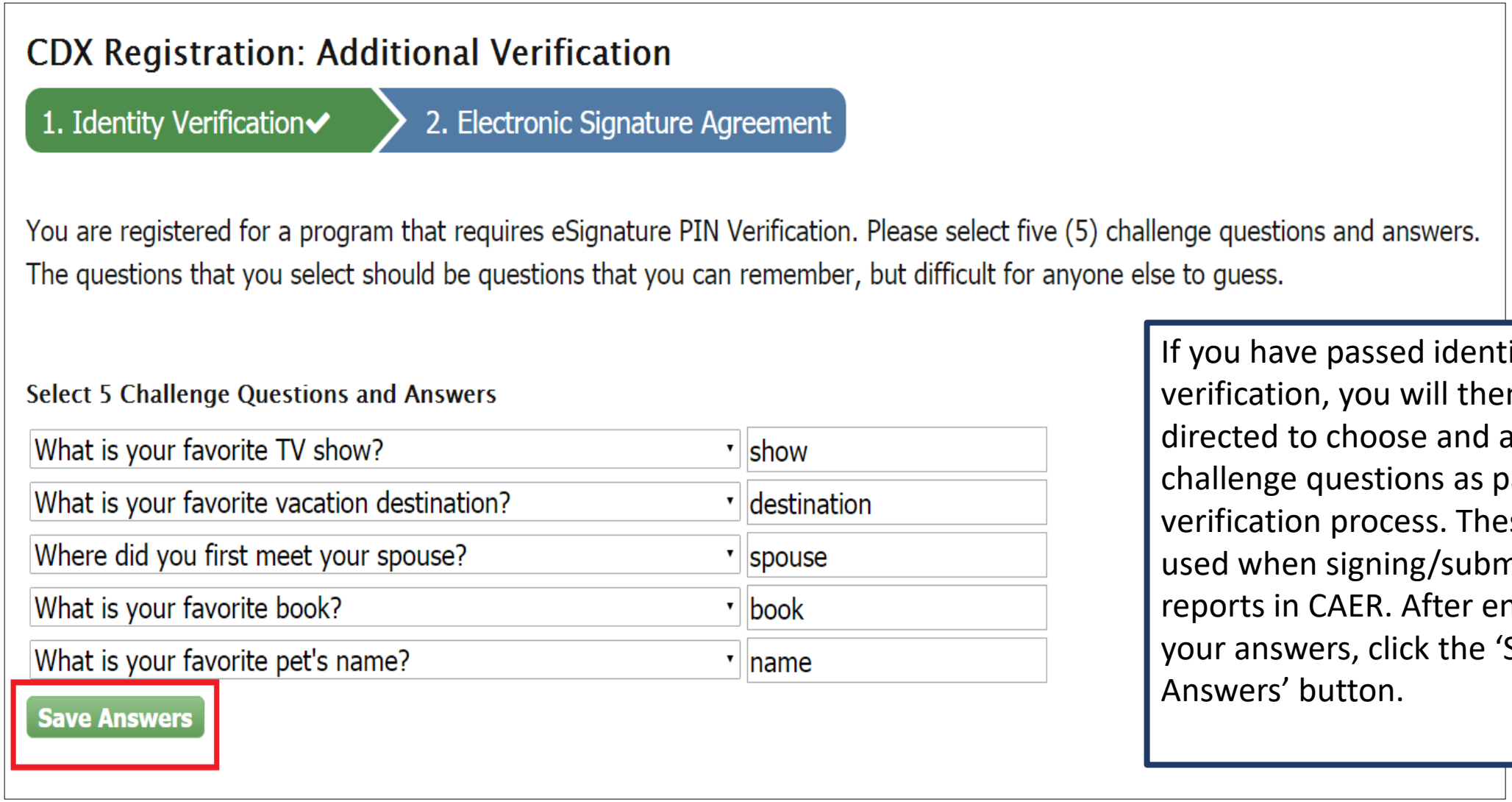
You will then be brought to the 'Identity Verification' screen. **Important:** You MUST provide accurate personal information during CDX registration in order to pass LexisNexis Electronic Identity Verification. If you do not pass LexisNexis verification you will be prompted to view, print, and sign a paper ESA. If this happens simply view and sign the paper ESA by clicking the 'Paper Verification' link and then closing the resulting window. This will bring you to the 'MyCDX Home' screen. Reach out to the CDX help desk for further instructions.

CDX LexisNexis Identity Verification Continued



When you finish filling out your personal information, scroll to the bottom of the Identity Verification screen. Then, check the box as shown below and click the 'Proceed to Verification' button.

CDX Electronic Signature Agreement



If you have passed identity verification, you will then be directed to choose and answer 5 challenge questions as part of the verification process. These will be used when signing/submitting reports in CAER. After entering your answers, click the 'Save Answers' button.

CDX Electronic Signature Agreement Continued

You will then be prompted to electronically sign an ESA. Click the 'Sign Electronically', then click 'Accept' in the pop-up window that will appear.

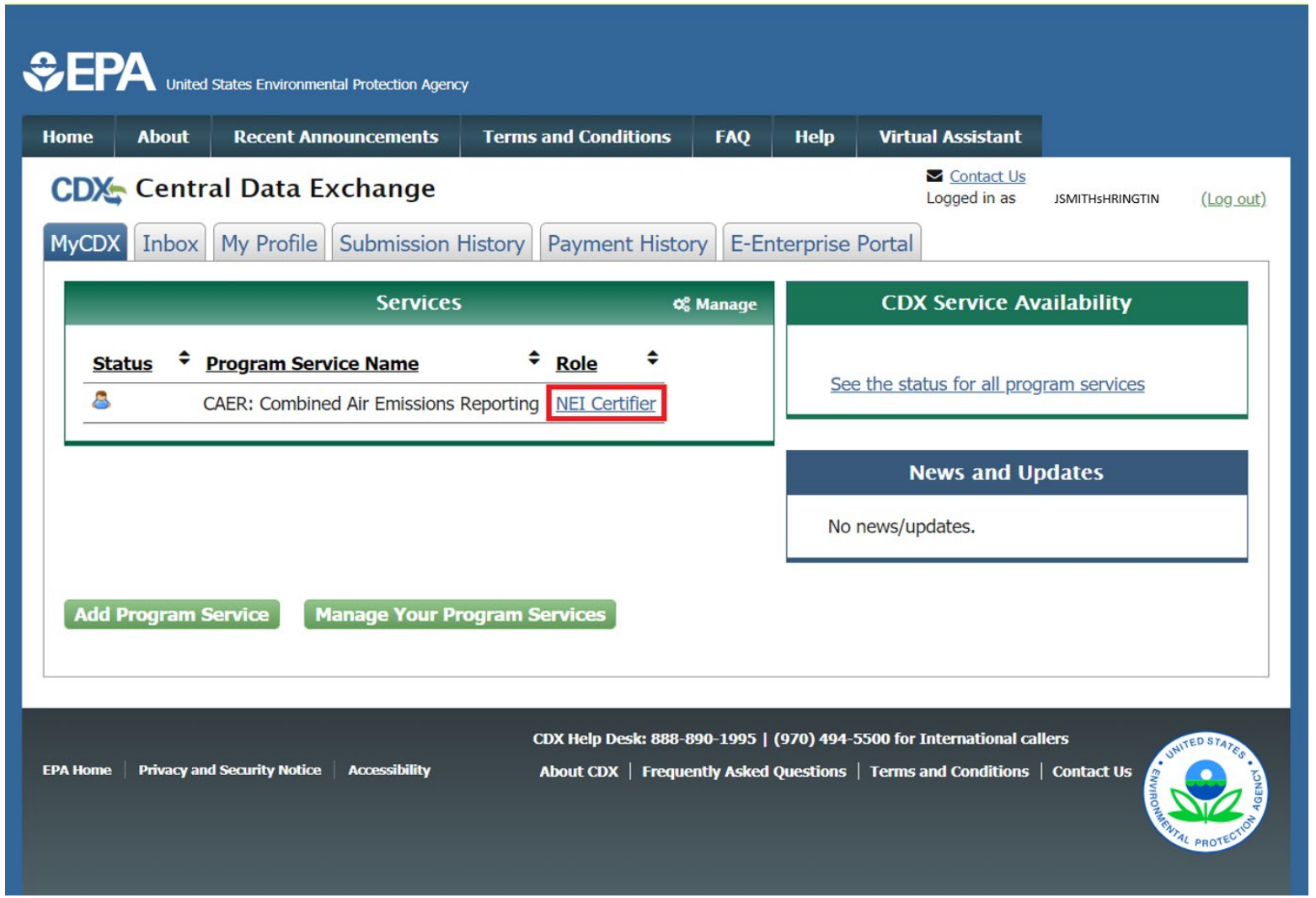
Remember that you may be able to use the same Electronic Signature Agreement (ESA) in CDX that you use for other programs/systems in CDX. You may need additional ESAs for additional organizations you are associated.

Reach out to the help desk if you have questions.

eSignature Widget Password Entry

Enter all required information in the ‘eSignature Widget’ pop-up. At the end of the 3 steps, click the ‘Sign’ button to complete the process.

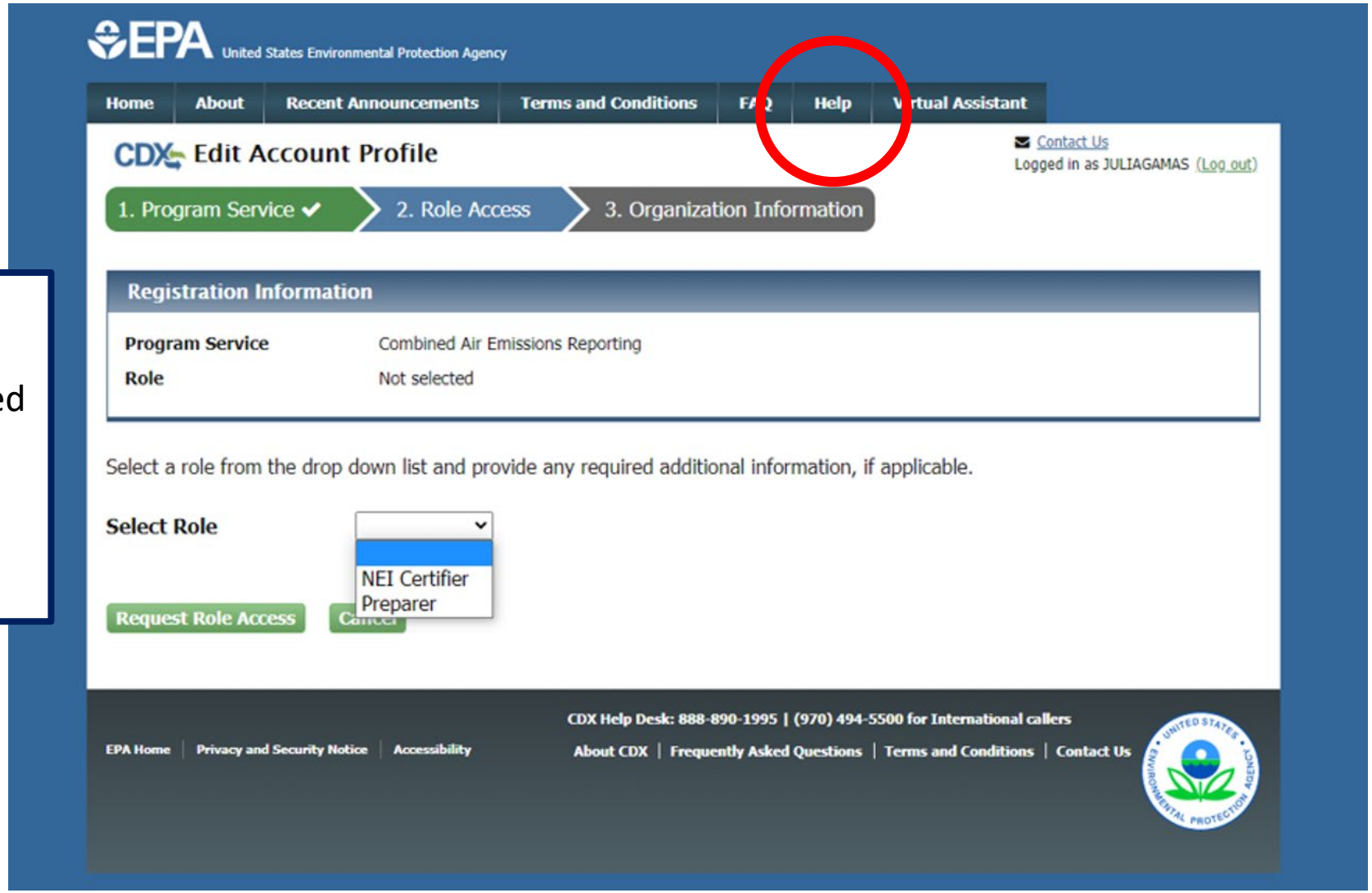
MyCDX Page After Registration



Following clicking to sign the Electronic Signature Agreement you should receive an email that the process is complete. You will also be redirected to the 'MyCDX Home' screen inside your CDX account automatically. Once redirected your account should be automatically activated. The 'NEI Certifier' link in the 'Role' column on the 'MyCDX Home' screen will be active and clickable as shown.

Help in CDX

If at any point you need help, refer to the CDX help desk.
CDX Help Desk: questions related to your registration in CDX, and questions about navigating the “MY CDX” page, and operating the CAERS application.

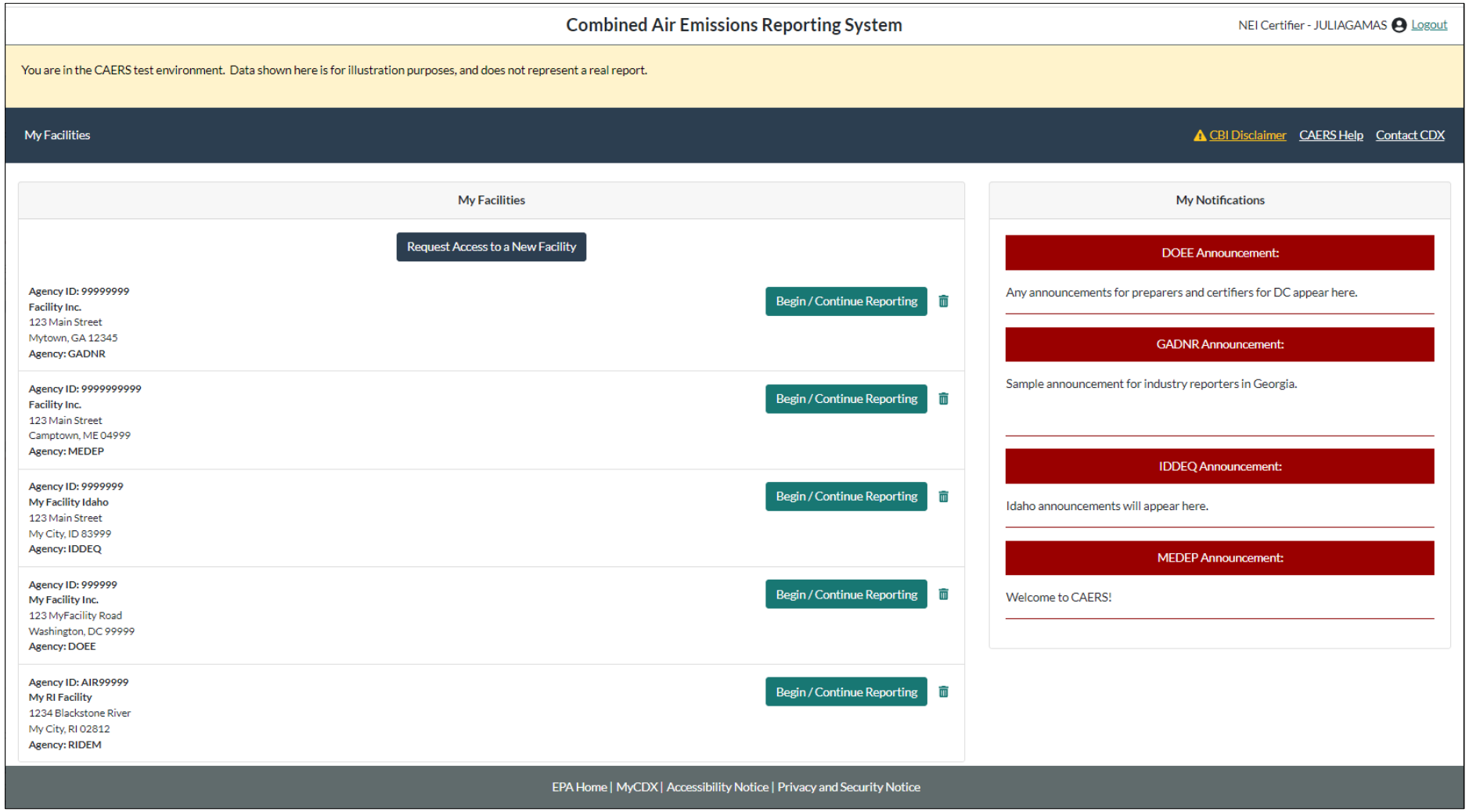


3. Receive Approval Notification from CAERS

With the previous steps completed your SLT will:

- Verify your preparer and certifier contact information.
- Approve your association with the correct facility(ies) in CAERS.
- Send you a confirmation email – then you will be ready to begin reporting.

CAERS My Facilities Page



After receiving your confirmation, you should see all the facilities associated with your account listed in your “My Facilities” page, whether they are in Idaho or other States using CAERS.

Questions so Far?

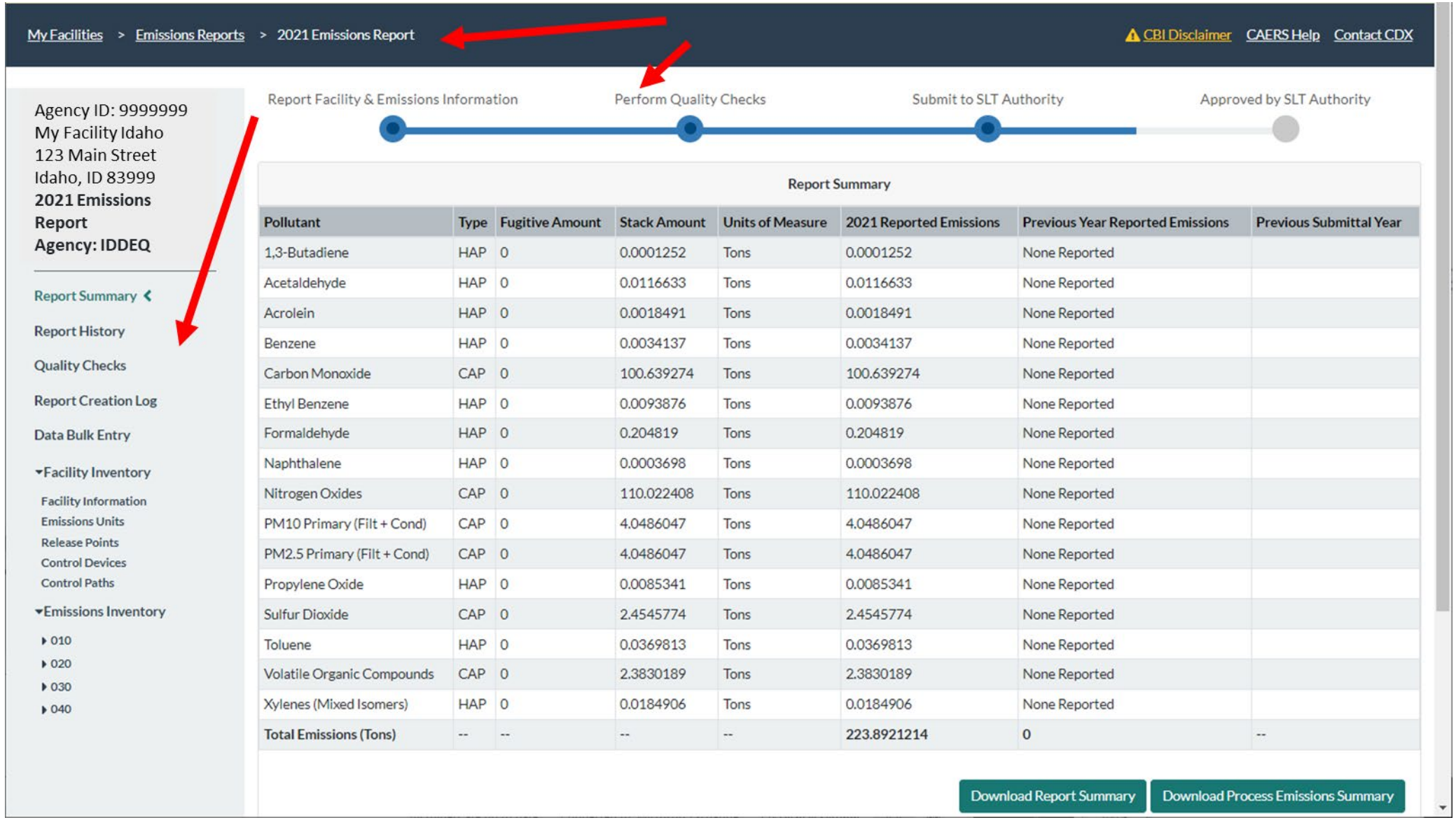
Highlights of CAERS Features

- Familiarize you with CAERS features but not exhaustive
- Detailed trainings on specific aspects of CAERS are forthcoming
- Go to the User Guide for more information (will be updated for February 2023 release)

Highlights of CAERS Features

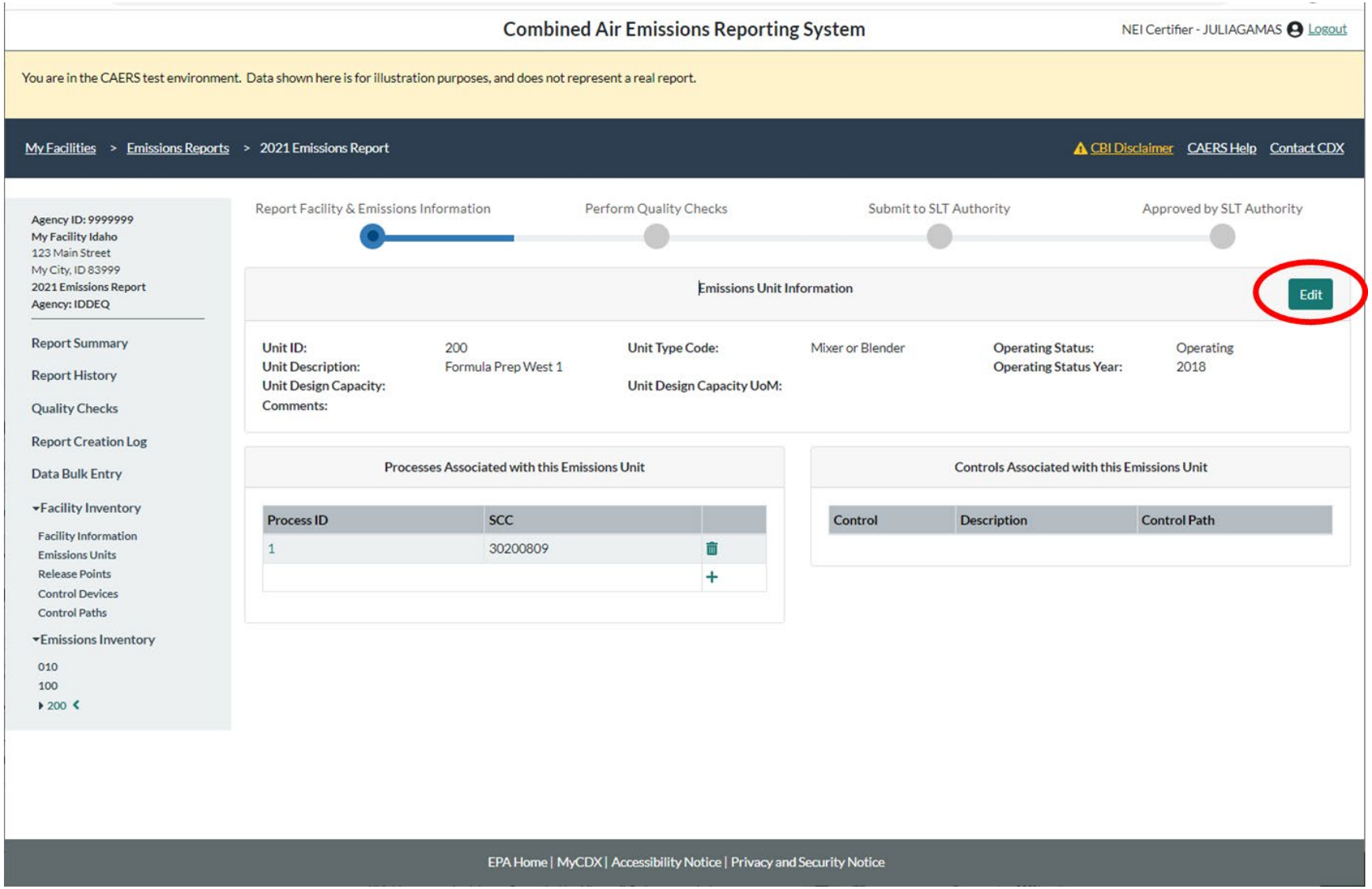
- **Three options for data entry:**
  - **User interface**

CAERS Main Report Page

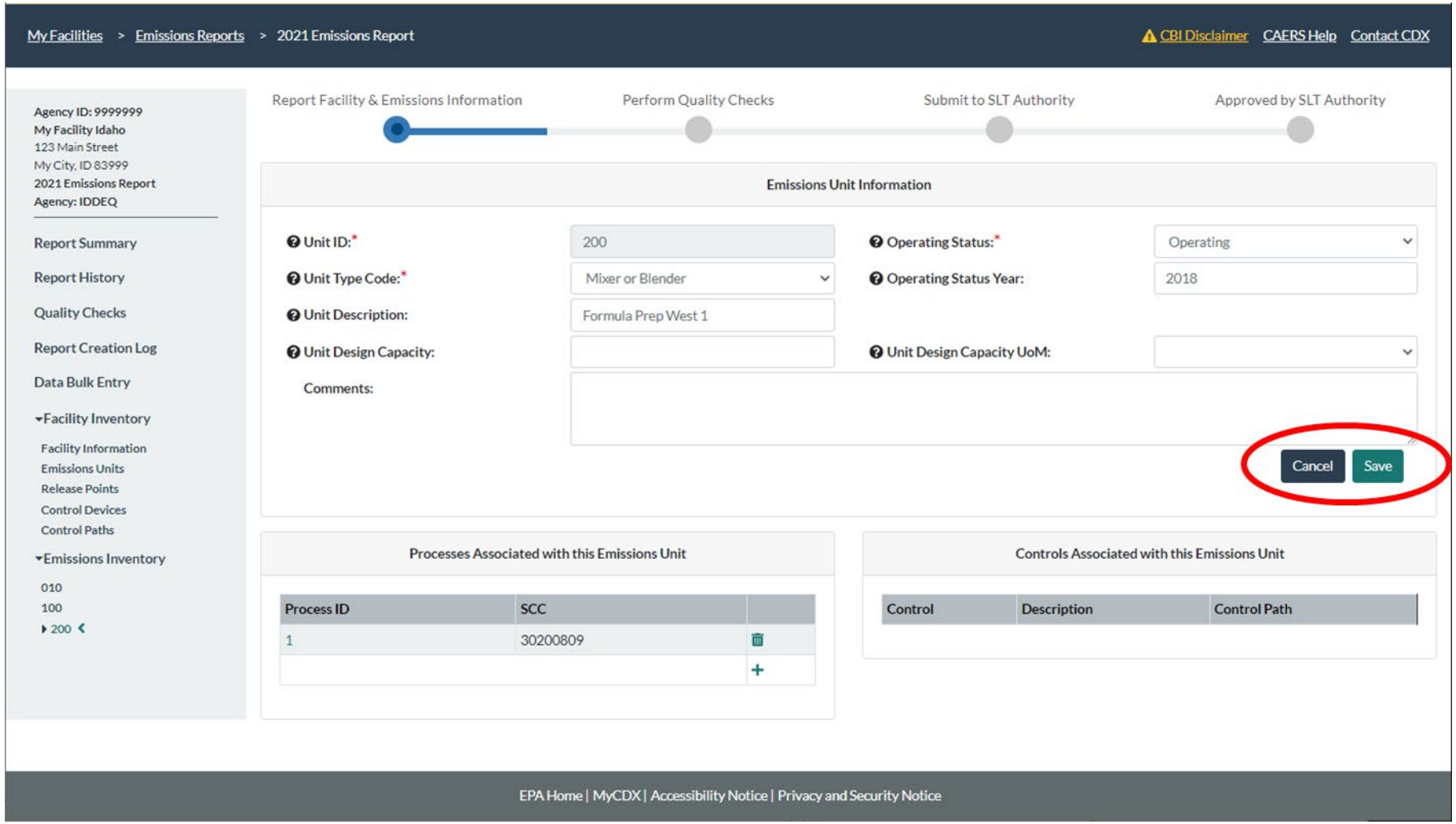


Pollutant	Type	Fugitive Amount	Stack Amount	Units of Measure	2021 Reported Emissions	Previous Year Reported Emissions	Previous Submittal Year
1,3-Butadiene	HAP	0	0.0001252	Tons	0.0001252	None Reported	
Acetaldehyde	HAP	0	0.0116633	Tons	0.0116633	None Reported	
Acrolein	HAP	0	0.0018491	Tons	0.0018491	None Reported	
Benzene	HAP	0	0.0034137	Tons	0.0034137	None Reported	
Carbon Monoxide	CAP	0	100.639274	Tons	100.639274	None Reported	
Ethyl Benzene	HAP	0	0.0093876	Tons	0.0093876	None Reported	
Formaldehyde	HAP	0	0.204819	Tons	0.204819	None Reported	
Naphthalene	HAP	0	0.0003698	Tons	0.0003698	None Reported	
Nitrogen Oxides	CAP	0	110.022408	Tons	110.022408	None Reported	
PM10 Primary (Filt + Cond)	CAP	0	4.0486047	Tons	4.0486047	None Reported	
PM2.5 Primary (Filt + Cond)	CAP	0	4.0486047	Tons	4.0486047	None Reported	
Propylene Oxide	HAP	0	0.0085341	Tons	0.0085341	None Reported	
Sulfur Dioxide	CAP	0	2.4545774	Tons	2.4545774	None Reported	
Toluene	HAP	0	0.0369813	Tons	0.0369813	None Reported	
Volatile Organic Compounds	CAP	0	2.3830189	Tons	2.3830189	None Reported	
Xylenes (Mixed Isomers)	HAP	0	0.0184906	Tons	0.0184906	None Reported	
Total Emissions (Tons)	--	--	--	--	**223.8921214**	**0**	--

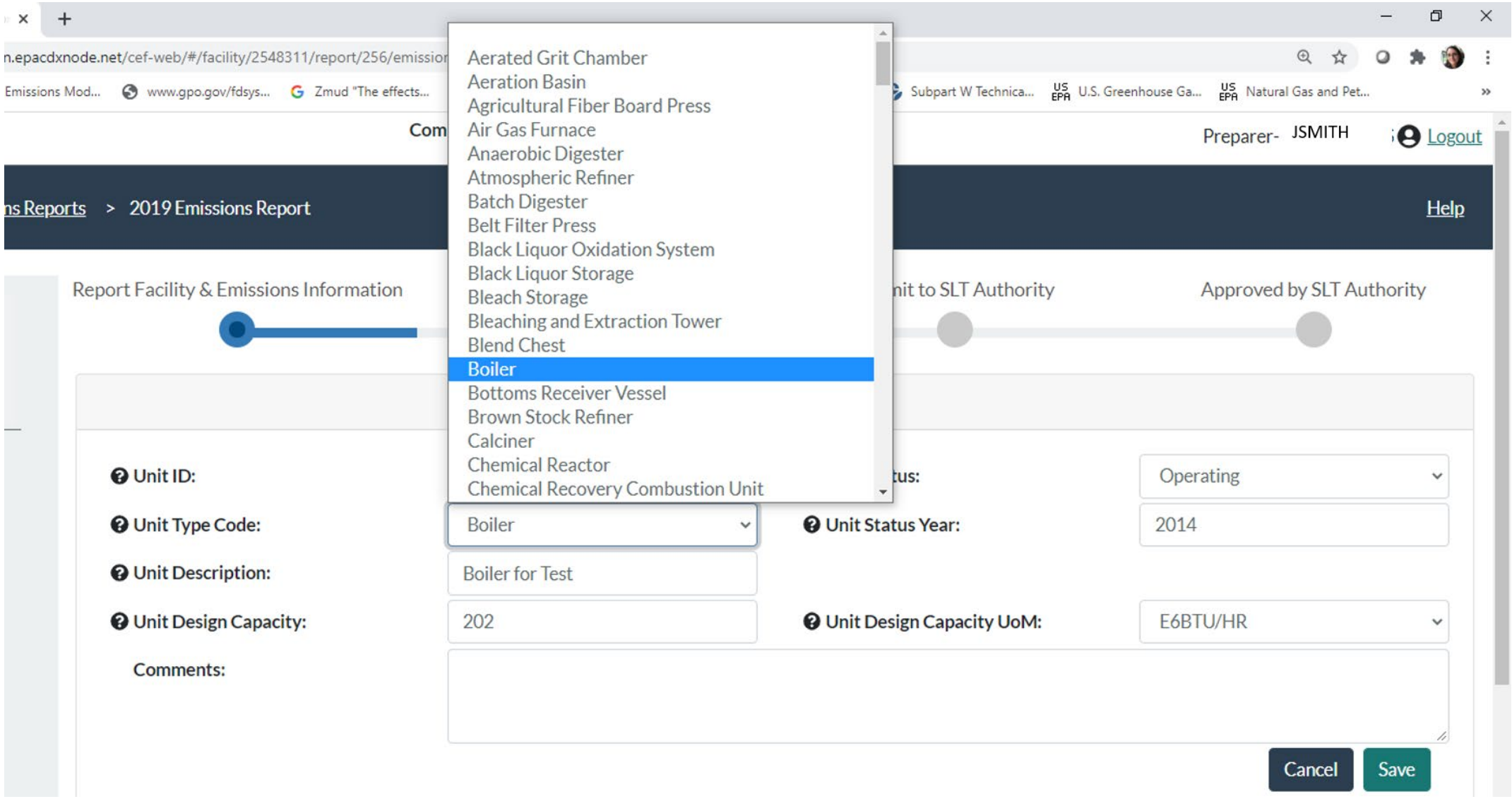
CAERS Emissions Unit Information Page



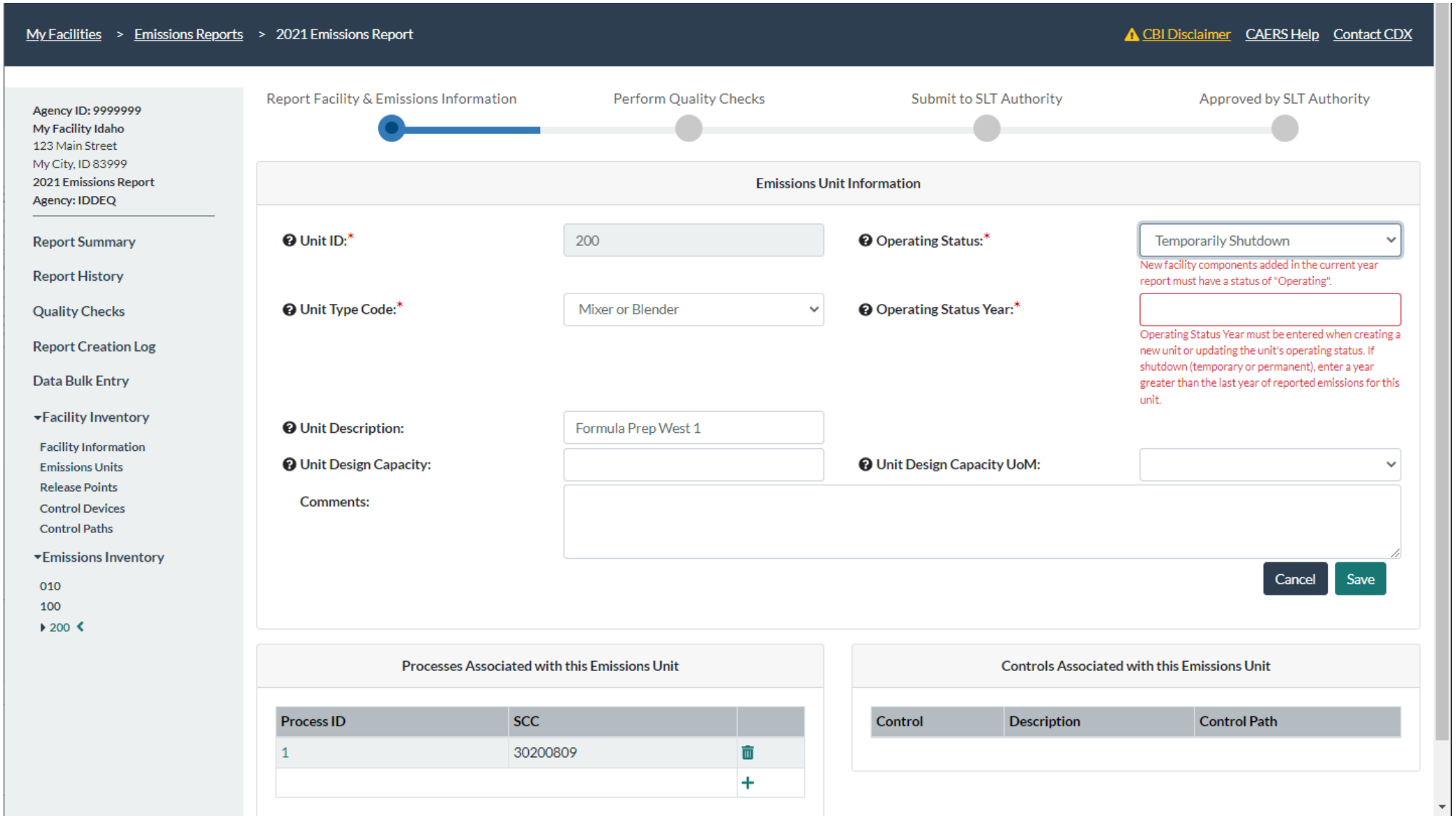
CAERS Emissions Unit Information Edit Page



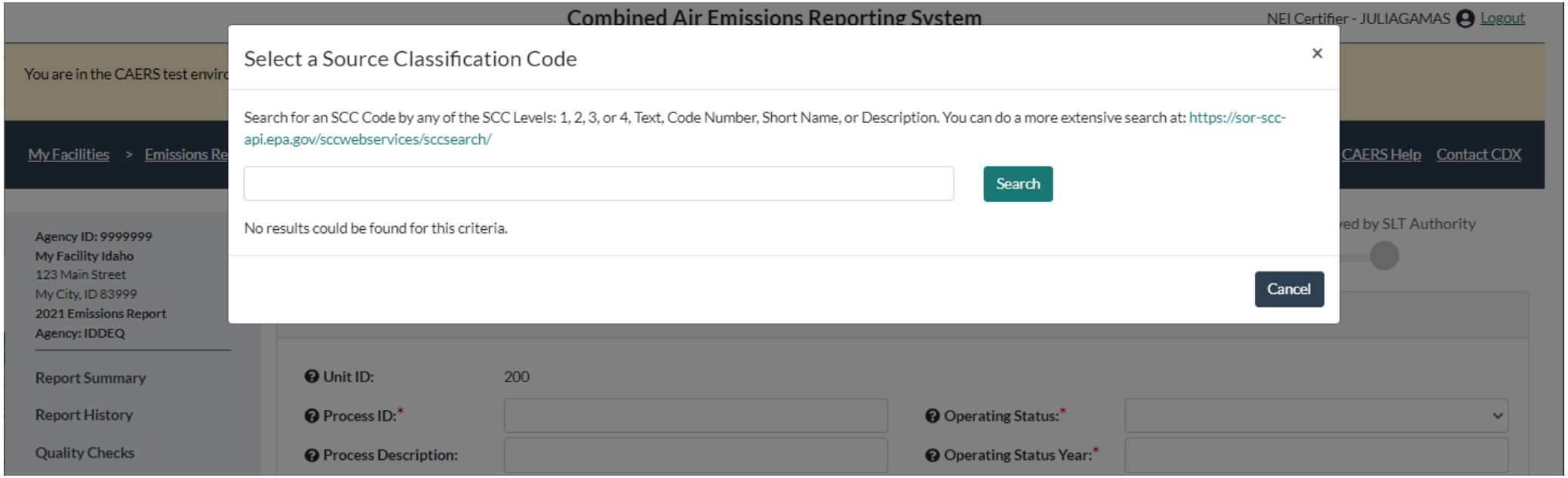
CAERS Drop Down Menu Example



CAERS On-screen Quality Assurance Checks



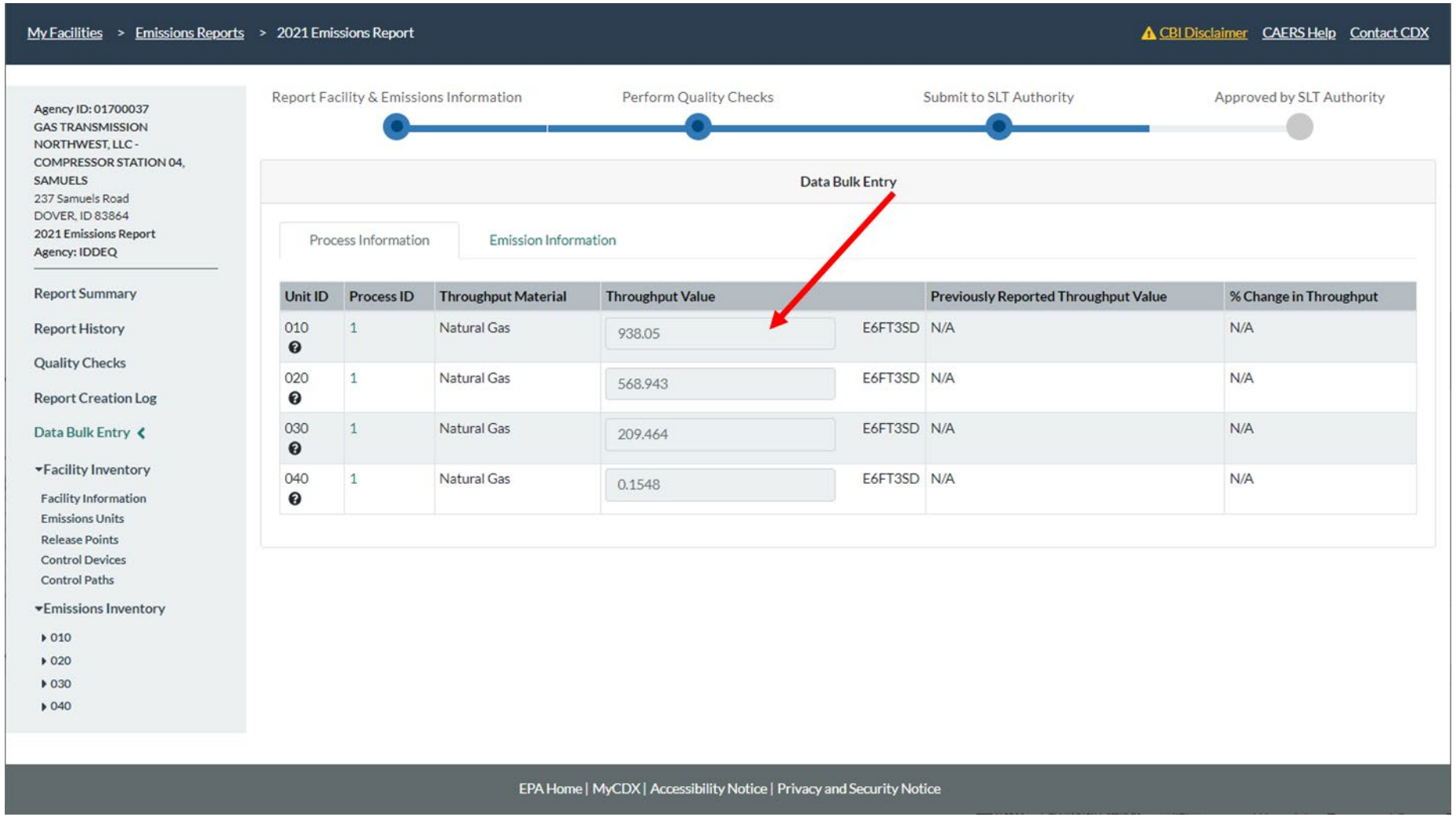
CAERS Search Pop-Up Window



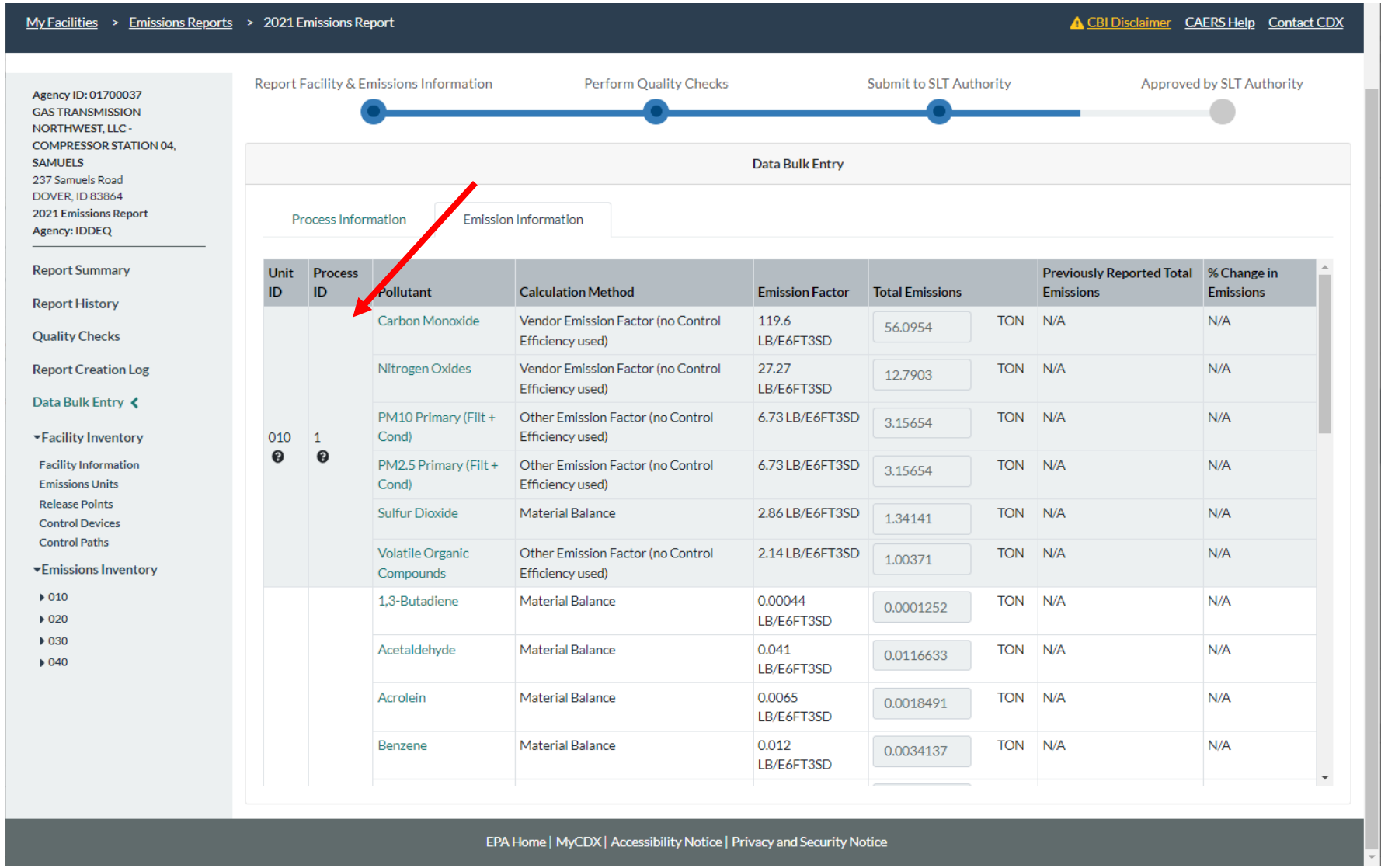
Highlights of CAERS Features

- **Three options for data entry:**
  - User interface
  - **Bulk entry**

CAERS Throughput Bulk Entry



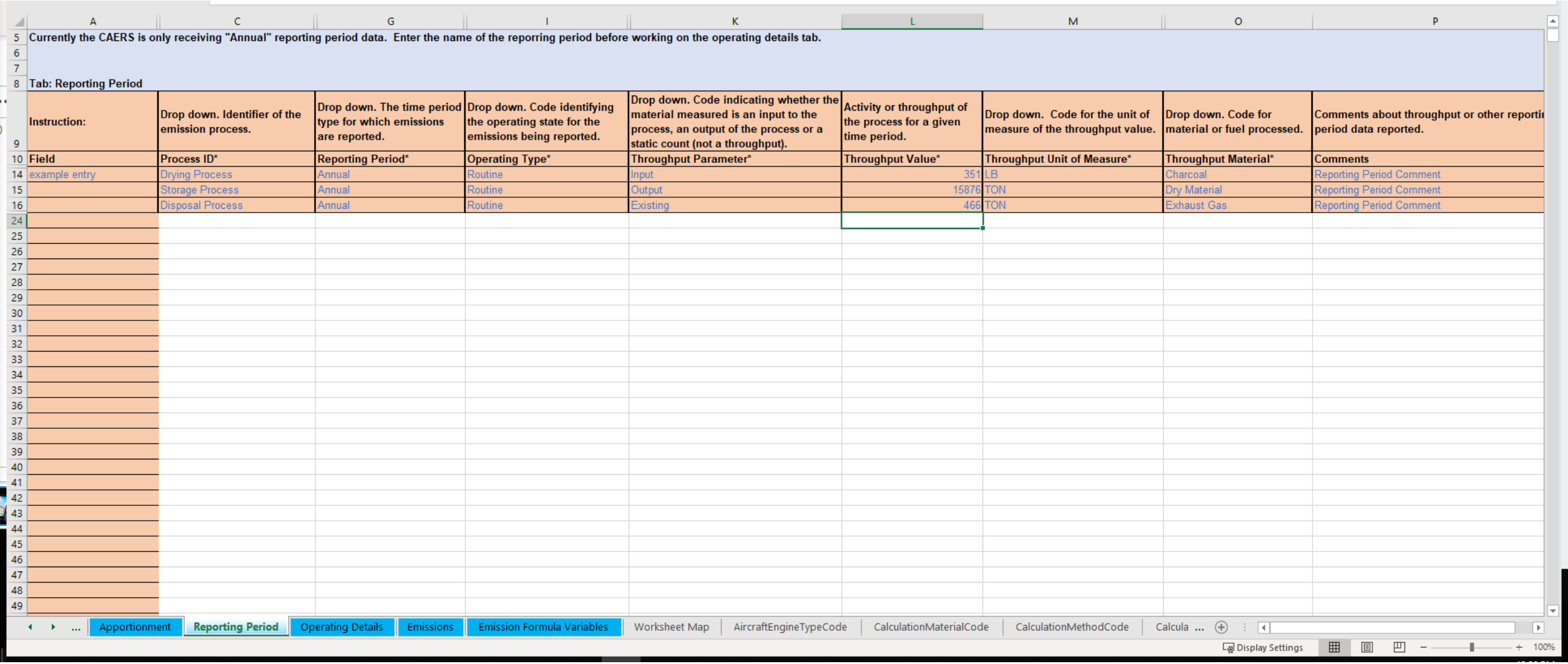
CAERS Total Emissions Bulk Entry



Highlights of CAERS Features

- **Three options for data entry:**
  - User interface
  - Bulk entry
  - **Bulk upload**
    - **Via preformatted**
    - **Via JSON upload (email caer@epa.gov with questions)**

Example of Bulk Upload Excel Template



	A	C	G	I	K	L	M	O	P
5	Currently the CAERS is only receiving "Annual" reporting period data. Enter the name of the reporring period before working on the operating details tab.								
6									
7									
8	Tab: Reporting Period								
9	Instruction:	Drop down. Identifier of the emission process.	Drop down. The time period type for which emissions are reported.	Drop down. Code identifying the operating state for the emissions being reported.	Drop down. Code indicating whether the material measured is an input to the process, an output of the process or a static count (not a throughput).	Activity or throughput of the process for a given time period.	Drop down. Code for the unit of measure of the throughput value.	Drop down. Code for material or fuel processed.	Comments about throughput or other reporti period data reported.
10	Field	Process ID*	Reporting Period*	Operating Type*	Throughput Parameter*	Throughput Value*	Throughput Unit of Measure*	Throughput Material*	Comments
14	example entry	Drying Process	Annual	Routine	Input	351	LB	Charcoal	Reporting Period Comment
15		Storage Process	Annual	Routine	Output	15876	TON	Dry Material	Reporting Period Comment
16		Disposal Process	Annual	Routine	Existing	466	TON	Exhaust Gas	Reporting Period Comment
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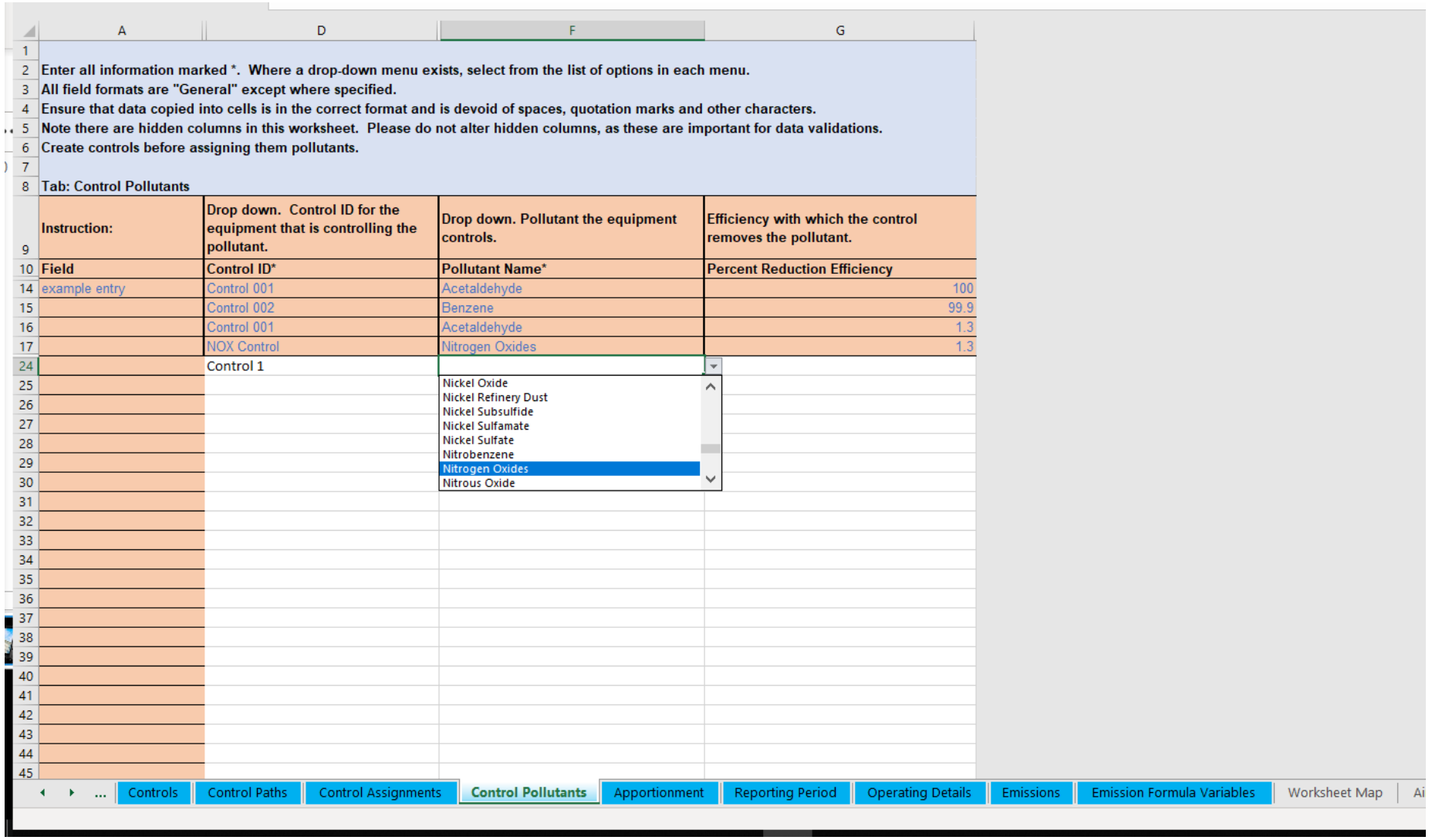
Apportionment | Reporting Period | Operating Details | Emissions | Emission Formula Variables | Worksheet Map | AircraftEngineTypeCode | CalculationMaterialCode | CalculationMethodCode | Calcula ...

Display Settings 100%

Bulk Upload Excel Template Example Continued



	A	D	F	G
1				
2	Enter all information marked *. Where a drop-down menu exists, select from the list of options in each menu.			
3	All field formats are "General" except where specified.			
4	Ensure that data copied into cells is in the correct format and is devoid of spaces, quotation marks and other characters.			
5	Note there are hidden columns in this worksheet. Please do not alter hidden columns, as these are important for data validations.			
6	Create controls before assigning them pollutants.			
7				
8	Tab: Control Pollutants			
9	Instruction:	Drop down. Control ID for the equipment that is controlling the pollutant.	Drop down. Pollutant the equipment controls.	Efficiency with which the control removes the pollutant.
10	Field	Control ID*	Pollutant Name*	Percent Reduction Efficiency
14	example entry	Control 001	Acetaldehyde	100
15		Control 002	Benzene	99.9
16		Control 001	Acetaldehyde	1.3
17		NOX Control	Nitrogen Oxides	1.3
24		Control 1		

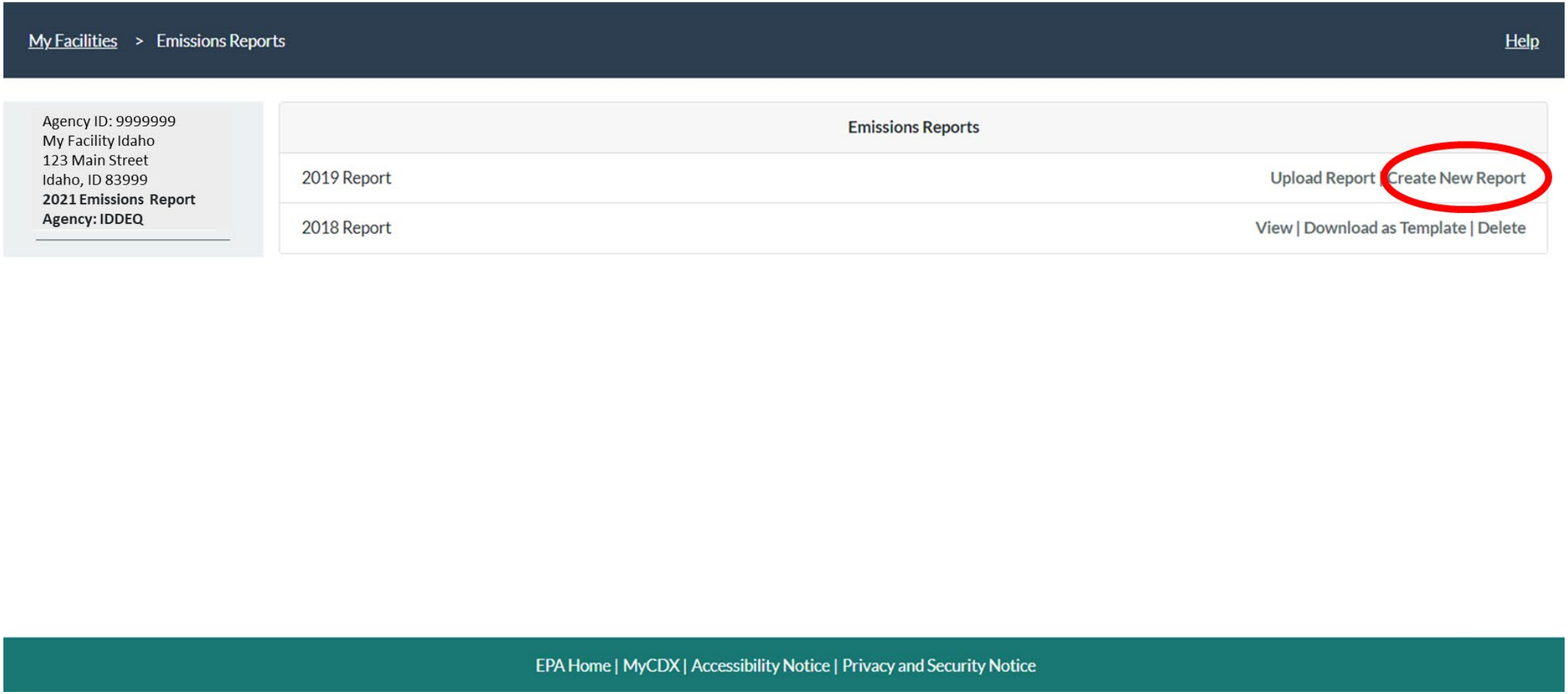
Nickel Oxide
Nickel Refinery Dust
Nickel Subsulfide
Nickel Sulfamate
Nickel Sulfate
Nitrobenzene
Nitrogen Oxides
Nitrous Oxide

Controls | Control Paths | Control Assignments | Control Pollutants | Apportionment | Reporting Period | Operating Details | Emissions | Emission Formula Variables | Worksheet Map

Highlights of CAERS Features

- Three Options for Data Entry
- **Previous Year Data**

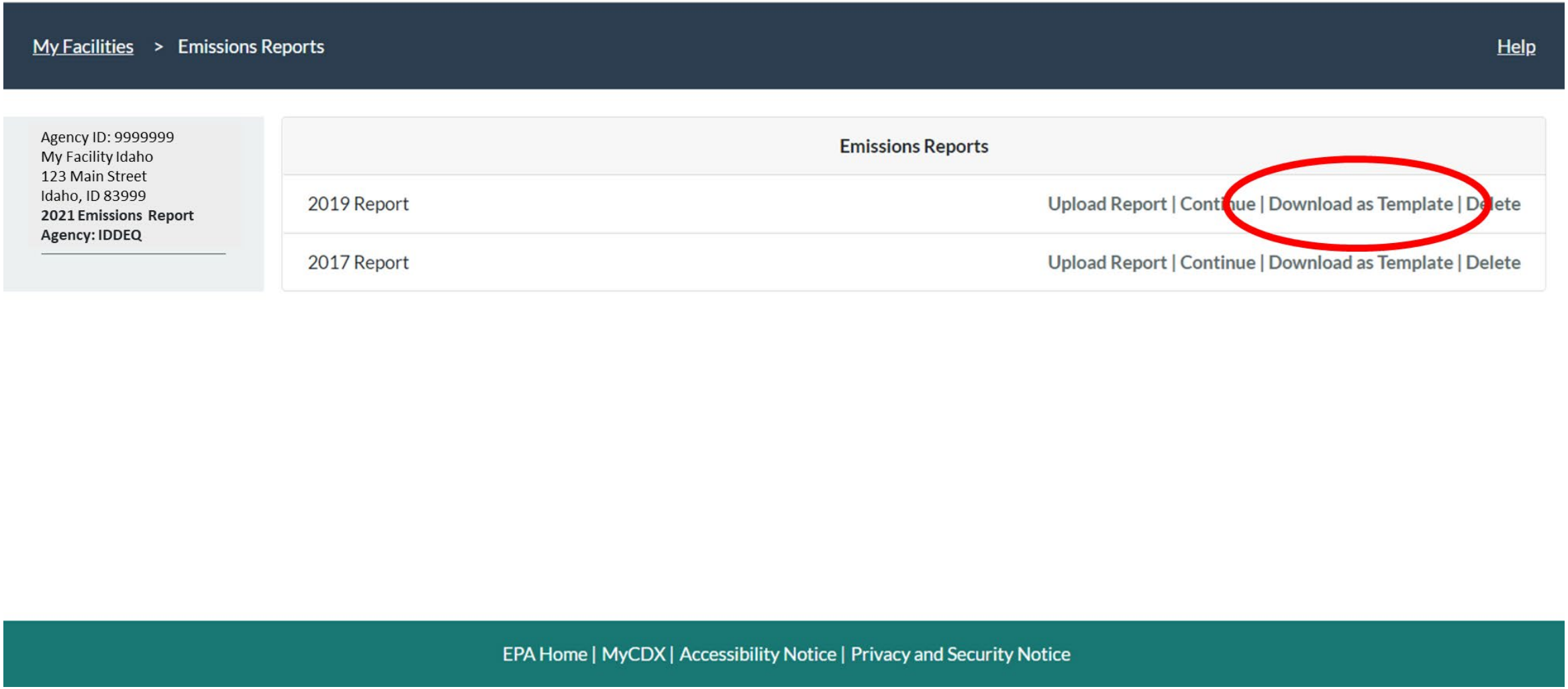
CAERS Emissions Reports Page



Highlights of CAERS Features

- Three Options for Data Entry
- Previous Year Data
- **Bulk Download into Pre-formatted Excel Template**

CAERS Emissions Reports Prepopulated Template Download



Highlights of CAERS Features

- Three Options for Data Entry
- Previous Year Data
- Bulk Download into Pre-formatted Excel Template
- **File Attachments**

CAERS Document Attachment Page

Report Summary
Report History
Quality Checks
Data Bulk Entry
Facility Inventory
Facility Information
Emissions Units
Release Points
Control Devices
Control Paths
Emissions Inventory
F1A
F1B
PI01
VP01
VP02
VP02A
VP02B
VP02C
VP02D
VP02E
VP02F
VP04

Pollutant	Type	Fugitive Amount	Stack Amount	Units of Measure	2019 Reported Emissions	Previous Year Reported Emissions	Previous Submittal Year
Carbon Monoxide	CAP	0	5.673	Tons	5.673	5.673	2017
Nitrogen Oxides	CAP	0	95.853	Tons	95.853	95.853	2017
Sulfur Dioxide	CAP	0	12.922	Tons	12.922	12.922	2017
Volatile Organic Compounds	CAP	41.16	100.3866	Tons	141.5466	47.0617	2017
Total Emissions (Tons)	--	--	--	--	**255.9946**	**161.5097**	--

Download Report

Preparer/NEI Certifier Attachments

Date	User ID	User Name	Comments	Attachments

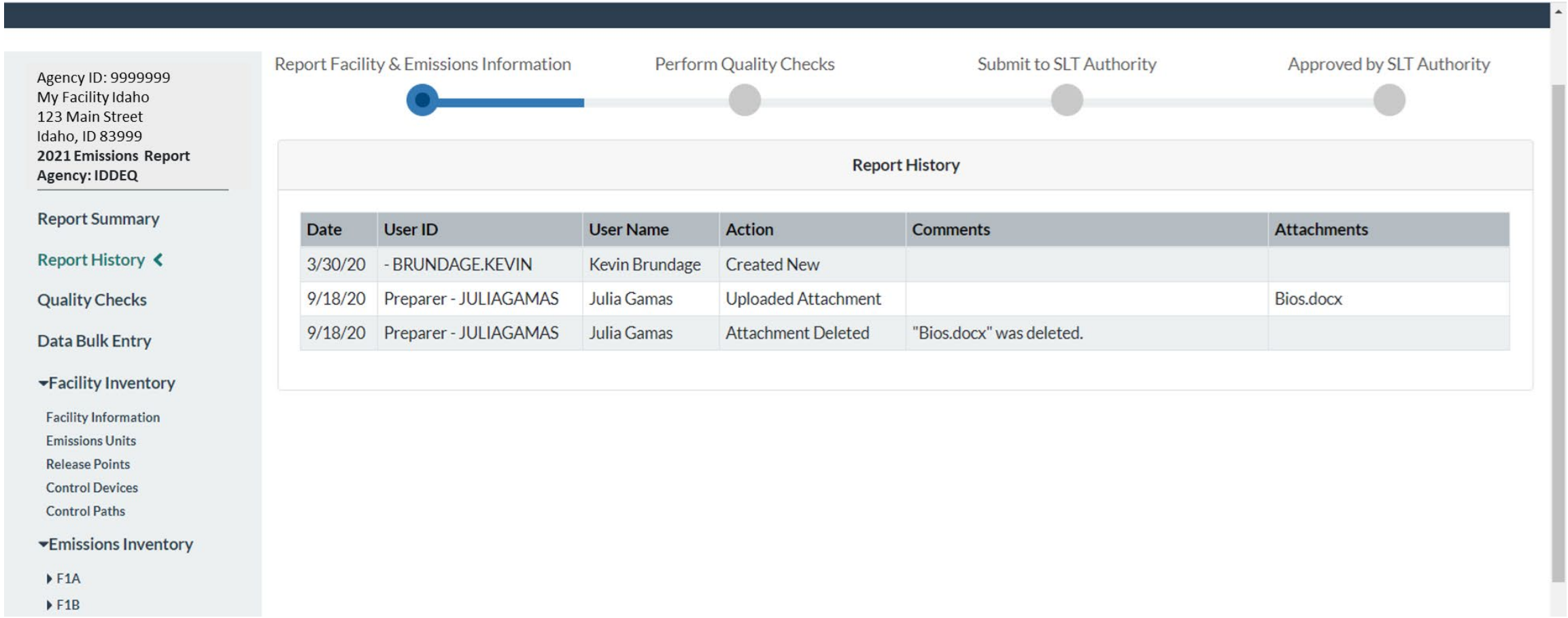
Attach Report Document

Run Quality Checks

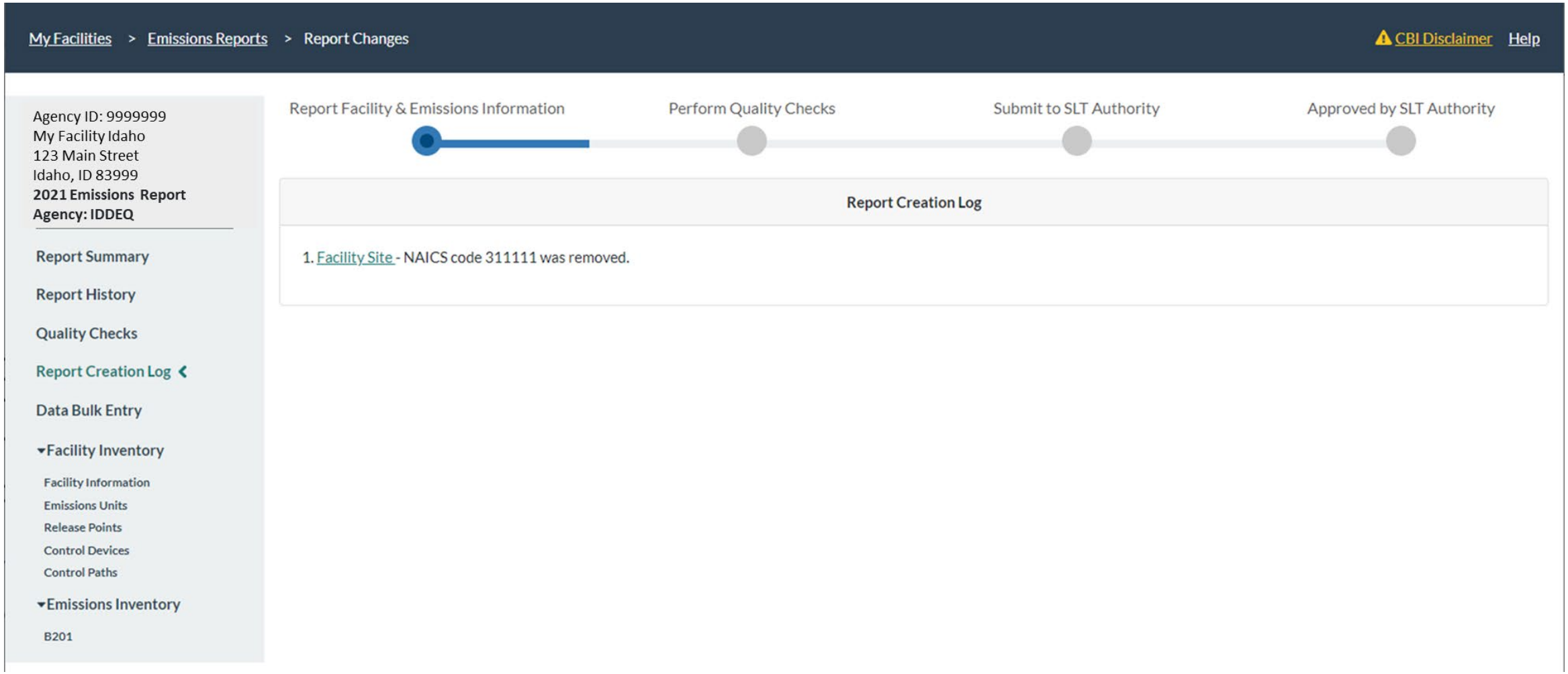
Highlights of CAERS Features

- Three Options for Data Entry
- Previous Year Data
- Bulk Download into Pre-formatted Excel Template
- File Attachments
- **Report History & Log**

CAERS Report History Page



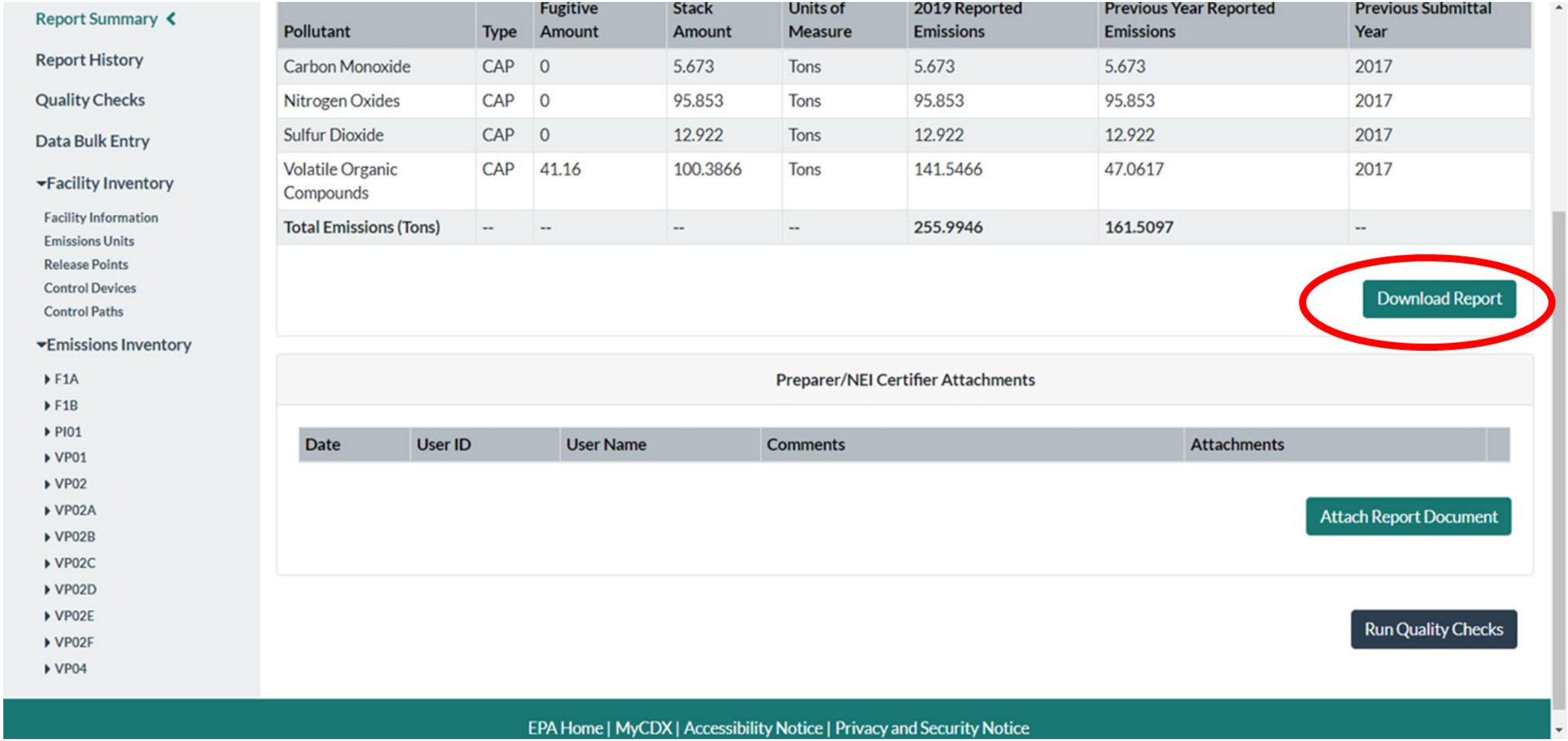
CAERS Report Log Page



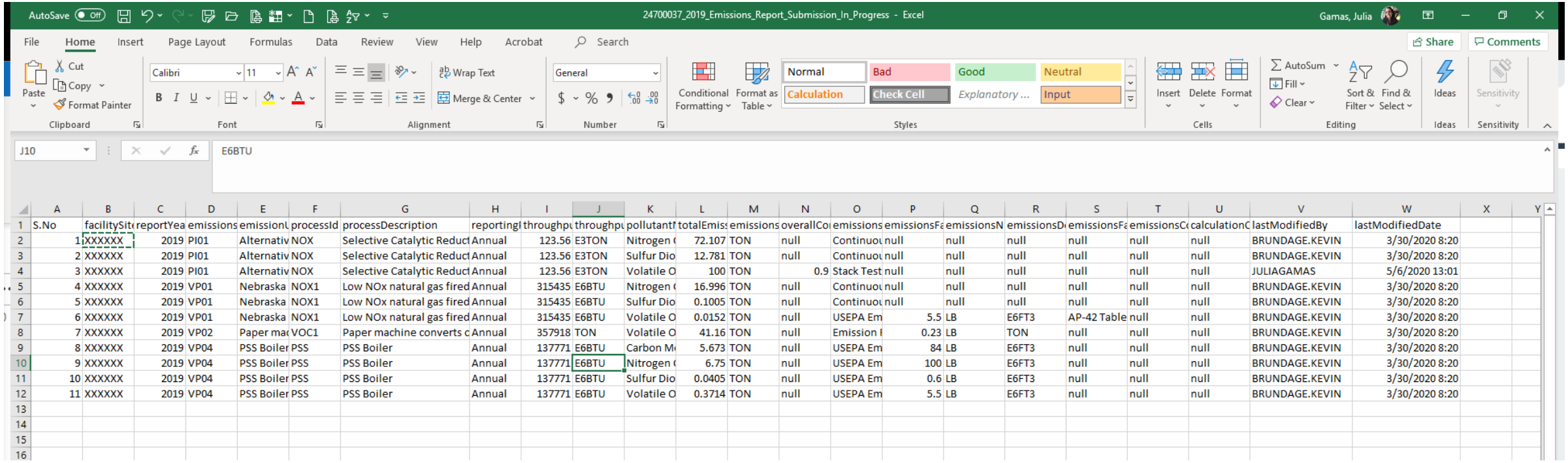
Highlights of CAERS Features

- Three Options for Data Entry
- Previous Year Data
- Bulk Download into Pre-formatted Excel Template
- File Attachments
- Report History & Log
- **Report Summary Download**

CAERS Summary Report Download



CAERS Example Summary Report



AutoSave Off | 24700037_2019_Emissions_Report_Submission_In_Progress - Excel | Gamas, Julia

File Home Insert Page Layout Formulas Data Review View Help Acrobat Search | Share | Comments

Paste | Cut | Copy | Format Painter | Clipboard | Calibri 11 | Font | Wrap Text | Merge & Center | Alignment | General | Number | Conditional Formatting | Format as Table | Normal | Bad | Good | Neutral | Calculation | Check Cell | Explanatory ... | Input | Styles | Insert | Delete | Format | Cells | AutoSum | Fill | Clear | Sort & Filter | Find & Select | Editing | Ideas | Sensitivity

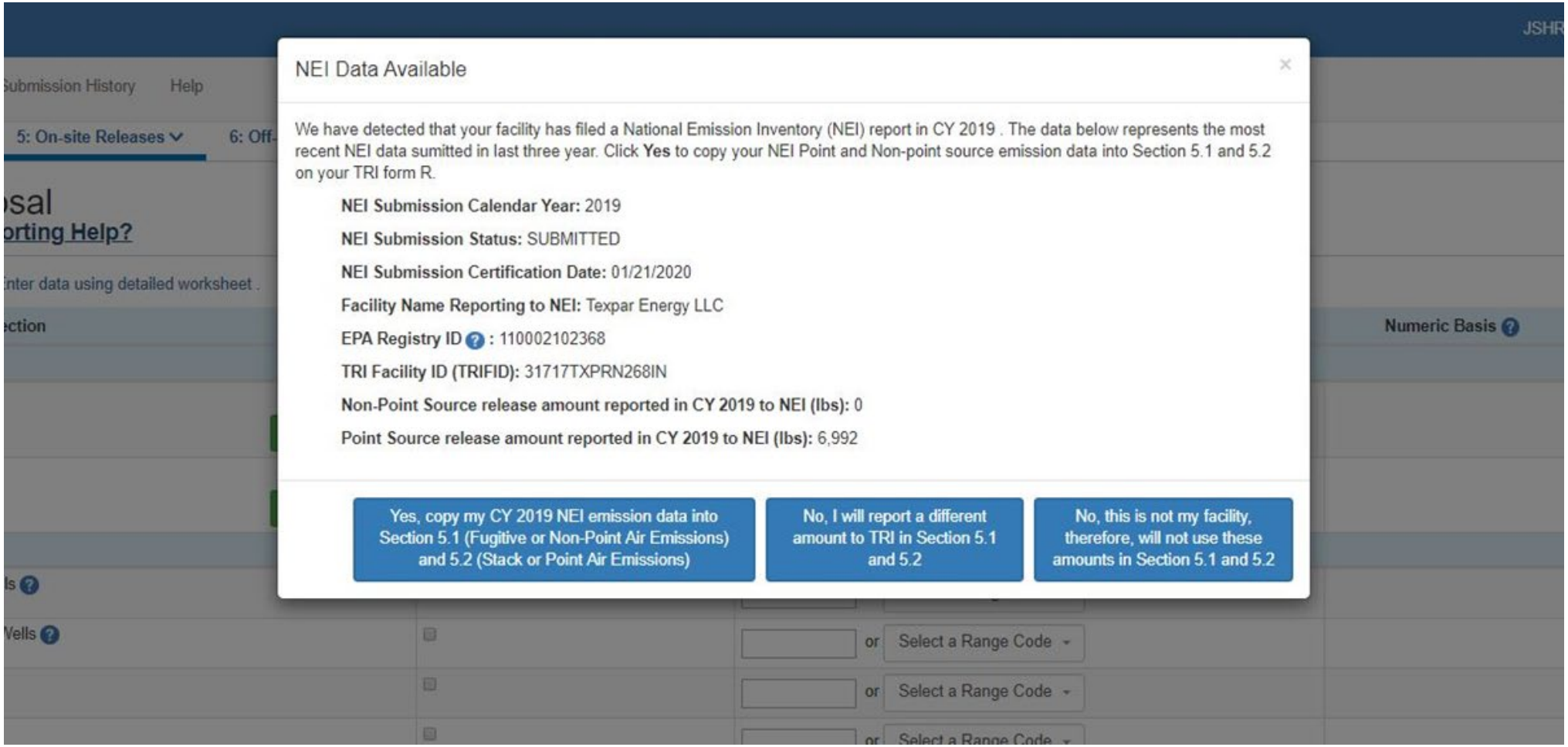
J10 | E6BTU

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	S.No	facilitySit	reportYea	emissions	emissionL	processId	processDescription	reportingI	throughpu	throughpu	pollutant	totalEmiss	emissions	overallCo	emissions	emissionsFa	emissionsN	emissionsDe	emissionsFa	emissionsCo	calculationC	lastModifiedBy	lastModifiedDate	
2	1	XXXXXX	2019	PI01	Alternativ	NOX	Selective Catalytic Reduct	Annual	123.56	E3TON	Nitrogen (	72.107	TON	null	Continuou	null	null	null	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
3	2	XXXXXX	2019	PI01	Alternativ	NOX	Selective Catalytic Reduct	Annual	123.56	E3TON	Sulfur Dio	12.781	TON	null	Continuou	null	null	null	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
4	3	XXXXXX	2019	PI01	Alternativ	NOX	Selective Catalytic Reduct	Annual	123.56	E3TON	Volatile O	100	TON	0.9	Stack Test	null	null	null	null	null	null	JULIAGAMAS	5/6/2020 13:01	
5	4	XXXXXX	2019	VP01	Nebraska	NOX1	Low NOx natural gas fired	Annual	315435	E6BTU	Nitrogen (	16.996	TON	null	Continuou	null	null	null	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
6	5	XXXXXX	2019	VP01	Nebraska	NOX1	Low NOx natural gas fired	Annual	315435	E6BTU	Sulfur Dio	0.1005	TON	null	Continuou	null	null	null	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
7	6	XXXXXX	2019	VP01	Nebraska	NOX1	Low NOx natural gas fired	Annual	315435	E6BTU	Volatile O	0.0152	TON	null	USEPA Em	5.5	LB	E6FT3	AP-42 Table	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
8	7	XXXXXX	2019	VP02	Paper mac	VOC1	Paper machine converts c	Annual	357918	TON	Volatile O	41.16	TON	null	Emission I	0.23	LB	TON	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
9	8	XXXXXX	2019	VP04	PSS Boiler	PSS	PSS Boiler	Annual	137771	E6BTU	Carbon M	5.673	TON	null	USEPA Em	84	LB	E6FT3	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
10	9	XXXXXX	2019	VP04	PSS Boiler	PSS	PSS Boiler	Annual	137771	E6BTU	Nitrogen (	6.75	TON	null	USEPA Em	100	LB	E6FT3	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
11	10	XXXXXX	2019	VP04	PSS Boiler	PSS	PSS Boiler	Annual	137771	E6BTU	Sulfur Dio	0.0405	TON	null	USEPA Em	0.6	LB	E6FT3	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
12	11	XXXXXX	2019	VP04	PSS Boiler	PSS	PSS Boiler	Annual	137771	E6BTU	Volatile O	0.3714	TON	null	USEPA Em	5.5	LB	E6FT3	null	null	null	BRUNDAGE.KEVIN	3/30/2020 8:20	
13																								
14																								
15																								
16																								

Highlights of CAERS Features

- Three Options for Data Entry
- Previous Year Data
- Bulk Download into Pre-formatted Excel Template
- File Attachments
- Report History & Log
- Report Summary Download
- **Toxics Air Emissions Calculated and Added for TRI-MEweb**

TRI-MEweb Page for Use of CAERS Data



Help and Resources

- User Guide and Training Videos (Forthcoming): https://www.epa.gov/e-enterprise/e-enterprise-combined-air-emissions-reporting-caer

- Help from within CAERS

CAERS Help Resources Page

My Facilities Help

Help Resources

Application Support

The Combined Air Emissions Reporting Form User Guide and Glossary will provide instructions and terminology necessary to navigate through the application from registration to report submission.

- Combined Air Emissions Reporting Form User Guide
- Combined Air Emissions Reporting Form Glossary

CDX Helpdesk Support

By Telephone: Person-to-person telephone support is available from **8:00 am to 6:00 pm (EST/EDT)** . Call our toll-free line at **888-890-1995** or our direct line at **970-494-5500** for International callers.
By E-mail: Send e-mail to Technical Support at helpdesk@epacdx.net.
By Live Chat: Chat with the CDX Help Desk to answer your questions.

Program Support

Note: Questions related specifically to emissions reporting and facility data should be referred to your SLT Authority.

- MEDEP: DEP-Emissionsinventory@maine.gov.

Additional Resources

- State Emission Factor Compendium
- General Energy Conversions

This help page will be updated soon, as the SLT compendium and emission factor updates are now provided to the user in CAERS.

Help from CDX Help Desk

For CDX questions such as:

- Can’t login/Password resets
- Repudiation

For CAERS application questions such as:

- Unexplained errors while using the CAERS application
- How to enter a specific piece of data
- How to navigate from one screen to another

CDX Help Desk:

- **Phone:** Person-to-person telephone support from 8:00 am to 6:00 pm (EST/EDT). Call our toll-free line at 888-890-1995 or our direct line at (970) 494-5500 for International callers.
- **E-mail:** Technical Support at helpdesk@epacdx.net

Program Questions

For program questions such as:

- What data to use to fix critical errors that appear in red.
- Selecting an appropriate SCC and/or emission factor.
- Finding out the unit capacity measure of a unit.
- The appropriateness of a calculation method for the emission being estimated.

Idaho Contact:

- Gary Reinbold

Want to make CAERS better?

Please help us make CAERS better by sending us feedback to caers@epa.gov. Help us prioritize upcoming features and functionality.

To make your reporting easier:

- What else should CAERS be able to do?
- What data elements should CAERS collect to send to other SLT and EPA air programs?
- How should CAERS do this?
- How should CAERS *not* do this?

Questions