Managing Sub-facility Data

This Job Aide explains how to add and edit sub-facility data to an existing facility. While it is possible for you to add this data to a facility during the registration process, this documentation recommends that you complete the registration process and/or associate a facility to your CDX CEDRI account/role prior to adding this data. Adding sub-facility data is not imperative to associating a facility with your CDX profile, and can be put off until registration is completed and you have signed in to your CEDRI CDX role.

Sub-facility Data

Sub-facility data includes units, release points, processes, and emission control measures (see Exhibit 1). Sub-facility data is collected that describes or characterizes each facility component. Start with adding the unit, then the release point, followed by the process and then finally add the emissions Controls. Separate sub-sections below are used for each of these different facility component types. They are added after a facility is added. For information on how to add a facility refer to Manage Facilities Job Aide.

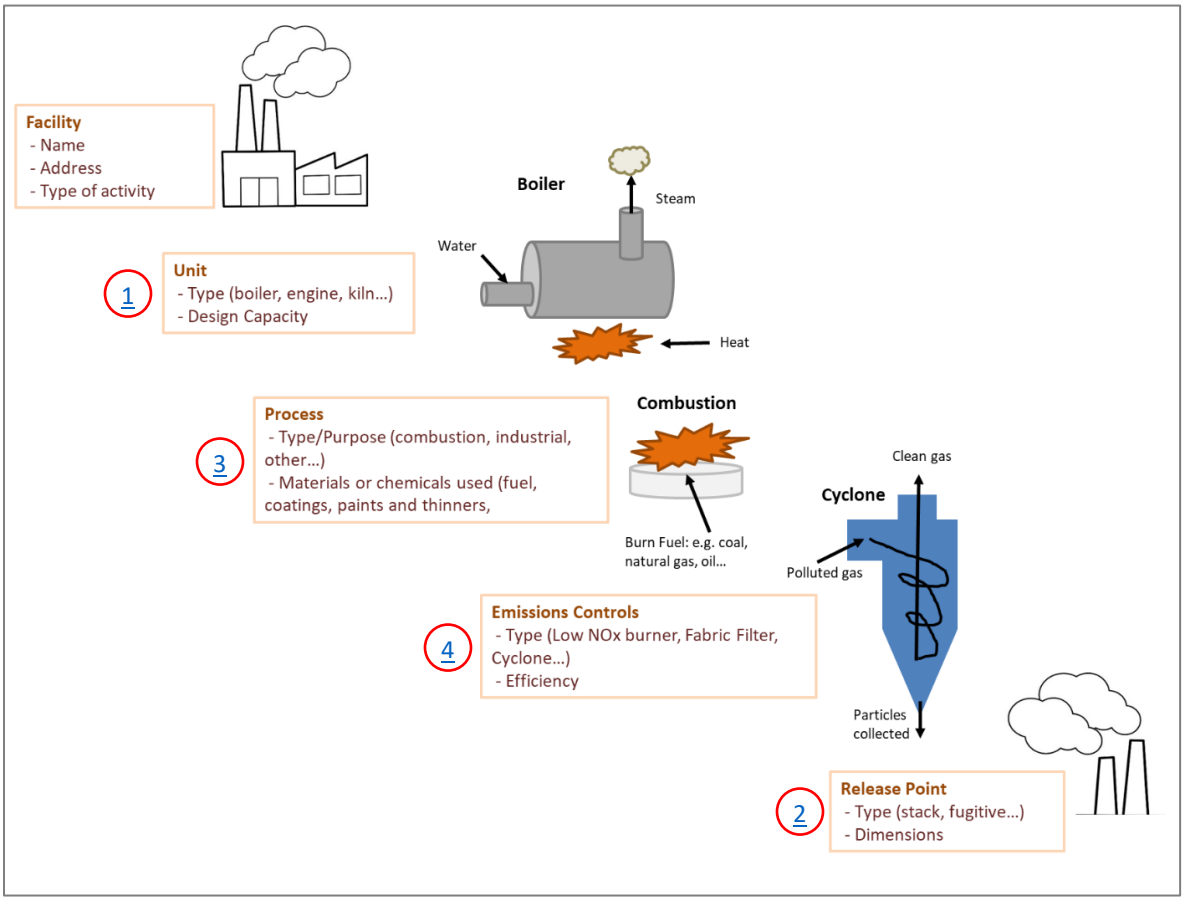

Exhibit 1

1. Add Units to a Facility
2. Add Release Points to a Unit
3. Add Processes to a Unit
4. Add Emission Controls to a Unit

Using the Facility Widget to Add Sub-facility Data

The Facility Widget allows saving your sub-facility data in two ways:

1) Temporarily on your computer
2) Sending it to FRS with the option to edit it later. **It is extremely important to use method 2 in the current session, before leaving your computer if you have started entering sub-facility data.** Otherwise, your additions are likely to be lost because CDX times out after twenty minutes (a warning will be displayed to you after fifteen minutes and will give you the option to extend your session).

The temporary save occurs when you click the 'OK' button at the bottom of any of the edit component dialog windows (for unit, release point, process, or control measure). An example of this button is shown in (Exhibit 2) for units. **Clicking the "OK" button does not store your sub-facility data except on your local computer, where it will be lost if your CDX connection times out.** So, use the approach below periodically to ensure your work is not lost.

Once you click the 'Save Sub-facility Information' button at the bottom of the 'Create Sub- facility Component' page, you are returned to the 'Edit Facility' screen. The more robust save occurs when you click the "Submit' button at the bottom of the 'Edit Facility' screen. When you do this, your facility and sub-facility edits are submitted to FRS and you are returned to the 'My Facilities' list. You will have to select the facility again to continue adding sub-facility data. The only way to not lose your sub-facility data is to click the 'Save Sub-Facility Information' button and then click the 'Submit' button on the 'Edit Facility' screen. For additional details on how to save and submit your sub-facility information, please see Section Save and Submit Sub-facility Information

For information about how to add a facility to your CEDRI profile, please consult the Manage Facilities Job Aide.

Add Units to a Facility

First, to navigate to the 'Create Sub-facility Component' page to add sub-facility component(s) data, click the 'Add Sub-facility' Component(s)' link on the 'Create Facility' (or 'Edit Facility') screen. From the 'Create Sub-facility Component' page, you can navigate back to the 'Create Facility' (or 'Edit Facility') screen, without adding sub-facility components, by clicking the '< Back to Create Facility' (or '<Back to Edit Facility') link (Exhibit 2).

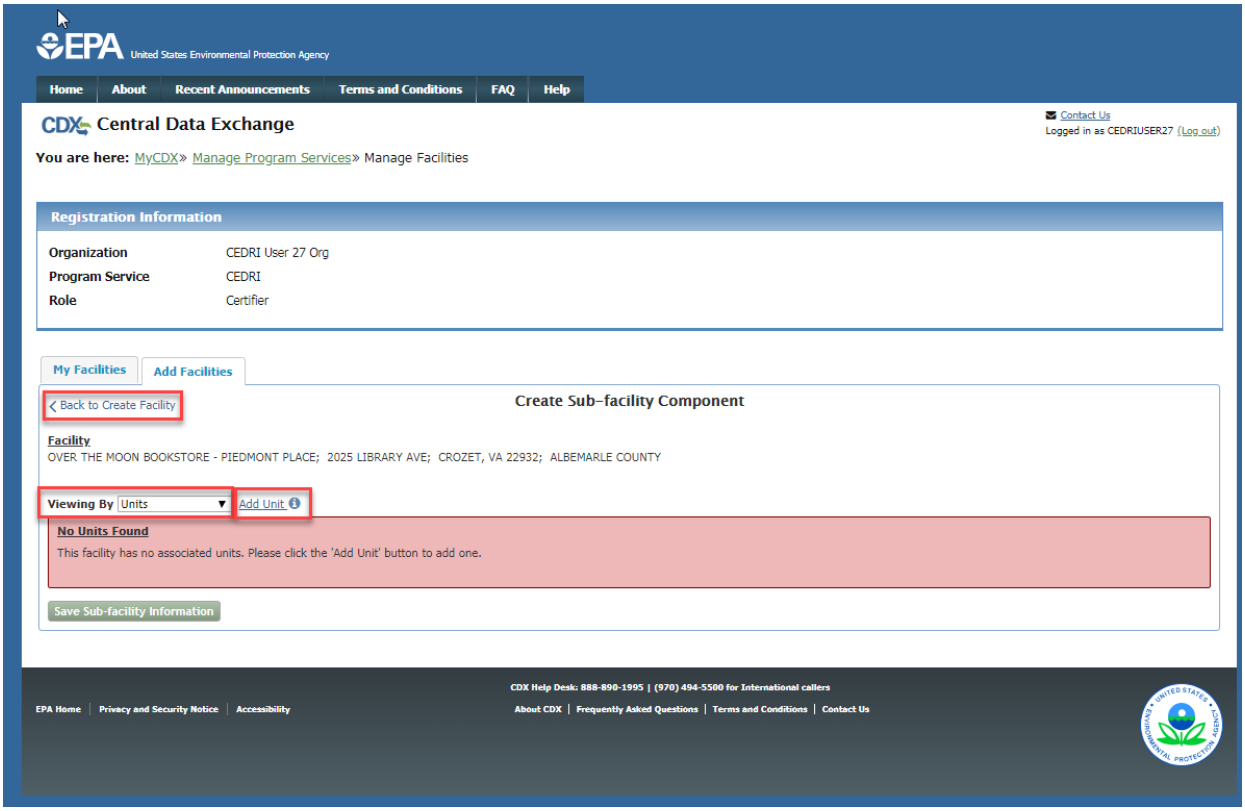

Exhibit 2

1. The 'Create Sub-facility Component' page displays the facility name and address information as read-only at the top of the screen. You are provided with the option to view sub-facility components in the context of units, release points, processes, or control measures by selecting an option from the 'Viewing By' drop-down menu. The 'Viewing By' drop-down defaults to viewing in the context of 'Units.'

When no units have yet been added, a message is displayed that indicates that the facility has no associated units. The message dynamically changes based on the component type chosen in the 'Viewing By' drop-down menu.

For the purposes of this document, a unit will be added first and then associated with other components (i.e., release point, process, control measure) to demonstrate the functionality available. However, you may add one of the other component types first, if desired.

- The 'Add Unit' link label, to the right of the 'Viewing By' drop-down menu, dynamically changes based on the component type chosen in the 'Viewing By' drop-down menu.
- A help icon is included next to the 'Add Unit' link that provides guidance on creating a new sub-facility component or adding related components to the top- level component.

2. To add a unit to the facility, click the 'Add Unit' link. The system will generate the 'Create Unit' modal (see Exhibit 3).
   - The 'Create Unit' modal captures the following information about a unit:
     - Unit ID

- Alternate Unit ID
- Unit Type
- Alternate Unit Name
- Unit Description
- Unit Design Capacity
- Capacity Unit of Measure
- Status of Operating Permit
- Permit Start Year
- Permit End Year
- Unit Installation Date
- Unit Operating Status

Note: Newly created units are assigned a Unit ID of 'Pending' until registration is completed and the facility is submitted to FRS. Upon submission FRS will assign a Unit ID. Unit ID is an internal FRS ID. Alternative Unit ID is the ID that a user from a state, or from the facility, would use to label the unit with an identifier the user can recognize. If a user wishes for their sub-facility data entered for CEDRI to be able to match other data submitted to EPA (such as the National Emissions Inventory), then users should use the sub-facility component IDs assigned by their state regulatory agency.

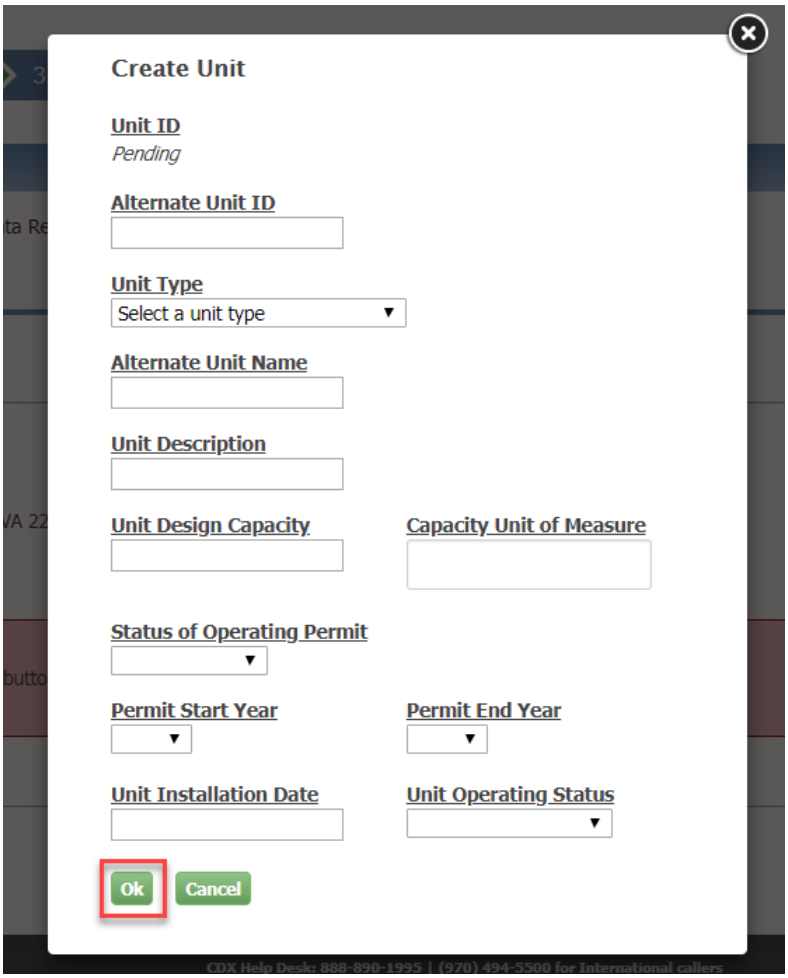

Exhibit 3

4. Enter unit information into the editable fields.

   - The following fields on the 'Create Unit' modal are required:
     - Alternate Unit ID
     - Unit Type
     - Unit Description
     - Unit Design Capacity
       - Required only when 'Capacity Unit of Measure' is provided.
     - Capacity Unit of Measure
       - Required only when 'Unit Design Capacity' is provided.
   - The 'Unit Design Capacity' field accepts numeric values only.
   - The 'Permit End Year' value cannot be a year prior to the entered 'Permit Start Year.'

5. Click the 'Ok' button to temporarily save your unit information, during the session, until you can submit the facility and sub-facility data by clicking the 'Submit' button on the 'Edit Facility' screen. The system will take you back to the 'Create Sub-facility Component' page where the new unit is displayed in a table format (if you instead choose to click the 'Cancel' button on the

'Create Unit' screen, all entered unit data will be lost and the system will take you back to the 'Create Sub-facility Component' page). An expandable row is added to the unit table for the newly added unit (Exhibit 4). The table contains the following read-only data columns:

- Unit ID
- Alternate Unit ID
- Alternate Unit Name
- Unit Type
- # of Release Points
- # of Processes
- # of Control Measures

In the table, the columns for the number of release points, number of processes, and number of control measures count only those components that are associated with the unit.

Below the table, read-only information is presented for 'Unit Description,' 'Permitting Status,' 'Permit Start Year,' and 'Permit End Year' (Exhibit 4).

You can continue to add units to the 'Units' table, remove units from the table, edit existing units, and/or add associated components to a unit:

- Click the 'Add Another Unit' link to navigate to the 'Create Unit' modal to create another unit.
- Click 'Remove' in a unit row to remove a unit from the list. Clicking the 'Remove' link will generate a pop-up message that will prompt you to confirm that you want to remove the component from the facility.
- Click 'View/Edit Details' to view the 'Unit Details' modal, where you will be presented with an 'Edit Unit' option to edit the unit further, if necessary.
- Click the 'Update' link under '# of Release Points,' '# of Processes,' or '# of Control Measures' to navigate to the appropriate component tab in the 'Related Components' section. Clicking the tabs in the 'Related Components' section also provides this same navigation.
- Click the 'v' icon on the left side of the unit table rows (see Exhibit 4) to collapse a unit row. Click the '>' icon on the left side of the table row to expand the row.

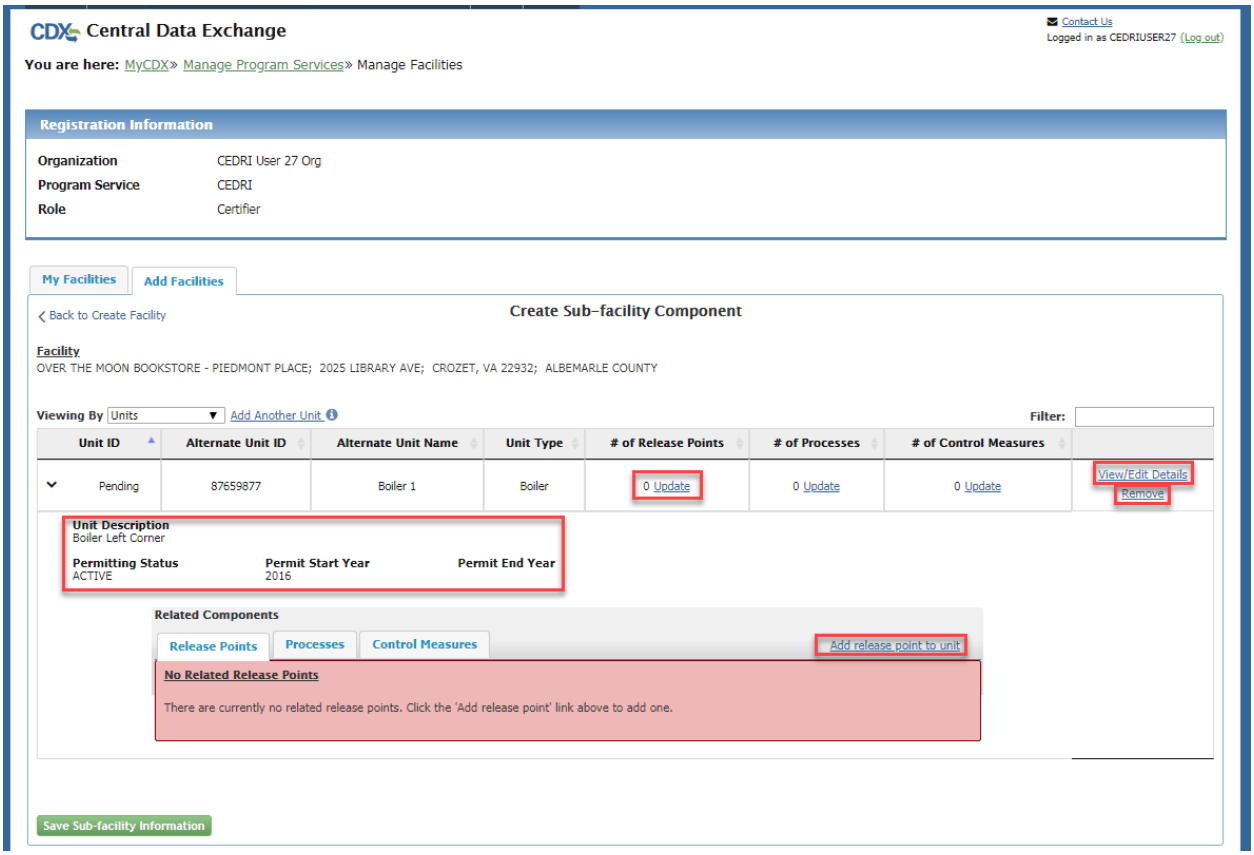

Exhibit 4

Add Release Points to a Unit

To add and associate a release point to the unit (in other words, tell the software that the unit sends emissions to the release point), click the 'Add release point to unit' link from the 'Release Points' tab of the 'Related Components' section. Make sure that the unit row is expanded so you will see the 'Related Components' section by clicking the '>' icon on the left side of the table row to expand the row. The system will generate the 'Please select the related release point(s)' modal (see Exhibit 5).

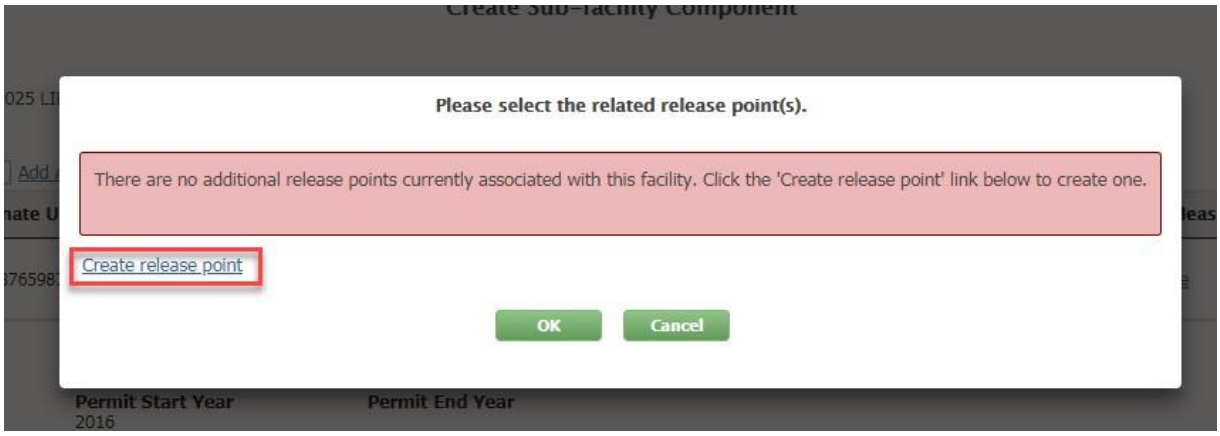

Exhibit 5

- If the facility contains existing release points, they will be listed on this modal and you may choose one or more from the list and click 'Ok.'
- You may cancel the process of adding a release point to the unit by clicking the 'Cancel' button on the 'Please select the related release point(s)' modal.
- Clicking the 'Create release point' link takes you to the 'Create Release Point' modal to create a new release point record to associate to the unit and facility.

1. Click the 'Create release point' link. The system will generate the 'Create Release Point' modal (see Exhibit 6, Exhibit 7, Exhibit 8, Exhibit 9, Exhibit 10, Exhibit 11, Exhibit 12, and Exhibit 13).
2. Enter release point data into the editable fields.
   - The fields presented on the 'Create release point' modal dynamically update or behave differently depending on the 'Release Point Type' chosen.
   - Use the appropriate sub-section below sections (Non-fugitive Release Points, Fugitive Vent Release Points, Fugitive Two-Dimensional Release Points, and Fugitive Three-Dimensional Release Points) depending on the release point type.
3. After completing the 'Create Release Point' screen, click the 'Ok' button to temporarily save your release point information, during the session, until you can you can submit the facility and sub-facility data by clicking the 'Submit' button on the 'Edit Facility' screen.

The system will take you back to the 'Create Sub-facility Component' page where the new release point is displayed on the 'Release Point' tab of the 'Related Components' section (if you instead choose to click the 'Cancel' button on the 'Create Release Point' screen, all entered release point data will be lost and the system will take you back to the 'Create Sub-facility Component' page). A new row is added to the 'Release Points' tab table for the newly added release point. The table contains the following read-only data columns:

- Release Point ID
- Alternate Release Point ID
- Release Point Type
- Release Point Description

You can continue to add associated release points to the 'Release Points' tab of the Related Components' section (see Exhibit 7 below) or you can choose to edit release points, remove release points from the table, and/or add other associated components to the unit:

- Click the 'Add another release point to unit' link to navigate to the 'Please select the related release point(s)' modal to select or create another release point.
- Click 'Remove' in a release point row to remove a release point from the unit. Clicking the 'Remove' link will generate a message that will prompt you to confirm that you want to remove the component from the unit. Doing so will not remove the release point from the facility, but it will no longer be associated to the unit.
- Click 'View/Edit Details' on a release point row to view the 'Release Point Details' modal where you will be presented with an 'Edit Release Point' option to open the release point for editing.

Non-fugitive Release Points

When a non-fugitive 'Release Point Type' is selected from the drop-down menu (i.e., Vertical Stack, Horizontal, Goose Neck, Vertical with Rain Cap, Downward Facing Vent), the 'Create Release Point' modal captures the following information about the release point (see Exhibit 6 and Exhibit 7):

- Release Point ID
- Alternate Release Point ID
- Release Point Type
- Height (ft)
- Diameter (ft)
- Velocity
- Temperature (□F)
- Gas Flow Rate
- Release Point Coordinates

Note: Release point coordinates are in the center of the release point (e.g., the center of a circular stack).

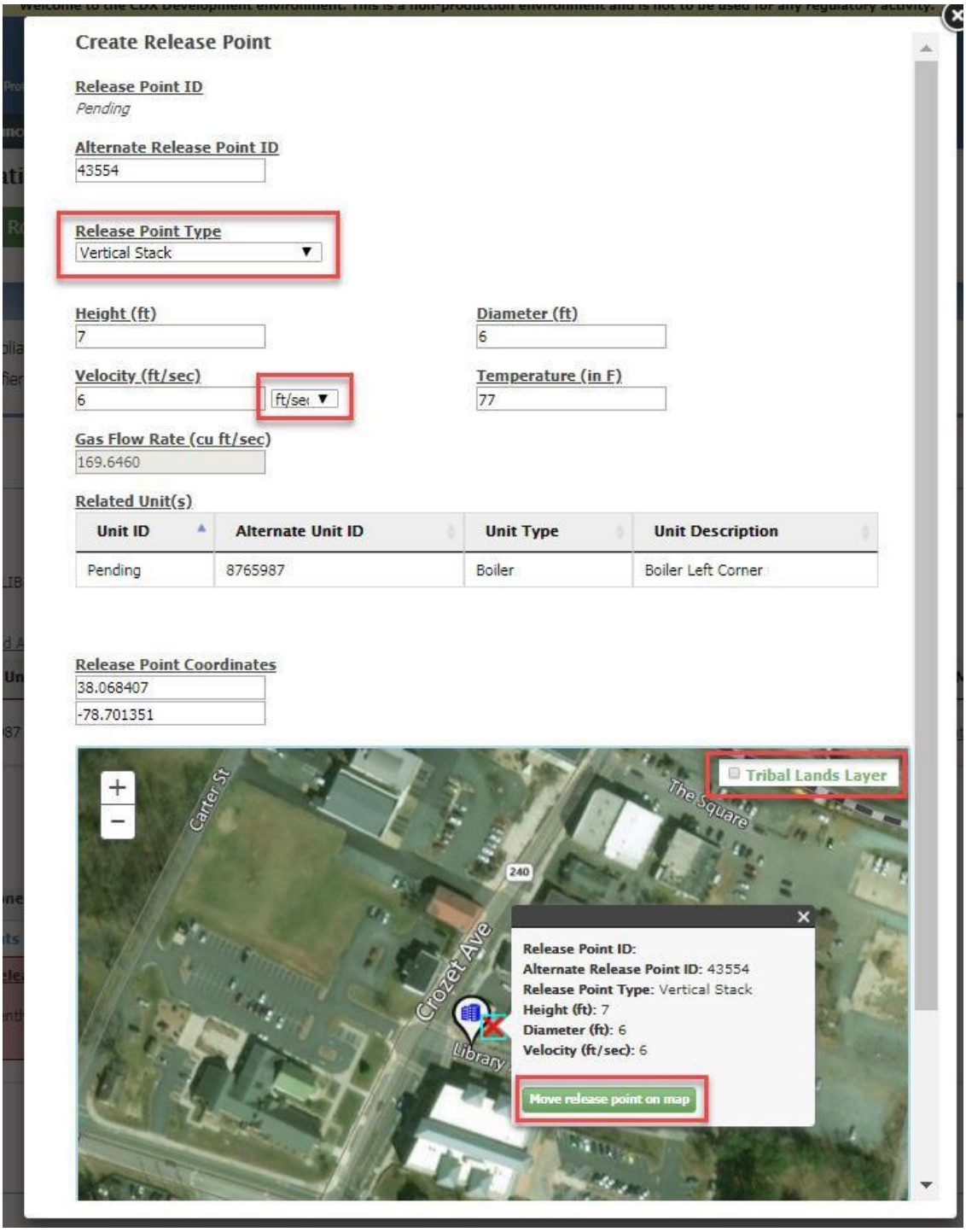
Create Release Point
Release Point ID
Pending
Alternate Release Point ID
43554
Release Point Type
Vertical Stack
Height (ft)
7
Diameter (ft)
6
Velocity (ft/sec)
6
ft/se
Temperature (in F)
77
Gas Flow Rate (cu ft/sec)
169.6460
Related Unit(s)
Unit ID
Alternate Unit ID
Unit Type
Unit Description
Pending
8765987
Boiler
Boiler Left Corner
Release Point Coordinates
38.068407
-78.701351
Tribal Lands Layer
Carter St
The Square
240
Crozet Ave
Library
Release Point ID:
Alternate Release Point ID: 43554
Release Point Type: Vertical Stack
Height (ft): 7
Diameter (ft): 6
Velocity (ft/sec): 6
Move release point on map

Exhibit 6

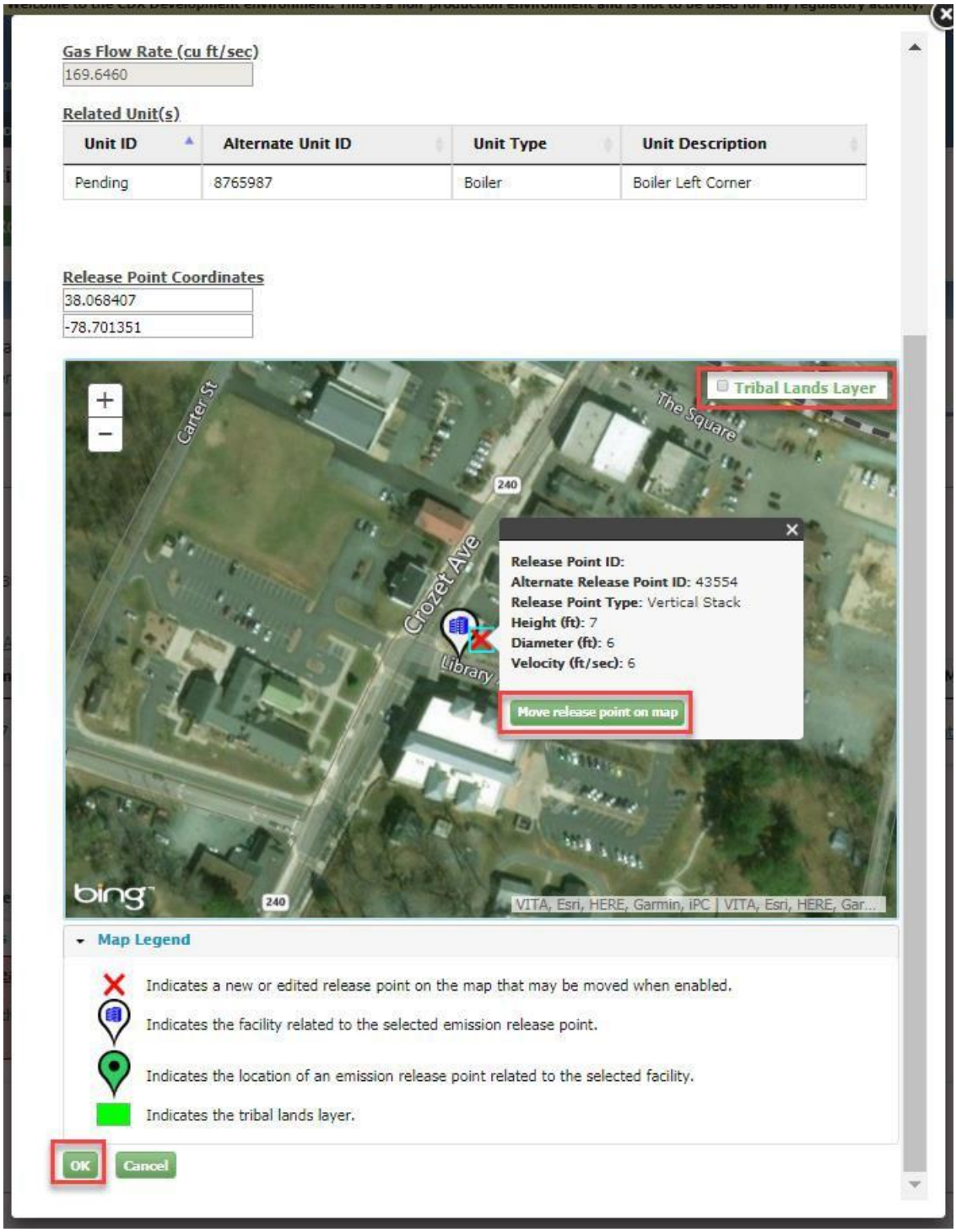
Gas Flow Rate (cu ft/sec)
169.6460
Related Unit(s)
Unit ID
Alternate Unit ID
Unit Type
Unit Description
Pending
8765987
Boiler
Boiler Left Corner
Release Point Coordinates
38.068407
-78.701351
Tribal Lands Layer
Carter St
The Square
240
Crozet Ave
Library
Release Point ID:
Alternate Release Point ID: 43554
Release Point Type: Vertical Stack
Height (ft): 7
Diameter (ft): 6
Velocity (ft/sec): 6
Move release point on map
bing
VITA, Esri, HERE, Garmin, iPC | VITA, Esri, HERE, Gar...
Map Legend
Indicates a new or edited release point on the map that may be moved when enabled.
Indicates the facility related to the selected emission release point.
Indicates the location of an emission release point related to the selected facility.
Indicates the tribal lands layer.
OK
Cancel

Exhibit 7

- The following fields on the 'Create Release Point' modal are required for non-fugitive release point types:
    - Alternate Release Point ID
    - Release Point Type
    - Height (ft)
    - Diameter (ft)
    - Velocity
    - (Velocity Unit of Measure – label not displayed)
        - Defaults to "ft/sec."
    - Temperature (°F)
    - Gas Flow Rate
        - Read-only; calculated and auto-populated based on the values entered in the 'Diameter' and 'Velocity' fields. If you have a flow value rather than a velocity, enter the diameter and then the velocity that causes the flow rate to match your value.
    - Release Point Coordinates
        - Defaults to the facility latitude and longitude values but is displayed on the map as slightly offset from the facility initially; dynamically updated based on interaction with the map
- A map is displayed on the 'Create Release Point' modal that shows the release point location as a red "X" and defaulted to the facility latitude and longitude coordinates (but is shown as slightly offset from the facility).
- Once you have set the 'Release Point Type,' you can set the release point location on the map by first clicking the 'Move release point on map' button and then dragging the red "X" to a new location. For release points with a single coordinate set (e.g., a stack), release point coordinates are expected over the center of the release point. Moving the red "X" via the map dynamically updates the 'Release Point Coordinates' fields.
- The map includes an expandable map legend that defines the icons displayed on the map. Additionally, a 'Tribal Land Layer' checkbox is provided that when checked turns on a layer displaying the tribal land areas (if applicable); you will be prompted to acknowledge disclaimer language regarding the tribal land layer upon checking the checkbox.
- If the release point location is inadvertently moved far away from the facility location, use the 'Reset Coordinates' button to move the release point back near the facility location on the map.
- The 'Height' field accepts numeric values between 1 and 1300 (ft), inclusive.
- The 'Diameter' field accepts numeric values between 0.1 and 100 (ft), inclusive. The value must also be less than the 'Height' value.
- The 'Related Units' section contains the following read-only data in table format:
    - Unit ID
    - Alternate Unit ID
    - Unit Type
    - Unit Description

Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by release points.

Fugitive Vent Release Points

When 'Fugitive Vent' is selected from the 'Release Point Type' drop-down menu, the 'Create Release Point' modal captures the following information about the release point (see Exhibit 8 and Exhibit 9):

- Release Point ID
- Alternate Release Point ID
- Release Point Type
- Height (ft)
- Diameter (ft)
- Velocity
- Temperature (in ^{o}F)
- Gas Flow Rate
- Release Point Coordinates

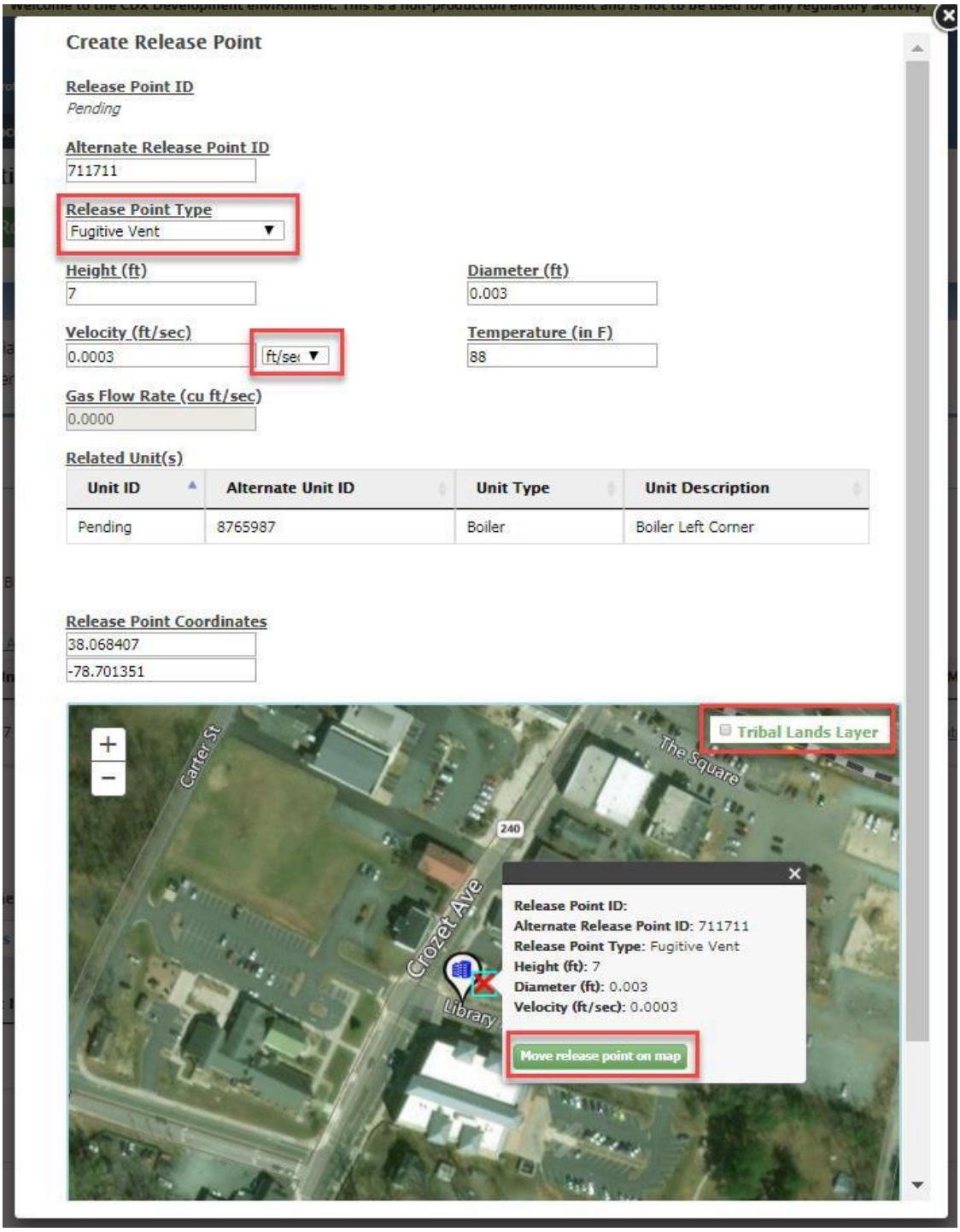
Create Release Point
Release Point ID
Pending
Alternate Release Point ID
711711
Release Point Type
Fugitive Vent
Height (ft)
7
Diameter (ft)
0.003
Velocity (ft/sec)
0.0003
ft/se
Temperature (in F)
88
Gas Flow Rate (cu ft/sec)
0.0000
Related Unit(s)
Unit ID
Alternate Unit ID
Unit Type
Unit Description
Pending
8765987
Boiler
Boiler Left Corner
Release Point Coordinates
38.068407
-78.701351
Tribal Lands Layer
Carter St
The Square
240
Crozet Ave
Library
Release Point ID:
Alternate Release Point ID: 711711
Release Point Type: Fugitive Vent
Height (ft): 7
Diameter (ft): 0.003
Velocity (ft/sec): 0.0003
Move release point on map

Exhibit 8

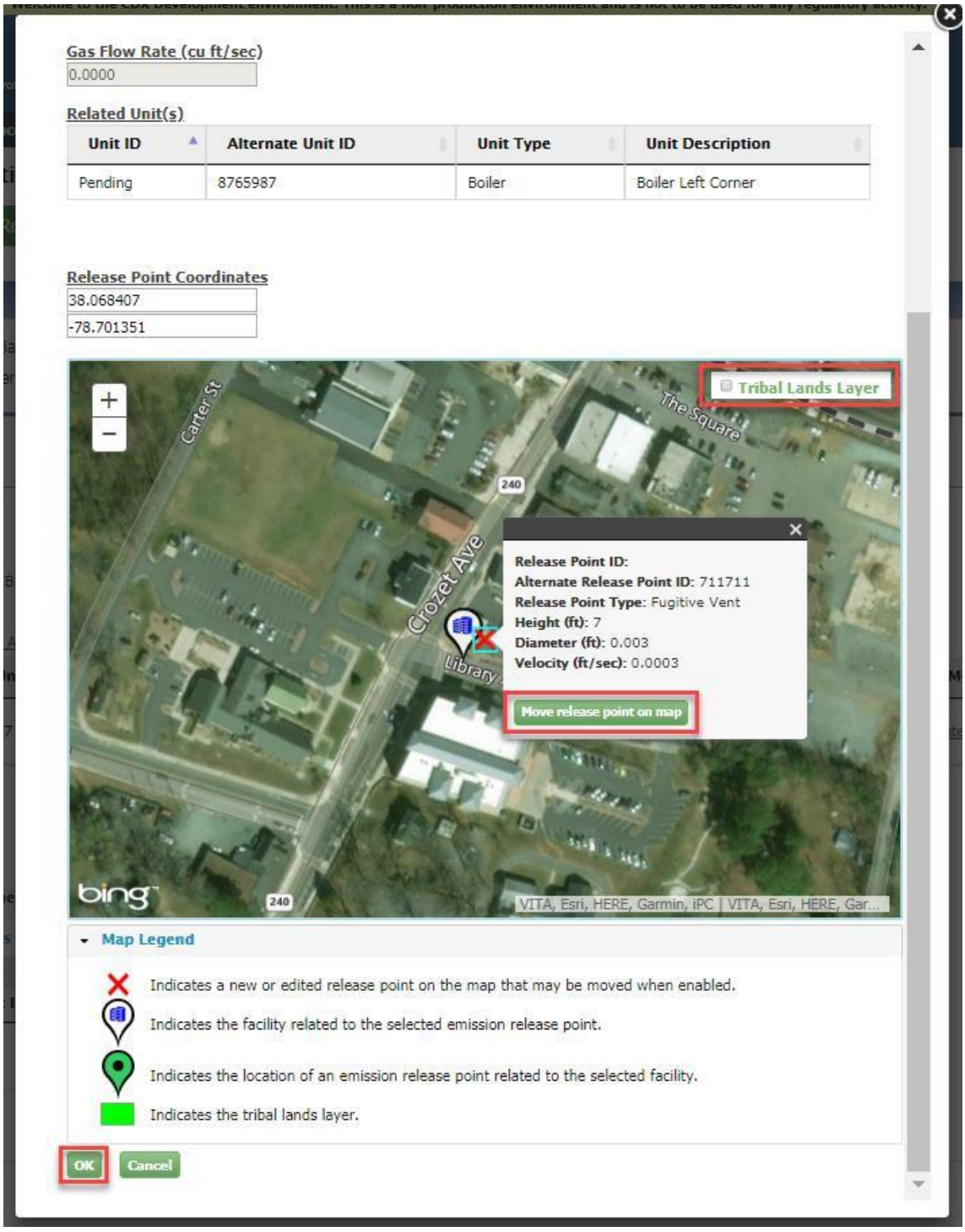

Exhibit 9

- The following fields on the 'Create Release Point' modal are required for fugitive vent release point types:

- Alternate Release Point ID
- Release Point Type
- Height (ft)

- Diameter (ft)
  - Auto-populated with a value of "0.003" but is editable.
- Velocity
  - Auto-populated with a value of "0.0003" but is editable.
- (Velocity Unit of Measure – label not displayed)
  - Defaults to "ft/sec."
- Temperature (^{o}F)
- Gas Flow Rate
  - Read-only; calculated and auto-populated based on the values entered in the 'Diameter' and 'Velocity' fields. If you have a flow value rather than a velocity, enter the diameter and then the velocity that causes the flow rate to match your value.
  - Units of measure are dependent upon the units of measure selected for 'Velocity.'
- Release Point Coordinates
  - Defaults to the facility latitude and longitude values; dynamically updated based on interaction with the map.

- A map is displayed on the 'Create Release Point' modal that shows the release point location as a red "X" and defaulted to the facility latitude and longitude coordinates (but is slightly offset from the facility).

Once you have set the 'Release Point Type,' you can set the release point location on the map by first clicking the 'Move release point on map' button and then dragging the red "X" to a new location. For release points with a single coordinate set (e.g., fugitive vent), release point coordinates are expected over the center of the release point. Moving the red "X" via the map dynamically updates the 'Release Point Coordinates' fields.

The map includes an expandable map legend that defines the icons displayed on the map. Additionally, a 'Tribal Land Layer' checkbox is provided that when checked turns on a layer displaying the tribal land areas (if applicable); you will be prompted to acknowledge disclaimer language regarding the tribal land layer upon checking the checkbox.

If the release point location is inadvertently moved far away from the facility location, use the 'Reset Coordinates' button to move the release point back near the facility location on the map.

- The 'Height' value must be greater than "0."
- The 'Temperature' value must be greater than "50."
- The 'Related Units' section contains the following read-only data in table format:

- Unit ID
- Alternate Unit ID
- Unit Type
- Unit Description

Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by release points.

Fugitive Two-Dimensional Release Points

When 'Fugitive Two-Dimensional' is selected from the 'Release Point Type' drop-down menu, the 'Create Release Point' modal captures the following information about the release point (see Exhibit 10 and Exhibit 11):

- Release Point ID
- Alternate Release Point ID
- Release Point Type
- Height (ft)
- Width (ft)
- Length (ft)
  - Read-only; auto-populated with a value of "0."
- Angle (degrees)
  - Read-only; auto-populated with a value of "0."
- Velocity (ft/sec)
  - Read-only; auto-populated with a value of "0."
- Gas Flow Rate (cu ft/sec)
  - Read-only; auto-populated with a value of "0."
- Midpoint 1 (Latitude/Longitude)
- Midpoint 2 (Latitude/Longitude)

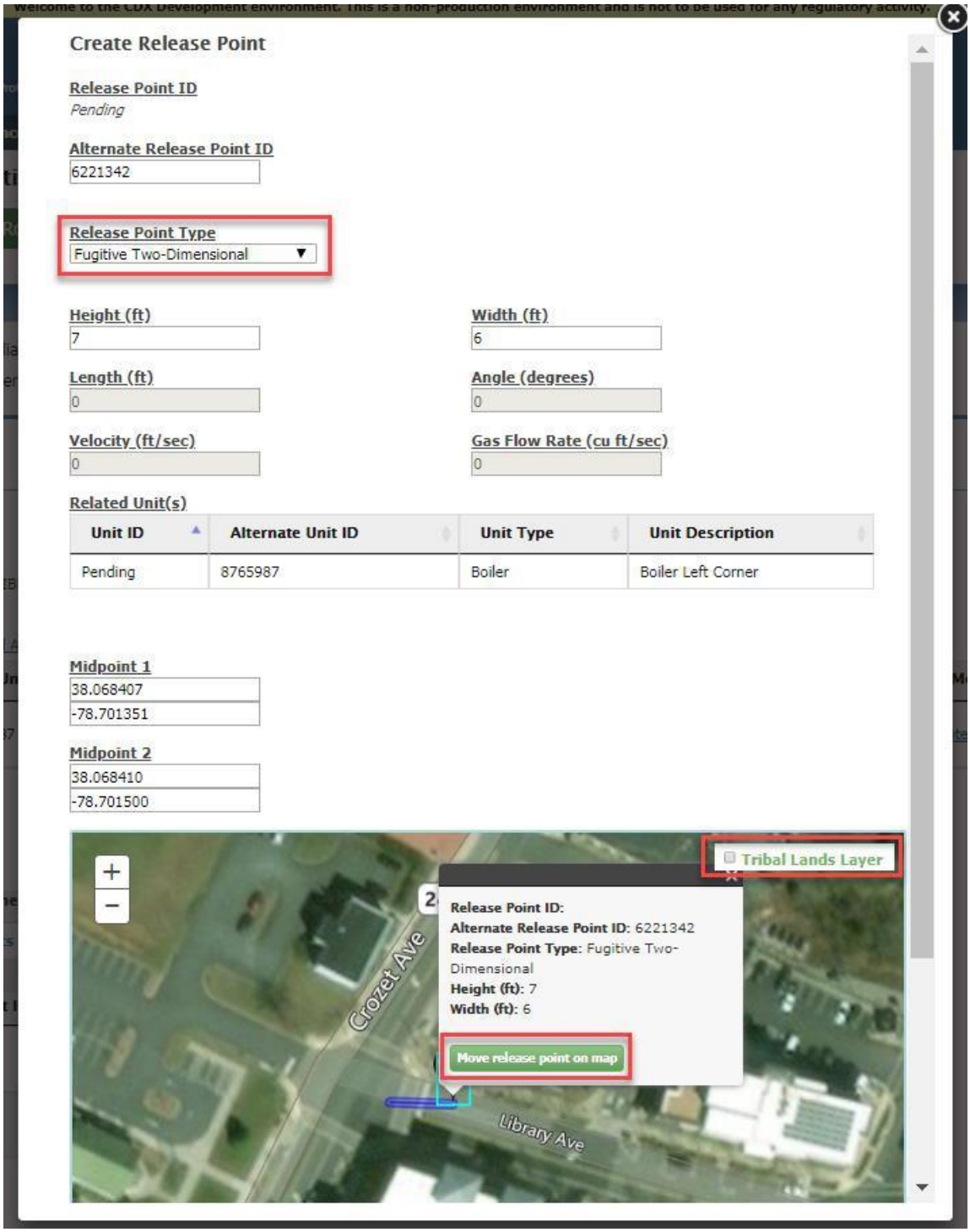
Create Release Point
Release Point ID
Pending
Alternate Release Point ID
6221342
Release Point Type
Fugitive Two-Dimensional
Height (ft)
7
Width (ft)
6
Length (ft)
0
Angle (degrees)
0
Velocity (ft/sec)
0
Gas Flow Rate (cu ft/sec)
0
Related Unit(s)
Unit ID
Alternate Unit ID
Unit Type
Unit Description
Pending
8765987
Boiler
Boiler Left Corner
Midpoint 1
38.068407
-78.701351
Midpoint 2
38.068410
-78.701500
Tribal Lands Layer
Release Point ID:
Alternate Release Point ID: 6221342
Release Point Type: Fugitive Two-Dimensional
Height (ft): 7
Width (ft): 6
Move release point on map
Crozet Ave
Library Ave

Exhibit 10

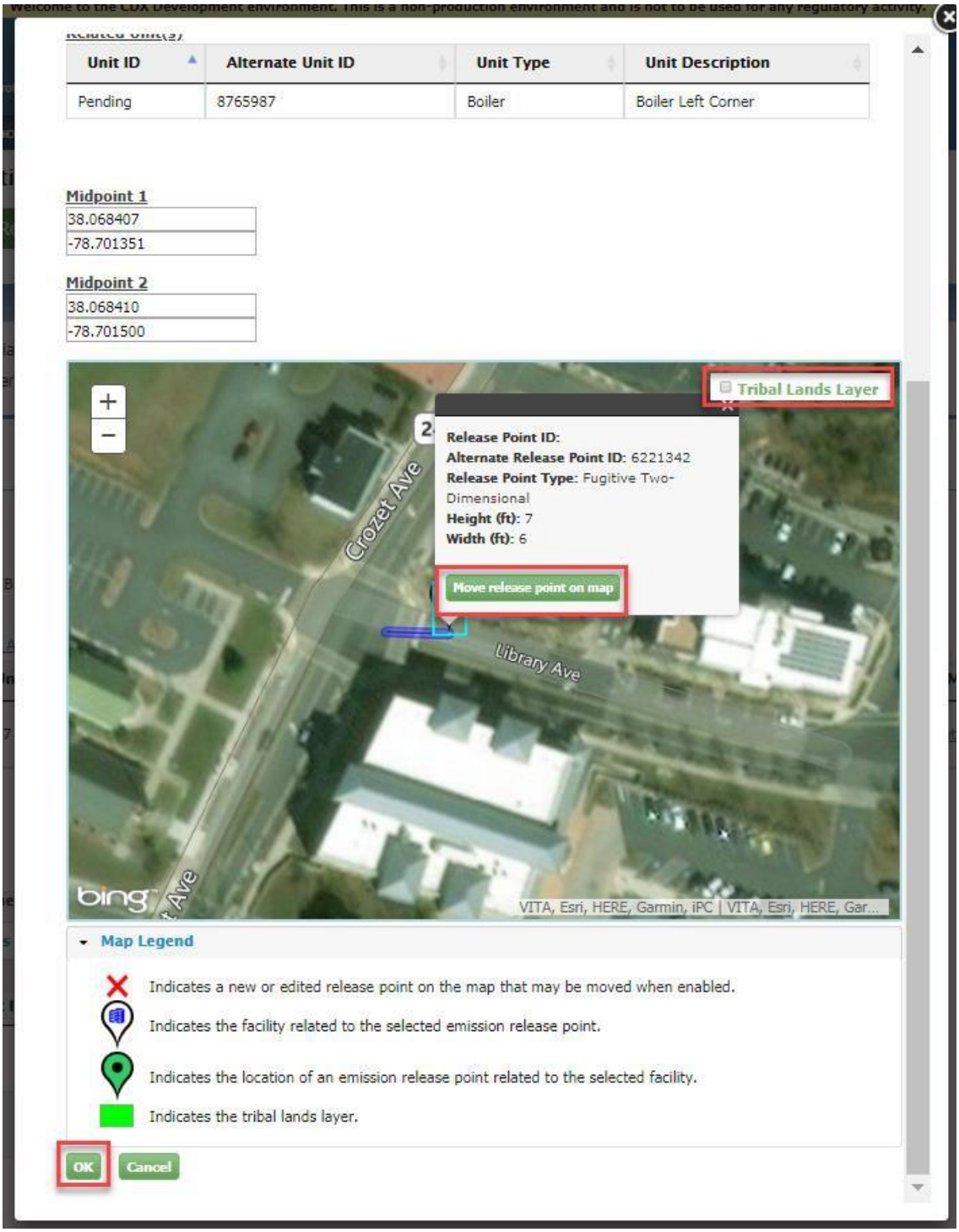

Exhibit 11

- The following fields on the 'Create Release Point' modal are required for fugitive two-dimensional release point types:
    - Alternate Release Point ID
    - Release Point Type

  - Height (ft)
  - Width (ft)
  - Midpoint 1
    - Dynamically updated based on interaction with the map.
  - Midpoint 2
    - Dynamically updated based on interaction with the map.

- A map is displayed on the 'Create Release Point' modal that shows the midpoint 1 release point location as a red "X" and as defaulted to the facility latitude and longitude coordinates (but is shown as slightly offset from the facility).

  Once you have set the 'Release Point Type,' you can set the release point location on the map by clicking the 'Move release point on map' button and then dragging the two red "Xs" to a new location. Moving the red "Xs" via the map dynamically updates the 'Midpoint 1' and 'Midpoint 2' coordinate fields. Once the red "Xs" are moved, and/or data are populated into the 'Midpoint 1' and 'Midpoint 2' fields, a line is displayed on the map between the two points. The value entered into the 'Width' field updates the width of the line between the two points. The center of the arcs, displayed on the map, represent the midpoint 1 and midpoint 2 points.

  The map includes an expandable map legend that defines the icons displayed on the map. Additionally, a 'Tribal Land Layer' checkbox is provided that when checked turns on a layer displaying the tribal land areas (if applicable); you will be prompted to acknowledge disclaimer language regarding the tribal land layer upon checking the checkbox.

  If the release point location is inadvertently moved far away from the facility location, use the 'Reset Coordinates' button to move the release point back near the facility location on the map.
- The 'Height' value must be greater than "0."
- The 'Width' value must be greater than "0."
- The 'Related Units' section contains the following read-only data in table format:
  - Unit ID
  - Alternate Unit ID
  - Unit Type
  - Unit Description

Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by release points.

Fugitive Three-Dimensional Release Points

When 'Fugitive Three-Dimensional' is selected from the 'Release Point Type' drop-down menu, the 'Create Release Point' modal captures the following information about the release point (see Exhibit 12 and Exhibit 13):

  - Release Point ID
  - Alternate Release Point ID

- Release Point Type
- Height (ft)
- Width (ft)
- Length (ft)
- Angle (degrees)
  - Read-only; auto-populated with a value of “0.”
- Velocity (ft/sec)
  - Read-only; auto-populated with a value of “0.”
- Gas Flow Rate (cu ft/sec)
  - Read-only; auto-populated with a value of “0.”
- Release Point Coordinates – Center of Release

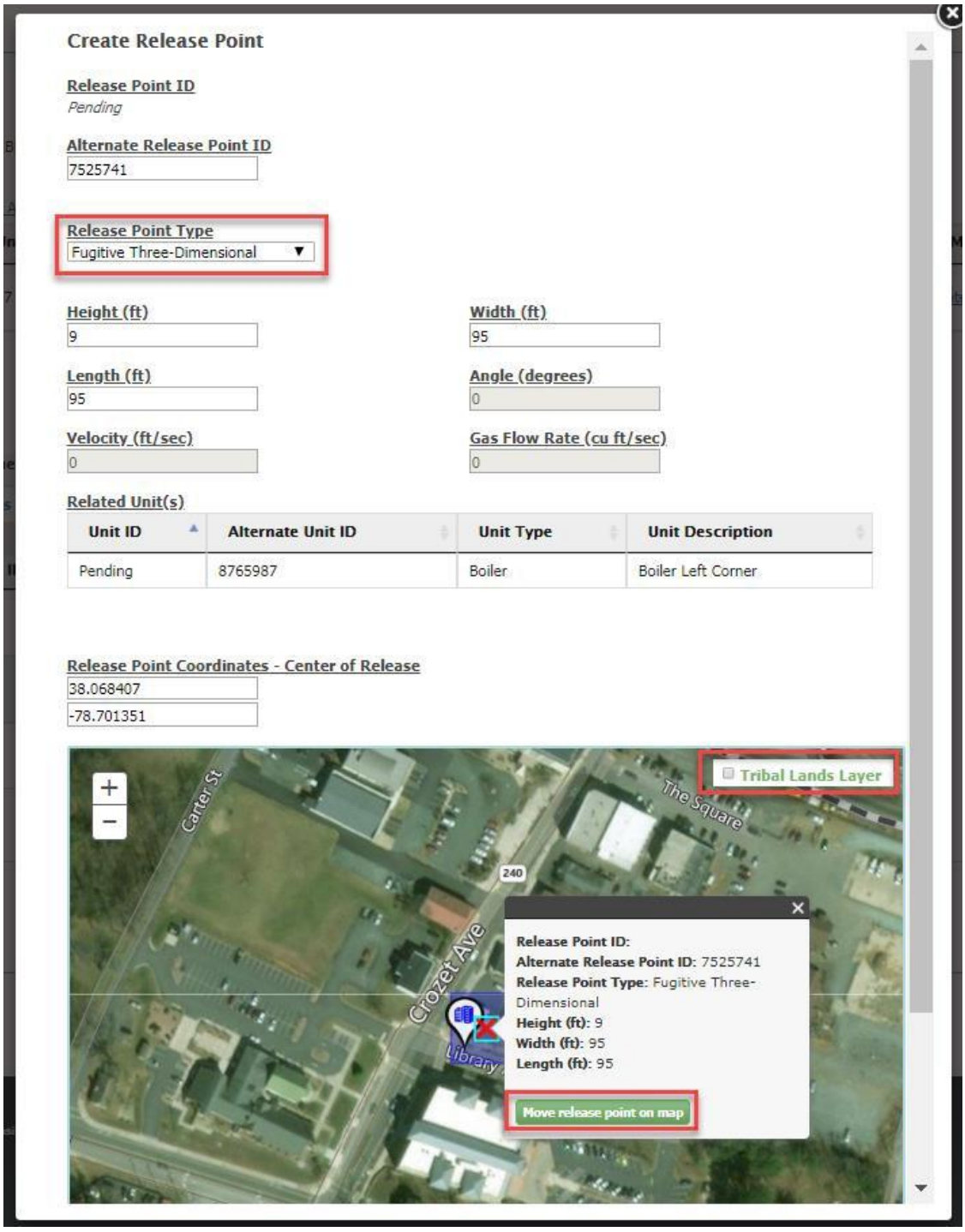
Create Release Point
Release Point ID
Pending
Alternate Release Point ID
7525741
Release Point Type
Fugitive Three-Dimensional
Height (ft)
9
Width (ft)
95
Length (ft)
95
Angle (degrees)
0
Velocity (ft/sec)
0
Gas Flow Rate (cu ft/sec)
0
Related Unit(s)
Unit ID
Alternate Unit ID
Unit Type
Unit Description
Pending
8765987
Boiler
Boiler Left Corner
Release Point Coordinates - Center of Release
38.068407
-78.701351
Tribal Lands Layer
Carter St
The Square
240
Crozet Ave
Library
Release Point ID:
Alternate Release Point ID: 7525741
Release Point Type: Fugitive Three-Dimensional
Height (ft): 9
Width (ft): 95
Length (ft): 95
Move release point on map

Exhibit 12

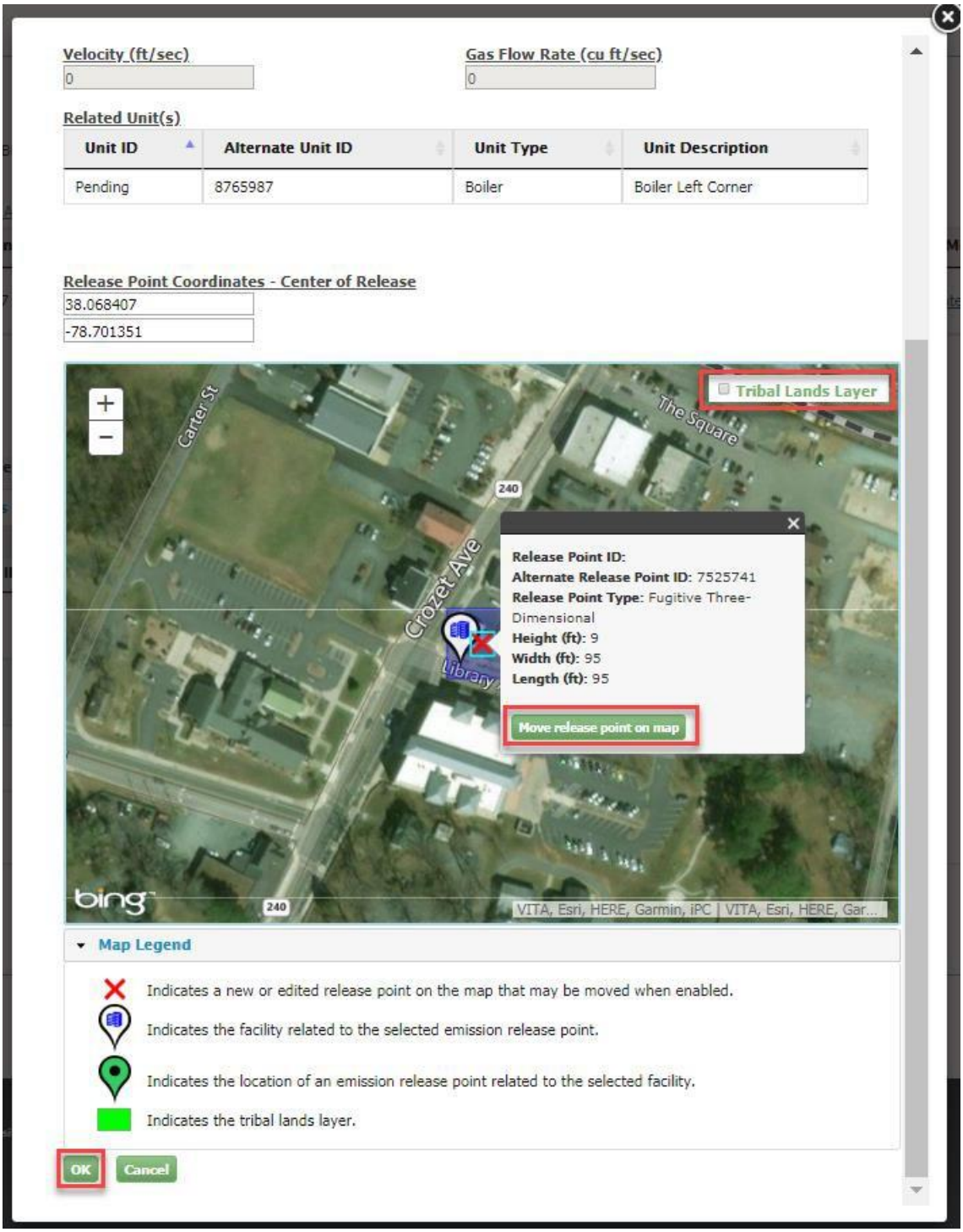

Exhibit 13

- The following fields on the 'Create Release Point' modal are required for fugitive three-dimensional release point types:

  - Alternate Release Point ID
  - Release Point Type
  - Height (ft)
  - Width (ft)
  - Length (ft)
  - Release Point Coordinates – Center or Release
    - Defaults to the facility latitude and longitude values; dynamically updated based on interaction with the map.
- A map is displayed on the 'Create Release Point' modal that shows the center of the release point location as a red "X" and as defaulted to the facility latitude and longitude coordinates (but is shown as slightly offset from the facility).
- Once you have set the 'Release Point Type' and enter data into the 'Length' and 'Width' fields, a square polygon is displayed on the map with the latitude and longitude coordinates as the center of the shape. To move the red "X" on the map, click the 'Move release point on map' button and drag the center of the square to the desired location.
- Moving the red "X" via the map dynamically updates the 'Release Point Coordinates' fields.

- The map includes an expandable map legend that defines the icons displayed on the map. Additionally, a 'Tribal Land Layer' checkbox is provided that when checked turns on a layer displaying the tribal land areas (if applicable); you will be prompted to acknowledge disclaimer language regarding the tribal land layer upon checking the checkbox.
- If the release point location is inadvertently moved far away from the facility location, use the 'Reset Coordinates' button to move the release point back near the facility location on the map.
- The 'Height' value must be greater than "0."
- The 'Width' value must be greater than "0" and must be equal to the value entered for 'Length.'
- The 'Length' value must be greater than "0" and must be equal to the value entered for 'Width.'
- The 'Related Units' section contains the following read-only data in table format:
  - Unit ID
  - Alternate Unit ID
  - Unit Type
  - Unit Description

Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by release points.

Add Processes to a Unit

From the 'Create Sub-facility Component' screen, click the 'Update' link for '# of Processes' in the unit table or click the 'Processes' tab in the 'Related Components' section (Exhibit 14) to navigate to the 'Processes' tab shown in (Exhibit 15).

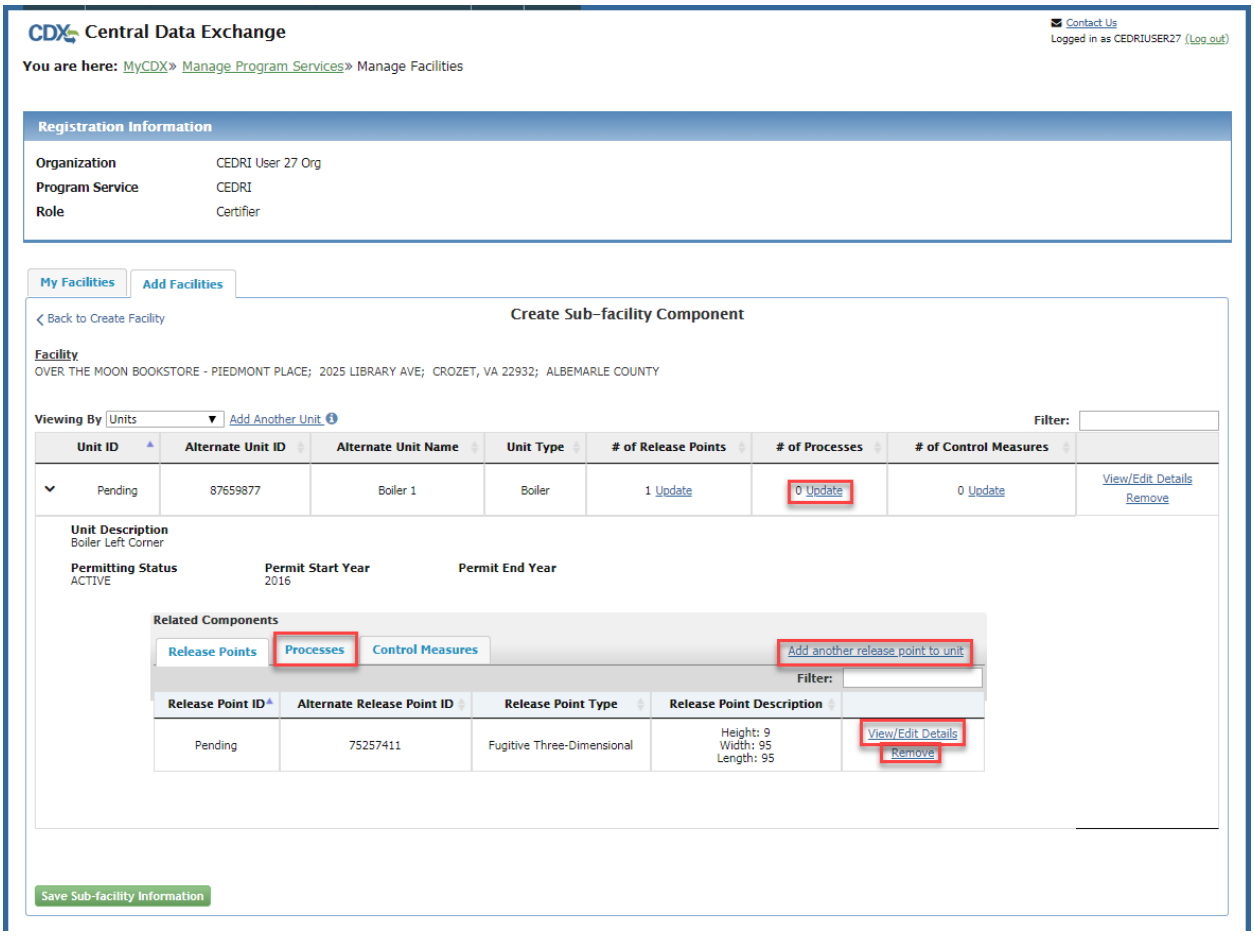

Exhibit 14

1. To add an associated process to the unit, click the 'Add process to unit' link, shown in Exhibit 15, from the 'Processes' tab of the 'Related Components' section under the expanded top-level unit row. The system will generate the 'Please select the related processes' modal (see Exhibit 16)

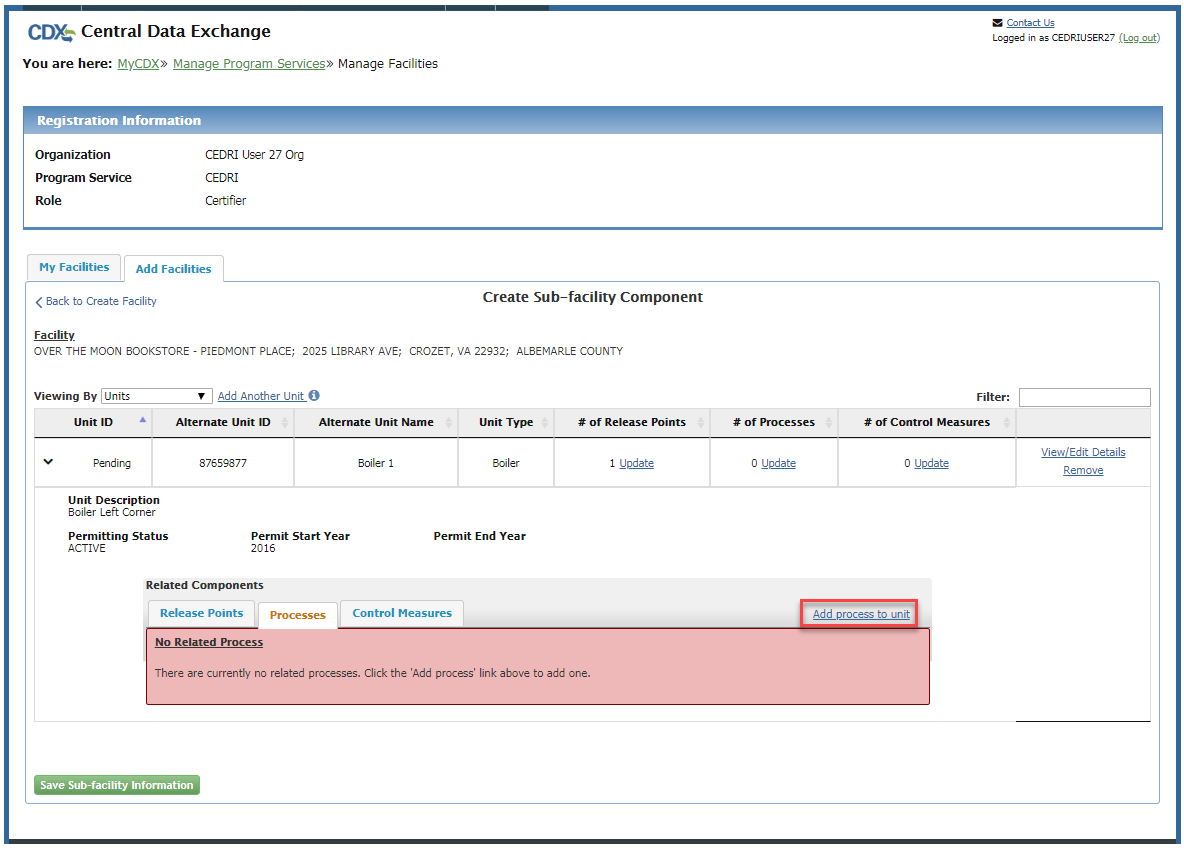

Exhibit 15

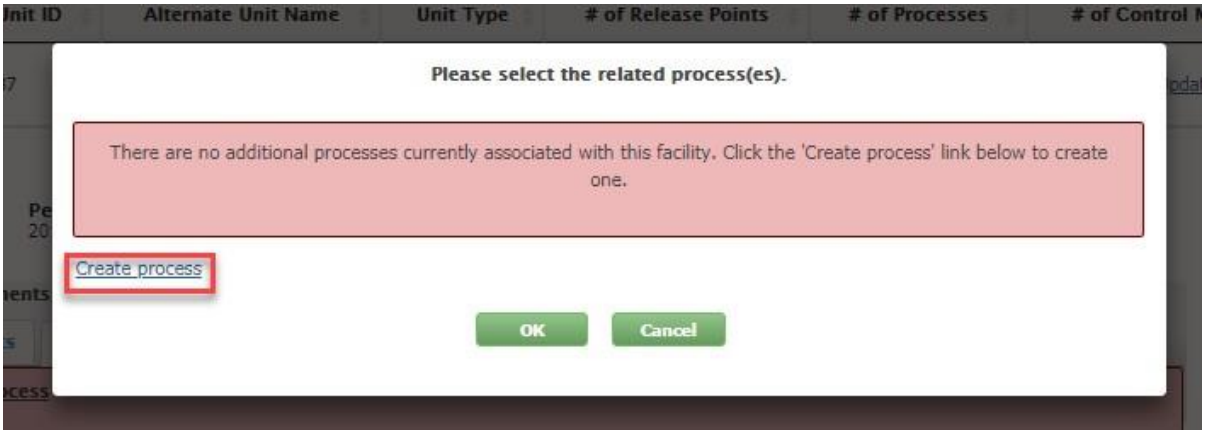

Exhibit 16

- If the facility contains existing processes, they will be listed on this modal and you may choose one or more from the list and click 'Ok.'
- You can cancel the process of adding a process to the unit by clicking the 'Cancel' button on the 'Please select the related processes' modal.
- Clicking the 'Create process' link takes you to the 'Create Process' modal to create a new process record to associate to the unit and facility.

2. Click the 'Create process' link. The system will generate the 'Create Process' modal (see Exhibit 17).

   - The 'Create Process' modal captures the following information about a process:
     - Process ID
     - Alternate Process ID
     - Source Classification Code
     - Code Explanation
     - Related Release Points
     - Process Allocation %
       - Displayed and captured if related release point is provided

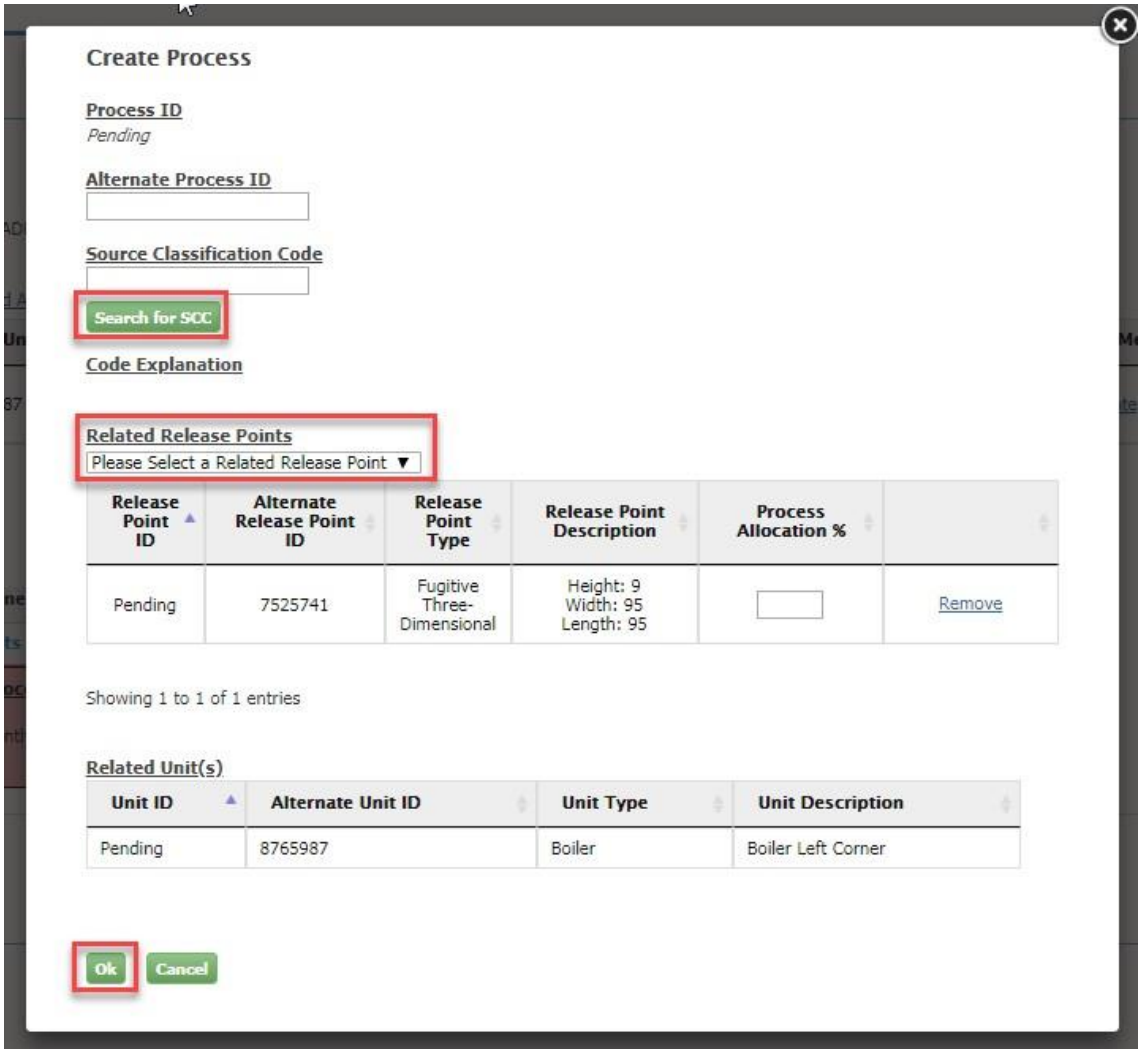

Exhibit 17

4. Enter process information into the editable fields. All fields are required except 'Code Explanation' and 'Related Release Points.' 'Code Explanation' is read-only and is auto-populated based on the 'Source Classification Code' selected. If one or more 'Related Release Points' are selected, then the 'Process Allocation %' is required and validation will verify that the sum of all process allocation percentages equal 100% across release points. Please note that if a top-level release point, that is associated with a process, is removed (when "Viewing by: Release Points"), an error is displayed to the user upon submission with a link to the 'Edit Process' screen to adjust the process allocation percent for any remaining release points so they sum to 100%.

    - Click the 'Search for SCC' button to generate the 'Source Classification Codes (SCCs)' search page in a new window. Search by key words and/or use filters to find a specific SCC code (see Exhibit 18). Upon finding the desired SCC code, click the 'Select This SCC' button (see Exhibit 19) to navigate back to the 'Create Process' modal; the selected SCC code will be auto-populated into the 'Source Classification Code' field and the associated description is displayed in the 'Code Explanation' field (see Exhibit 20).

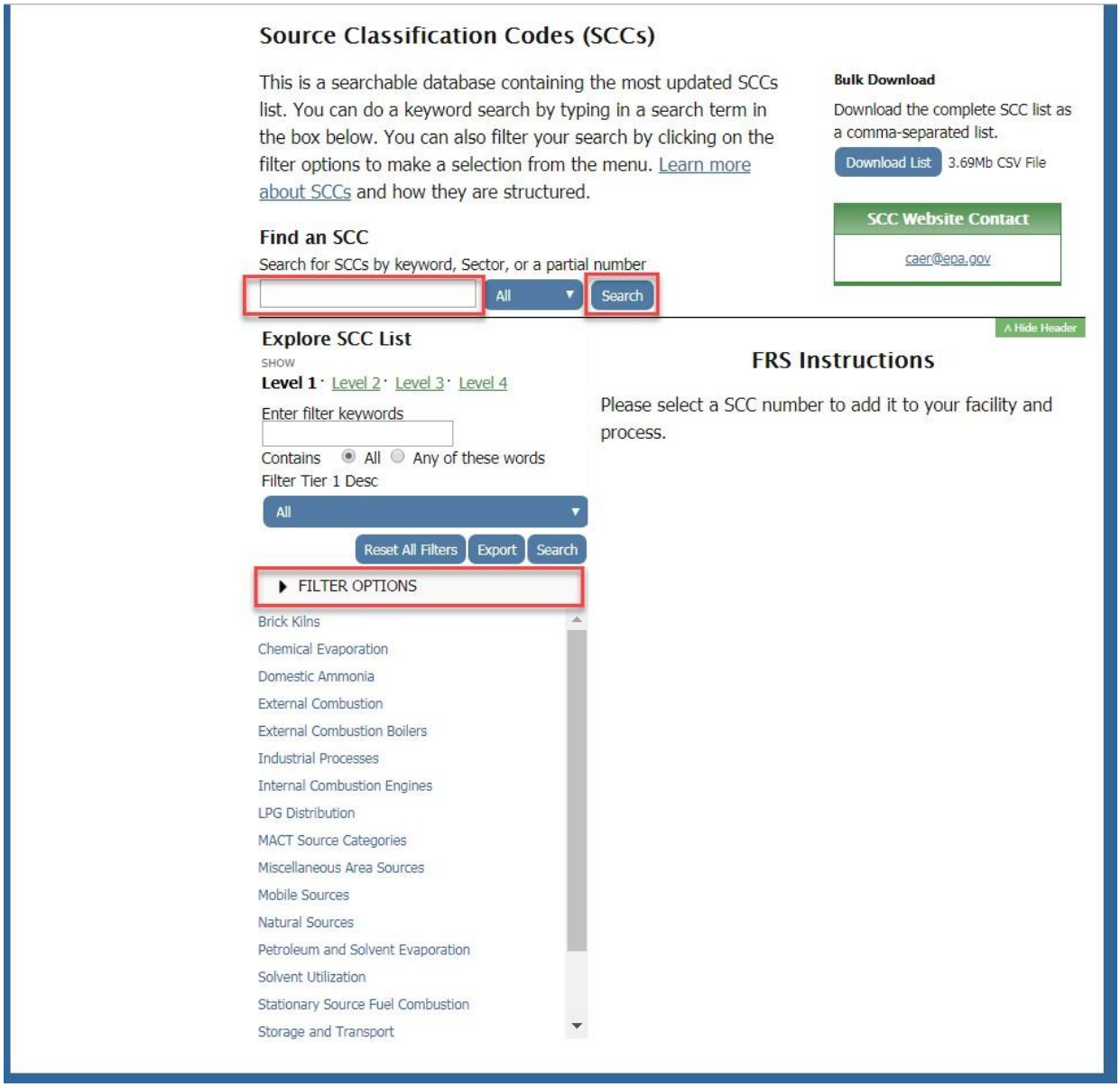
Source Classification Codes (SCCs)
This is a searchable database containing the most updated SCCs list. You can do a keyword search by typing in a search term in the box below. You can also filter your search by clicking on the filter options to make a selection from the menu. Learn more about SCCs and how they are structured.
Bulk Download
Download the complete SCC list as a comma-separated list.
Download List
3.69Mb CSV File
SCC Website Contact
caer@epa.gov
Find an SCC
Search for SCCs by keyword, Sector, or a partial number
All
Search
Hide Header
Explore SCC List
SHOW
Level 1 · Level 2 · Level 3 · Level 4
Enter filter keywords
Contains All Any of these words
Filter Tier 1 Desc
All
Reset All Filters
Export
Search
FILTER OPTIONS
Brick Kilns
Chemical Evaporation
Domestic Ammonia
External Combustion
External Combustion Boilers
Industrial Processes
Internal Combustion Engines
LPG Distribution
MACT Source Categories
Miscellaneous Area Sources
Mobile Sources
Natural Sources
Petroleum and Solvent Evaporation
Solvent Utilization
Stationary Source Fuel Combustion
Storage and Transport
FRS Instructions
Please select a SCC number to add it to your facility and process.

Exhibit 18

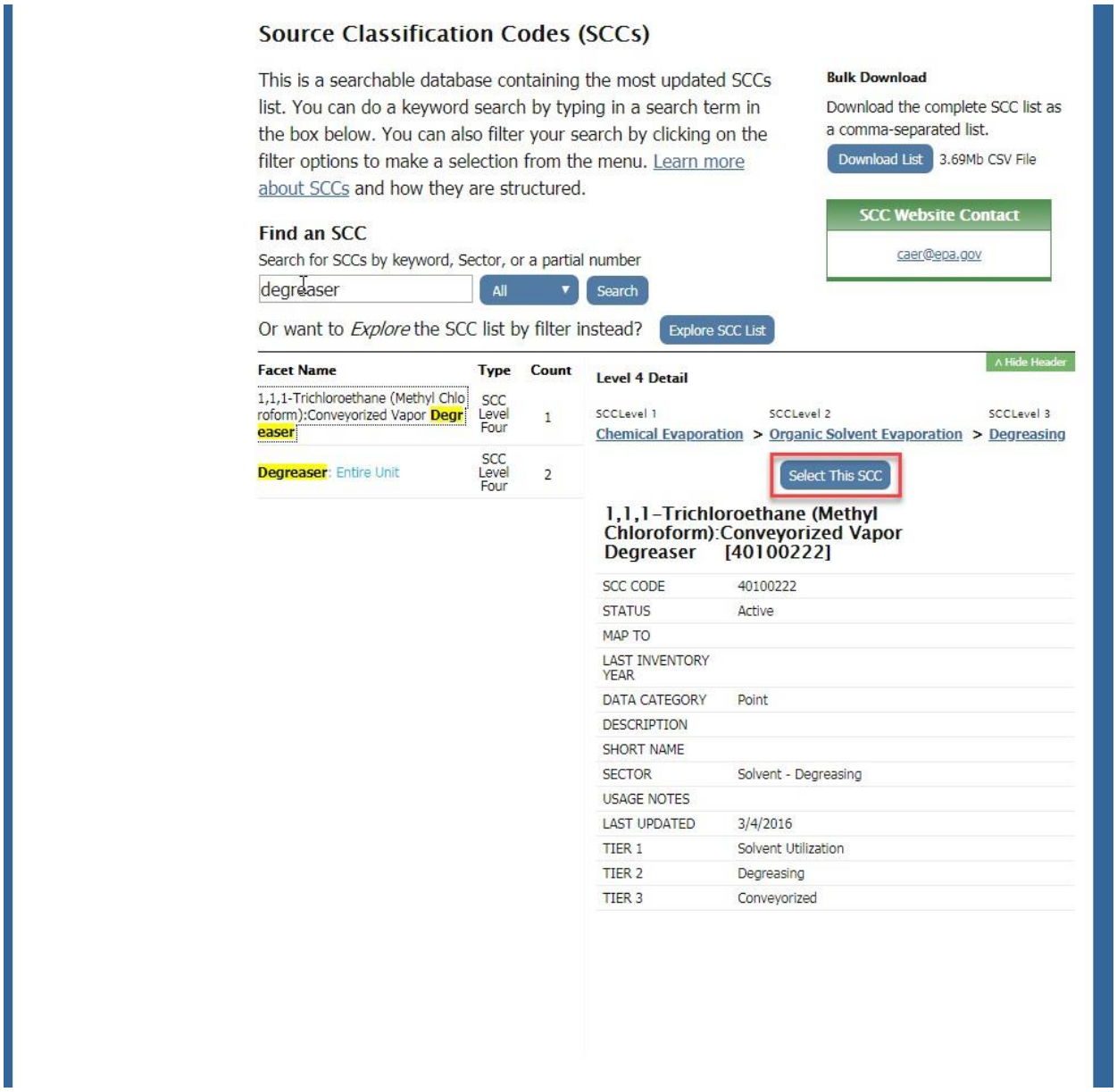
Source Classification Codes (SCCs)
This is a searchable database containing the most updated SCCs list. You can do a keyword search by typing in a search term in the box below. You can also filter your search by clicking on the filter options to make a selection from the menu. Learn more about SCCs and how they are structured.
Bulk Download
Download the complete SCC list as a comma-separated list.
Download List
3.69Mb CSV File
SCC Website Contact
caer@epa.gov
Find an SCC
Search for SCCs by keyword, Sector, or a partial number
degreaser
All
Search
Or want to Explore the SCC list by filter instead?
Explore SCC List
Facet Name
Type
Count
1,1,1-Trichloroethane (Methyl Chloroform):Conveyorized Vapor Degreaser
SCC Level Four
1
Degreaser: Entire Unit
SCC Level Four
2
Level 4 Detail
Hide Header
SCCLevel 1
SCCLevel 2
SCCLevel 3
Chemical Evaporation > Organic Solvent Evaporation > Degreasing
Select This SCC
1,1,1-Trichloroethane (Methyl Chloroform):Conveyorized Vapor Degreaser [40100222]
SCC CODE 40100222
STATUS Active
MAP TO
LAST INVENTORY YEAR
DATA CATEGORY Point
DESCRIPTION
SHORT NAME
SECTOR Solvent - Degreasing
USAGE NOTES
LAST UPDATED 3/4/2016
TIER 1 Solvent Utilization
TIER 2 Degreasing
TIER 3 Conveyorized

Exhibit 19

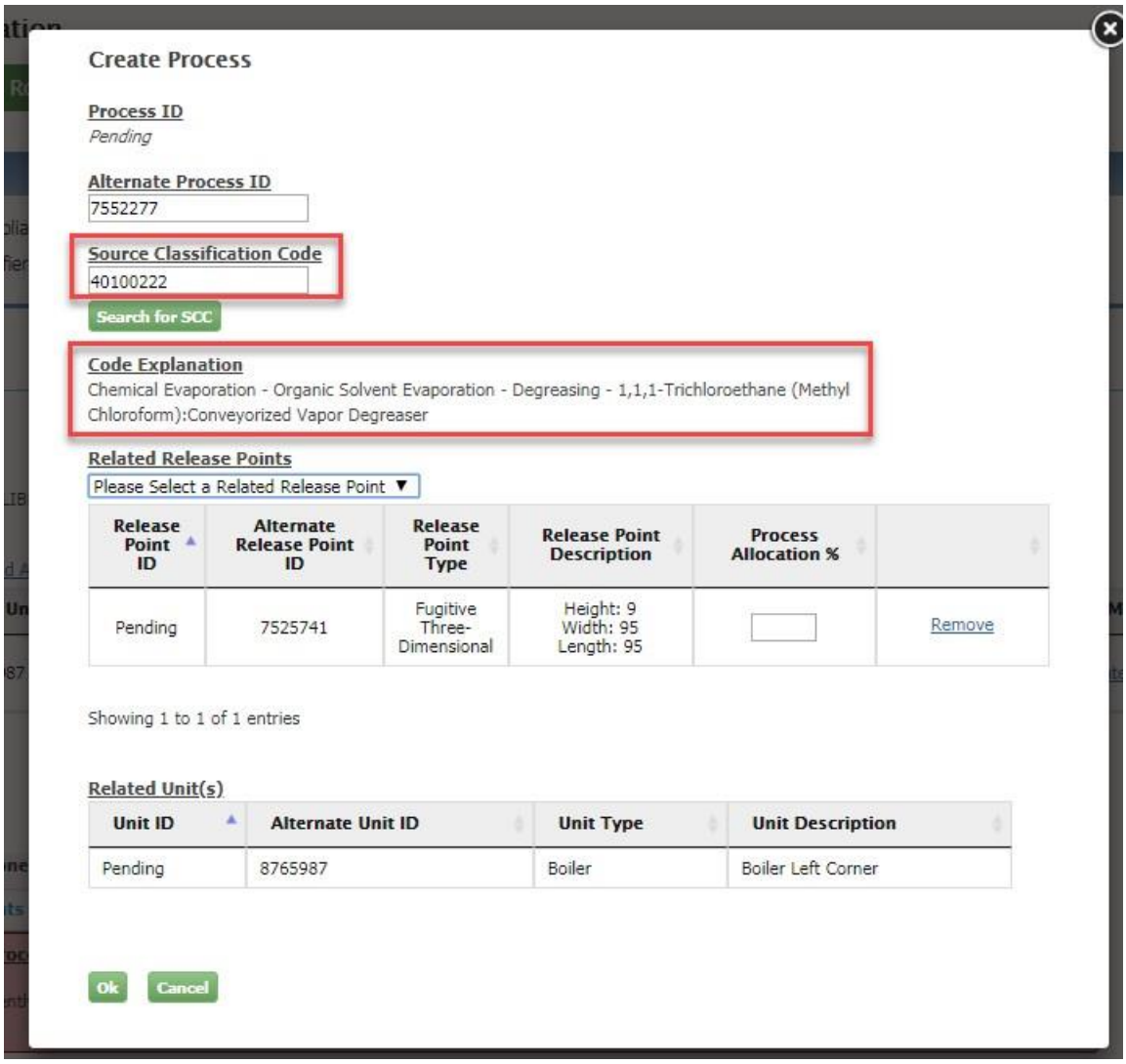

Exhibit 20

- You can also manually enter a valid code into the 'Source Classification Code' field; the service will validate the code and return the associated code description in the 'Code Explanation' field.
- If a retired SCC code is selected or entered, the following warning message is returned upon clicking 'Ok' that states, "The SCC number you have selected has been retired. The last inventory year is <Last Inventory Year>." See Exhibit 21. Click 'Ok' again to proceed. Such an SCC is valid only for historical purposes. The SCC search page can be used to find newer SCC(s) to use by using the "Map to" information for the retired SCC.

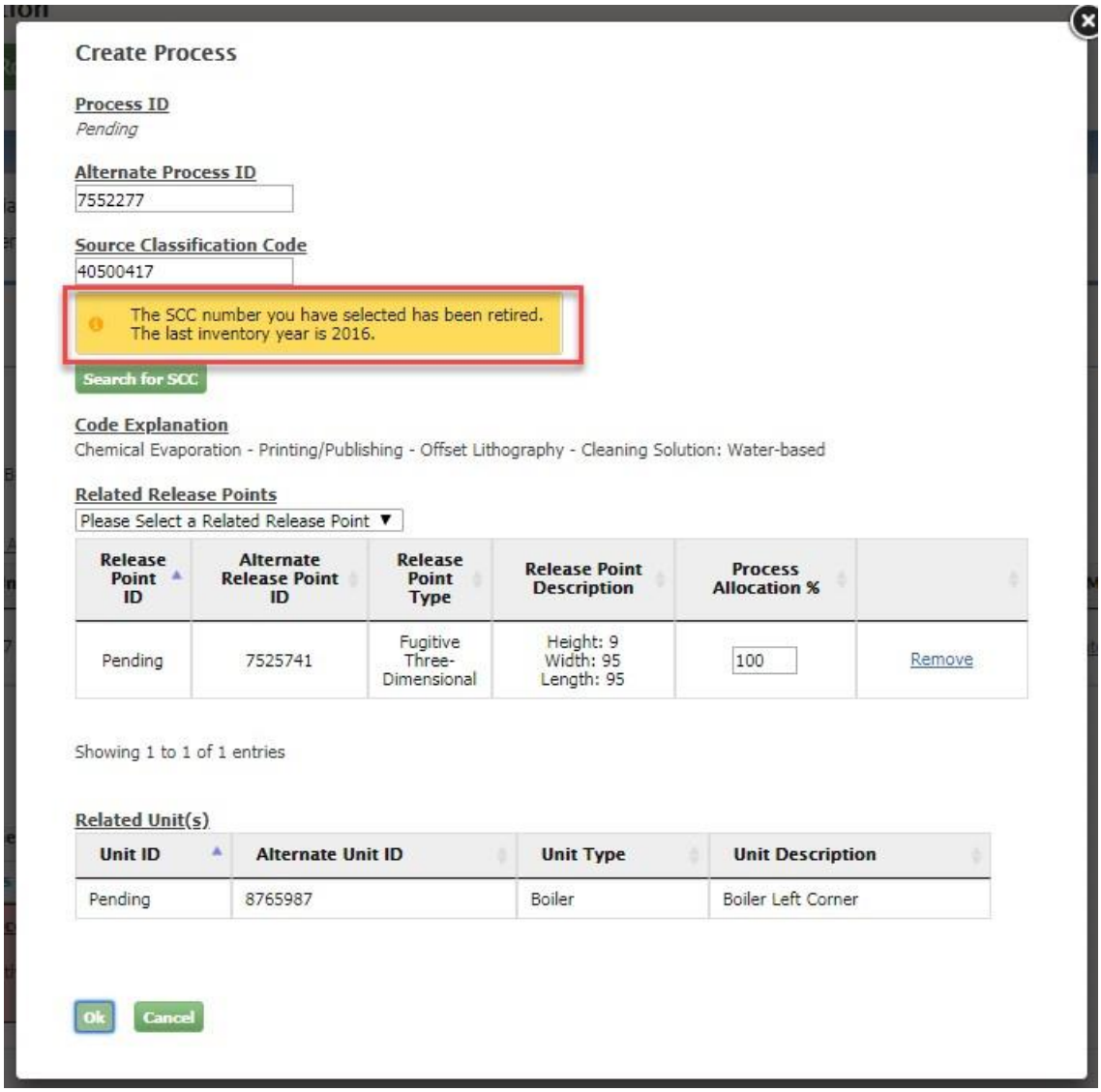

Exhibit 21

- If an SCC code that is not in the "point" category is entered, the following error is displayed: "Please provide a SCC with a data category of 'Point.'" See Exhibit 22.

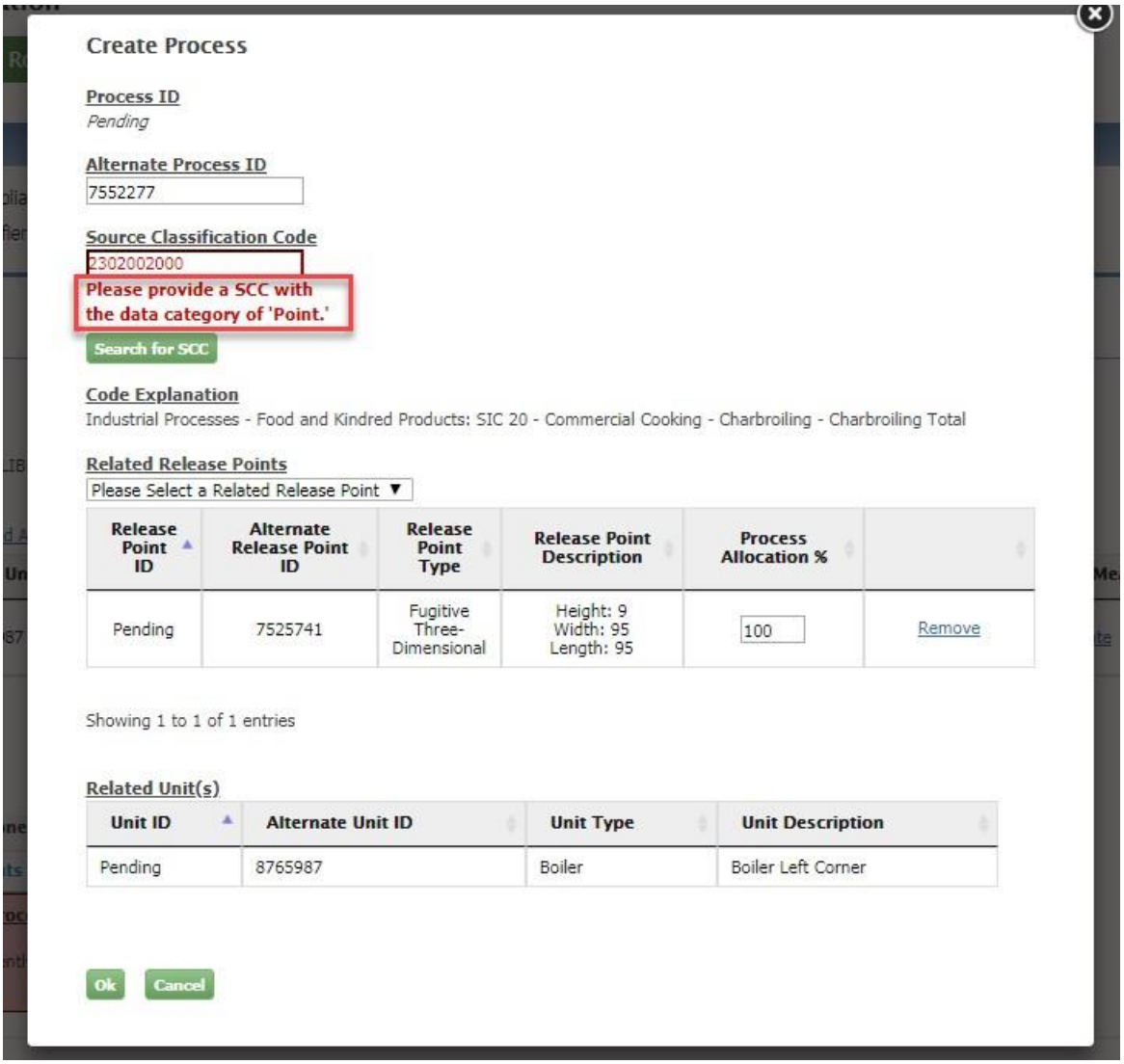

Exhibit 22

- The 'Related Units' section contains the following read-only data in table format:
    - Unit ID
    - Alternate Unit ID
    - Unit Type
    - Unit Description

  Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by processes.

5. Click the 'Ok' button to temporarily save your process information, during the current session, until you can you can submit the facility and sub-facility data by clicking the 'Submit' button on the 'Edit Facility' screen.

The system takes you back to the 'Create Sub-facility Component' page where the new process is displayed on the 'Process' tab of the 'Related Components' section (if you instead choose to click the 'Cancel' button on the 'Create Process' screen, all entered process data will be lost and the system will take you back to the 'Create Sub-facility Component' page). A new row is added to the 'Processes' tab in the 'Related Components' section for the newly added process (see Exhibit 23). The table contains the following read-only data columns:

- Process ID
- Alternate Process ID
- SCC
- Process Description

You can continue to add associated processes to the 'Processes' tab in the 'Related Components' section or you can choose to edit processes, remove processes from the table, and/or add other associated components to the unit:

- Click the 'Add another process to unit' link to navigate to the 'Please select the related process(s)' modal to select or create another process.
- Click 'Remove' in a process row to remove a process from the unit. Clicking the 'Remove' link will generate a message that will prompt you to confirm that you want to remove the component from the unit. Doing so will not remove the process from the facility, but it will no longer be associated to the unit.
- Click 'View/Edit Details' on a process row to view the 'Process Details' modal where you will be presented with an 'Edit Process' option to open the process for editing.

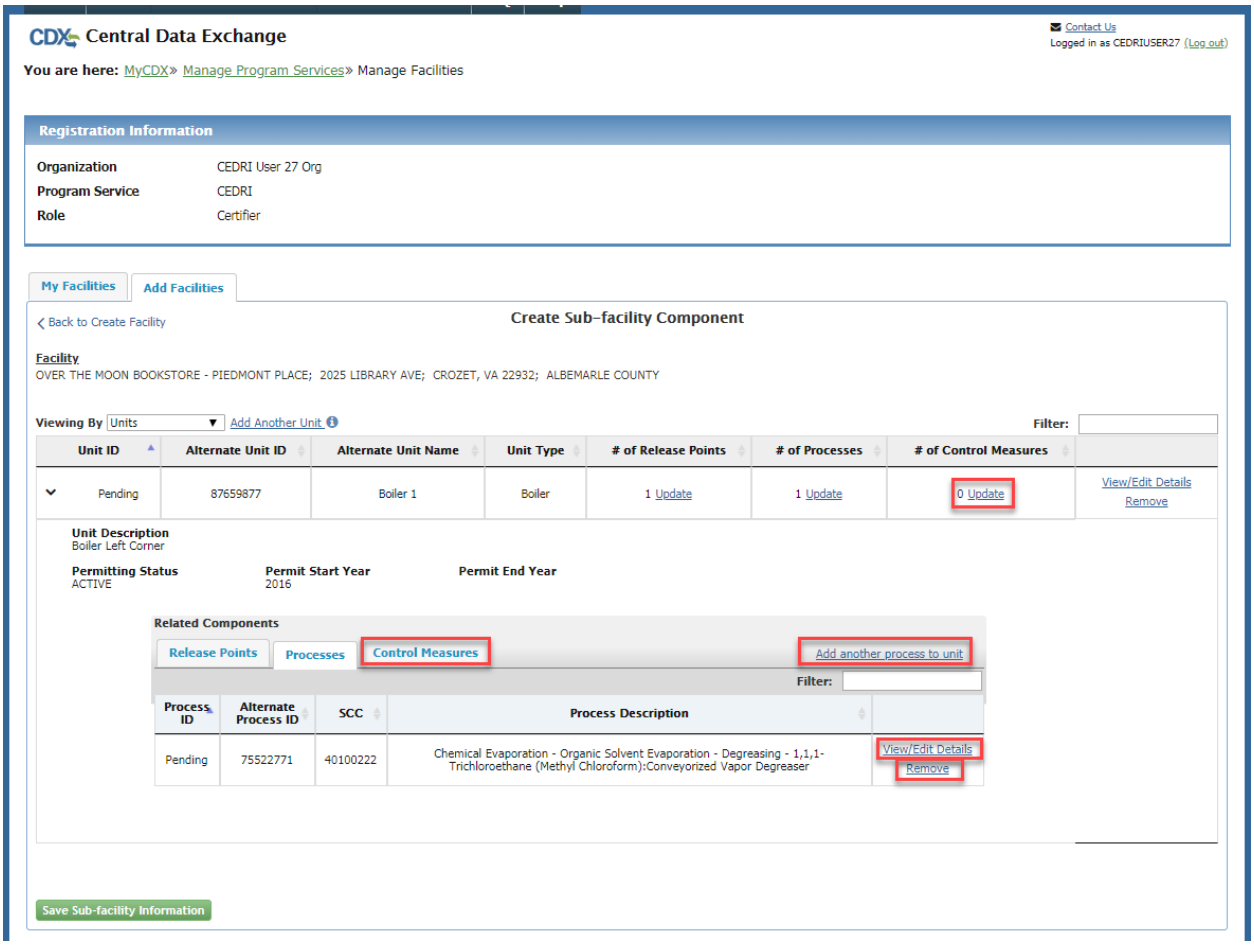

Exhibit 23

Add Emission Controls to a Unit

1. Click the 'Update' link for '# of Control Measures' in the unit table or click the 'Control Measures' tab in the 'Related Components' section to navigate to the 'Control Measures' tab (see Exhibit 24)
2. To add an associated control measure to the unit, click the 'Add control measure to unit' link from the 'Control Measures' tab of the 'Related Components' section under the expanded top-level unit row (see Exhibit 24). The system will generate the 'Please select the related control measure(s)' modal (see Exhibit 25).

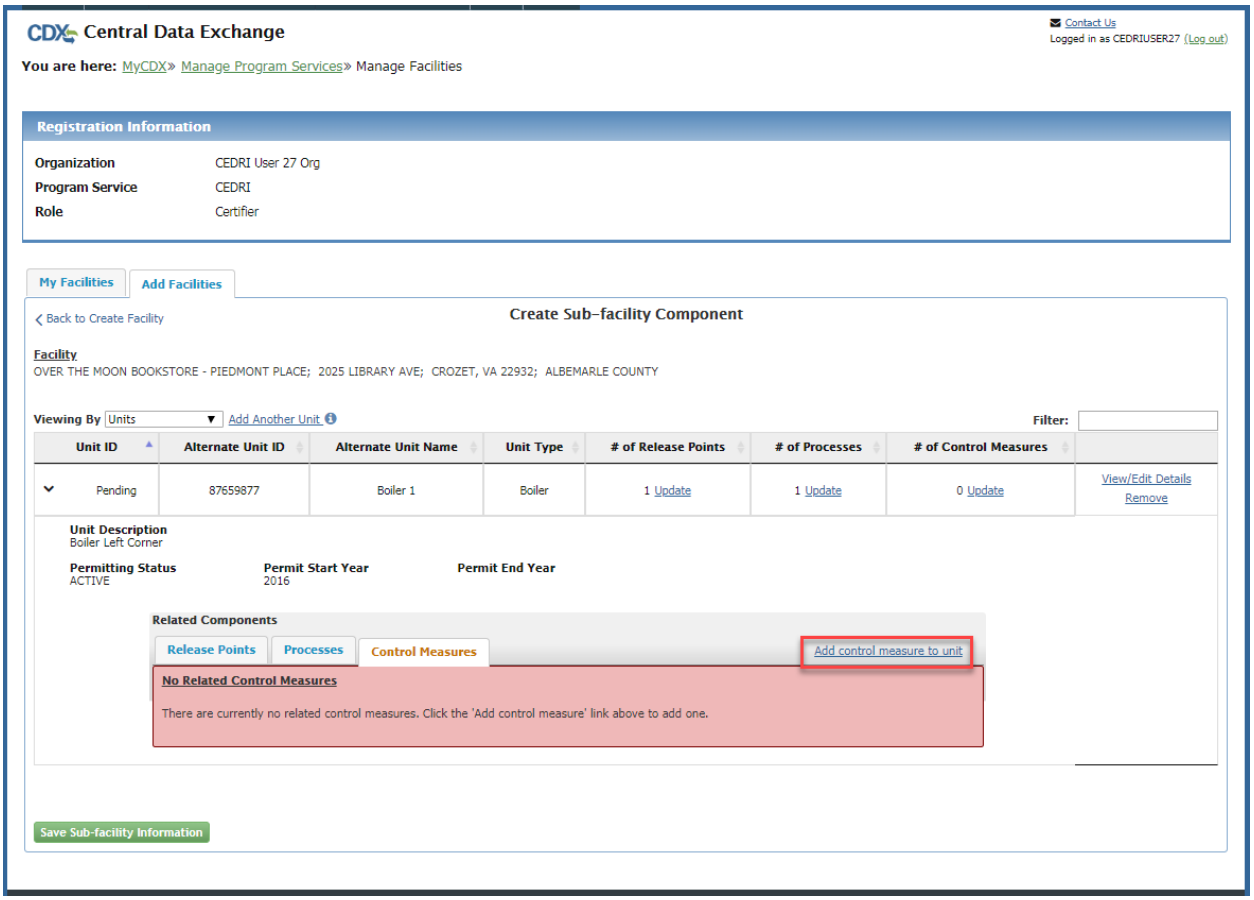

Exhibit 24

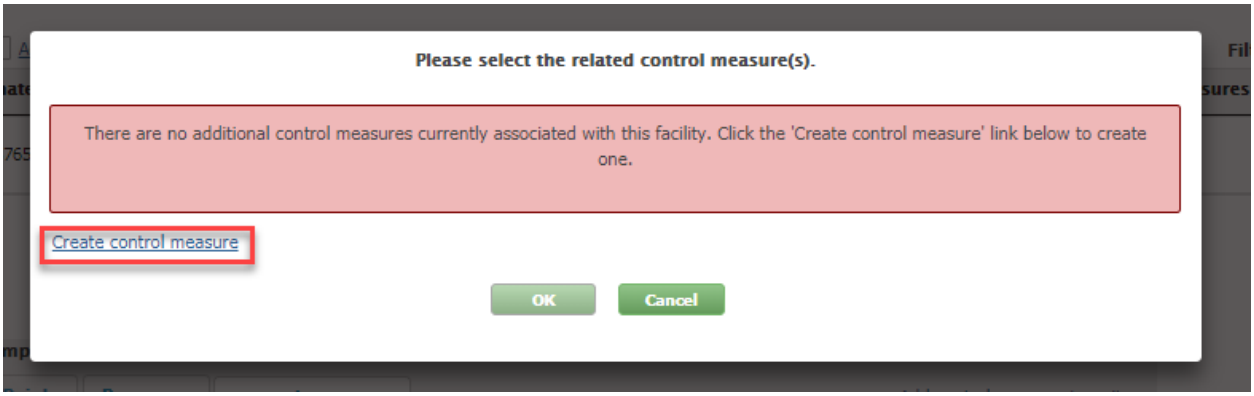

Exhibit 25

- If the facility contains existing control measures, they will be listed on this modal and you may choose one or more from the list and click 'Ok.'
- You may cancel the process of adding a control measure to the unit by clicking the 'Cancel' button on the 'Please select the related control measure(s)' modal.
- Clicking the 'Create control measure' link takes you to the 'Create Control Measure' modal to create a new control measure record to associate to the unit and facility.

3. Click the 'Create control measure' link. The system will generate the 'Create Control Measure' modal (see Exhibit 26).

    - The 'Create Control Measure' modal captures the following information about a process:

        - Control Measure ID
        - Alternate Control Measure ID
        - Start Year
        - End Year
        - Number of Months Active per Year
        - Control Measure Type
        - Control Effectiveness (in %)
        - Capture Efficiency (in %)
        - Pollutant
        - Control Measure Reduction Efficiency (in %)

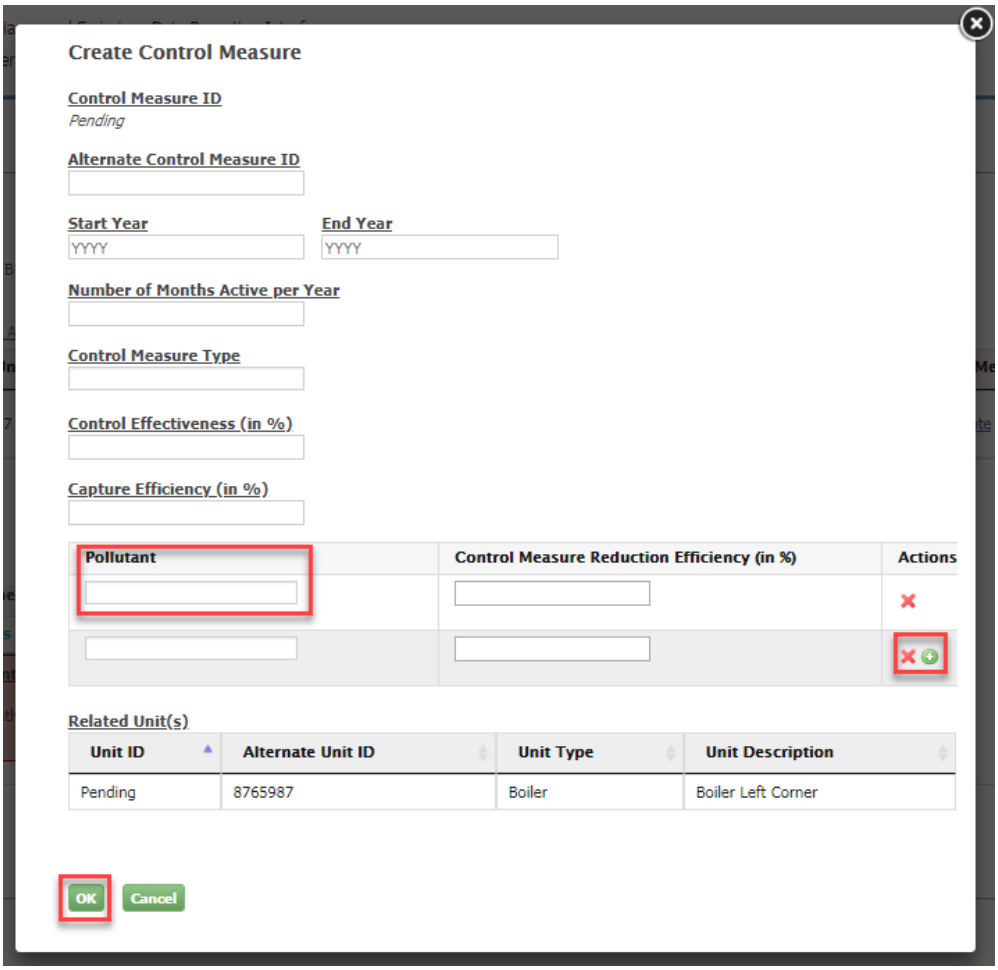

Exhibit 26

4. Enter control measure information into the editable fields.

    - The following fields on the 'Create Control Measure' modal are required:
        - Alternate Control Measure ID
        - Start Year
        - Number of Months Active per Year
        - Control Measure Type
        - Pollutant
            - At least one pollutant must be provided.
    - The 'End Year' value must be greater than or equal to the 'Start Year' value.
    - The 'Number of Months Active per Year' value must be less than or equal to 12.
    - The 'Control Effectiveness (in %)' value must be less than or equal to 100 and cannot have more than two (2) numbers after the decimal.
    - The 'Capture Efficiency (in %)' value must be less than or equal to 100 and cannot have more than two (2) numbers after the decimal.
    - Multiple pollutants can be added to a control measure with an associated 'Control Measure Reduction Efficiency (in %)' value per pollutant. This data is displayed in table format on the 'Create Control Measure' modal. The system will verify that the same pollutant is not added twice to a control measure. Add pollutant rows to the table by clicking the '+' icon. Remove pollutants from the table by clicking the 'x' icon.
    - The 'Control Measure Reduction Efficiency (in %)' value must be less than or equal to 100 and cannot have more than two (2) numbers after the decimal. A 'Capture.
    - The 'Related Units' section contains the following read-only data in table format:
        - Unit ID
        - Alternate Unit ID
        - Unit Type
        - Unit Description
        - Unit Description

    Remember, units can be added to this table only from the 'Related Components' section on the main 'Create Sub-facility Components' window while viewing by control measures.

5. Click the 'Ok' button to temporarily save your control measure information, during the current session, until you can you can submit the facility and sub-facility data by clicking the 'Submit' button on the 'Edit Facility' screen.

The system will take you back to the 'Create Sub-facility Component' page where the new control measure is displayed on the 'Control Measures' tab of the 'Related Components' section (if you instead choose to click the 'Cancel' button on the 'Create Control Measure' screen, all entered control measure data will be lost and the system will take you back to the 'Create Sub-facility Component' page). A new

row is added to the 'Control Measures' tab, in the 'Related Components' section for the newly added control measure (see Exhibit 27). The table contains the following read-only data columns:

- Control Measure ID
- Alternate Control Measure ID
- Control Measure Type
- Control Measure Description

You can continue to add associated control measures to the 'Control Measure' tab table or you can choose to edit control measures, remove control measures from the table, and/or add other associated components to the unit:

- You can continue to add associated control measures to the 'Control Measure' tab table or you can choose to edit control measures, remove control measures from the table, and/or add other associated components to the unit:
- Click the 'Add another control measure to unit' link to navigate to the 'Please select the related control measure(s)' modal to select or create another control measure.
- Click 'Remove' in a control measure row to remove a control measure from the unit. Clicking the 'Remove' link will generate a message that will prompt you to confirm that you want to remove the component from the unit. Doing so will not remove the control measure from the facility, but it will no longer be associated to the unit.
- Click 'View/Edit Details' on a control measure row to view the 'Control Measure Details' modal where you will be presented with an 'Edit Control Measure' option to open the control measure for editing.

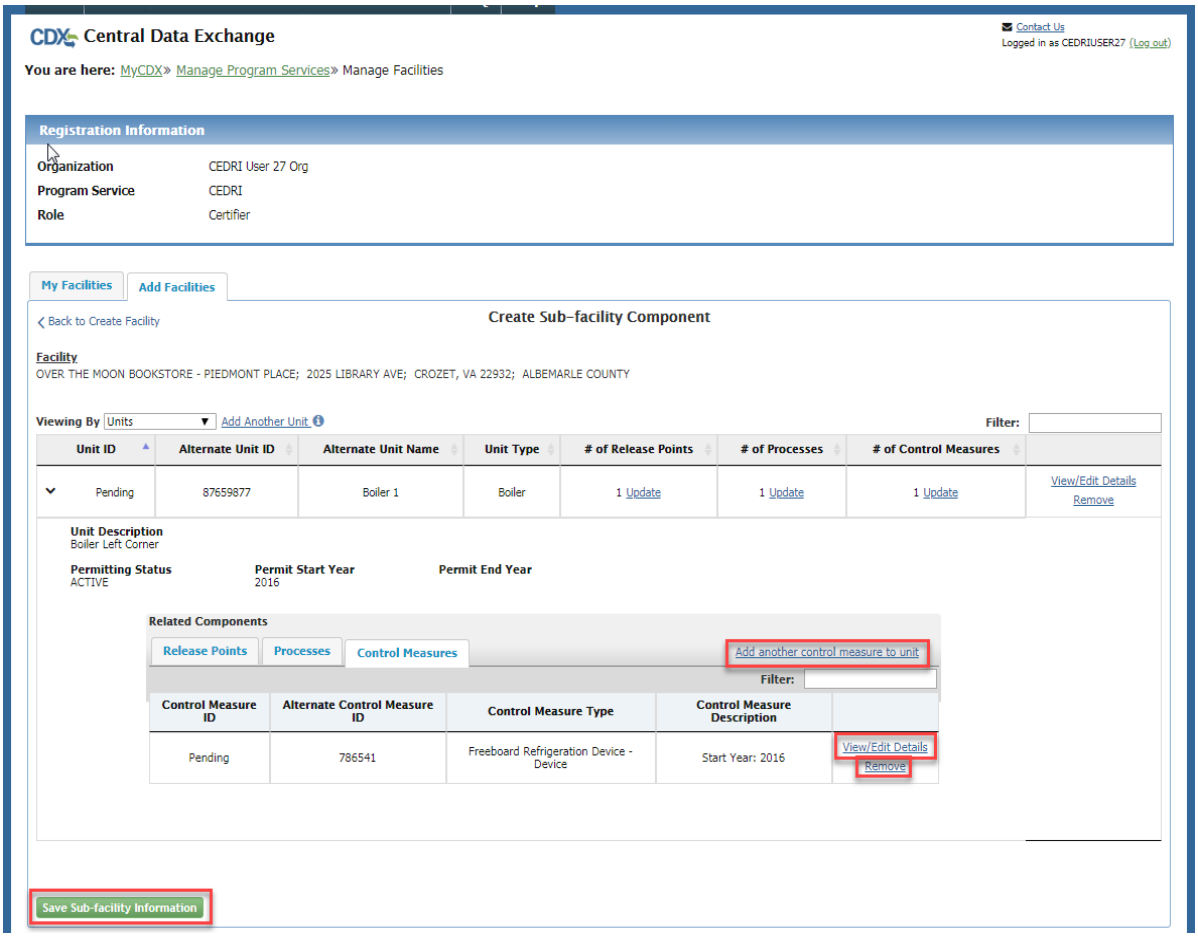

Exhibit 27

Ordering Control Measures

The Facility Widget allows you to indicate the order in which control measures are deployed for a particular unit, process, or release point. If there is more than one control measure associated with a component, the 'Actions,' 'Parallel with Previous?,' and 'Control Order' columns are displayed on the 'Control Measures' tab of the 'Related Components' section of the screen.

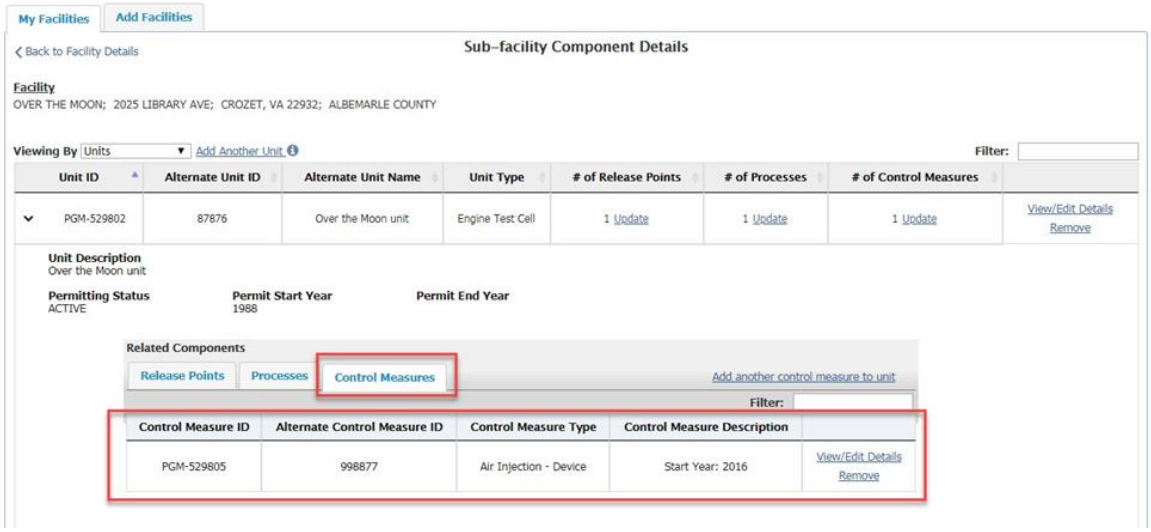

Exhibit 28

Note that in Exhibit 28, there is only one associated control measure, and therefore, no mechanism for ordering control measures. Exhibit 29 illustrates the scenario in which multiple control measures are added and associated to a component; the 'Actions,' 'Parallel with Previous?,' and 'Control Order' columns enable the user to change the order in which the control measures are displayed.

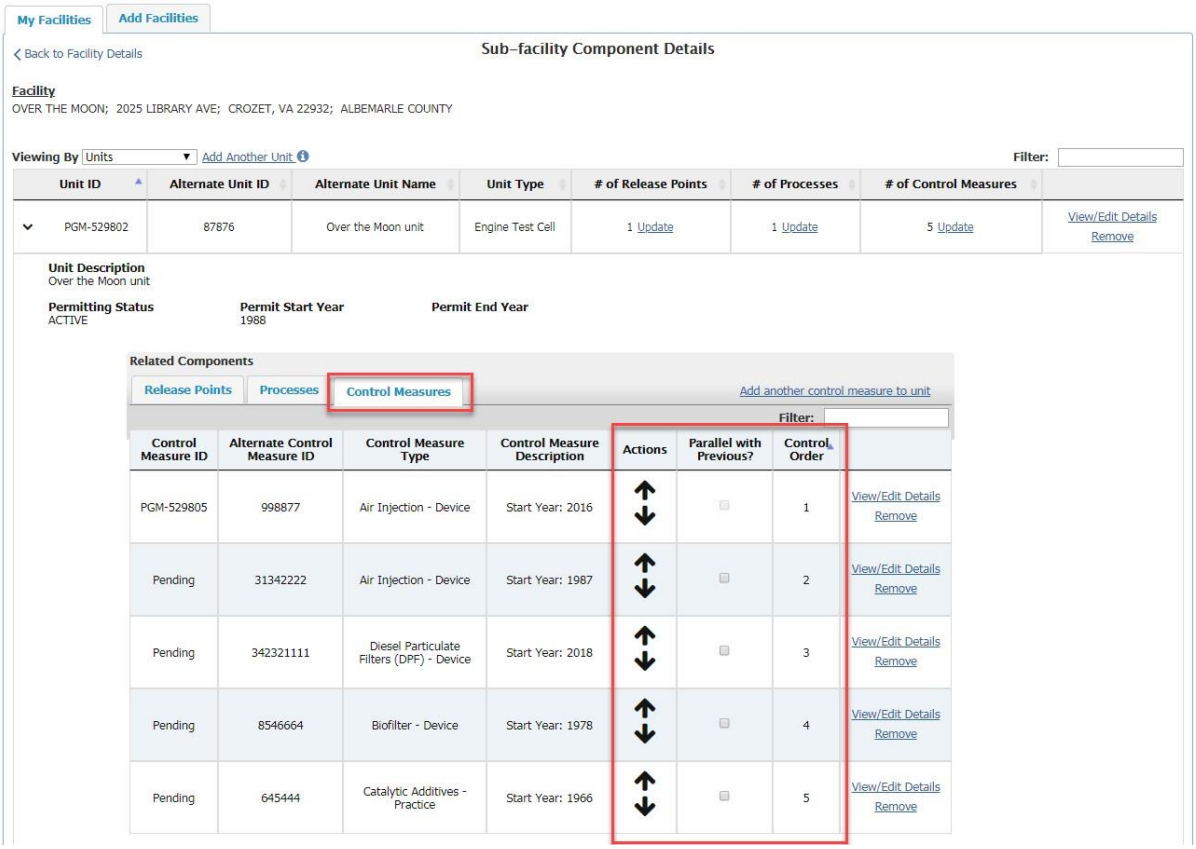

Exhibit 29

1. Check the 'Parallel with Previous?' checkbox to indicate that a control measure, and the one listed before it, are used in parallel for a component. Both control measures will receive the same number for control order, as illustrated below, in Exhibit 30.

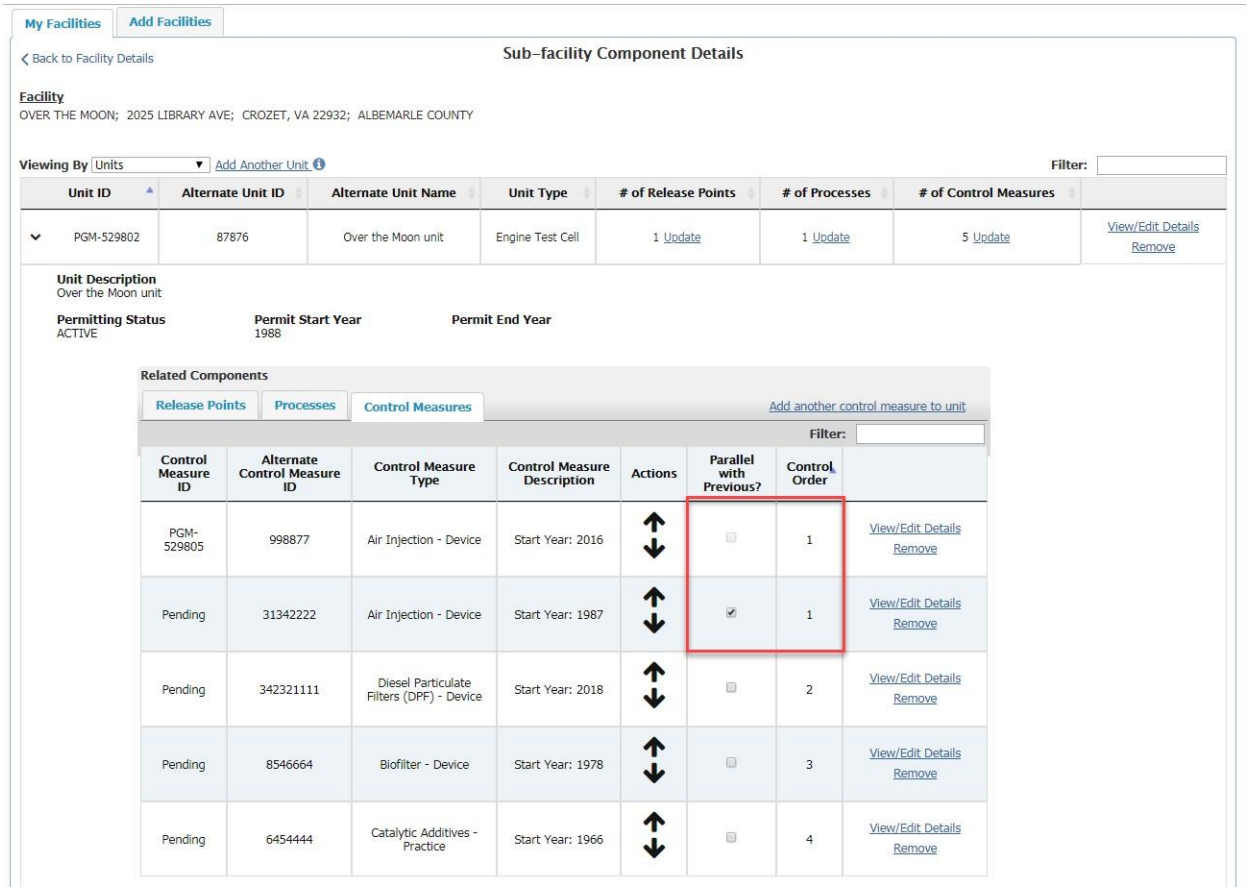

Exhibit 30

2. Move a particular control measure, or set of parallel control measures, up or down in the list by clicking the up or down arrows, as highlighted below, in Exhibit 31 and Exhibit 32.

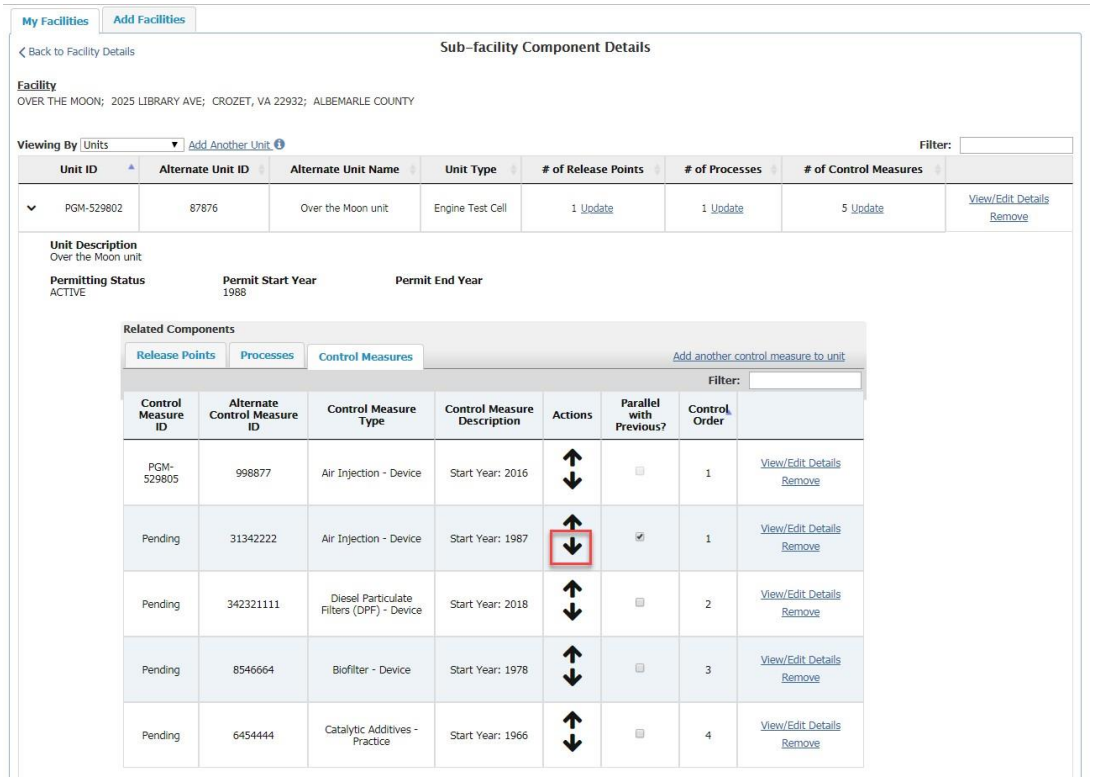

Exhibit 31

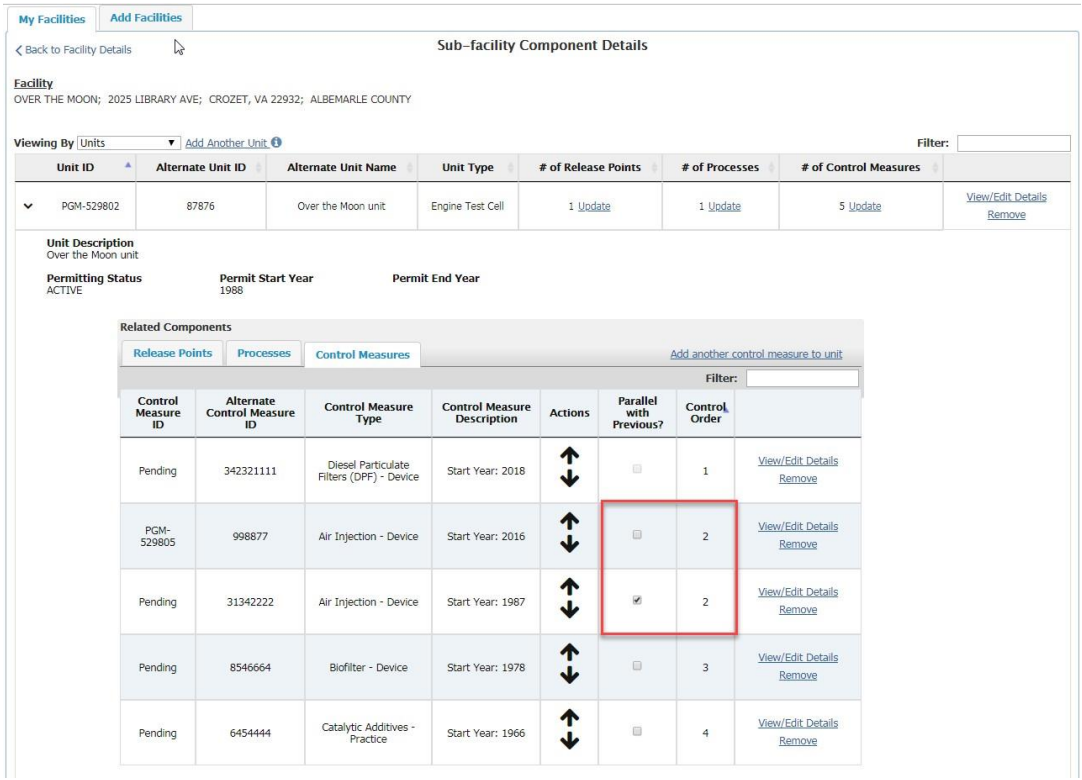

Exhibit 32

Save and Submit Sub-facility Information

1. Click the 'Save Sub-facility Information' button at the bottom of the 'Create Sub-facility Component' page. Upon clicking the button, any relevant warnings and errors will be displayed (see Exhibit 33). Warnings will not prevent submission. You can choose to resolve the warnings or you can click the 'Save Sub-facility Information' button again. You will be taken back to the 'Create Facility' screen. You must submit the facility from the 'Create Facility' screen to save all facility and sub-facility information.

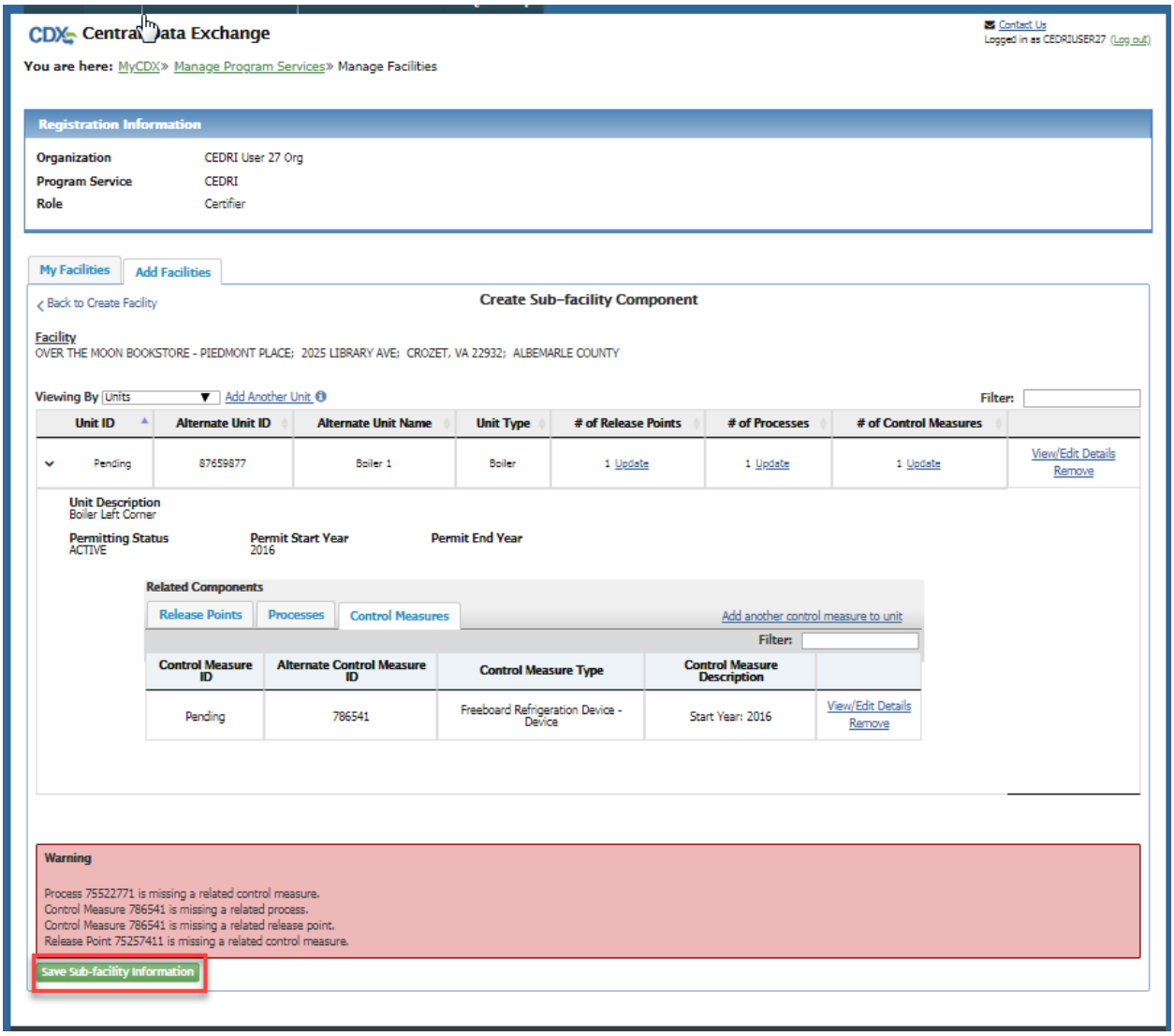

Exhibit 33

2. While warnings do not need to be resolved before saving and submitting, most warnings can be resolved by associating components that were not associated through the steps listed above.

   To add an association for a specific component type (e.g., process in the first example in

Exhibit 33), use the 'Viewing By' drop-down menu to select processes. Then, in the 'Related Components' section of the resulting page, select the 'Control Measures' tab and add a control measure to the process.

Similarly, other associations can be made by using the 'Viewing By' drop-down and the appropriate tab in the 'Related Components' section of each page.

3. Click the 'Submit' button on the 'Create Facility' (or 'Edit Facility') screen (see Exhibit Create Facility- Submit). You will be taken to the 'Selected Facilities' page on the 'Unsaved Facilities' tab of the Facility Widget (see Exhibit Save Selected Facilities).
4. Click the 'Save Selected Facilities' button (see Exhibit Save Selected Facilities) to submit the facility and sub-facility data to FRS and associate it to your CEDRI role.