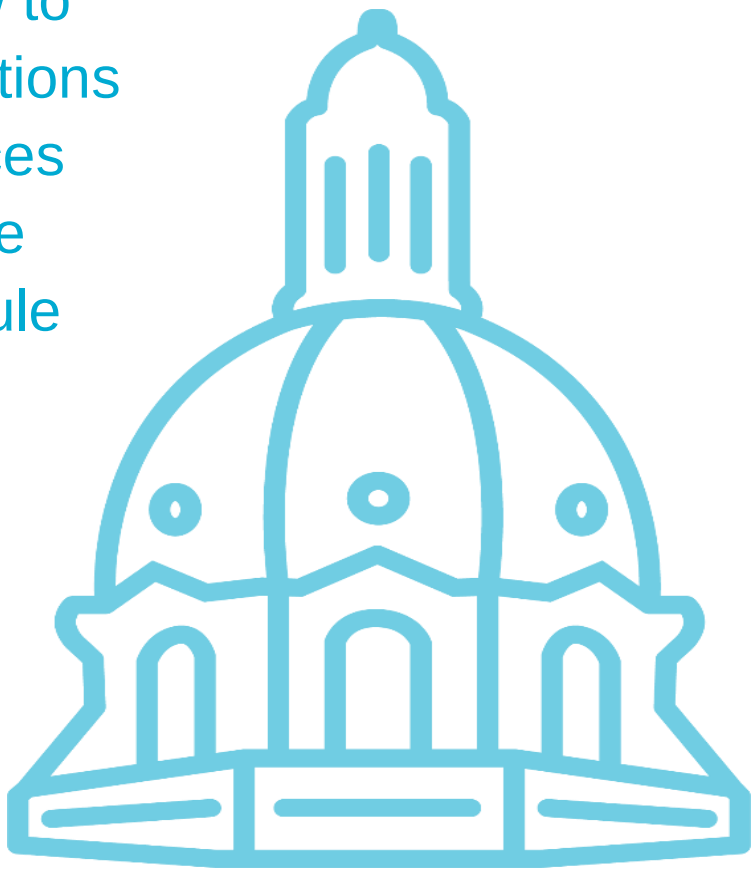
ETS - Industrial Data Administration Training Manual

An overview on how to update Ambient Stations and Emission Sources information using the Administration Module



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1. ETS Role Management

Each Client Account must be assigned User Role(s). **One or any combination** of User Roles can be assigned to each client account.

Please note:

- Site Administrator needs to assign Coordinator role(s)
- Coordinator needs to go though each user and assign or remove User Roles, as needed for each approval
- All active EPEA Approvals linked to a company EN account will show up on the Role Maintenance screen, under 'Company Approval' dropdown even if there is no air related monitoring or reporting requirements, this includes Reclamation and Decommissioning status approvals, as they are still active.
- If an EPEA Approval number is not showing up on the Company Approval list, or should be removed from this list, please contact air.reporting@gov.ab.ca to have it assigned

Roles in ETS

The roles available in ETS are:

User Roles	**Description**
Site Administrator	Create accounts and assign Coordinator role in ETS account node. **Must assign at least one User the Coordinator role.**
Coordinator	Can assign all roles below, by approval, to all active users in admin module.
Station Manager (this role is covered in the *Industrial Data Administration Training Manual)*	Can modify source and ambient stations details and assign reference data for station/approvals to which they are assigned.

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Reviewer	Can review 'Pending Review' submissions and pass or fail them, progressing them to Submitted or Review Failed status. Can view and edit the submissions of others. Role is assigned by approval.
Submitter	Can create requests and begin the submission process; data will be validated and submission will progress to Pending Review but not to Completed (unless user also has Reviewer role). Cannot view submissions of others. Role assigned by approval.
Viewer	Can view, but not modify the submissions and station reference data of other users, as assigned by approval.

Roles	Role Assignment by Approval	Update Source and Station info (includes assigning ambient VVC, equipment)	See Stations (read-only)	Submit (create a submission)	Review (sign off on a submission)	View Submissions (work in progress)
Coordinator	Yes	No	Yes	No	No	Yes
Station Manager	No	Yes	Yes	No	No	No
Reviewer	No	No	Yes	No	Yes	Yes
Submitter	No	No	Yes	Yes	No	Yes
Viewer	No	No	Yes	No	No	Yes

Note: A Submitter can only view submissions that they have submitted (i.e. not all submissions for that approval, if there is more than one submitter)

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2. Roles and Roles Assignment

This manual discusses Industry Administration in relation to Emission Source and Ambient Station Maintenance.

For more information on:

- Roles
- Roles assignment
- Data Submission

Refer to the *ETS – Industrial Data Submission Online Training Manual* on https://training.energy.gov.ab.ca/Pages/Air.aspx

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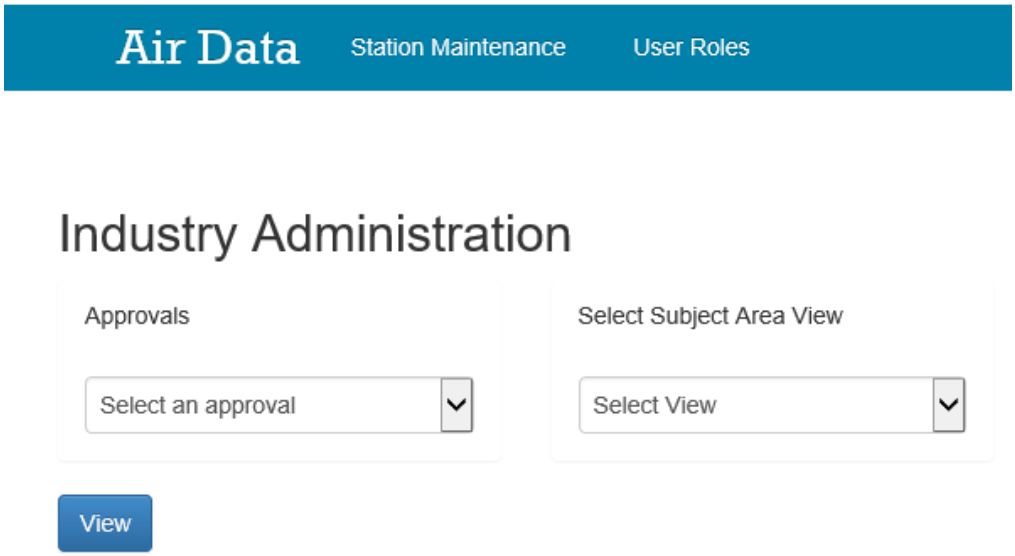
3. Industry Administration Form Types

Industry Administration Screen



This is the "***Industry Administration***" Screen. At the top of the screen in the blue band are two choices:

- "***Station Maintenance***" - the Station Manager(s) maintains information on source and/or ambient stations. (**Note**: clicking this choice will return you to this screen)
- "***User Roles***" - the Coordinator will assign various roles to user(s).

The "***Industry Administration***" screen shows approvals assigned to the company EN account. In order to view a specific list of Emission Sources or Ambient Stations, select the approval number from the "***Approval***" dropdown list; this is accompanied by the facility name, then select the subject from the "***Select Subject Area View"*** dropdown list.

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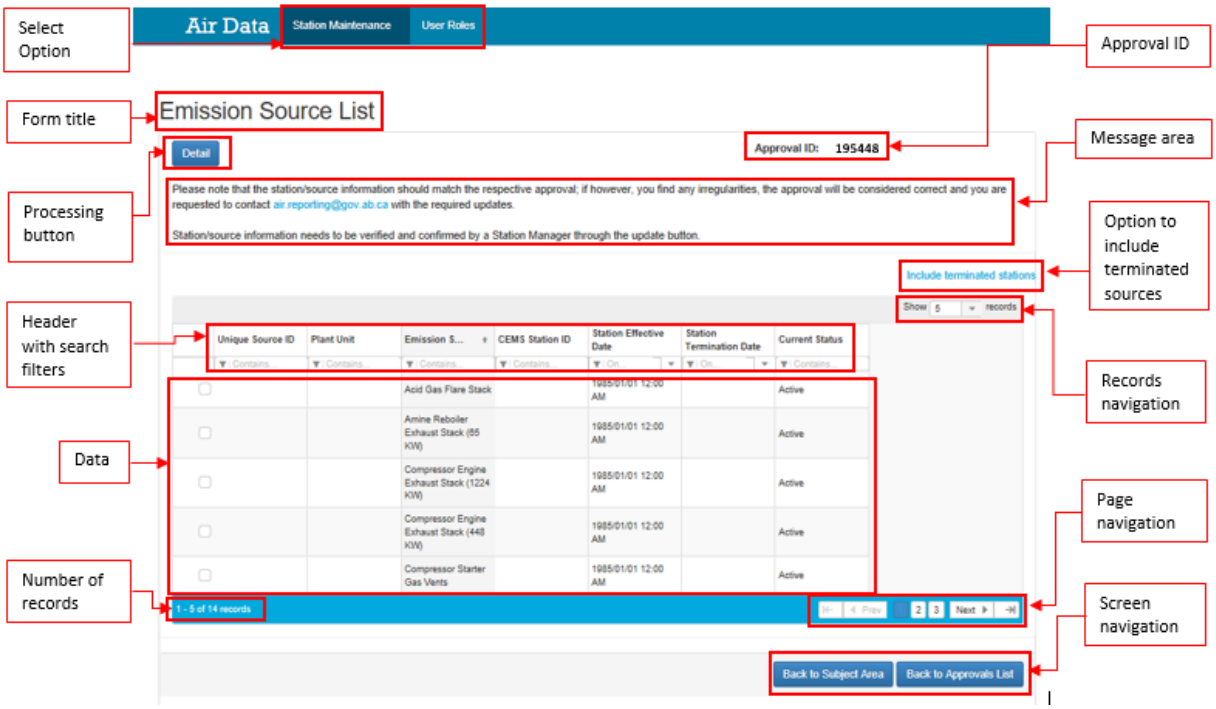
Industry Administration: Subject Area View



The contents in the form will change depending on the selection made (i.e. Emission Source List vs. Ambient Station List). They will be identified throughout the document.

Industry Administration: Subject Area View – Navigation

- Clicking on any title row will sort in ascending/descending order
- The number of records showing up in the grid per page can be picked between 5 and 100

- If one of the buttons is not showing up on your screen you many not have the proper role(s) assigned

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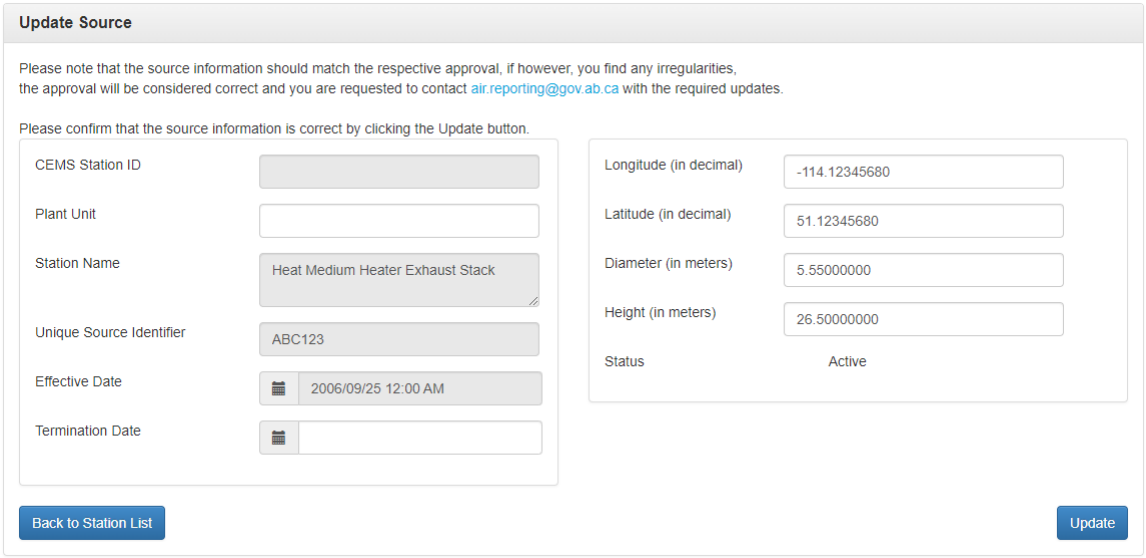
Industry Administration: Update Form

When a Station Manager selects a source and hits “Update”, they are redirected to the below form. Only Station Managers have the “Update” option.



This is an example of the Update form, where you can modify information if you have a Station Manager role.

Note: Only sources with monitoring and/or reporting requirements should be updated. If source information requires further updates, e-mail air.reporting@gov.ab.ca to request changes.

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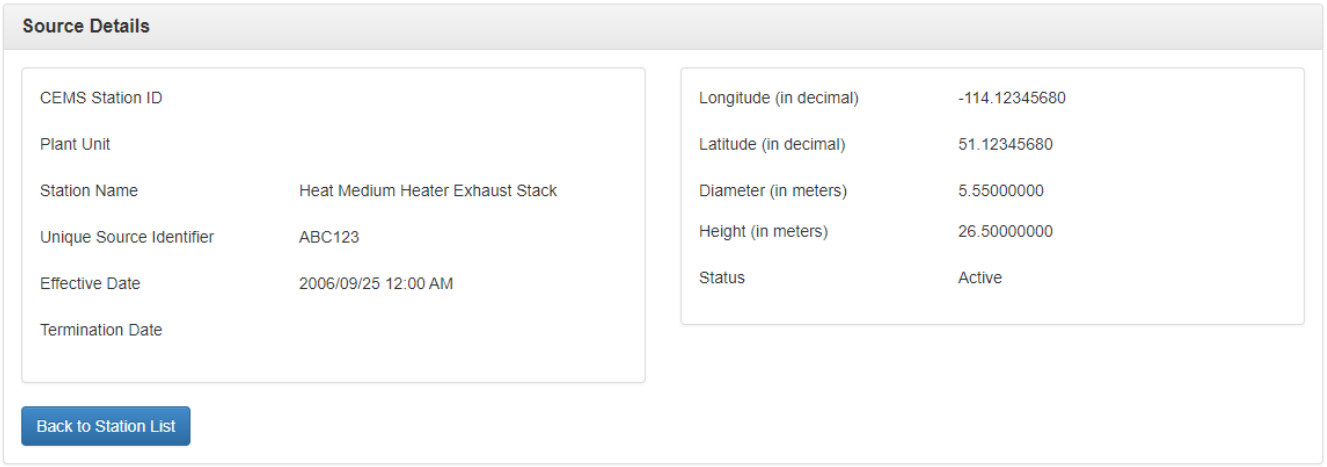
Industry Administration: Details Form

When a User selects a source and hits “Details”, they are redirected to the below form:



This is an example of the Details form, where you can view information, but not update.

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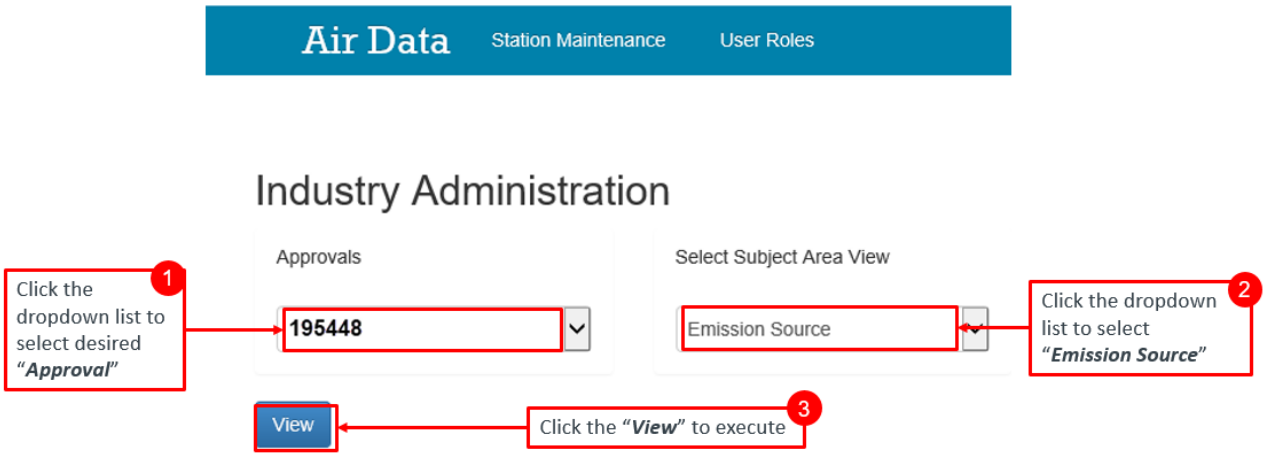
4. Industry Administration

Emission Source

Emission Source: View



This is an example of a user selecting an "***Emission Source***" view for a specific approval.

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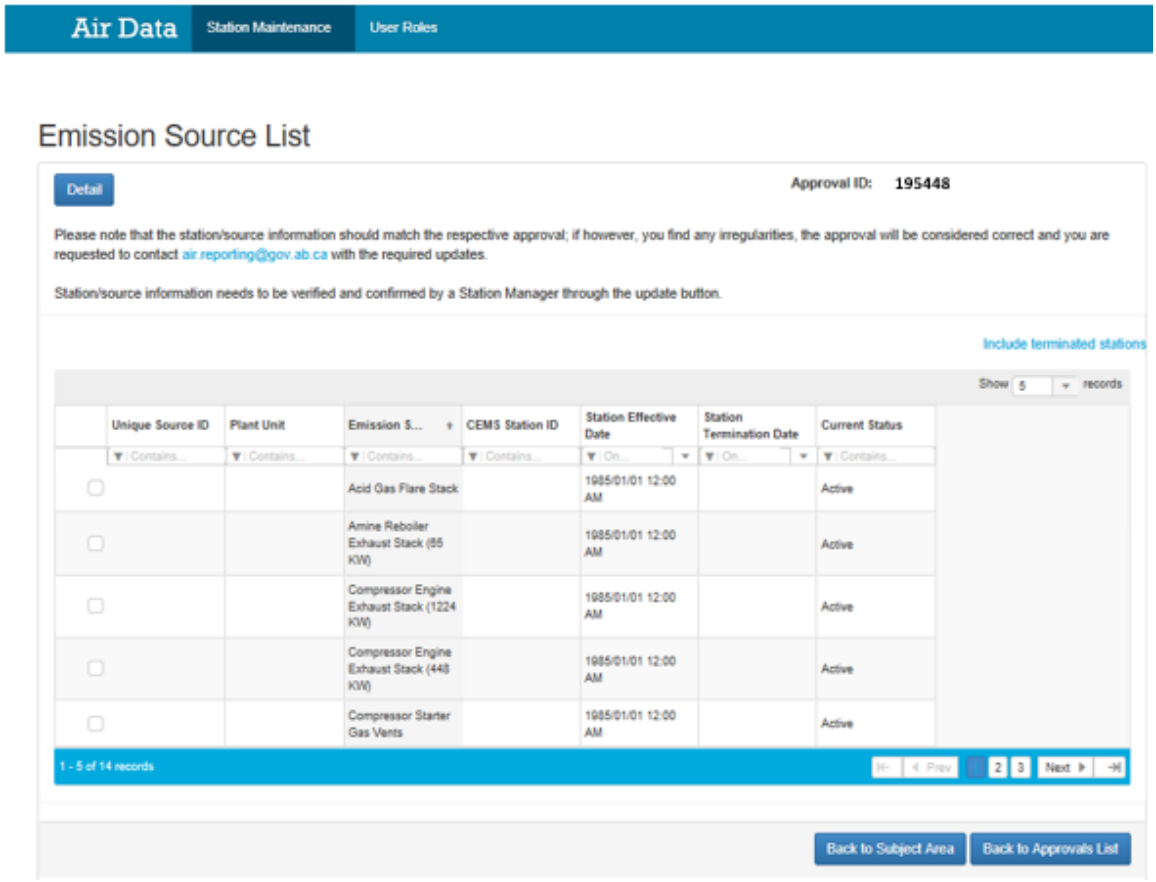
Emission Source: Source List



This is the "***Emission Source"*** List form.

This form shows a list of Source(s) with detailed information based on the following headers:

- Unique Source ID
- Plant Unit
- Emission Source Name
- CEMS Station ID
- Effective Date
- Termination Date
- Current Status of the source (active, inactive, terminated)

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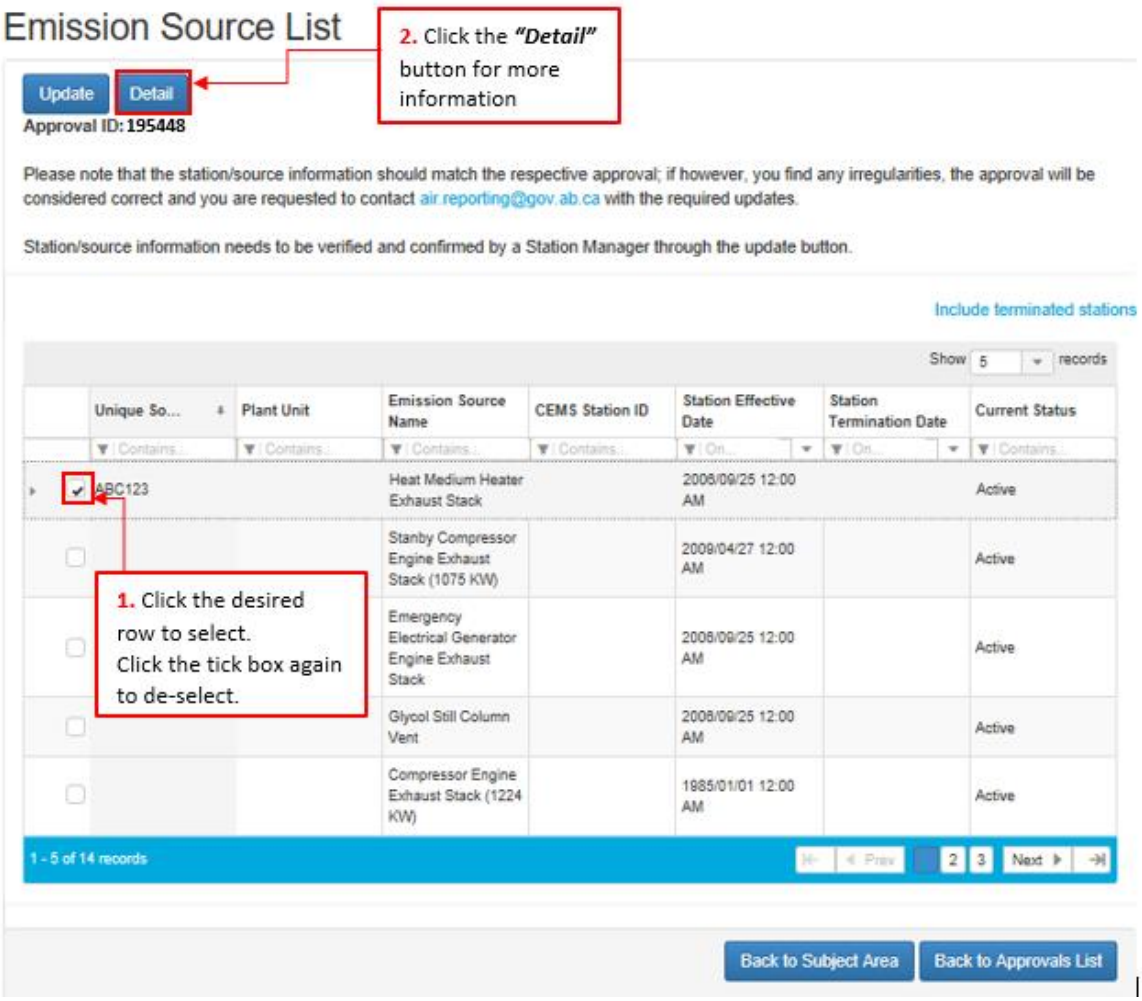
Emission Source: Source List – Detail



More information on each Emission Source can be reviewed in the Detail tab.

To view more information on an Emission Source, click the:

- Desired row (the entire row will be highlighted in blue) and
- "***Detail***" button at the top left.

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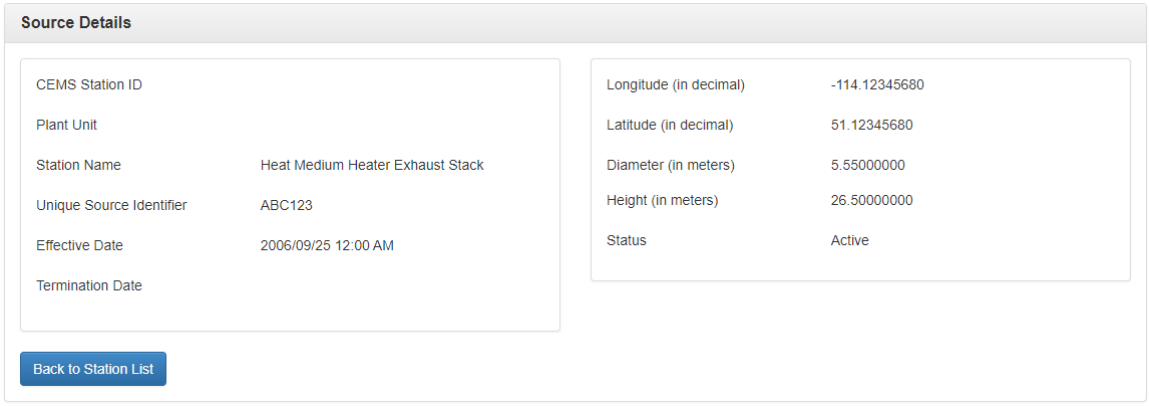
Emission Source: Details Screen



This is the "***Source Details***" screen where details of the Emission Source are provided. Details include:

- CEMS Station ID
- Plant Unit
- Station Name
- Unique Source Identifier
- Effective Date
- Termination Date
- Longitude (in decimal)
- Latitude (in decimal)
- Diameter (in meters)
- Height (in meters)
- Status of the source (active, inactive or terminated)

Note: the details *cannot* be amended on this page.

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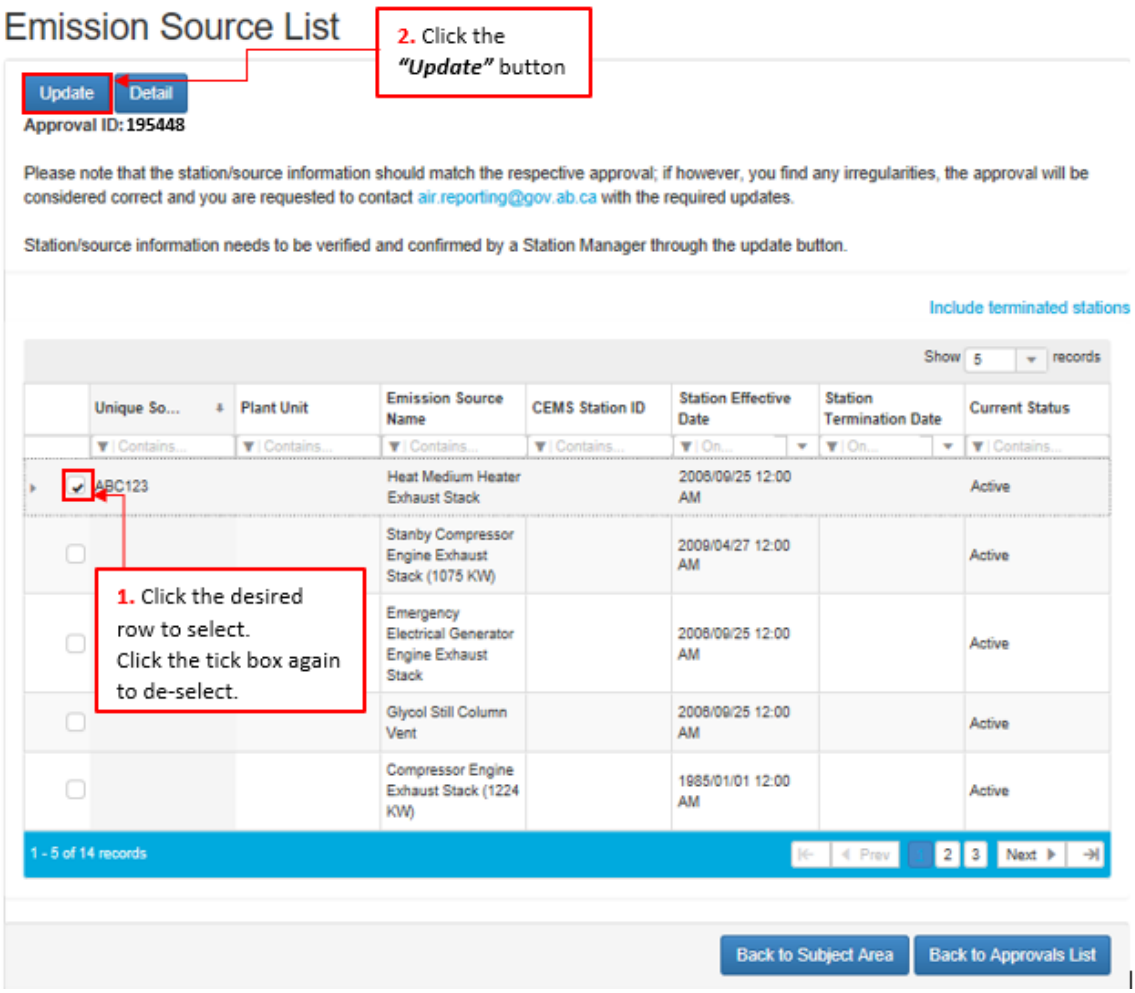
Emission Source: Source List – Update



To update information on an Emission Source, the Station Manager clicks the:

- Desired row (the entire row will be highlighted in blue) and
- "***Update***" button at the top left.

Note: Only a Station Manager can update Emission Source information

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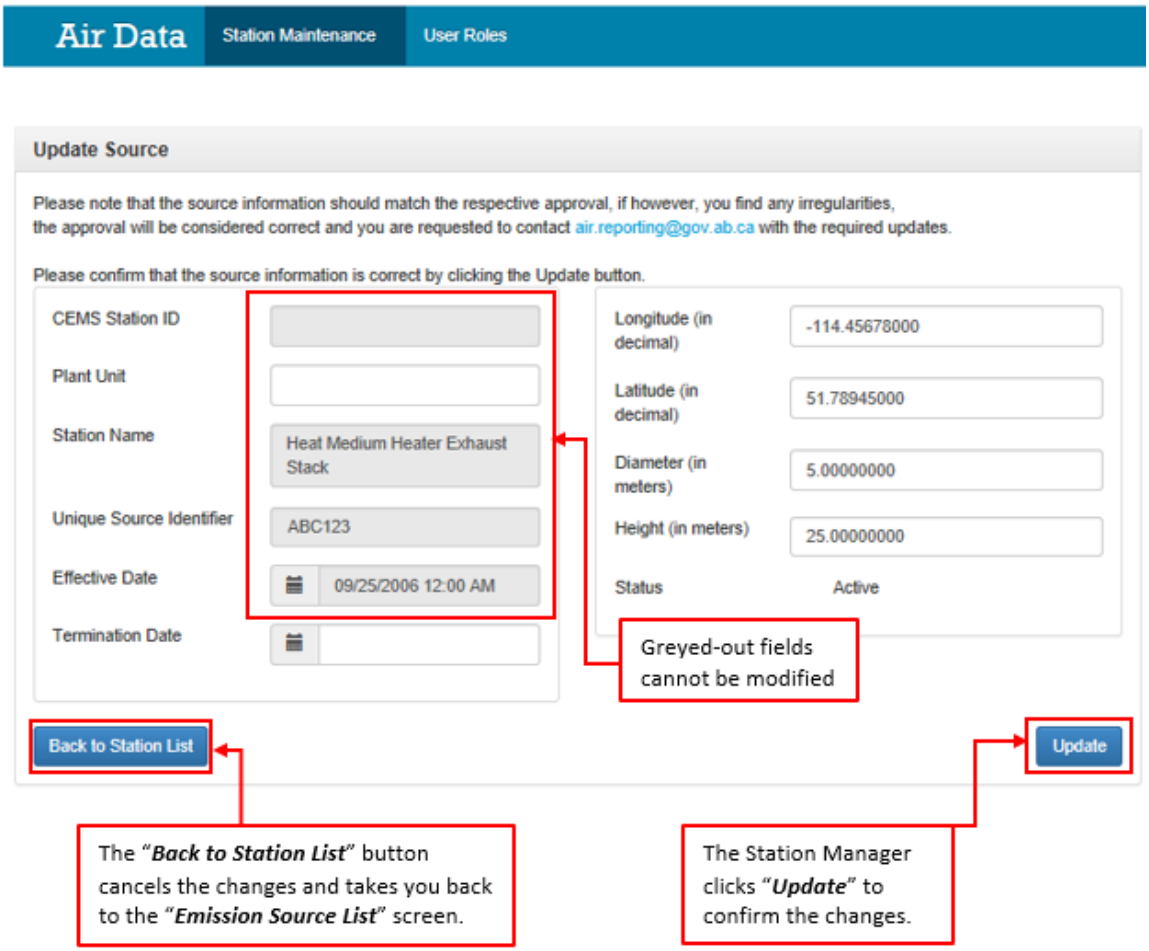
Emission Source: Update Screen



This is the "***Update Source***" screen where the Station Manager can amend/update information on an Emission Source.

The following fields can be amended/updated:

- Termination Date
- Longitude (minimum 5 decimal places)
- Latitude (minimum 5 decimal places)
- Diameter (in meters)
- Height (in meters)

Note: Required fields must be filled in or an error will occur and changes are not saved.

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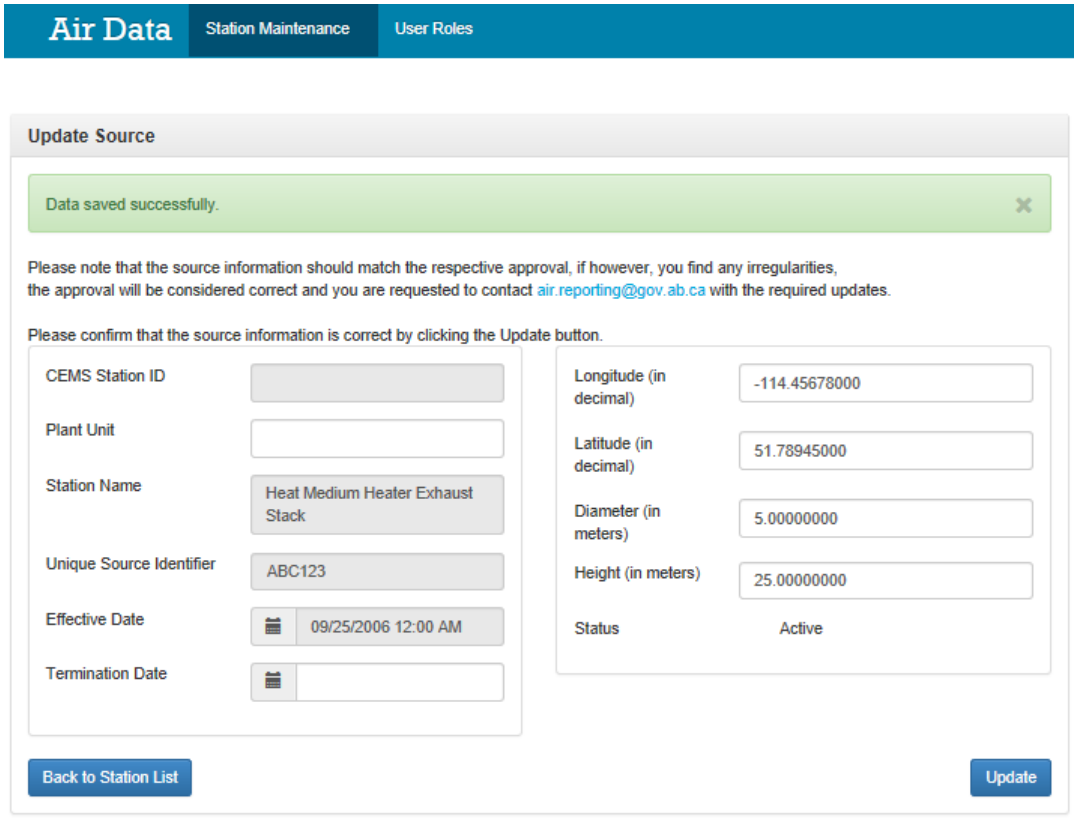
The following fields, once updated, are greyed-out:

- Plant Unit,
- Unique Source Identifier
- Termination date

The following fields are greyed-out and cannot be updated:

- CEMS Station ID – provided with Codes of Electronic Reporting by CEM.UserCoord@gov.ab.ca.
- Station Name (taken from EPEA Approval), or other greyed-out fields – if needs to be updated air.reporting@gov.ab.ca needs to be contacted.

Emission Source: Update Screen – Success



Once the data is filled in and the "***Update***" button clicked, the green bar with the message, "***Data has been saved***" appears indicating success in updating the station information.

To get back to the previous screen, click the "***Back to Station List***" button.

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Emission Source: Information

Emission Sources are based on your EPEA Approval List. Plant Unit, Emission Source Name and Unique Source ID are found in the approval.

PLANT UNIT	EMISSION SOURCE	SUBSTANCE
Units 1 and 2	Stack No. 1	Particulate Matter(PM)
		Nitrogen Oxides (expressed as NO_2)
		Sulphur Dioxide (SO_2)

(c) Light Hydrocarbons-1 unit (LHC-U1):

(i) LHC-1 flare stack (FS-123);

(ii) two package boilers stacks;

(iii) eleven cracking furnace stacks (CF-1, CF-2, CF-3, CF-4, CF-5, CF-6, CF-7, CF-8, CF-9, CF-10, CF-11);

If there is a grouping of sources (i.e. Vents) you do not need to update information (Latitude/Longitude, etc.) as this is intended for singular sources.

If anything on this list needs to be updated that is greyed out (Station Name, Unique Source ID, etc.) please e-mail air.reporting@gov.ab.ca with the approval number and required updates.

CEMS Station IDs are generated by Alberta Environment and Parks. If a source needs to have a CEMS Station ID assigned, contact AEP CEM UserCoord CEM.UserCoord@gov.ab.ca.

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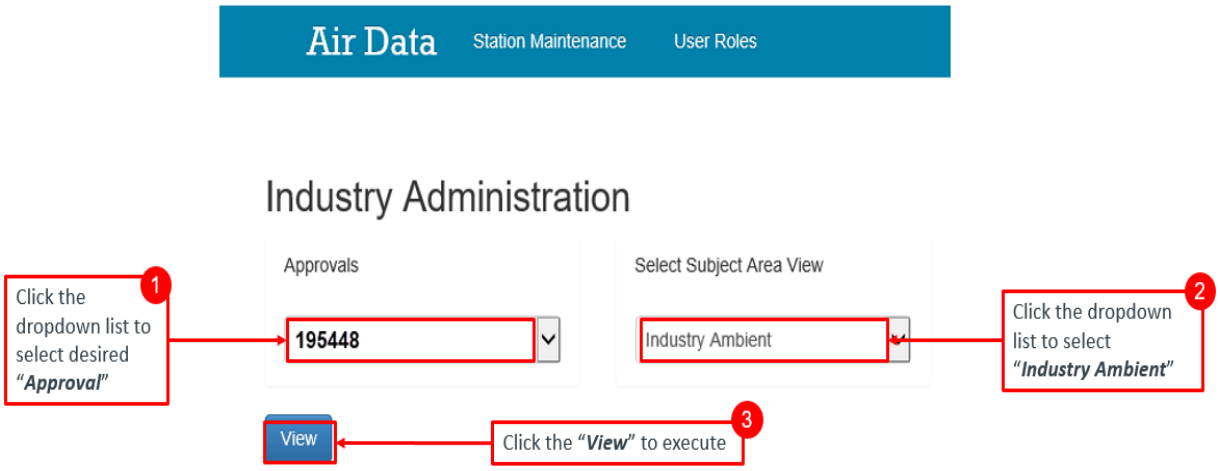
Industry Ambient

Industry Ambient: View



This is an example of a user selecting the "***Industry Ambient"*** view for a specific approval.

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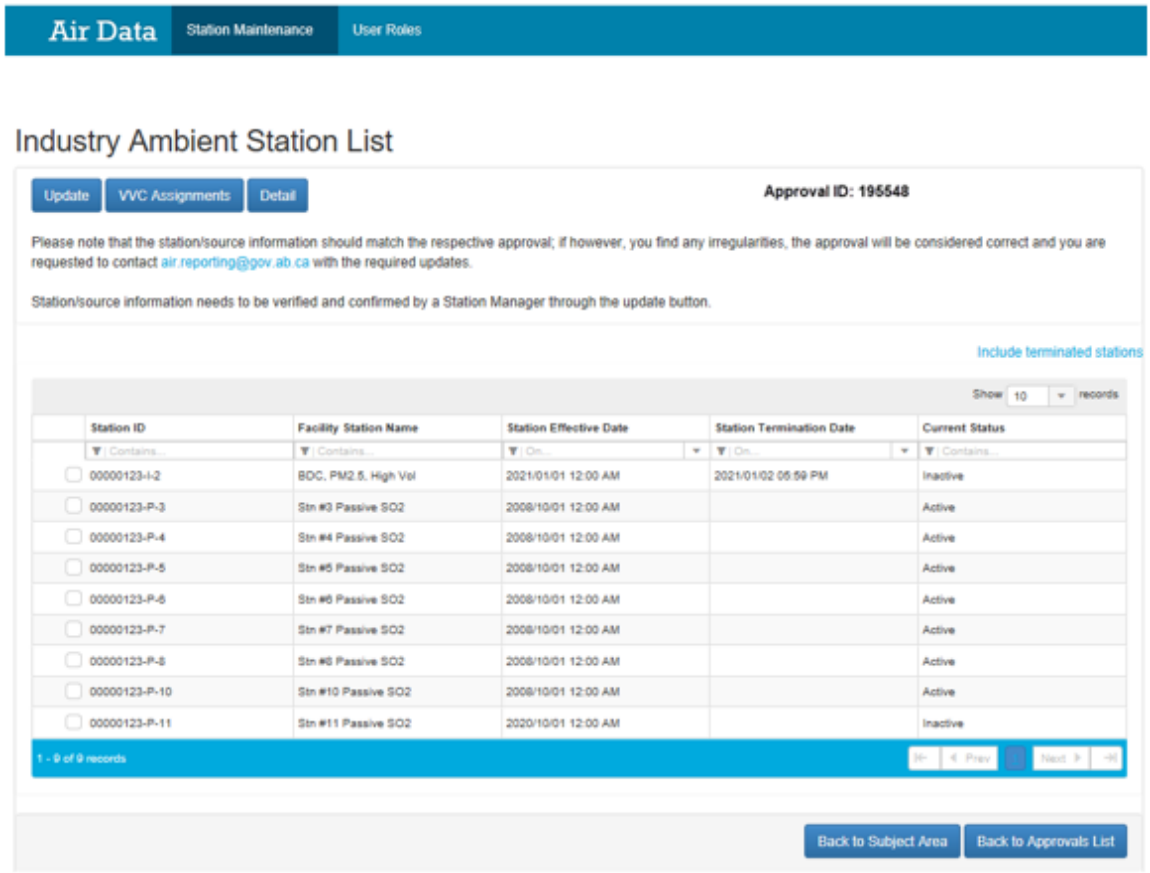
Industry Ambient: Station List



This is the "***Industry Ambient Station List***" form.

This form shows a list of Ambient Stations with detailed information based on the following headers:

- Station ID
- Facility Station Name
- Station Effective Date
- Station Termination Date
- Current Status

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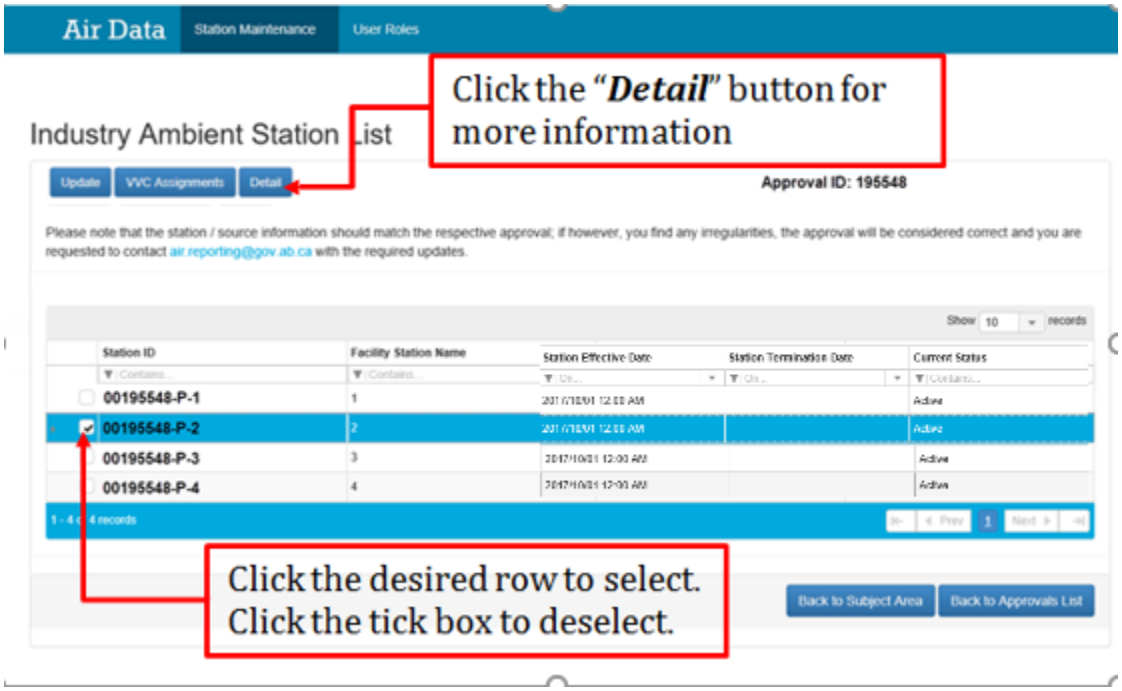
Industry Ambient: Station List - Detail



To view more information on the Industry Ambient Station click the:

- Desired row (the entire row will be highlighted in blue) and
- "***Detail***" button at the top left.

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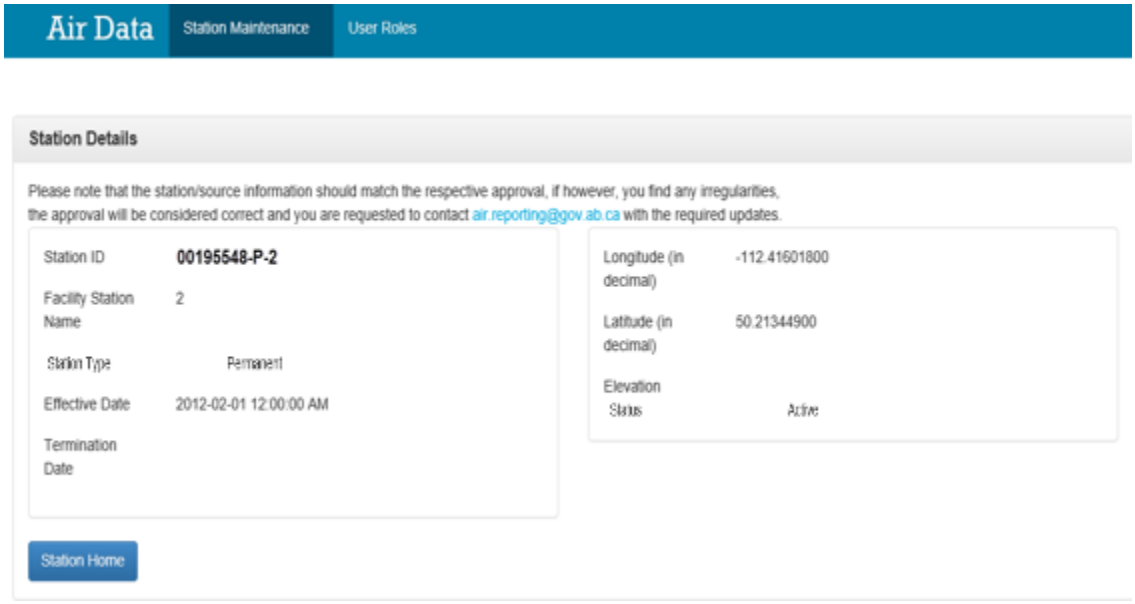
Industry Ambient: Details Screen



This is the "***Station Details***" form where details on the Ambient Station are provided.

The information provided includes:

- Station ID (assigned by AEP)
- Facility Station Name
- Station Type
- Effective Date
- Termination Date
- Longitude (minimum 5 decimal places)
- Latitude (minimum 5 decimal places)
- Elevation (if applicable)
- Station Status

Note: the details *cannot* be amended on this page.

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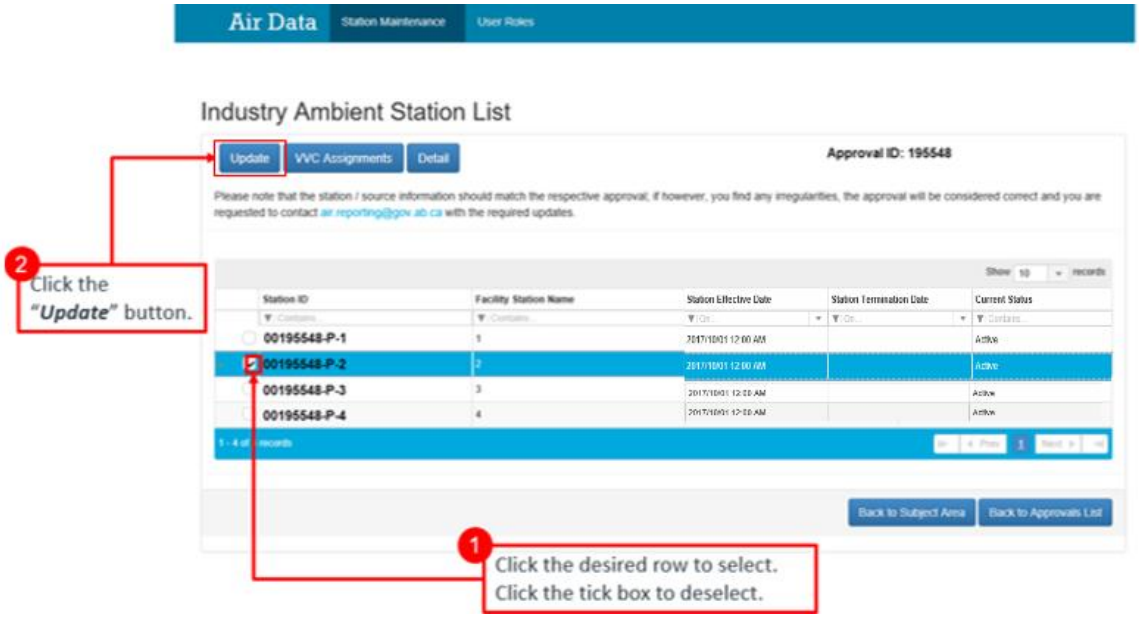
Industry Ambient: Station List - Update



To update information on the Ambient Station, the Station Manager clicks the:

- Desired row (the entire row will be highlighted in blue) and
- "***Update***" button at the top left.

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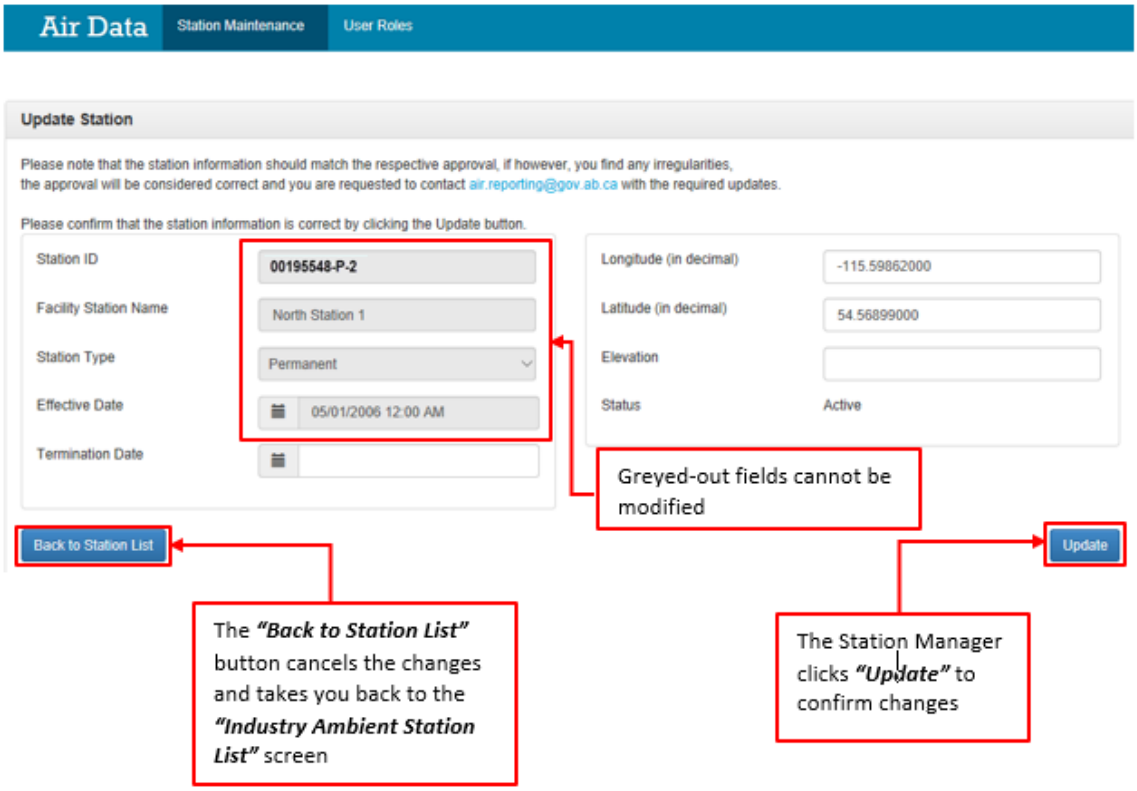
Industry Ambient: Update Screen



This is the "***Update Station***" form where Station Manager can amend/update information on the station.

The following fields can be updated:

- Longitude (minimum 5 decimal places)
- Latitude (minimum 5 decimal places)
- Elevation (if applicable)

Note: All required fields must be filled in or an error will occur.

The following fields, once updated, are greyed-out:

- Facility Station Name
- Termination Date

If anything on this list needs to be updated but is greyed out, please e-mail air.reporting@gov.ab.ca with the approval number and required updates.

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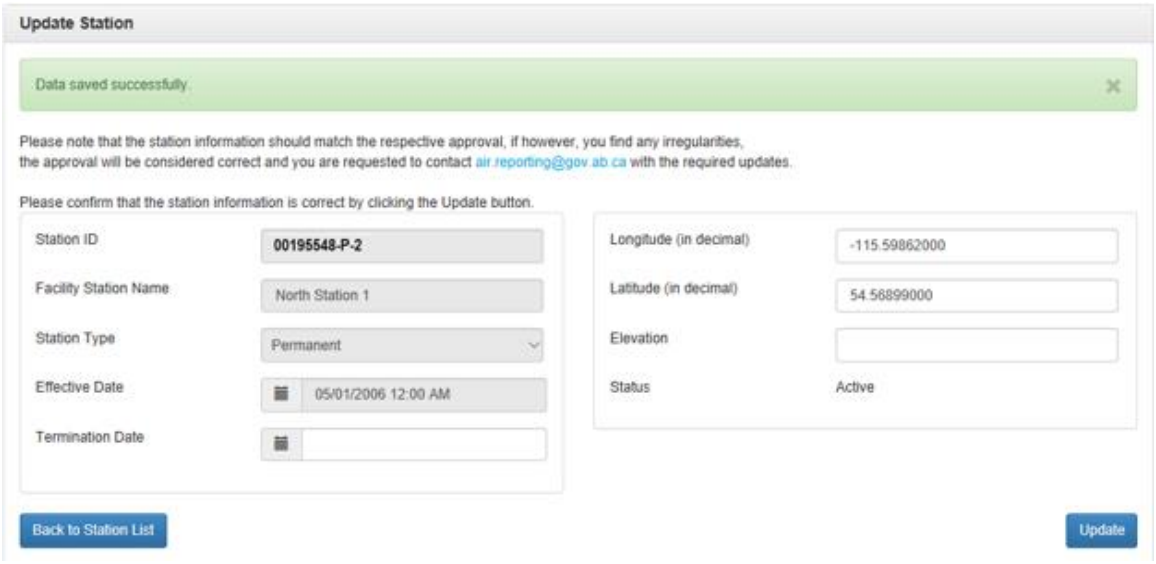
Industry Ambient: Update Screen – Success



Once the data is filled in and the "***Update***" button is clicked, the green bar message "***Data saved successfully***" appears indicating success in updating the station information.

To get back to the previous screen, click the "***Back to Station List***" button.

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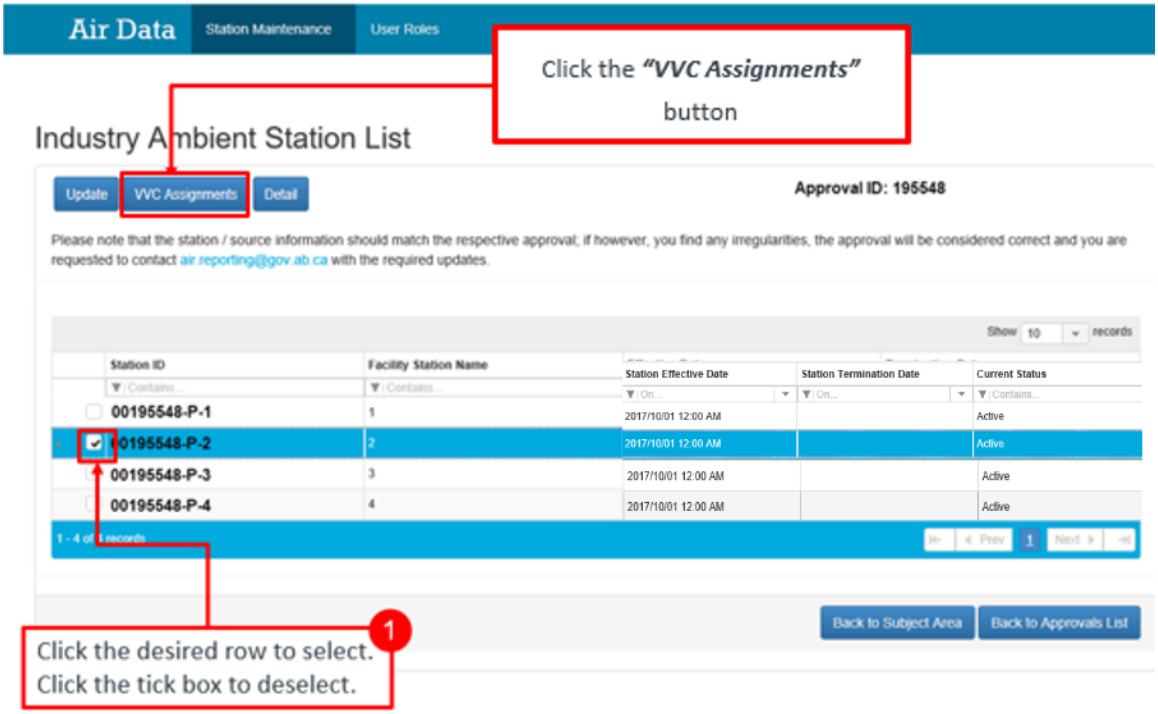
Industry Ambient: Station List –VVC Assignments



To assign a VVC to an Ambient Station, the Station Manager clicks the:

- Desired row (the entire row will be highlighted in blue) and
- "***VVC Assignments***" button at the top.

Note: Can only assign VVCs to one station at a time

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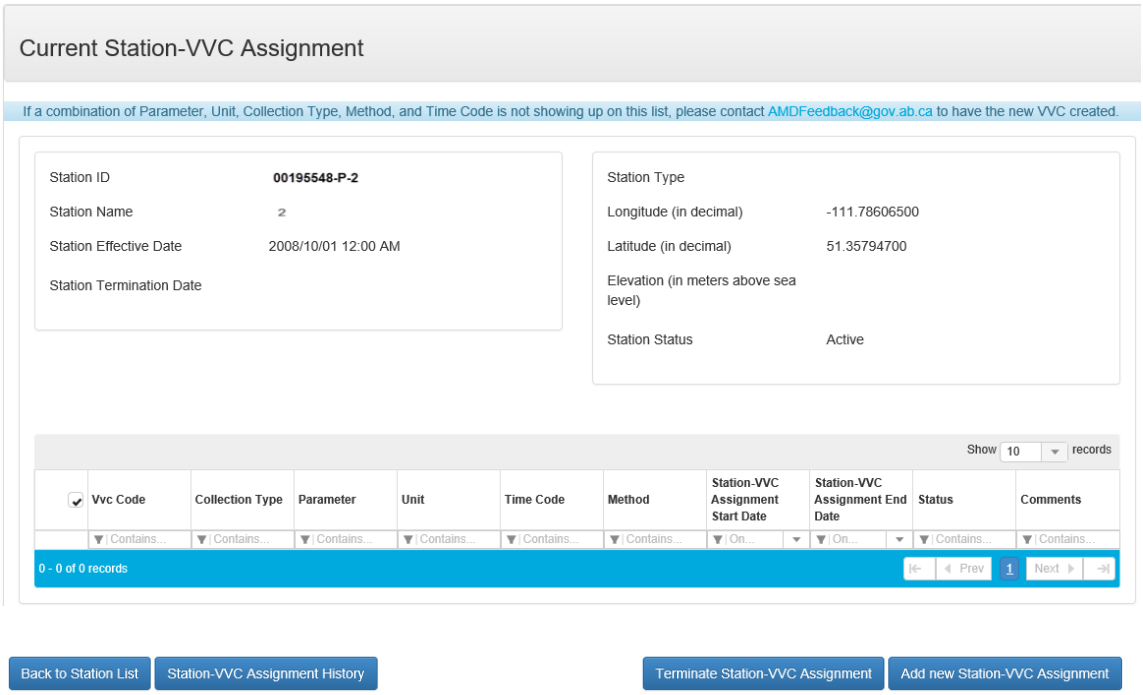
Industry Ambient: Current Station-VVC Assignment Screen



This is the "***Current Station-VVC Assignment***" form for the selected Station.

If there is nothing showing up in the grid, it means no VVCs are currently assigned to the station. To see all (including inactive Station VVC assignments) select "***Station-VVC Assignment History***".

This form shows a list of all VVCs currently assigned to the station with detailed information based on the following headers:

- VVC Code
- Collection Type
- Parameter
- Unit
- Time Code
- Method
- Station-VVC Assignment Start Date
- Station-VVC Assignment End Date
- Status of the VVC Assignment
- Comments

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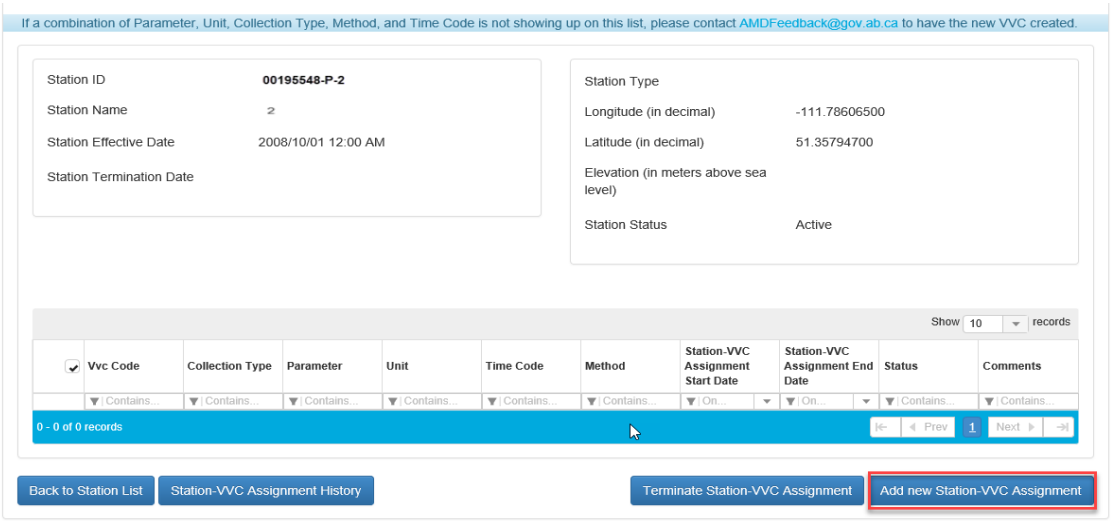
The "***Back to Station List***" button, located at the bottom of the screen, takes you to the previous screen.

Industry Ambient: Add New Station-VVC Assignment Screen

To assign a VVC to an Ambient Station, the Station Manager clicks on the "***Add New Station-VVC Assignment***".

Current Station-VVC Assignment



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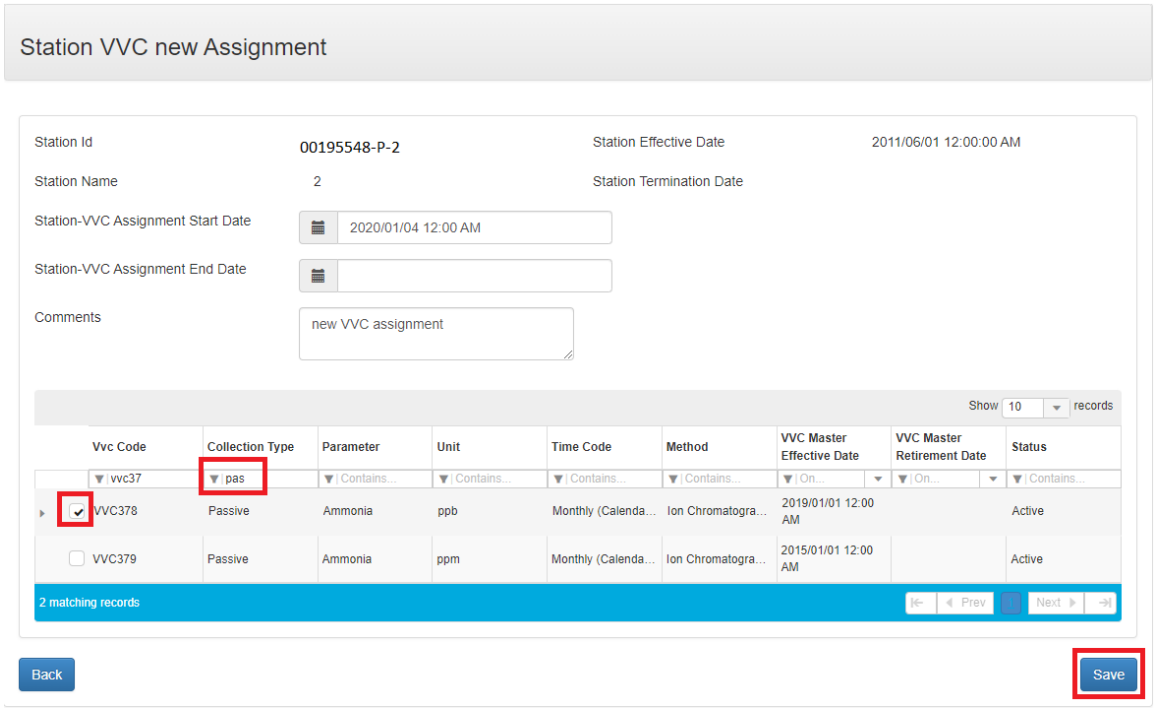
On the Station VVC new Assignment screen:



- Select VVCs from the list. This is done by clicking on the checkbox next to the VVC.
- Multiple VVCs can be assigned at once with the same Station-VVC Assignment Start Date if required.
- To find a VVC from the list that applies you can search on any field (collection type, parameter name, etc).
    - If a combination of Parameter, Unit, Collection Type, Method, and Time Code is not showing up on this list, please contact AMDFeedback@gov.ab.ca to have the new VVC created
- The Station-VVC Assignment Start Date has a time that defaults to 12:00 AM; this can be updated if needed.
- A comment field must be populated with the reason for addition of VVCs.
- When all required fields are populated click the "***Save***" button at the bottom right.
- Once the "***Save***" button is clicked, the green message bar displays the "VVCs have been successfully saved" this indicates success in assigning VVCs to the station.
- The "***Back***" button, located at the bottom of the screen, takes you to the previous screen.

An error will be generated if the Station-VVC Assignment Start Date entered is:

- Before the Station Effective Date

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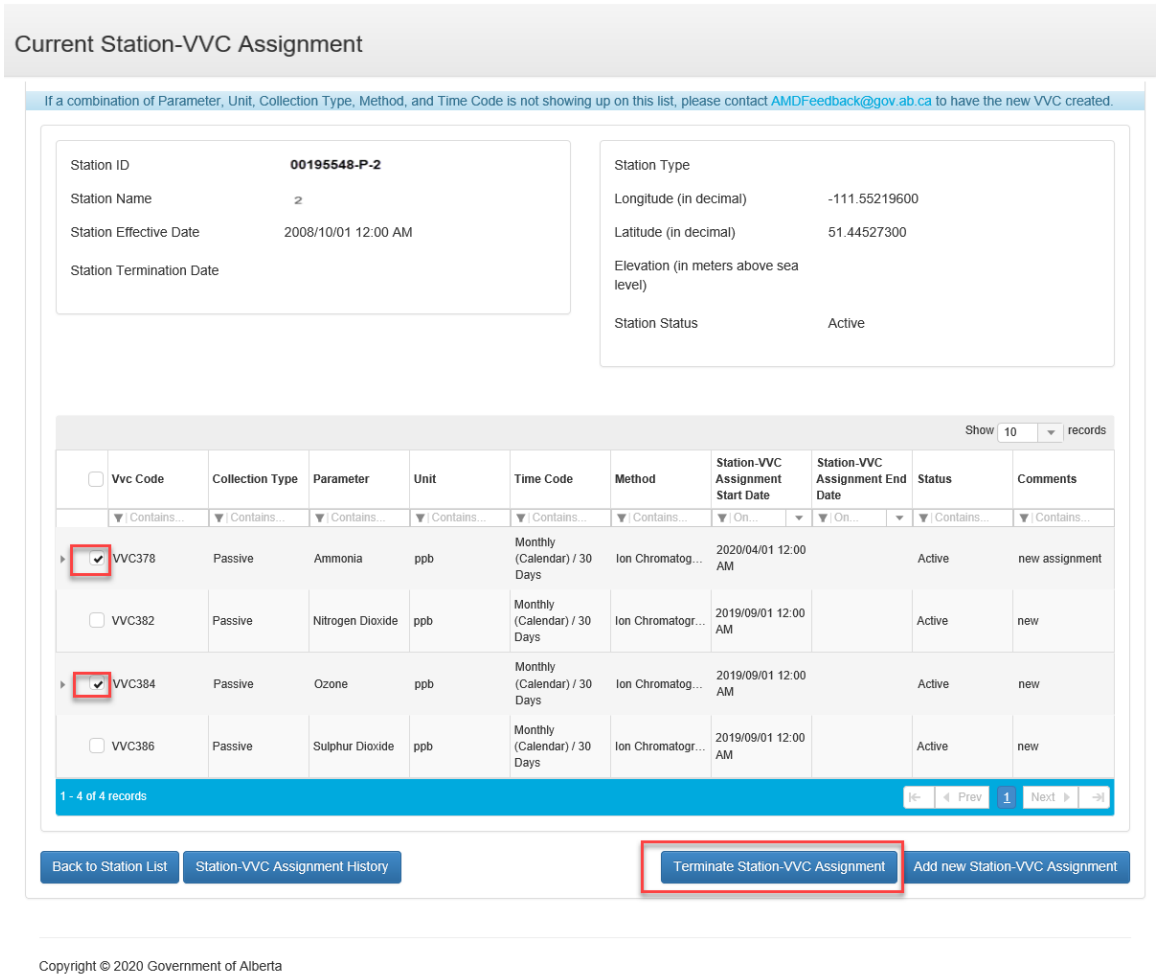
- After the Station Termination Date
- Before the VVC Master Effective Date
- If a station has a termination date in the future, the VVC-station assignment needs to also have a termination date before or the same as the station termination date.

Industry Ambient: Terminate Station VVC Assignment Screen

On the Current Station-VVC Assignment screen to terminate VVC assignment, click on "***Terminate Station-VVC Assignment***".



- Select VVCs to terminate from the list of current VVCs. This is done by clicking on desired row(s).

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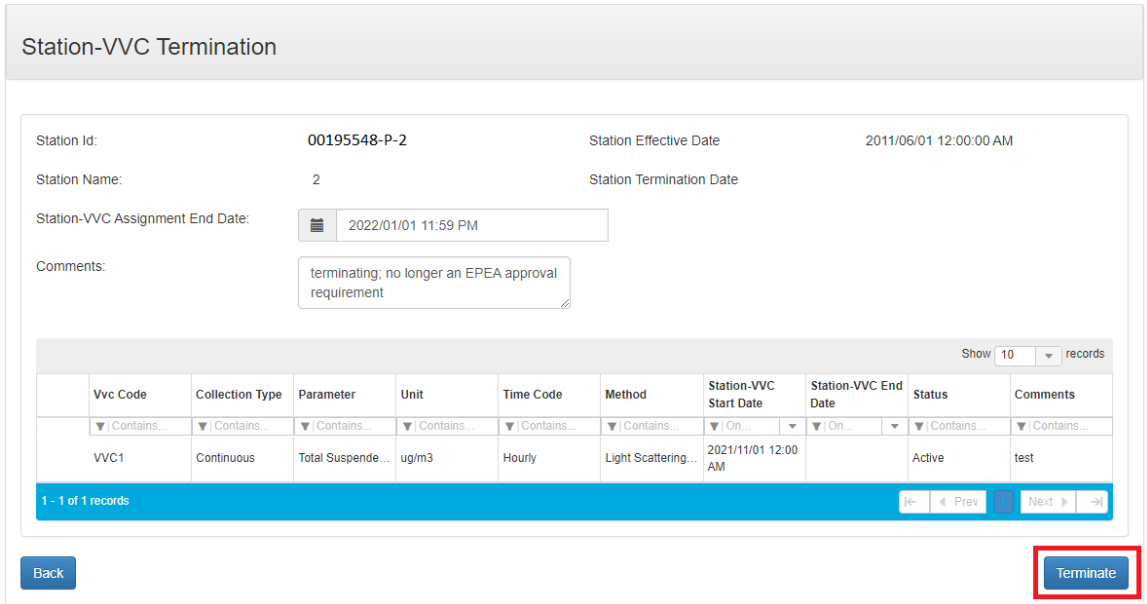
- Multiple VVCs can be terminated at once with the same Station-VVC Assignment End Date if required
- Once desired VVCs are selected click on "***Terminate Station-VVC Assignment***".

A new screen will open ***"Station-VVC Termination"***



- The Station-VVC Assignment End Date needs to be populated. It has a time that defaults to 11:59 PM; this can be updated if needed.
- A comment field must be populated with the reason for VVCs termination.
- When all required fields are populated, click the "***Terminate***" button at the bottom right.
- Once the "***Terminate***" button is clicked, the green message bar displays the "Changes saved successfully", this indicates success in terminating the VVCs.
- The "***Back***" button, located at the bottom of the screen, takes you to the previous screen.

An error will be generated if the Station-VVC Assignment End Date entered is:

- before the Station-VVC Assignment Start Date
- before the Station Effective Date
- after the Station Termination Date
- if data for that period has been submitted

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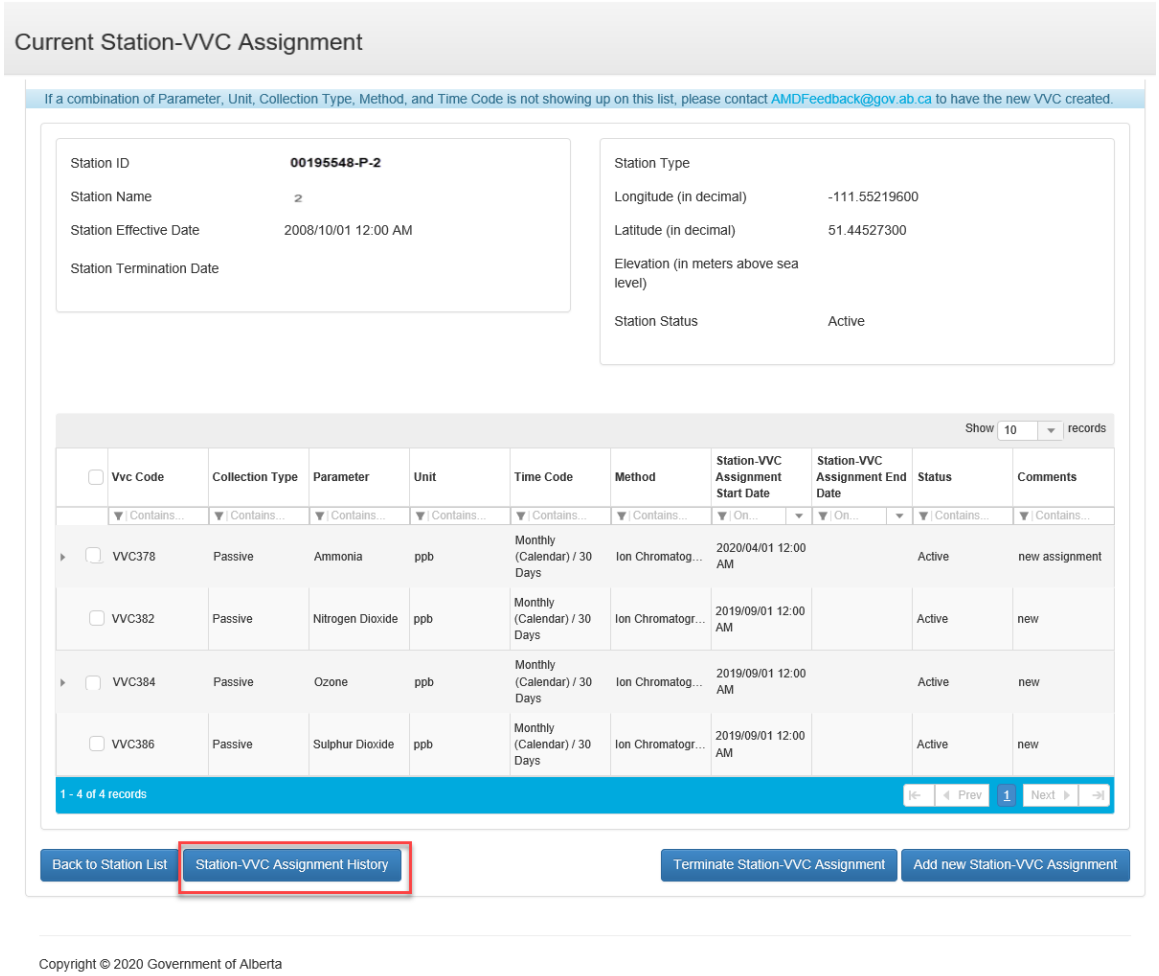
Industry Ambient: Station VVC Assignment History Screen

On the Current Station-VVC Assignment screen to see VVC Assignment History, click on "***Station-VVC Assignment History***".



On the Station-VVC Assignment history screen all VVCs assigned to that station will show. This includes:

- active VVC assignments (current assignments)
- inactive VVC assignments (VVCs that have an assignment end date in the past)

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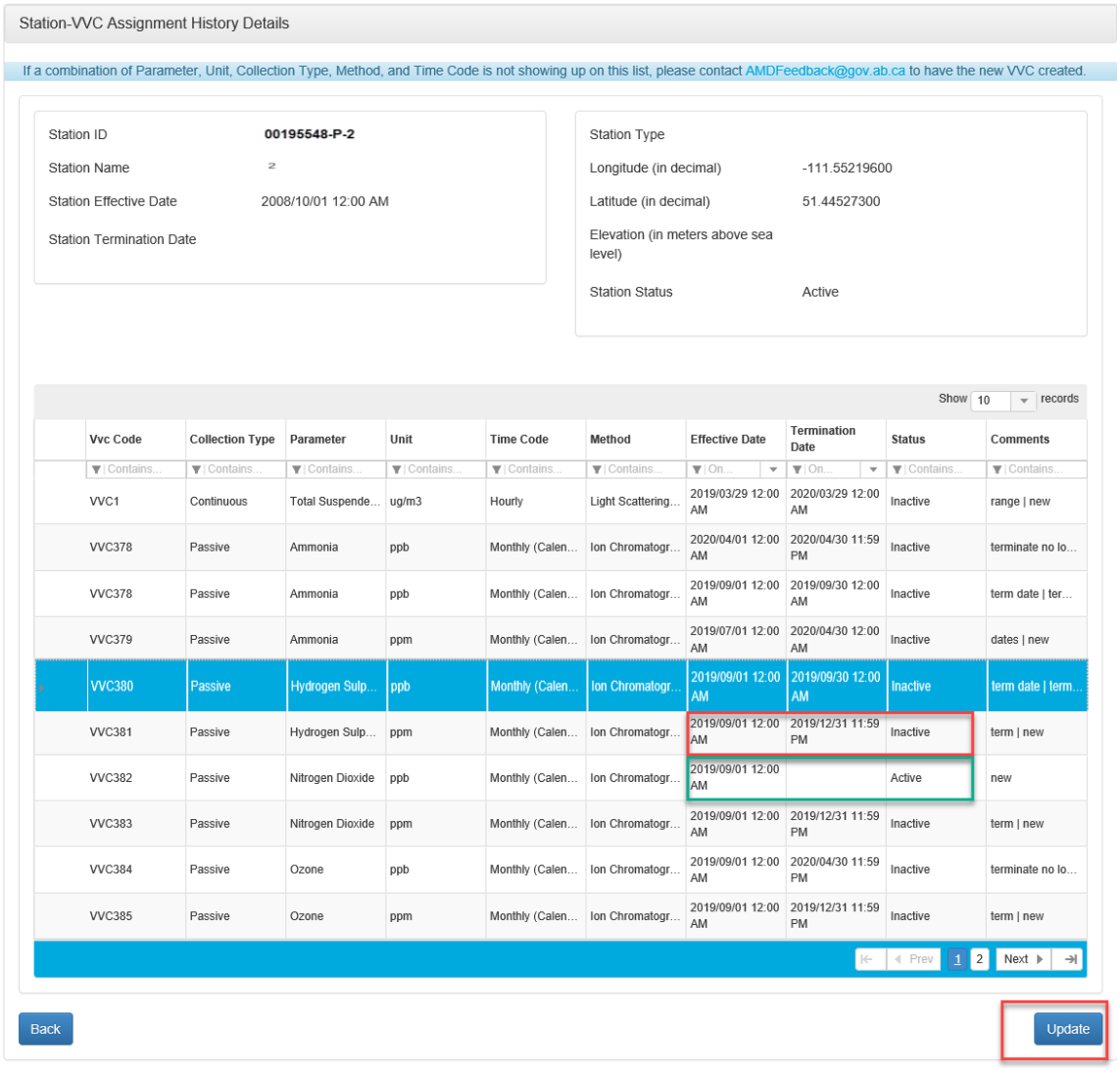
In addition, the Station-VVC Assignment history screen can be used to update any of the effective and termination dates of VVC assignments.



On the Station-VVC Assignment History screen select a VVC (selection will highlight in blue) click on "***Update***" to make changes to effective and termination VVC assignment dates.

This will bring up a pop-up screen "***Update-VVC Assignment Effective Period***" for the selected VVC.

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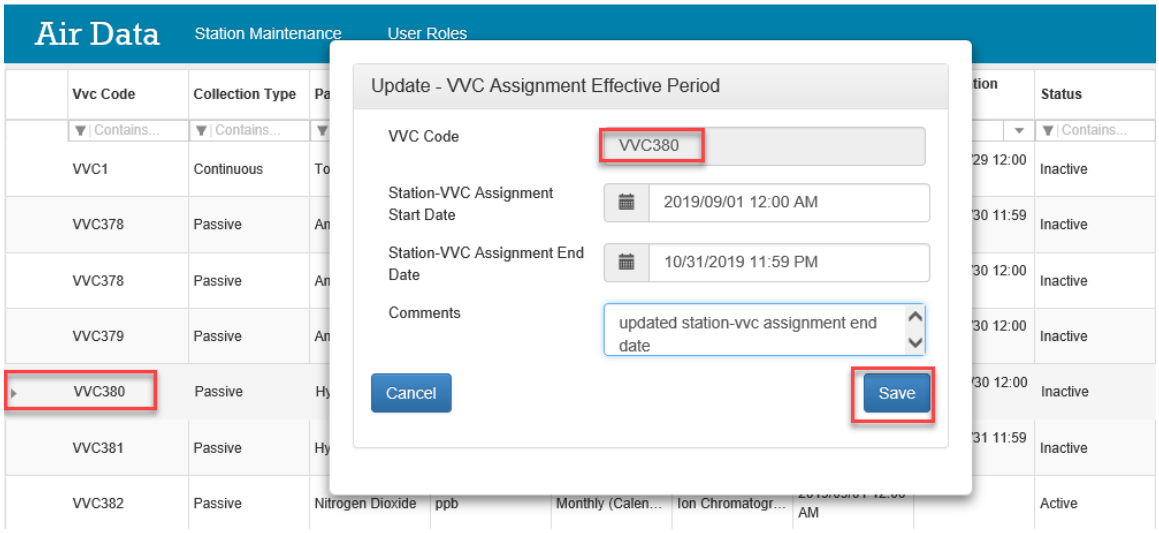

To make updates to VVC Assignment Effective Period:

- The Station-VVC Assignment Start or End Date can be updated.
- A comment field must be populated with the reason for VVCs effective date adjustment.
- When all required fields are updated, click the "***Save***" button at the bottom right.
- Once the "***Save***" button is clicked, the green message bar displays the "Changes saved successfully", this indicates success in updating the effective period of a VVC-station assignment.
- The "***Cancel***" button, located at the bottom of the pop-up screen, takes you to the previous screen.

An error will be generated if the VVC Assignment Effective Period entered is:

- before the Station Effective Date
- after the Station Termination Date
- Before the VVC Master Effective Date
- if data for that period has been submitted

Industry Ambient: Shared Stations

If you have a shared station please contact air.reporting@gov.ab.ca for information on how to report correctly.

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5. Common VVC's

The VVCs listed below are to be used for reporting of industrial ambient data.

A complete listing of all VVCs is found in our Reference Tables document found here: Alberta Online Learning (gov.ab.ca)

Continuous VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC41	Continuous	Ammonia	Chemiluminescence	Parts Per Billion (by Volume)	Hourly
VVC100	Continuous	Benzene	Gas Chromatography/ Photo Ionization Detector	Parts Per Billion (by Volume)	Hourly
VVC86	Continuous	Ethylene	Gas Chromatography/ Photo Ionization Detector	Parts Per Billion (by Volume)	Hourly
VVC26	Continuous	Hydrogen Fluoride	Open Path Tunable Diode Laser (OP-TDL)	Parts Per Billion (by Volume)	Hourly
VVC31	Continuous	Hydrogen Sulphide	UV Pulsed Fluorescence	Parts Per Billion (by Volume)	Hourly

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VVC35	Continuous	Nitric Oxide	Chemiluminescence	Parts Per Billion (by Volume)	Hourly
VVC37	Continuous	Nitrogen Dioxide	Chemiluminescence	Parts Per Billion (by Volume)	Hourly
VVC125	Continuous	PM10 Mass	Beta Attenuation (Met One BAM 1020)	Micrograms per cubic meter	Hourly
VVC352	Continuous	Relative Humidity	Hygrometer	Percent Relative Humidity	Hourly
VVC365	Continuous	Solar Radiation	Pyrheliometer	Watts per Square Meter	Hourly
VVC29	Continuous	Sulphur Dioxide	UV Pulsed Fluorescence	Parts Per Billion (by Volume)	Hourly
VVC39	Continuous	Total Oxides of Nitrogen	Chemiluminescence	Parts Per Billion (by Volume)	Hourly
VVC97	Continuous	Total Reduced Sulphur	UV Pulsed Fluorescence	Parts Per Billion (by Volume)	Hourly
VVC2	Continuous	Total Suspended Particulates	Beta Attenuation (Met One BAM 1020)	Micrograms per cubic meter	Hourly

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Continuous Completeness VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC1261	Continuous	Ammonia	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1263	Continuous	Benzene	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1265	Continuous	Ethylene	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1266	Continuous	Hydrogen Fluoride	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1267	Continuous	Hydrogen Sulphide	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1269	Continuous	Nitric Oxide	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1270	Continuous	Nitrogen Dioxide	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1274	Continuous	PM10 Mass	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1277	Continuous	Relative Humidity	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days

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VVC1278	Continuous	Solar Radiation	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1279	Continuous	Sulphur Dioxide	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1282	Continuous	Total Oxides of Nitrogen	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1283	Continuous	Total Reduced Sulphur	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days
VVC1284	Continuous	Total Suspended Particulates	Monthly Completeness	Percent of Observation	Monthly (Calendar) / 30 Days

Continuous Completeness – Example

The % operational time should be included with your data now.

You need to report a monthly operational uptime for each parameter, once per month.

Example: NO2 % uptime would look like:

<Interval Start="2019-04-01T00:00:00" End="2019-04-30T23:59:00" />

<Station ID="0000XXXX-C-1" />

<ProgramCode>APC1</ProgramCode>

<ApprovalID>0000XXXX</ApprovalID>

<ValidVariableCombination VvcCode="VVC1270" Value="93.4" />

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Dustfall VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC1010	Dustfall (Bucket)	Fixed Dustfall	Gravimetric	Milligrams per 100 square centimeters per 30 days	Monthly (Calendar) / 30 days
VVC546	Dustfall (Bucket)	Total Dustfall	Gravimetric	Milligrams per 100 square centimeters per 30 days	Monthly (Calendar) / 30 days

Filter Based VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC784	Filter Based	PM10 Mass	Gravimetric	Micrograms per cubic meter	Monthly (Calendar) / 30 days
VVC792	Filter Based	PM2.5 Mass	Gravimetric	Micrograms per cubic meter	Monthly (Calendar) / 30 days
VVC391	Filter Based	Total Suspended Particulates	Gravimetric	Micrograms per cubic meter	Monthly (Calendar) / 30 days

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Hi-Vol VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC390	Hi-Vol	Total Suspended Particulates	Gravimetric	Micrograms per cubic meter	NAPS Schedule 6 Day

Passive VVCs

VVC Code	Collection Type	Parameter	Method	Unit	Time Code
VVC378	Passive	Ammonia	Ion Chromatography	Parts Per Billion (by Volume)	Monthly (Calendar) / 30 days
VVC380	Passive	Hydrogen Sulphide	Ion Chromatography	Parts Per Billion (by Volume)	Monthly (Calendar) / 30 days
VVC382	Passive	Nitrogen Dioxide	Ion Chromatography	Parts Per Billion (by Volume)	Monthly (Calendar) / 30 days
VVC384	Passive	Ozone	Ion Chromatography	Parts Per Billion (by Volume)	Monthly (Calendar) / 30 days
VVC386	Passive	Sulphur Dioxide	Ion Chromatography	Parts Per Billion (by Volume)	Monthly (Calendar) / 30 days

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Revision History

Version	Date	Author(s)	Revision Notes
1.0	15-Nov-2019	AEP Environmental Knowledge and Data Integration Branch	Initial document
2.0	22-May-2020	AEP Environmental Knowledge and Data Integration Branch	Format change of the manual Minor changes on ambient station update and details screens Added VVC assignment details and additional screens
3.0	28-Jan-2022	AEP Environmental Knowledge and Data Integration Branch	Updated screenshots throughout Added link to ambient Reference Tables for complete VVC listing

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