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ETS - Industrial Data Administration Training Manual

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

ETS – Industrial Data Administration | Ambient Station and Emission Source | Version 3.0 | January 28, 2022



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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 <u>air.reporting@gov.ab.ca</u> 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.



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 <u>https://training.energy.gov.ab.ca/Pages/Air.aspx</u>



3. Industry Administration Form Types

Industry Administration Screen

loles
ect Area View
w
ie

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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Select Option	Air Data	Station Maintenance	User Roles						Appro	ova
Form title	Emission Sol	urce List				Ap	proval ID: 19544	18	Messag	ge a
Processing outton	Please note that the stati requested to contact air. Station/source informatio	on/source information reporting@gov.ab.ca v n needs to be verified	should match the re ith the required upd and confirmed by a	spective approval; lates. Station Manager th	if however, you find	any irregularities, th	e approval will be co	Include terminated stations	Optic incluc termi sourc	on to de inat ces
leader vith search	Unique Source II	D Plant Unit	Emission S +	CEMS Station ID	Station Effective Date	Station Termination Date	Current Status	anter 5 + records]	
lters		• Contains	Acid Gas Flare Stack	Contains	1985/01/01 12:00 AM	TOL: T	Active	1	Recor	ds: atic
Data	•		Amine Reboiler Exhaust Stack (85 KW)		1985/01/01 12:00 AM		Active		ind vigo	arcic
Data	0		Compressor Engine Exhaust Stack (1224 KW)		1985/01/01 12:00 AM		Active		Page	
	0		Compressor Engine Exhaust Stack (448 KW)		1985/01/01 12:00 AM		Active		naviga	itio
Number of	0		Compressor Starter Gas Vents		1985/01/01 12:00 AM		Active			
ecords	1 - 5 of 14 records						ie 4 P	rev 2 3 Next 🕨 州	Screer naviga	n atio
							Back to Subject Ar	rea Back to Approvals List		

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.

Update Source	Update Source								
Please note that the source information the approval will be considered correct	on should match the respective approval, if however ct and you are requested to contact air.reporting@go	r, you find any irregularities, ov.ab.ca with the required update	25.						
Please confirm that the source inform	ation is correct by clicking the Update button.								
CEMS Station ID		Longitude (in decimal)	-114.12345680						
Plant Unit		Latitude (in decimal)	51.12345680						
Station Name	Heat Medium Heater Exhaust Stack	Diameter (in meters)	5.55000000						
Unique Source Identifier	ABC123	Height (in meters)	26.50000000						
Effective Date	2006/09/25 12:00 AM	Status	Active						
Termination Date	H								
Back to Station List			Update						

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 <u>air.reporting@gov.ab.ca</u> 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:

Source Details			
CEMS Station ID		Longitude (in decimal)	-114.12345680
Plant Unit		Latitude (in decimal)	51.12345680
Station Name	Heat Medium Heater Exhaust Stack	Diameter (in meters)	5.55000000
Unique Source Identifier	ABC123	Height (in meters)	26.5000000
Effective Date	2006/09/25 12:00 AM	Status	Active
Termination Date			
Back to Station List			

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

	Air Data	Station Maintenand	ce User Roles		
	Industry Adı	ministratio	n		
	Approvals		Select Subject Area View		
dropdown list to select desired "Approval"	195448	~	Emission Source	••	Click the dropdown list to select " <i>Emission Source</i> "
	View	Click the "Vi	ew" to execute		

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



Emission Source: Source List

Air Data	Station Maintenance	User Roles					
Emission So	ource List						
Detail					Ap	proval ID: 1954	48
Please note that the st requested to contact a	ation/source informatio	n should match the re with the required upd	spective approval; lates.	if however, you find	any irregularities, @	ne approval will be o	onsidered correct and you are
Station/source information	tion needs to be verifie	d and confirmed by a	Station Manager 8	hrough the update bu	fton.		Include terminated station
							Show 5 + records
Unique Source	ID Plant Unit	Emission S +	CEMS Station ID	Station Effective Date	Station Termination Date	Current Status	
T Contains	Tontains	T Contains	Ti Contains	¥10n ¥	¥ 0n *	T Contains	
		Acid Gas Flare Stack		1985/01/01 12:00 AM		Active	
		Amine Reboiler Exhaust Stack (85 KW)		1985/01/01 12:00 AM		Active	
		Compressor Engine Exhaust Stack (1224 KW)		1985/01/01 12:00 AM		Active	
		Compressor Engine Exhaust Stack (448 KW)		1985/01/01 12:00 AM		Active	
		Compressor Starter Gas Vents		1985/01/01 12:00 AM		Active	
1 - 5 of 14 records						e € 3	Prev 23 Next 🕨 🕂
						Back to Subject /	Vea Back to Approvals 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

Update Approva	Detail		2. Click the " button for m information	Detail" ore			
Please n considere Station/se	ote that the station ed correct and you ource information n	source information are requested to o needs to be verifier	n should match the re contact air reporting@ d and confirmed by a	spective approval; gov.ab.ca with the Station Manager th	if however, you find required updates. prough the update bu	any irregularities, the	e approval will be
						Inclu	de terminated stati
						Show	5 + records
	Unique So +	Plant Unit	Emission Source Name	CEMS Station ID	Station Effective Date	Station Termination Date	Current Status
	T Contains	T Contains	T Contains	TContains	¥! On ¥	¥10s	Y Contains
	ABC123		Heat Medium Heater Exhaust Stack		2008/09/25 12:00 AM	Active	
D		 Click the desired row to select. Click the tick box again 			2009/04/27 12:00 AM		Active
	1. Click the row to selec Click the tic				2008/09/25 12:00 AM		Active
	to de-select.		Glycol Still Column Vent		2008/09/25 12:00 AM		Active
D			Compressor Engine Exhaust Stack (1224 KW)		1985/01/01 12:00 AM		Active
1 - 5 of 14	4 records				24	< Prav 2	3 Next ≱ -∋ł

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.



Emission Source: Details Screen

Source Details			
CEMS Station ID Plant Unit Station Name	Heat Medium Heater Exhaust Stack	Longitude (in decimal) Latitude (in decimal) Diameter (in meters)	-114.12345680 51.12345680 5.55000000
Unique Source Identifier Effective Date	ABC123 2006/09/25 12:00 AM	Height (in meters) Status	26.50000000 Active
Termination Date Back to Station List			

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

Update Detail Approval ID: 195448	2. Click the <i>"Update"</i> bu	tton			
Please note that the station/source information considered correct and you are requested to c Station/source information needs to be verified	n should match the re contact air.reporting@ d and confirmed by a	spective approval; gov.ab.ca with the Station Manager th	if however, you find required updates. prough the update b	any irregularities, th utton.	e approval will be
				Inclu	ude terminated stati
				Show	5 v records
Unique So + Plant Unit	Emission Source Name	CEMS Station ID	Station Effective Date	Station Termination Date	Current Status
V Contains V Contains	T Contains	T Contains	▼ On ▼	▼ On ▼	T Contains
→ ₽ €C123	Heat Medium Heater Exhaust Stack		2008/09/25 12:00 AM		Active
	Stanby Compressor Engine Exhaust Stack (1075 KW)		2009/04/27 12:00 AM		Active
1. Click the desired row to select. Click the tick box again	Emergency Electrical Generator Engine Exhaust Stack		2008/09/25 12:00 AM	Active	
to de-select.	Glycol Still Column Vent		2008/09/25 12:00 AM		Active
	Compressor Engine Exhaust Stack (1224 KW)		1985/01/01 12:00 AM		Active
1 - 5 of 14 records				- 4 Prev 2	3 Next ▶ →
			Back to S	ubject Area	k to Approvale List

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



Emission Source: Update Screen

Air Data	Station Maintenance	User Roles			
Update Source					
Please note that the so the approval will be con	urce information should ma sidered correct and you ar	atch the respective app e requested to contact	roval, if however, you find ar air.reporting@gov.ab.ca wit	ny irregularities, h the required updates.	
Please confirm that the	source information is corre	ect by clicking the Upda	ate button.		
CEMS Station ID			Longitude (in decimal)	-114.45678000	
Plant Unit			Latitude (in decimal)	51.78945000	
Station Name	Heat Medium H Stack	eater Exhaust	Diameter (in meters)	5.0000000	
Unique Source Ident	ABC123		Height (in meters)	25.0000000	
Effective Date	69/25/20	06 12:00 AM	Status	Active	
Termination Date	Ĭ		Greyed-out fie cannot be mo	elds dified	
Back to Station List	ŀ ₁				Update
The " <i>Back</i> cancels the to the " <i>Em</i>	to Station List" butt changes and takes ission Source List" s	on you back creen.	The Star clicks "U confirm	tion Manager <i>Jpdate</i> " to the changes.	

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 <u>must</u> 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 <u>air.reporting@gov.ab.ca</u> needs to be contacted.

Emission Source: Update Screen – Success

Air Data	Station Maintenance	User Roles		
Update Source				
Data saved success	fully.			×
Please note that the so the approval will be con	urce information should ma nsidered correct and you an	tch the respective approval, if h e requested to contact air.report	owever, you find ar ing@gov.ab.ca wit	ny irregularities, h the required updates.
CEMS Station ID		Lor dec	gitude (in imal)	-114.45678000
Plant Unit		Lat	tude (in imal)	51.78945000
Station Name	Heat Medium He Stack	eater Exhaust Dia me	meter (in lers)	5.0000000
Unique Source Iden	ABC123	Hei	ght (in meters)	25.0000000
Effective Date	69/25/200	6 12:00 AM Sta	tus	Active
Termination Date	=			
Back to Station List				Update

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
		Particulate Matter(PM)
Units 1 and 2	Stack No. 1	Nitrogen Oxides (expressed as NO ₂)
		Sulphur Dioxide (SO ₂)
(c) Light Hydrocarbo	ons-1 unit (LHC-U1):	
(i) LHC-1 flare st	ack (FS-123);	
(ii) two package b	ooilers stacks;	
(iii) eleven crackir CF-3, CF-4, CF-5, C	ng furnace stacks (CF F-6, CF-7, CF-8, CF-9, CF	1, CF-2, 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 <u>air.reporting@gov.ab.ca</u> 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 <u>CEM.UserCoord@gov.ab.ca</u>.



Industry Ambient

Industry Ambient: View



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



Industry Ambient: Station List

Station Maintenance User Roles Air Data Industry Ambient Station List Update VVC Assignments Detail Approval ID: 195548 Please note that the station/source information should match the respective approval; if however, you find any irregularities, the approval will be considered correct and you are requested to contact air.reporting@gov.ab.ca with the required updates. Station/source information needs to be verified and confirmed by a Station Manager through the update button Include terminated static Show 10 w rec Station ID **Facility Station Name** Station Effective Date Station Termination Date Current Status **V**(0 Ŧ 10 **T** | 0 ₹ Co 00000123-1-2 BDC, PM2.5, High Vol 2021/01/01 12:00 AM 2021/01/02 05:59 PM Inactive 00000123-P-3 Stn #3 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-4 Stn #4 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-5 Stn #5 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-8 Stn #6 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-7 Stn #7 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-8 Stn #8 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-10 Stn #10 Passive SO2 2008/10/01 12:00 AM Active 00000123-P-11 Stn #11 Passive SO2 2020/10/01 12:00 AM Inactive IC 4 9 of 9 records Back to Subject Area

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



Industry Ambient: Station List - Detail

dustry Ambie	ent Station	_ist	Click more	the " Deta informati	il " button fo on	r	
Update VVC Assignme	nts Detail	J '			Approval ID: 19	5548	
geranda no contaca dal tep	a any grow and a way	ine required up	umo.				Show 10 + reco
Station ID		Facility Station	Name	Station Effective Date	Station Termination Date	Curre	ent Status
▼ (Contains		▼ Confains		¥ 01	* T 01	* * [0	ontanto
00195548-P-1		1		2017/10/01 12:00 AM		Adive	
00195548-P-2		2		201 //10/01 12:00 AM		Adapt	
00195548-P-3		3		2017/10/01 12:00 AM		Adv	-
00195548-P-4		4		2017/10/01 12:00 AM		Adh	м
- 4 c 4 records						le d	Prev 1 Next >
			-				

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.



Industry Ambient: Details Screen

Air Data	Station Maintenance	User Roles
Station Dataila		
Station Details		
Please note that the st the approval will be co	ation/source information sh nsidered correct and you a	ould match the respective approval, if however, you find any irregularities, e requested to contact air reporting@gov.ab.ca with the required updates.
Station ID Facility Station	00195548-P-2	Longitude (in -112.41601800 decimal)
Name Station Type	Permanent	Latitude (in 50.21344900 decimal)
Effective Date	2012-02-01 12:00:00 AM	Elevation Status Active
Termination Date		
Station Home		

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

	Update WC Assig	nments Detail			Approval ID: 195548	S.
P	lease note that the station equested to contact air reg	I source information s contrigitigov ab ca with	hould match the respective appro h the required updates.	wal, if however, you find any irregu	vlarities, the approval will be o	onsidered correct and yo
_						Day is
lick the	Station ID		Facility Station Name	Station Effective Date	Station Termination Date	Current Status
Update" button.	T. Contaria		T. Contama	¥iQi.	* ¥:00.	T Torian
	00195548-P-1		1	2017/10/01 12:00 AM		Attive
	00195548-P-2		2	2817/10/01 12:00 AM		ADM
	00195548-P-3		3	2017/10/01 12:00 AM		Acity
	00195548-P-4		4	2017/10/01 12:00 AM		Arthus
	- 4 of month				-	A Person and Person in

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

Air Data	Station Maintenance	User Roles			
Update Station					
Please note that the sta the approval will be con	tion information should m sidered correct and you a	atch the respective approval, if I re requested to contact air.repo	however, ye	ou find any irregularities, ab.ca with the required update	15.
Please confirm that the	station information is corre	ect by clicking the Update butto	n.		
Station ID	0019554	8-P-2		Longitude (in decimal)	-115.59862000
Facility Station Name	North St	ation 1		Latitude (in decimal)	54.56899000
Station Type	Permane	nt	- 1	Elevation	
Effective Date	= 05	/01/2006 12:00 AM		Status	Active
Termination Date				Greyed-out field modified	ds cannot be
Back to Station List]•]			Update
	The "Back i button cane and takes y "Industry A List" screen	to Station List" cels the changes ou back to the mbient Station			The Station Manager clicks <i>"Update"</i> to confirm changes

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 <u>air.reporting@gov.ab.ca</u> with the approval number and required updates.



Data saved successfully			1
ease note that the station infor	rmation should match the respective approval, if however	, you find any irregularities,	
ease confirm that the station in	nformation is correct by clicking the Update button.	ov ab ca wai are required updates.	
Station ID	00195548-P-2	Longitude (in decimal)	-115.59862000
Facility Station Name	North Station 1	Latitude (in decimal)	54.56899000
Station Type	Permanent ~	Elevation	
Effective Date	105/01/2006 12:00 AM	Status	Active
Termination Date	Ħ		

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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Air Data Station Mainte	enance User Roles	Click the "VVC Assig button	nments"	
Update VVC Assignments Deta	4		Approval ID: 1955	48
Please note that the station / source inf requested to contact air reporting@gov	ormation should match the respec ab.ca with the required updates.	tive approval; if however, you find any irreg	ularities, the approval will b	e considered correct and you are Show to v records
Station ID	Facility Station Name	ALM		
V Contains	V Contains	Station Effective Date	Station Termination Date	Current Status
00195548-P-1	1	2017/10/01 12:00 AM	• •	Active
• 0195548-P-2	2	2017/10/01 12:00 AM		Active
00195548-P-3	3	2017/10/01 12:00 AM		Active
00195548-P-4	4	2017/10/01 12:00 AM		Active
1-4 of Incontin	select.		Back to Subject	It- K Pitev 1 Next → H t Area Back to Approvals List

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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001 2	195548-P-2			Station Type				
2								
				Longitude (in de	ecimal)	-111.7860650	D	
200	8/10/01 12:00 A	M		Latitude (in deci	imal)	51.35794700		
				Elevation (in me level)	eters above sea			
				Station Status		Active		
							Show	10 -
ection Type	Parameter	Unit	Time Code	Method	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status	Comments
Contains	▼ Contains	▼ Contains	Y Contains	Y Contains	▼ 0n ▼	▼ 0n ▼	▼ Contains	V Contains
	ection Type	ection Type Parameter	ection Type Parameter Unit	ection Type Parameter Unit Time Code	ection Type Parameter Unit Time Code Method	ection Type Parameter Unit Time Code Method Status	ection Type Parameter Unit Time Code Method Station-VVC Assignment End Date	Elevation (in meters above sea level) Station Status Active Station-VVC Assignment End Status

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*".

rent	Station-\	/VC Assig	nment							
combir	nation of Parame	eter, Unit, Collecti	on Type, Metho	d, and Time Cod	le is not showing u	ip on this list, ple	ase contact AMD	Feedback@gov.a	b.ca to have the	new VVC crea
Statio	n ID	00	195548-P-2			Station Type				
Statio	n Name	2				Longitude (in o	decimal)	-111.786065	00	
Statio	n Effective Date	200	8/10/01 12:00 /	AM		Latitude (in de	cimal)	51.35794700)	
Statio	n Termination D	ate				Elevation (in meters above sea level)				
						Station Status		Active		
									Show	10 - 190
	Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status	Comments
	▼ Contains	▼ Contains	▼ Contains	V Contains	▼ Contains	▼ Contains	▼ On ▼	▼ On ▼	▼ Contains	V Contains
- 0 of 0	records					Þ			l← ∢ Prev	1 Next ▶



On the Station VVC new Assignment so	screen:
--------------------------------------	---------

Station VVC new Assignm	ient						
Station Id	00195548-P-2		Station Effe	ective Date	20	11/06/01 12:00:00	AM
Station Name	2	Station Termination Date					
Station-VVC Assignment Start Date	2020/01/04	2020/01/04 12:00 AM					
Station-VVC Assignment End Date							
Comments	new VVC assignm	ient	10				
						Show	10 v records
Vvc Code Collection Type	e Parameter	Unit	Time Code	Method	VVC Master Effective Date	VVC Master Retirement Date	Status
VVc37 Vpas	▼ Contains	▼ Contains	V Contains	V Contains	▼ On ▼	▼ On ▼	▼ Contains
VVC378 Passive	Ammonia	ppb	Monthly (Calenda	Ion Chromatogra	2019/01/01 12:00 AM		Active
VVC379 Passive	Ammonia	ppm	Monthly (Calenda	Ion Chromatogra	2015/01/01 12:00 AM		Active
2 matching records						i← ◀ Prev	Next 🕨 🔿
Back							Save

- 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 <u>AMDFeedback@gov.ab.ca</u> 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*".

	neter, Unit, Collecti	on Type, Method,	, and Time Code	e is not showing u	p on this list, plea	se contact AMDF	eedback@gov.at	o.ca to have the	new VVC create	
Station ID	00	195548-P-2			Station Type					
Station Name	2				Longitude (in decimal) -111.55219600					
Station Effective Dat	e 200	8/10/01 12:00 AM	N		Latitude (in decimal) 51.44527300					
Station Termination I	Date				Elevation (in meters above sea level)					
					Station Status		Active			
Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status	Comments	
Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status	Comments	
Vvc Code VICOntains VVC378	Collection Type V Contains Passive	Parameter ▼ i Contains Ammonia	Unit VI Contains ppb	Time Code Time Code Contains Monthly (Calendar) / 30 Days	Method Contains	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status V Contains	Comments V Contains new assignment	
Vvc Code ▼ Contains VVC378 VVC382	Collection Type Collection Type Contains Passive Passive	Parameter ▼ Contains Ammonia Nitrogen Dioxide	Unit Unit Contains ppb ppb	Time Code ▼ Contains Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days	Method Contains Ion Chromatog	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status I Contains Active	Comments Contains rew assignment	
Vvc Code ▼ Contains ▼ Vvc378 ▼ Vvc382 ▼ Vvc384	Collection Type V Contains Passive Passive Passive	Parameter ▼ Contains Ammonia Nitrogen Dioxide Ozone	Unit ▼ Contains ppb ppb	Time Code ▼ i Contains Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days	Method I Contains Ion Chromatog Ion Chromatog	Station-VVC Assignment Start Date ♥ On<	Station-VVC Assignment End Date ▼ On ▼	Status ▼ i Contains Active Active Active	Comments Contains Pew assignment new new	
Vvc Code ▼ Contains ▼ VVC378 ▼ VVC382 ▼ VVC384 ▼ VVC386	Collection Type ♥ Contains Passive Passive Passive Passive	Parameter ♥ Contains Ammonia Nitrogen Dioxide Ozone Sulphur Dioxide	Unit Vi Contains ppb ppb ppb ppb ppb	Time Code ▼ Contains Wonthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days	Method Y Contains Ion Chromatog Ion Chromatogr Ion Chromatogr	Station-VVC Assignment Start Date ♥ On 2020/04/01 12:00 AM 2019/09/01 12:00 AM 2019/09/01 12:00 AM 2019/09/01 12:00 AM	Station-VVC Assignment End Date	Status ♥ i Contains Active Active Active Active	Comments ▼ Contains new assignment new new new	

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 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"

	innation								
tation Id:		00195548-P-2			Station Effective D	2011/0	2011/06/01 12:00:00 AM		
tation Name:		2			Station Termination Date				
tation-VVC Assignmer	t End Date:	2022/0	🗮 2022/01/01 11:59 PM						
omments:		terminating; n requirement	o longer an EPE	EA approval					
								Show	10 v records
Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Station-VVC Start Date	Station-VVC End Date	Status	Comments
V Contains	▼ Contains	▼ Contains	▼ Contains	▼ Contains	▼ Contains	▼ On ▼	▼ On ▼	V Contains	▼ Contains
	Continuous	Total Suspende	ug/m3	Hourly	Light Scattering	2021/11/01 12:00 AM		Active	test
VVC1									_
VVC1 - 1 of 1 records								l∈ ∢ Prev	1 Next ▶ →

- 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*".

Ct-										
310	ation ID	00)195548-P-2			Station Type				
Sta	ation Name	2				Longitude (in de	ecimal)	-111.5521960	0	
Sta	ation Effective Da	te 200	08/10/01 12:00 AM	N		Latitude (in deci	imal)	51.44527300		
Sta	ation Termination	Date				Elevation (in me level)	eters above sea			
						Station Status		Active		
									Show	10 v recor
	Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Station-VVC Assignment Start Date	Station-VVC Assignment End Date	Status	Comments
	V Contains	▼ Contains	V Contains	▼ Contains	V Contains	▼ Contains	▼ 0n ▼	▼ 0n ▼	▼ Contains	V Contains
		Pagaina	Ammonia	ppb	Monthly (Calendar) / 30	Ion Chromatog	2020/04/01 12:00 AM		Active	new assignme
• (VVC378	Fassive			Days					
▶ (VVC378	Passive	Nitrogen Dioxide	ppb	Monthly (Calendar) / 30 Days	Ion Chromatogr	2019/09/01 12:00 AM		Active	new
► (VVC378	Passive	Nitrogen Dioxide Ozone	ppb ppb	Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days	Ion Chromatogr	2019/09/01 12:00 AM 2019/09/01 12:00 AM		Active Active	new
► (VVC378 VVC382 VVC384 VVC386 	Passive Passive Passive	Nitrogen Dioxide Ozone Sulphur Dioxide	ppb ppb	Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days Monthly (Calendar) / 30 Days	Ion Chromatogr Ion Chromatog Ion Chromatogr	2019/09/01 12:00 AM 2019/09/01 12:00 AM 2019/09/01 12:00 AM		Active Active Active	new new

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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)



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

Station	ND	00	195548-P-2			Station Type					
Otation	. Nama		1300404142			Station Type		444 5504000			
Station	n Name	2				Longitude (in decimal) -111.55219600					
Station	1 Effective Dat	e 200	18/10/01 12:00 AI	vi		Latitude (in decimal) 51.44527300					
Station Termination Date Elevation (in meters above sea level)											
				Active							
									Oher		
								Termination	310	w 10 + leco	
	Vvc Code	Collection Type	Parameter	Unit	Time Code	Method	Effective Date	Date	Status	Comments	
	▼ Contains	V Contains	▼ Contains	▼ Contains	V Contains	▼ Contains	▼ On ▼	▼ On ▼	▼ Contains	▼ Contains	
	VVC1	Continuous	Total Suspende	ug/m3	Hourly	Light Scattering	2019/03/29 12:00 AM	AM	Inactive	range new	
	VVC378	Passive	Ammonia	ppb	Monthly (Calen	Ion Chromatogr	2020/04/01 12:00 AM	2020/04/30 11:59 PM	Inactive	terminate no le	
	VVC378	Passive	Ammonia	ppb	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2019/09/30 12:00 AM	Inactive	term date ter	
	VVC379	Passive	Ammonia	ppm	Monthly (Calen	Ion Chromatogr	2019/07/01 12:00 AM	2020/04/30 12:00 AM	Inactive	dates new	
	VVC380	Passive	Hydrogen Sulp	ppb	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2019/09/30 12:00 AM	Inactive	term date ter	
	VVC381	Passive	Hydrogen Sulp	ppm	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2019/12/31 11:59 PM	Inactive	term new	
	VVC382	Passive	Nitrogen Dioxide	ppb	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM		Active	new	
	VVC383	Passive	Nitrogen Dioxide	ppm	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2019/12/31 11:59 PM	Inactive	term new	
	VVC384	Passive	Ozone	ppb	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2020/04/30 11:59 PM	Inactive	terminate no lo	
	VVC385	Passive	Ozone	ppm	Monthly (Calen	Ion Chromatogr	2019/09/01 12:00 AM	2019/12/31 11:59 PM	Inactive	term new	
								14-	A Prov 1	2 Nevt N	

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.



A	ir Data	Station Mainter	ance	User Roles				
	Vvc Code	Collection Type	Ра	Update - VVC Assignment	Effective Period	tion		Status
	▼ Contains	V Contains	Y	VVC Code	10/0000		Ŧ	▼ Contains
	VVC1	Continuous	То	Station VA/C Assignment	VVC380	29 12	00	Inactive
	VVC378	Passive	An	Start Date	2019/09/01 12:00 AM	30 11:	59	Inactive
	VVC378	Passive	An	Station-VVC Assignment End Date	in 10/31/2019 11:59 PM	30 12	00	Inactive
	VVC379	Passive	An	Comments	updated station-vvc assignment end date	30 12:	00	Inactive
Þ	VVC380	Passive	Ну	Cancel	Save	30 12	:00	Inactive
	VVC381	Passive	Ну			31 11:	59	Inactive
	VVC382	Passive	Nitroge	en Dioxide ppb Month	ly (Calen Ion Chromatogr AM			Active

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 <u>air.reporting@gov.ab.ca</u> 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: <u>Alberta</u> <u>Online Learning (gov.ab.ca)</u>

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



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" />



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



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