

Baseline and Reduction Opportunity (BRO) Assessment Program

BROA APP HELP

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The BRO Assessment (BROA) Data Collection App

General Information

The BROA App has been developed to assist in the collection of the data required for the Device / Equipment Inventory and, if applicable, the Leak Detection assessment types.

- The BROA App is a progressive web app that can be used in a number of devices (i.e., cell phones, tablets, desktop, etc.)
- After it is installed as an App on the device, it will run without the need of internet or the use of cell data.
- All project, facility, and source data is stored **locally** in the user's device.
 - Note: CCI is NOT ABLE to access the data stored in users' devices, so export project data frequently and email to yourself or save to the cloud to prevent data loss in the event of a device malfunction. Manually deleting device data (e.g., clearing cache data) may also result in data loss.
- Project information downloaded from the BROA App will match the BRO Assessment Program required CSV output format.
- The App allows partially completed data to be saved. Ensure that you have completed all **required fields** before submitting the project files.
 - The Data Input Library file (available in the "BROA Documents/Templates" tab of the CCI Portal) defines all requirements for these assessment types. Sample CSV files (Facilities and Sources) are also available for download.

Installing the BROA App in a Device

Access the App through the link provided on the CCI Portal.

The first time you access the link on your device, you may be asked whether you would like to install it. If you accept that option, the BROA App will be downloaded to your device.

If are not given the option to install, you can still do so manually:

- On Android devices:
 - Open the link on your browser.
 - If using Google Chrome, click the three dots at the top of the screen, beside the URL. Select the "Install app" option.
 - Other popular browsers offer similar "Install" or "Save" options.



- On **iOS** devices:
 - Open the link on your browser.
 - o Click the save/share icon that usually appears at the bottom of the screen.
 - Select "Add to Home Screen".
 - You may have the option to name the App before saving it.

On a **Windows** device (e.g., laptop), using Google **Chrome**:

carbonconnectinternational.

- See the instructions for Android devices above.
- On a Windows device (e.g., ٠ laptop), using Microsoft Edge:
 - The first time you access the link, click the "+" icon beside the URL to open the app installation scree
 - then click the Install button.
 - If you choose the "Not Now" option, you would st be able to install it at a later date by clicking the three dots to the right of the URL, then choosing the "Save to Home Screen" option.
- Other popular browsers offer similar "Install" or "Save" options.

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Using the BROA App

THE LANDING PAGE

From the App's landing page users have the option to:

- Add a new Project.
- View the list of Projects that have been previously added.
- Select the "Get Help" button to be directed to the BROA page on CCI's website.

Note the warning recommending that users download the data on a regular basis and reminding that deleting device data (e.g., clearing cache data) may result in data loss.

The App requests permission from the device to mark the data as "persistent," so that it knows that the data should not be recycled as part of its normal storage management strategies. So, the first time you open the App, you will see "NOT PERSISTED" at the bottom of the landing page (as shown to the right).

	CARBON CONNECT
A	We strongly recommend that you download the data for all your projects on a regular basis to prevent data loss in case of device malfunction. CCI does not have access to the data atored in users' devices. MANUALLY DELETING PHONE OR BROWSER DATA MAY RESULT IN LOSS
	PROJECT LIST
	ADD NEW PROJECT
	GET HELP

BROA App

	GET HELP		
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When you navigate to a data page, the App requests permission from the device to make the data persistent. *You* <u>may get a pop-up asking if you allow this, but in many cases</u> the device will automatically grant it. Once permission is

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granted, the label at the bottom will change to "PERSISTED."

NOT PERSISTED

THE PROJECTS SCREEN

The Projects screen contains a list of all Projects created on the device. From this screen users have the option to:

- **Create** a new Project:
 - Click the "Add Project" button.
 - Enter the Project number. The Project number should be the BROA Project ID number that was assigned when the Project was first created on the CCI Portal.
 - Enter the Service Provider name.
 - When finished, click the "Done" button.
- **Edit** existing Project information:
 - Click a Project identifier to open the Edit Project screen.
 Note: you can filter the list by clicking the magnifying glass and entering the desired information in the filter-by field.
 - Update the Project number or Service Provider information, as needed.
 - When finished, click the "Done" button or the back arrow to return to the Projects screen.
 - Users also have the option to delete the Project and all related information.
 Note: Deleted Project information cannot be recovered, so be extra careful with this option.
- **Navigate to Project's Facilities:** Click the "Facilities" button in the Edit Project screen, or the arrow to the right of the Project number on the Projects screen to navigate to the Project's Facilities screen.

THE FACILITIES SCREEN

The Facilities screen contains a list of all Facilities that have been added for a particular Project. From this screen users have the option to:

- **Create** a new Facility:
 - Click the "Add Facility" button. You will be taken to a blank "Edit Facility" screen, where you can provide the Facility information.
 - The "Service Provider Name" and "BROA Project ID" will be pre-populated.
 - The answer to the "Fugitive Survey included?" field determines whether "Fugitives" will be one of the available Sources for the facility. Only answer "Yes" is a Fugitive Leak Assessment was included in the Project submission.
 - The "Tag Photo(s)" field allows you to choose the image(s) from your device that correspond to the facility.
 - Note: Use this utility <u>only</u> for TAGGING (selecting) images that were previously acquired and are already saved to the device. DO NOT use the "camera" functionality as some devices consider these as temporary images, and do not save them to the photo gallery.
 - The file names of the tagged images associated to each facility will be exported to an interim "photos" column in the Facilities CSV file. The association of file names to the facility is meant to assist users with the process of renaming image files to follow the naming convention described in the Data Input Library document (contact the Reviewer assigned to your project if you need guidance regarding this process). The interim "photos" column is not part of data submission, so remember to <u>delete</u> it prior to submitting the data.
 - \circ When finished, click the arrow on the left of the title bar to return to the Facilities screen.
 - Note: The unique Facility Identifier will be automatically created, based on the information provided for the Facility. See the Data Input Library file to review the components that make up the Facility Identifier.
 - Click the garbage can icon to cancel without saving the new Facility.
- **Download** Project information:
 - Click the download icon on the right of the title bar.
 The download pop-up will open.
 - Click each the "Download Facilities" and/or the "Download Sources" button.
 - Android Devices: After confirming the download, the file will be saved to your device. From there you will have the option of emailing it to yourself, saving to the cloud, etc.
 - iOS Devices: You may need to tap and hold the download button until a screen appears displaying the file name. Click the save/share icon that appears at the bottom of the screen,

and then choose to save the file to your device. From there you will have the option of emailing it to yourself, saving to the cloud, etc.

- Edit existing Facility information:
 - Click a Facility identifier to open the Edit Facility screen.

Note: you can filter the list by clicking the magnifying glass and entering the desired information in the filter-by field.

- Update the Facility information, as needed.
- When finished, click the arrow on the left of the title bar to return to the Facilities screen.
- Users also have the option to delete the Facility and all related information.

Note: Deleted Facility information cannot be recovered, so be extra careful with this option.

• Navigate to Facility's Sources: Click the "Sources" button in the Edit Facility screen, or the arrow to the right of the Facility identifier on the Facilities screen to navigate to the Facility's Sources screen.

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	SUURCES >	
Service Provider Name Service Provider 1		
BROA Project ID ABBR00001		
Operator BA Code 0001		
Surface Location		
$\begin{array}{c} \text{LSD} \\ 02 \end{array} \begin{array}{c} \text{SEC} \\ 03 \end{array} \begin{array}{c} \text{TWF} \\ 00 \end{array}$	$r_{4} = \frac{r_{GE}}{05} = \frac{DIR}{W} = \frac{MER}{6}$	
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Surface Location Latitude 49.001663 (e.g. 49.001663) Facility Type Compressor Station Fugitive Survey Included? Yes (Does the BROA include a Fugit Primary Petrinex Code ABBT0001234 (e.g. ABBT0001234 or ABWI10)	Ver Leak Detection Survey?)) •
Surface Location Latitude 49.001663 (e.g. 49.001663) Facility Type Compressor Station Fugitive Survey Included? Yes (Does the BROA include a Fugit Primary Petrinex Code ABBT0001234 (e.g. ABBT0001234 or ABWI10) Facility Licence Number F10074	Vurface Location Longitude -110.007849 (e.g110.007849) Ve Leak Detection Survey?) 2010200304W502)) -
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THE SOURCES SCREEN

The Sources screen contains a list of all Sources that have been added for a particular Facility. From this screen users have the option to:

- Create a new Source:
 - Click the "Add Source" button. You will be taken to a blank "Edit Source" screen, where you can provide the Source information.
 - The "Facility Identifier" will be pre-populated.
 - Fields that are common to all Sources appear first. Source-specific fields, based on the "Equipment / Source Category" chosen, will appear at the bottom of the form.
 - The "Tag Photo(s)" field allows you to choose the image(s) from your device that correspond to the source.
 - Note: Use this utility <u>only</u> for TAGGING (selecting) images that were previously acquired and are already saved to the device. DO NOT use the "camera" functionality as some devices consider these as temporary images, and do not save them to the photo gallery.
 - The file names of the tagged images associated to each source will be exported to an interim "photos" column in the Sources CSV file. The association of file names to the source is meant to assist users with the process of renaming image files to follow the naming convention described in the Data Input Library document (contact the Reviewer assigned to your project if you need guidance regarding this process). The interim "photos" column is not part of data submission, so remember to <u>delete</u> it prior to submitting the data.
 - \circ $\;$ When finished, click the arrow on the left of the title bar to return to the Sources screen.
 - Note: The "Equipment / Source Identifier" provided must be unique within the Facility. You may need to append a sequential number (e.g., Pressure Controller 1, Pressure Controller 2, etc.), or use other information about the Source to make the Source Identifier unique. See the Data Input Library file to review these requirements.
 - Click the garbage can icon to cancel without saving the new Source.

- Edit existing Source information:
 - Click the Source identifier to open the Edit Source screen.

Note: you can filter the list by clicking the magnifying glass and entering the desired information in the filter-by field.

- Update the Source information, as needed.
- When finished, click the arrow on the left of the title bar to return to the Sources screen.
- Users also have the option to delete the Source.
 Note: Deleted Source information cannot be recovered, so be extra careful with this option.

< Edit S	Source
Assessment Date 14/12/2020	,
Facility Identifier ABBR00001_0001_01-02-003	3-04-W5_ABBT0001234
Equipment / Source Identifier Pressure Controller 1	
Source Latitude 49.001663	Source Longitude 110.007849
(E.g. 49.001663)	(E.g110.007849)
Release Point Latitude 49.001665	Release Point Longitude 110.007852
(E.g. 49.001663)	(E.g110.007849)
Equipment / Source Petrinex Code ABBT0001234	
(e.g. ABBT0001234 or ABWI1020102	00304W502)
Equipment / Source Category Pneumatic Instrument	
Equipment / Device Type Pressure Controller	© -
Manufacturer Manuf 1	

General Data Entry Considerations

FIELDS THAT ALLOW "OTHER: [SPECIFY]" OPTION

In some cases, fields that contain a drop-down list also allow users to enter different information from the choices provided (see the Data Input Library file for fields that include this option).	Primary Commodity Type Other Commodity
In those cases, the BROA App will allow you to either choose an item from the drop-down list OR type directly into the field.	Gas Sour
The information you enter in the field will be saved and displayed as "Other: <i>Your Info</i> ".	Oil
Primary Commodity Type Other: Other Commodity	Water

OPENING CSV FILES IN MICROSOFT EXCEL WITHOUT LOSING THE REQUIRED FORMATTING

THE PROBLEM

At times you may decide to open the exported CSV files using programs like Microsoft Excel to check or update their contents before submitting them. However, when Microsoft Excel opens a CSV file, it attempts to "interpret" the data in that file and usually makes changes to it. Unfortunately, this has the unintended consequence of breaking the CSV file for the application that the CSV was specifically designed for.

For example, if Excel sees something in the CSV file that it identifies as a date, Excel will change the format in the CSV file to suit the way that it prefers dates to be formatted, regardless of the prescribed data format (in this case YYYY-MM-DD). Also, if Excel sees a value that it identifies as a number (e.g., "002" in the Township column), it will change the format in the CSV file to display it as a number ("2") by dropping any leading zeros.

THE SOLUTION

If you need to open a CSV file in Excel without breaking it, follow these steps:

- 1) Save the CSV file to your device.
- 2) Open a new Excel sheet, select the "Data" tab, then click 'From Text/CSV' in the Get & Transform Data group.
- 3) Browse to the CSV file and select 'Import'.
- 4) In the Import Wizard, ensure Delimiter is set to "Comma" and Data Type Detection is set to "Do not detect data types".

File Origin			Delimite	er			Da	ata Type Detect	ion				
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Column1	Column2	Column3	Column4	Column5	Column6	Colum	nn7	Column8	Column9	Column10	Colum	11	
broa_id	op_ba	Isd	sec	twp	rge	dir		mer	surface_lat	surface_long	facil_type		in
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- 5) Click "Load" to insert the data into cell A1.
- 6) Excel will likely add a new header row above the file column headings showing "Column 1", "Column 2", etc., and will display the "Table Design" tab.
 - a) Uncheck the "Header Row" in the Table Style Options group.
 - b) Delete the now blank top row, so that the first row displays the Facilities or Sources column headings.
- 7) Highlight the whole sheet and, in the "Home" tab, set the data type to "Text" in the Number group.

You should now have a spreadsheet with the imported data, but without Excel breaking the formatting required for the BRO Assessment Program submission.

If you make any changes to the data, remember to save the file as a CSV again before submitting.

Note: If you are using an older version of Microsoft Excel, search online for "open csv file without changing format" for directions.

ENTERING NEGATIVE VALUES

The default keyboard in some devices may not contain the dash/minus sign, so you would not have the option of entering negative values. However, this would be required for all the **Longitude** fields, and could be needed for some **temperature** values as well.

If that is the case, you could try clicking the keyboard icon at the bottom of the screen and changing the keyboard to one that contains the dash/minus sign.

Note that the keyboard options may also vary depending on which browser you used to download the App.

If that option is not available for your device, you would have the choice of updating the information after it is downloaded to the CSV file. See the "Opening CSV Files in Microsoft Excel" section above to ensure that the required formatting is maintained.

Note that it is the Service Provider's responsibility to ensure that submitted data is in the correct format, as specified in the Data Input Library file.

Operator BA Code 0001			
Surface Locatio	n		
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Release Notes

BUILD	NOTES
2020-12-17	BROA App initial release.
2021-01-19	 Updated warning on landing page to clarify that wiping phone or browser data (e.g., cache data) may result in loss. Included functionality to make data persistent, so that the device would know that the data should not be recycled as part of its normal storage management strategies. Added a Sources navigation button to the Edit Facility screen.
2021-02-18	• Reordered data points so that fields that are more likely to be completed in the office, as part of a desktop exercise, will appear at the bottom of the screen.
2021-04-13	 Added a "Tag Photo(s)" field to both the Edit Facility and Edit Sources screens. This interim information from this field facilitates the association between image files from the user's device to either an individual facility or a source record. Added "Other" as a choice in the Equipment / Source Category field. If "Other" is chosen as the source category, users would need to describe the source type in the Equipment / Device Type field.
2021-06-01	 Updated the spelling of some list options to ensure consistency. Added new fields to accommodate changes to data requirements: Instrument Level of Detail Instrument Device Type Count Instrument Equation 10 Actuation Frequency for Level Controllers (min) Pump Level of Detail Pump Type Count Pump Type Count Seal Inaccessible?
2021-06-09	• Updated the list of valid options in the "Pump Vent Rate Unit" field.
2022-04-25	 Updated some list options of the Component Type element in the Fugitives source to accommodate changes to data requirements: Added "Unlit Flare" to dropdown list Renamed "Thief Hatch" to "Thief Hatch on Controlled Tanks" Added new fields to accommodate changes to data requirements for Combustion Equipment – Recip Engines source: Air Fuel Ratio Controller Catalyst Housing Functioning Catalyst Pre-Chamber Ignition (4SLB engines only)

