

# FACILITY BOUNDARY MAP GUIDANCE

Section 11.3 of the Greenhouse Gas Emission Reporting Regulation requires Single Facility Operations and Linear Facilities Operations to provide a facility boundary map (boundary map) during registration. This document provides guidance for operators of industrial operations to create a boundary map. It sets out a description of what could be considered reasonable when meeting the requirement of the Regulation.

This information is for your convenience and guidance only and does not replace or constitute legal advice. It is recommended that operators review the *Greenhouse Gas Industrial Reporting and Control Act* (GGIRCA), the Greenhouse Gas Emission Reporting Regulation (GGERR), and the Greenhouse Gas Emission Administrative Penalties and Appeals Regulation (GGEAPAR) and seek independent legal advice to understand their status and legal obligations. The GGIRCA and its Regulations can be found at: [bclaws.gov.bc.ca](http://bclaws.gov.bc.ca)

## INTRODUCTION

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A boundary map is a digital file that outlines the boundaries of a facility that is part of an operation. It provides a visual representation of the size and scale of an industrial operation, as these can often be difficult to describe. A boundary map can help regulators get a better understanding of the regulated activities and production processes that cause attributable emissions at a facility.

## WHO NEEDS TO PROVIDE A FACILITY BOUNDARY MAP?

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All reporting and regulated operations must prepare and upload a boundary map for registration under the GGERR. Electricity Import Operations (EIO's) are excluded from this requirement.

## WHEN DOES A FACILITY BOUNDARY MAP NEED TO BE PROVIDED?

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A boundary map can be uploaded when registering in BCIERS. Once uploaded, that boundary map stays on file for all following reporting periods that it remains up-to-date. A boundary map only needs to be updated if there are changes to the boundaries of an operation that warrant updates, such as the acquisition or divestment of facilities within a linear facilities operation, or the closure of a facility. In this case, an updated boundary map must be uploaded to BCIERS on or before the May 31 deadline for the reporting year that the boundary map pertains to.

## WHAT TO INCLUDE IN A FACILITY BOUNDARY MAP

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A boundary map is a digital map that indicates an accurate geographical location of a facility's boundaries in the form of points, lines, and a polygon. For a single facility operation (SFO), a boundary map should outline the legal boundaries of the facility. For a linear facilities operation (LFO), the boundary map must show the boundaries for each individual facility within the operation that has emissions attributable under section 3 of the GGERR that are or are likely to be greater than 1,000 tonnes of carbon dioxide equivalent, not including carbon dioxide from biomass listed in item 1 of Schedule C of the [Greenhouse Gas Emissions Reporting Regulation](#).

A boundary map's resolution and scale should be appropriate to determine the operation's location relative to the surrounding major infrastructure and features, such as public roads or railways. Elements or features, such as public roads or railways, that pass through the facility boundary but are not part of or within the facility boundary, should be identified in the boundary map.

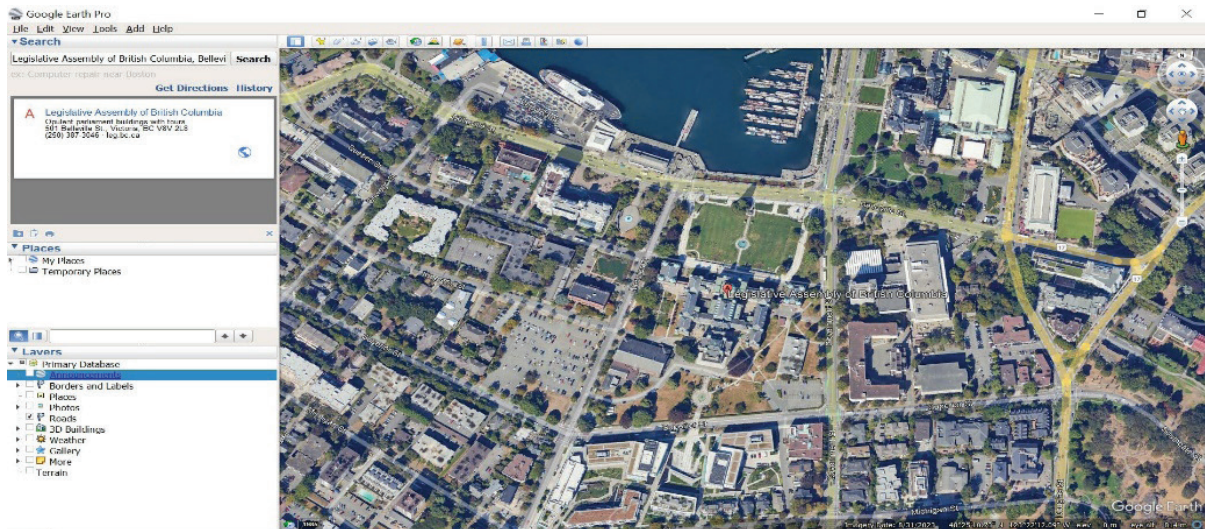
## FILE TYPE

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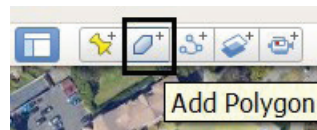
The boundary map should be in .KMZ or .KML file formats and be a maximum size of 10 MB. A boundary map can be built on various geographic information system (GIS) applications. The Ministry encourages the use of Google Earth for creating a boundary map, and has provided step by step instructions for doing so below. Completed boundary maps can be uploaded to the BC Industrial Emission Reporting System (BCIERS) as part of an operations registration.

# CREATING A FACILITY BOUNDARY MAP WITH GOOGLE EARTH

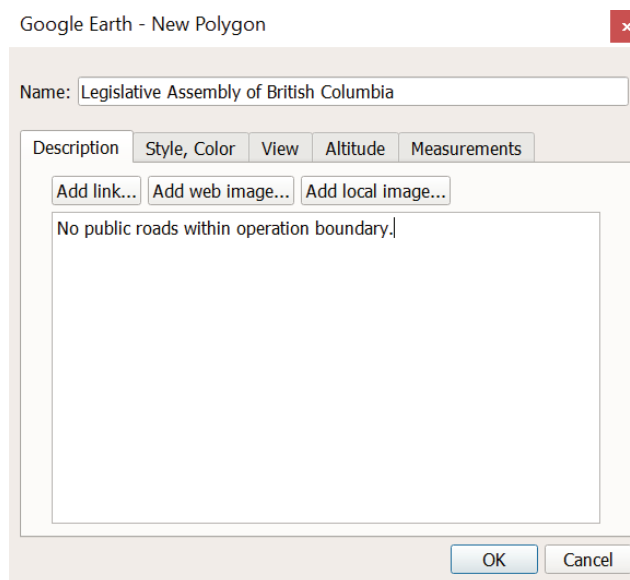
1. Download and install Google Earth Pro on your desktop (available at [Earth Versions – Google Earth](#)).



2. Open Google Earth Pro and locate your facility. The “Search” box can be used to input an address or a geographic coordinate.
3. Once your facility is located, click on the “Add Polygon” icon in the top toolbar.

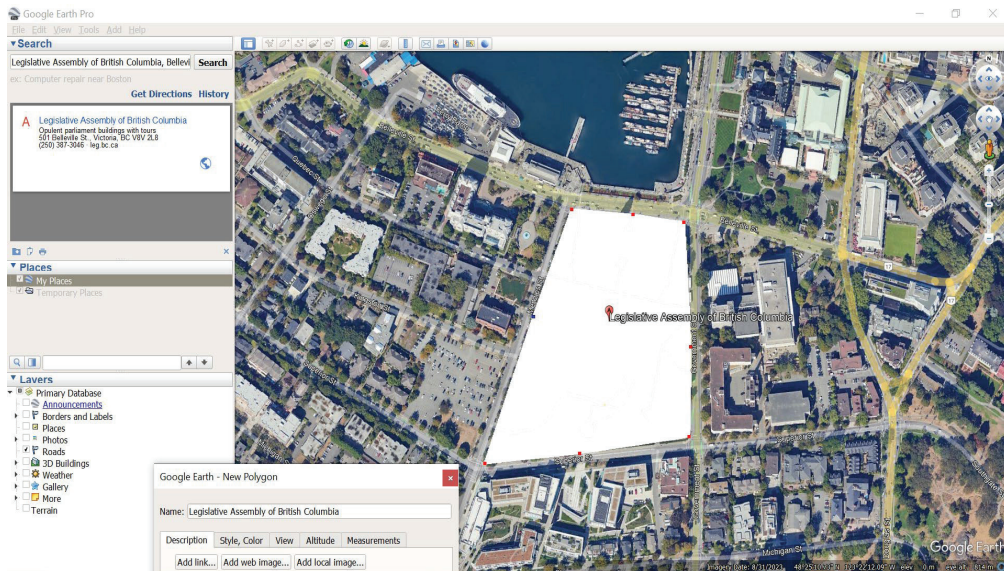


4. The “New Polygon” window will appear. Enter the name of the facility in the “Name” box. Any additional information that you consider relevant can be added under the “Description” tab. **Do not click on the “OK” button yet.**

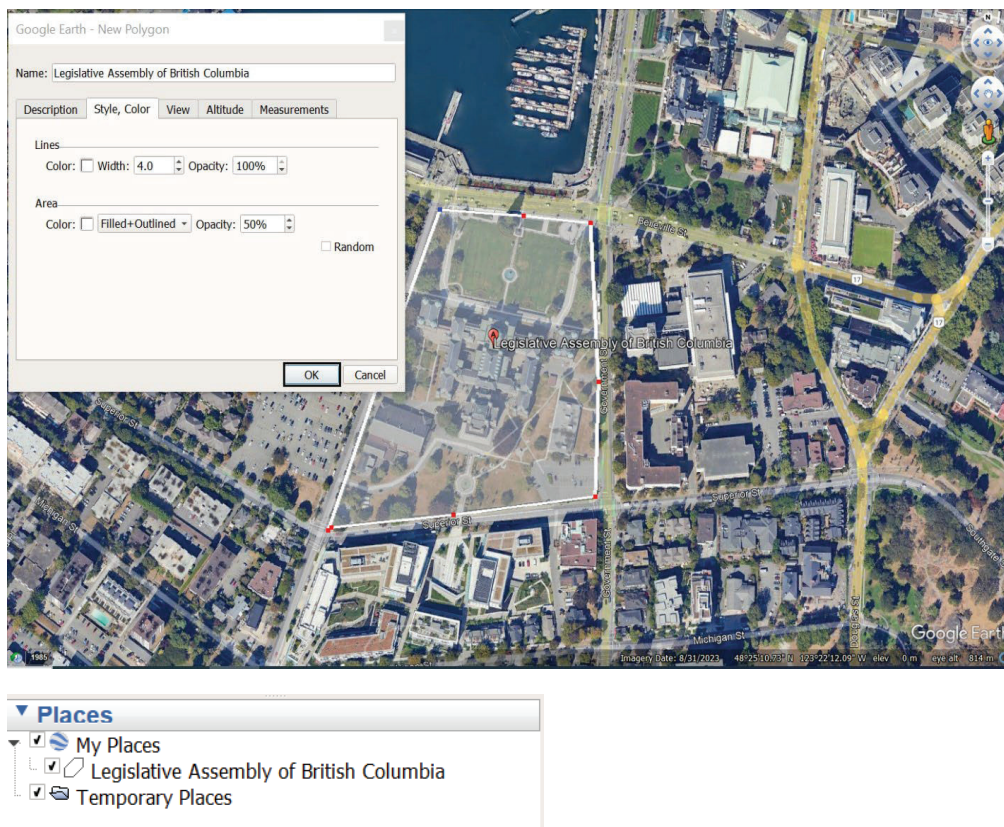




5. To draw a polygon, the “New Polygon” window should be open. Polygons are drawn by adding a series of points that represent a perimeter. Add as many points as needed to accurately depict the boundary of the facility. Points can be dragged after being added.



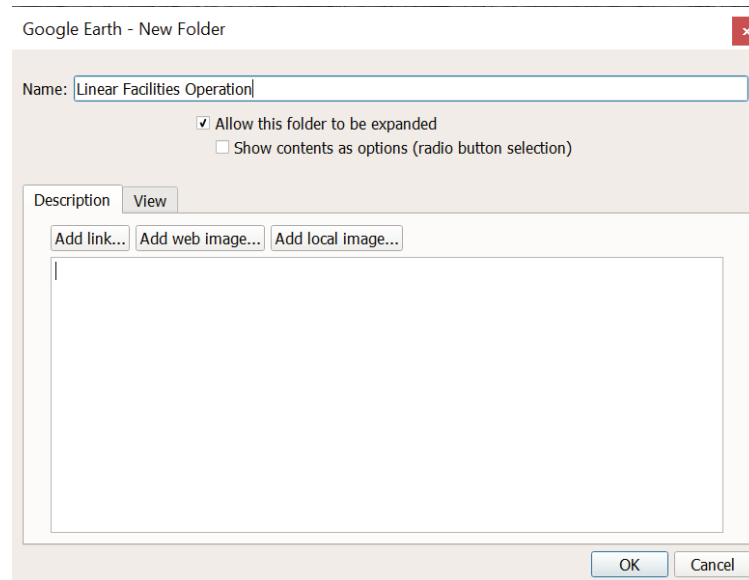
6. In the tab “Style, Color” of the “New Polygon” window, you can adjust the format of the polygon's lines and surface. Set the line width to 4.0 and area opacity to 50%. Then, click the “OK” button. The polygon will appear under “My Places” on the left panel. The line width and area opacity values are only suggestions for the best visibility of the boundary.









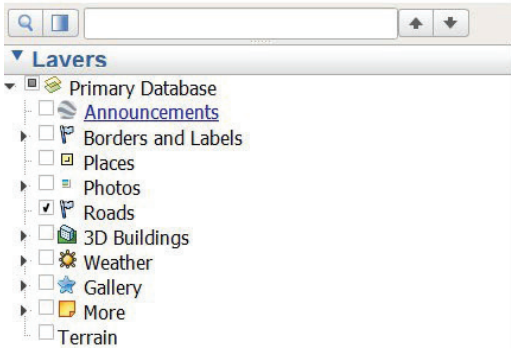
7. If your facility is a single facility operation, the polygon created is the facility's boundary and you can move on to step 10.

If your facility is part of a linear facilities operation, create one polygon for each individual facility (repeating steps 2 to 6) in the linear facilities operation. If your operation includes transmission pipelines, refer to the section "Depicting Transmission Pipelines as Paths" on page 7.

8. Right-click on "My Places" in the left panel. Select "Add". Select "Folder". In the "New Folder" window, enter the name of the operation in the "Name" box. Any additional information that you consider relevant can be added under the "Description" tab.



- Places**
- ☒  My Places
    - ☒  Linear Facilities Operation
      - ☒  South Facility
      - ☒  NorthEast Facility
      - ☒  NorthWest Facility
    - ☐  Temporary Places





10. Right-click on the facility's boundary under "My Places" in the left panel. Select "Save place as". Enter the name of the facility in the "File name" box. Select either Kml or Kml as the file type.

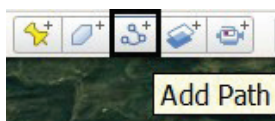
File name: Legislative Assembly of British Columbia  
Save as type: Kml (\*.kml)  
^ Hide Folders [Save] [Cancel]

File name: Linear Facilities Operation  
Save as type: Kml (\*.kml)  
^ Hide Folders [Save] [Cancel]

11. Ensure that the file containing the boundary map is functional (i.e. can be imported and opened in Google Earth) before uploading it to BCIERS.

## Depicting Transmission Pipelines as Paths

- Follow steps 1 and 2 of the above section.
- Click the "Add Path" icon in the top toolbar.



- The "New Path" window will appear. Enter the name of the facility in the "Name" box. Under the "Description" tab, add the width of the facility on both sides of the centerline of the pipeline and the direction of the flow. **Do not click on the "OK" button yet.**

Google Earth - New Path

Name: Pipeline 1

Description Style, Color View Altitude Measurements

Add link... Add web image... Add local image...

Flow direction: North to South  
Width from centerline to the right of flow: 6 meters  
Width from centerline to the left of flow: 3 meters

[OK] [Cancel]

- d. To draw a path the “New Path” window should be open. Paths are drawn by adding a series of points that create a line. The location of the points should accurately trace the centerline of the pipeline. Points can be moved after being added.
- e. In the tab “Style, Color” of the “New Path” window, you can adjust the format of the line. Set line width to 4.0. Then, click the “OK” button. The path will appear under “My Places” on the left panel.
- f. Remember that equipment and infrastructure that is part of the individual facility but outside of the width range specified in “Description” (i.e., step c) should be represented as polygons. Paths and polygons should be grouped in one operation folder following steps 8 and 9 of creating a boundary map with Google Earth

