## FACILITY BOUNDARY MAP GUIDANCE FOR THE B.C. OUTPUT-BASED PRICING SYSTEM

This guidance document provides information for operators of industrial operations to produce and submit a facility boundary map (FBM). An FBM must be prepared as a digital record that outlines the boundaries of a facility that is part of an operation. The Greenhouse Gas Emissions Reporting Regulation (GGERR) requires FBM(s) to register as an operation in order to apply to be designated as an opted-in operation to the B.C. Output Based Pricing System (B.C. OBPS).

## Introduction

Boundaries of industrial facilities can often be difficult to describe. A map provides verification bodies and regulators a better understanding of the regulated activities and production processes that cause attributable emissions at a facility.

An FBM is a digital map that indicates an accurate geographical location of a facility's boundaries. An FBM's resolution and scale must be appropriate to determine the operation's location relative to the surrounding major infrastructure and features, such as public roads or railways.

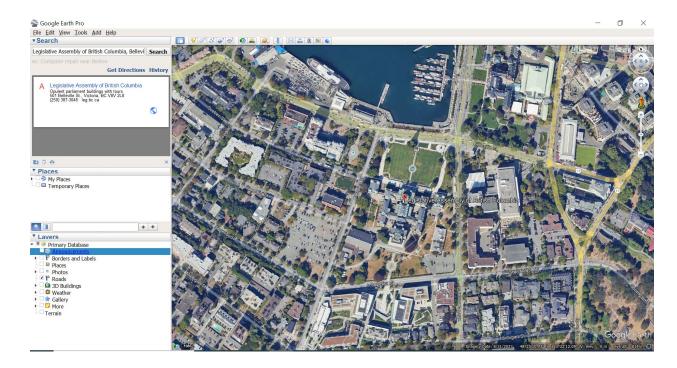
Elements or features, such as public roads or railways, that pass through the facility boundary, but are not part of or within the facility boundary, must be identified in the FBM.

If a linear facility's operation consists of multiple facilities, the FBM 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 <a href="Greenhouse Gas Emissions Reporting">Greenhouse Gas Emissions Reporting</a> Regulation.

An FBM can be built on various geographic information system (GIS) applications. The submitted FBM should be in .KMZ or .KML file formats and be a maximum size of 10 MB. The next section explains how to create an FBM=using Google Earth.

## Creating a Facility Boundary Map with Google Earth

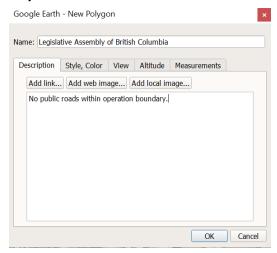
- 1. Download and install Google Earth Pro on your desktop (available at <u>Earth Versions Google Earth</u>).
- 2. Open Google Earth Pro and locate your facility. The "Search" box can be used to input an address or a geographic coordinate.



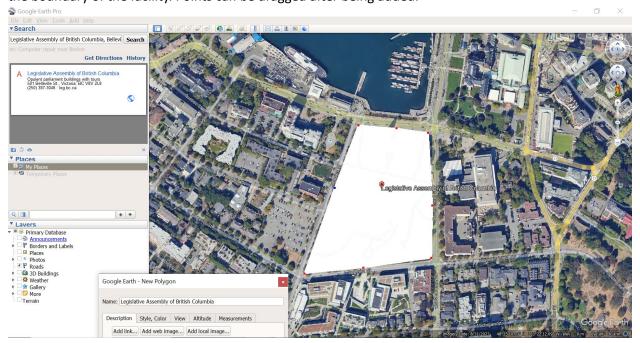
3. Once your facility is located, click on the "Add Polygon" icon in the top toolbar.



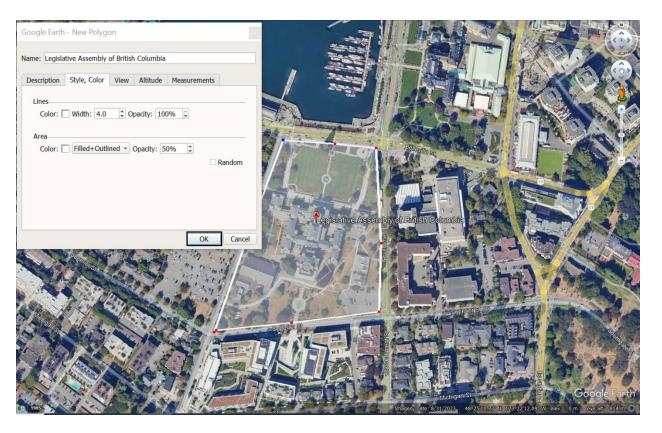
4. The "New Polygon" window will appear. Enter the name of the facility in the "Name" box. Any additional information that you consider relevant can be added under the "Description" tab. **Do not click on the "OK" button yet.** 



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.

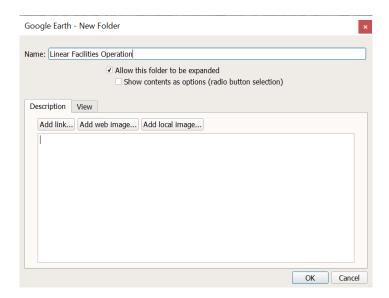


6. In the tab "Style, Color" of the "New Polygon" window, you can adjust the format of the polygon's lines and surface. Set the line width to 4.0 and area opacity to 50%. Then, click the "OK" button. The polygon will appear under "My Places" on the left panel. The line width and area opacity values are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

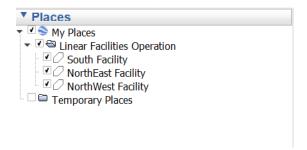


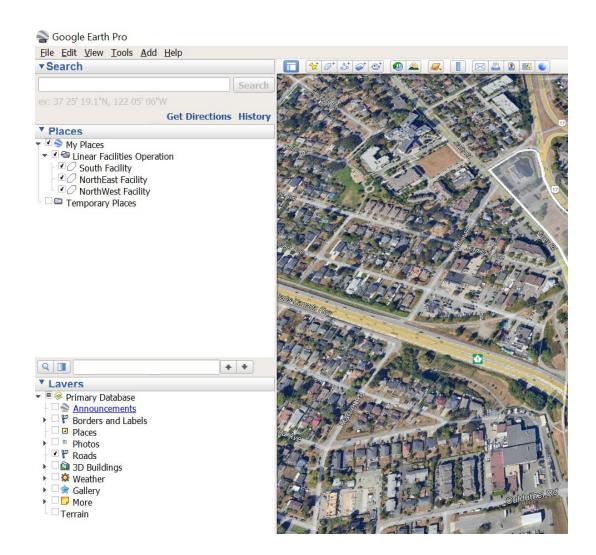


- 7. If your facility is a single facility operation, the polygon created is the facility's boundary and you can move on to step 10.
  - If your facility is part of a linear facilities operation, create one polygon for each individual facility (repeating steps 2 to 6) in the linear facilities operation. 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.

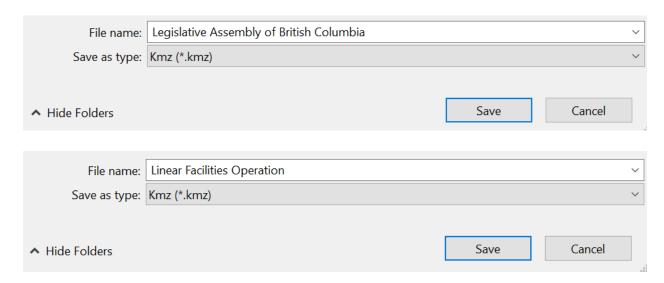


9. In the left panel, under "My Places", move the polygons/paths of individual facilities into the folder of the operation. You can move polygons/paths by dragging and dropping them in and out of folders/lists. The folder that groups all individual facilities is the linear facilities operation's boundary.





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 Kmz or Kml as the file type.



11. Ensure that the file containing the FBM is functional, i.e. can be imported and opened in Google Earth before submitting to GHGRegulator@gov.bc.ca.

## Depicting Transmission Pipelines as Paths

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



c. 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.** 



- 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 facility boundary map with Google Earth.

