

# PROCESS FLOW DIAGRAM GUIDANCE

This guidance document provides guidance for operators of industrial operations to create or revise a Process Flow Diagram (PFD) as required under s. 11.3(1) of the Greenhouse Gas Emission Reporting Regulation (GGERR). PFDs are required to register and apply to be designated as an opted-in operation in the B.C. Output Based Pricing System (B.C. OBPS).

## Introduction

A PFD provides an overview of facility operations and the relationship between major components by depicting industrial processes, product flow, and key equipment utilized to conduct an activity or to produce a product. It sets out, in reasonable schematic detail, the processes that produce emissions at a single facility operation or the distribution of individual facilities at a linear facilities operation.

A PFD is important for government regulators to ensure compliance. The PFD supports third-party verification processes and provides important guidance to the Ministry in conducting oversight and compliance review.

## Details to include in a Process Flow Diagram

The PFD must depict the step-by-step process of the production of products and also demonstrate the order in which industrial activities within the operation occur.

A PFD must include all key equipment used for industrial activities and index each emission source that produces, or is likely to produce, over 100 tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) in a reporting period. It must also include the source type if the emissions cumulatively exceed, or are likely to cumulatively exceed, 250 tCO<sub>2</sub>e in a reporting period.

Industrial activities include:

1. using equipment that combust fuels, such as engines, compressors, furnaces, boilers, generators, flares, and mobile equipment, and
2. industrial processes, such as chemical recovery, refinery oil-water separators, anode baking, and green coke calcination.

For a linear facilities operation, the PFD must depict how individual facilities function in an integrated manner and detail how individual facilities interact with each other.

## Who needs to provide a Process Flow Diagram?

All reporting and regulated operations must submit a PFD for registration under the GGERR, which is a necessary step when applying to be an opted-in operation in the B.C. OBPS.

## File Type

The Process Flow Diagram must be emailed to [GHGRegulator@gov.bc.ca](mailto:GHGRegulator@gov.bc.ca), and must not exceed a maximum size of 5 MB.

## Sample generic process flow diagram

Below is a sample process flow diagram. Operators are required to include all their processes, activities, key equipment, emission sources, and direction of flow clearly identified. Hand drawn diagrams are acceptable only if they are an engineering drawing.

