Greenhouse Gas Industrial Reporting and Control Act Bulletin

Reporting Fugitive Methane Emissions from Open Pit Coal Mining

Greenhouse Gas Emission Reporting Regulation

Overview

This bulletin provides information to industrial operators that have a reporting obligation under the Greenhouse Gas Emission Reporting Regulation (the Regulation) on the requirement to quantify fugitive methane emissions from open pit coal mining in accordance with best industry practices.

Reporting Emissions

Section 15 of the Regulation requires that operators quantify fugitive methane emissions from coal when broken or exposed to the atmosphere during mining in accordance with best industry practices (as referenced in Schedule A, Table 1, Item 25 of the Regulation).

For the purpose of submitting an emission report for the 2019 reporting year and until further notice, best industry practice for quantifying and reporting fugitive methane emissions from open pit coal mining operations in B.C. is the methodology given in Environment and Climate Change Canada’s National Inventory Report (NIR) publication. This methodology, outlined in more detail below, utilizes an emission factor. The most recently published emission factor for quantifying fugitive methane emissions from open pit coal mining provided in the NIR should be used for this methodology.

Emission reports prior to the 2019 reporting year that used other industry best practices in accordance with the Regulation are not required to be modified.

Further Detail on Methodology

Annex 3.2 of Part 2 of the NIR provides the underlying methodologies for assessing fugitive emissions from fossil fuel production, processing, transmission and distribution, including coal mining operations.

To obtain an estimate of fugitive methane emissions associated with an open pit coal mining operation, the following equation can be used (based on Eq.A3-4, NIR Part 2):

\[ Emissions = EF_{BC} \times Coal_{production} \]

Where:

- \( EF_{BC} \) is the emissions factor for the coal type and mine type of the operation (in tonnes CH4/kilotonnes coal mined)

[^1]: National Inventory Reports are available online at the Environment and Climate Change Canada site: https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html
Coal production is the gross production for the operation (in kilotonnes coal mined).

Emissions must be expressed in tonnes of carbon dioxide equivalent (CO₂e) by using the relevant global warming potentials as prescribed in B.C.’s Carbon Neutral Government Regulation.\(^2\)

\[^2\] See the Schedule in the Carbon Neutral Government Regulation available online: http://www.bclaws.ca/Recon/document/ID/freeside/392_2008