Improved Flare Source Parameters for CALPUFF and AERMOD Dispersion Models

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ABflare is freely distributed to assist in D060 temporary flaring permitting, non-routine and routine flaring air dispersion modelling within Alberta. ABflare performs both screening level calculations (uses only a few user inputs to create a realistic and conservative estimate of flare emissions and concentrations) and also refined level calculations. Although relatively few inputs are required through the interface, it is a complex tool. ABflare requires inputs that may require sound engineering judgement or other technical expertise. It uses site-specific thermodynamics, fluid dynamics, and air dispersion modelling. Flare dispersion assessment is a multidisciplinary and iterative task with many assumptions and judgments.

The ABflare and AERflare models were created so that a minimal amount of technical background is required to run the models. However, there remains some technical knowledge required to supply suitable inputs and the

ability to understand whether the output is appropriate for the inputs and meets the needs of stakeholders. The user must recognise that the models are technical in nature and the correct interpretation of the result may require technical expertise that proceeds from consequences of the inputs. In any modelling assessment, high quality input data is very important.
The model has been created with a professional commitment to environmental protection and safeguarding the well-being of the public. It is the responsibility of the software user to accept and continue this commitment in their application of the software. The software is supplied as a tool to assist the user to comply with applicable statutes, regulations and bylaws. Neither the software nor application of the software is intended to replace statutes, regulations or bylaws.

Report

2011 Presentation

2013 Presentation