

Phase II Non-Routine Flaring Modeling Tool Development

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Improving air emissions estimation methodologies. Environment assessments are a key component to new and renewing facility approvals and licenses. A significant component of the assessment is for companies to demonstrate compliance with regulations and requirements relating to air emissions and ambient air quality. Companies use dispersion modeling as a method to predict facilities' compliance with the regulations. History shows that the dispersion modelling predictions are often much higher than measured concentrations. As such, industry would like to ground-truth or validate dispersion modeling software used for facility approvals.

CALPUFF is a software program universally accepted by the provincial regulators (AENV and ERCB) and industry for modelling the dispersion of SO₂ from UOG facilities. Both industry and regulators would like to see the CALPUFF model to incorporate unique Alberta-specific algorithms around routine and non-routine flaring.

ABflare (spreadsheet and examples and userguide)
AERflare (spreadsheet and examples and userguide)

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