

# Flare / HF Emissions

2016

- [Flare Emissions from Unconventional Oil and Gas Extraction and Processing: An NSERC Strategic Network for Cleaner Fossil Fuels](#)
- ABFlare Tool Update
- [Revised emission factors for level controllers](#)
- [Vehicle-based fugitive emission detection and attribution within Alberta Energy Developments.](#)

2015

- [Potential Release into the Atmosphere of Additives used in the Hydraulic Fracturing Process](#)
- [Investigation of Potential Emission Trade-offs among Flare Efficiency, NO<sub>x</sub>, and Particulate Matter Emissions](#)
- [Flaring Cost-Benefit Analysis](#)

2013

- [Efficiency and Emissions of Flares Burning Non-Hydrocarbon Aerosols in the Flare Stream](#)
- [Investigation of the characteristics of ultrafine particles for improved PM emission factor reporting for flares](#)

2012

- [Phase II Non-Routine Flaring Modeling Tool Development](#)
- [Emissions from Flares with Non-hydrocarbon Liquids in the Flare Stream](#)
- [Evaluation of Emissions in the Upstream Oil and Natural Gas Industry](#)
- [Evaluation of Air Emissions Associated with Hydraulic Fracturing](#)
- [Field Measurement of Black Carbon Emissions from Flares](#)

2011

- [Practical Defensible PM 2.5 Emission Factors for Flares](#)

2010

- [Improved Flare Source Parameters for CALPUFF and AERMOD Dispersion Models](#)
- [Improved Emissions Factors for Particulate Matter \(PM\) from Flares](#)

2008

- [Continued Development of Numerical Simulation of a Sour Gas Flare](#)

2007

- [Gaseous Fuel Mixture Effects on Total Soot Yield from Flares](#)
- [GHG Emissions and Reductions from Solution Gas Flares in Alberta](#)

2006

- [Quantification of Soot Emissions from Flares – Phase 2](#)
- [Numerical Simulation of a Sour Gas Flare](#)

2005

- [Field Compatible Measurement of Flare Efficiency and Emissions](#)
- [Resolving Air Flow over Elevated Terrain to Improve Dispersion Modelling for Sour Gas Flares](#)
- [Effect of Sour Fuel Composition on Flare Combustion Efficiency](#)

2004

- [Flare Performance Research Initiative](#)
- [Flare Performance Research Initiative](#)

2003

- [New Flare Burner Designs](#)
- [Well Test Flare Plume Monitoring Phase II](#)
  
- [Well Test Flare Plume Monitoring](#)
- [Combustion Enhancement And Emission Reduction From Flare Stacks](#)