Quantification of Soot Emissions from Flares — Phase 2

Matthew Johnson, Carleton University GL 900851

The process of soot formation in flares is a very detailed and complex process and the

quantification and prediction of emissions for the development of models or "soot

factors" represents a very significant and longer term research challenge. In this phase 2

proposal, detailed and controlled lab experiments will form the primary methodology for

achieving these goals. We are also proposing to continue investigation of a potentially

promising approach to quantify PM emissions from flares under field conditions.

Through close collaboration with the National Research Council and with the continued

assistance of Environment Canada as well as potential leveraging through Natural

Sciences and Engineering Research Council, the broader goal of ultimately measuring,

modeling, predicting, and accurately reporting PM emissions will be achievable.

Report