



Company Assistance Needed for Ambient Air Quality NO₂ Drill Rig Field Study Program

Introduction

The WRAP in conjunction with BLM and the oil and gas industry is seeking to conduct a field measurement of potential impacts from drilling rigs. The purpose of this Study is to collect ambient measurements adjacent to oil & gas drill rigs in order to evaluate actual 1-hour NO₂ impacts from drilling operations.

A key component of this program is for a company to provide a drilling rig as an emission source (with known emissions), while a well is being drilled so that downwind impacts can be measured.

Company Assistance Needed as Follows

- 1) Provide safety training to air quality measurement contractors.
- 2) Develop procedures so that the ambient measurements do not interfere with rig operation.
- 3) Provide site access to conduct the ambient measurements.
- 4) Explore the possibility that rig power can be used to power the air quality analyzers.
- 5) Allow the study to continuously collect data from the rig with respect to:
 - a. Load on each engine; and
 - b. Individual fuel use for each NO_x source; and
 - c. Data on rig activity so that emissions can be correlated to rig activity.
- 6) Work with WRAP, BLM and industry to evaluate the most cost effective means of determining individual source NO_x emissions from the rig (on a continuous basis). Options under consideration are:
 - a. Stack testing followed by individual fuel use for each source or
 - b. Individual fuel use for each source with a NO_x analyzer installed on key engines; or
 - c. Other forms of parametric monitoring to determine emissions (continuous basis).
- 7) Once the emission monitoring approach is determined, install the necessary equipment.
- 8) Ensure that the collected rig data can be electronically delivered to the air quality contractor.