

Uinta Basin Study Overview

Docket No. 16-035-36
Sustainable Transportation and Energy Plan

Technical Conference
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WINTER OZONE FORMATION IN THE UINTA BASIN

NO_x (produced by combustion) + VOC (fumes) + UV light (amplified by snow cover) → ozone

SEVERAL LINES OF EVIDENCE SUGGEST THAT THE BASIN IS UNDER “NO_x CONTROL,” i.e., the best way to dial down ozone formation is to dial down NO_x emissions.



Under provisions of the Clean Air Act, Utah Division of Air Quality and the Environmental Protection Agency will be required, within about one or two years, to develop a plan for ozone abatement.

According to estimates by the Utah Division of Air Quality:

INTERNAL COMBUSTION ENGINES ARE THE SINGLE LARGEST NO_x SOURCE

THE MAJORITY OF THESE ARE USED FOR PUMPING OIL (“pump jacks”)

OBJECTIVES OF THE STUDY:

- Provide best available enumeration and quantification of NO_x sources.
- Modeling to settle the question of NO_x vs. VOC control.
- Modeling to predict the impact of electrification to eliminate engines.
- Modeling to inform the EPA/UDAQ ozone abatement process.
- Economic and logistic evaluation of the development of additional power transmission.