

## Community Exposure to Emissions and Noise Near Unconventional Oil and Gas Development: Eagle Ford Shale Region, Texas

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### Study Description

**ABOUT** Fact sheet in [English](#) and [Spanish](#)

**GOAL** Assess how people in the Eagle Ford Shale and surrounding areas might be exposed to both noise and chemicals in air from unconventional oil and gas development (UOGD).

- This study is part of the Tracking Community Exposures and Releases ([TRACER](#)) Collaboration, a three-team research collaboration funded by HEI Energy.



General study location

### What's happened?

- Set up and tested an all-electric mobile monitoring vehicle outfitted with instruments that measure air quality and noise.



- Began to evaluate the effects of UOGD on regional levels of ozone in the air and on the emissions of [nitrogen oxides](#).

### What's new?

- Wrapping up preparations for air quality and noise monitoring in Karnes County, beginning in Spring 2023. The monitoring is designed to capture emissions associated with UOGD, including flaring of natural gas.
- Continuing to develop the [TRACER model](#), which will predict local and regional concentrations of chemicals in air associated with UOGD. Initially, we are estimating chemical emissions annually at the county level.

### LEARN MORE

[HEI Energy Website](#)  
[Study Webpage](#)

### What's next?

- Organize and host community meetings before air quality and noise monitoring begins.
- Begin monitoring near Karnes City in Spring 2023.
- Using the TRACER model, evaluate the influence of EPA's [proposed methane rule](#) on the emissions of other chemicals from UOGD.

### UPCOMING EVENTS

- Dr. Bhattacharyya, a research team member, will present a paper titled "[High Chlorine Emissions from Unconventional Oil and Gas Development Impact Atmospheric Composition through Radical Chemistry](#)" at the December 2022 American Geophysical Union Meeting.