



ITRC Evaluation of Innovative Fugitive Gas (Methane) Detection Technologies Project

WHAT IS ITRC?

The Interstate Technology Regulatory Council (ITRC) is a state-led, public-private coalition of over 600 individuals that produces guidance and training on the use of innovative environmental solutions. Bringing together teams of state and federal regulators, along with private, academic, and stakeholder experts, ITRC broadens and deepens technical knowledge and reduces barriers to expedient and widespread regulatory approval. Since 1995, the collective success of this coalition has generated huge benefits to the environment, inspired new technical innovations, and saved hundreds of millions of dollars.

The ITRC is a part of the Environmental Council of the States (ECOS), the association of state and territorial environmental agency leaders. This partnership is based on a commitment to protect and improve human health and the environment across the United States of America.

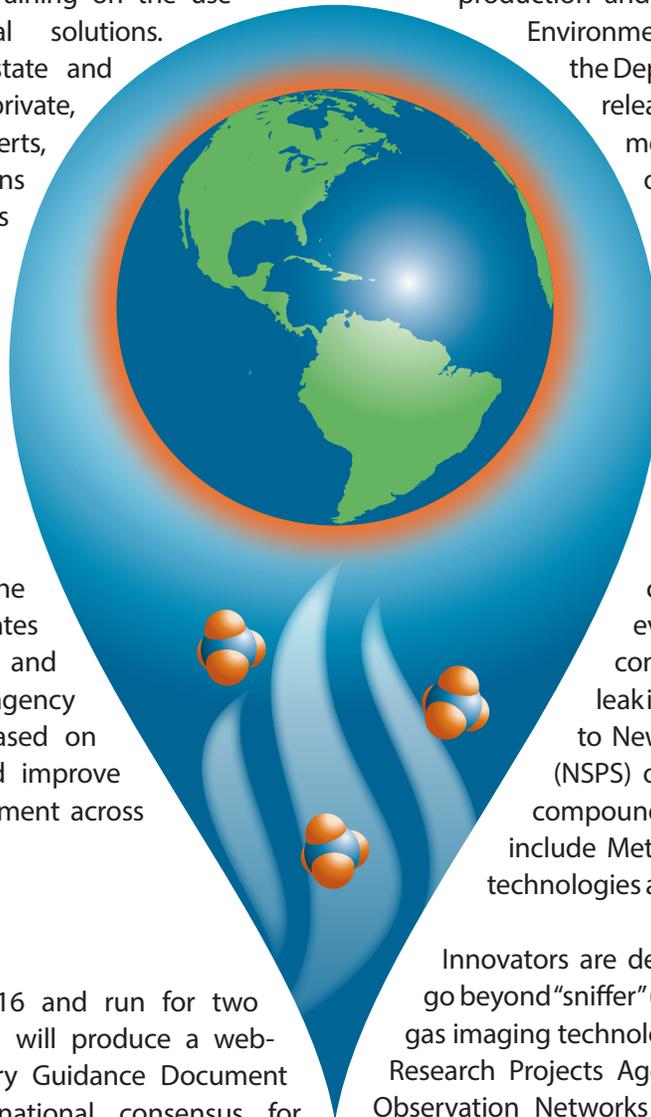
THE METHANE DETECTION PROJECT

This project will begin in 2016 and run for two to three years. The ITRC team will produce a web-based Technical and Regulatory Guidance Document establishing, if possible, a national consensus for evaluating the effectiveness of methane-detection and characterization technologies. The team will evaluate state-of-the-art methane detection technologies and will also assess regulatory barriers that might hinder the use of a standardized evaluation methodology. Training will be provided in the third year dependent on demand and available funding.

WHY THIS PROJECT?

Several states have recently passed or are considering regulations of methane emissions related to natural gas production and distribution. Moreover, the U.S. Environmental Protection Agency (EPA) and the Department of the Interior (DOI) have released proposed regulations for methane leaks at new sources and on Bureau of Land Management (BLM) lands. Historically, gas detection technologies used to regulate emissions in the oil and gas sector had to comply with EPA's Method 21 Requirements. With the advent of optical gas imaging technologies, EPA established an alternative work practice (AWP) to allow inclusion of manually operated infrared cameras, which provide visual evidence, in most environmental conditions, of a gas plume when a leak is present. EPA's draft amendments to New Source Performance Standards (NSPS) on methane and volatile organic compounds for oil and gas sources include Method 21 and optical gas imaging technologies as approved compliance methods.

Innovators are developing new technologies that go beyond "sniffer" (Method 21 approved) and optical gas imaging technologies. For example, the Advanced Research Projects Agency-Energy's (ARPA-E) Methane Observation Networks with Innovative Technology to Obtain Reductions (MONITOR) program is supporting development of a wide range of extremely sensitive and low-cost optical and chemical sensing technologies. These technologies will incorporate state-of-the-art dispersion modeling techniques to pinpoint and quantify the leak source. Many of these technologies will also have the capability to monitor sites remotely and/or continuously. There is currently no standard methodology to evaluate performance of new technologies like these.



POTENTIAL USERS

A broad swath of public and private sector leaders are following these technology and regulatory developments with great interest and will benefit from the work of the ITRC methane detection team. Among those who would benefit from this work are:

- Regulatory, technical staff and managers from all state environmental programs
- Regulatory, technical staff and managers from local government authorities
- Regulatory, technical staff and managers from Federal environmental, land management, and energy programs
- Technology developers and vendors
- Oil and gas producers, transmission companies, distribution utilities, municipalities, and large facilities (e.g., refineries, landfill owners) with interest in detecting and managing methane releases
- Tribal, environmental, community, and other interested stakeholders
- Academics involved in researching, developing, or evaluating methane-detection technologies

FUNDING

The Department of Energy (DOE), Advanced Research Projects Agency-Energy (ARPA-E) will provide the annual funding for two or three years (dependent on training needs) to facilitate fast-tracking this project to start in 2016.

JOIN THE TEAM!

The Methane Detection Project began in March 2016. By joining the team, you will help write the guidance document, develop training, and identify solutions to detect and reduce methane emissions.



Visit www.itrcweb.org

or contact one of the Methane team leaders:

Lisa Dorman at ldorman@pa.gov or 717-772-5941 or
Timothy Taylor at timothy.taylor@state.co.us or 303-692-3173
for more information.
