

- Efficient communication throughout the measurement process will improve accuracy and reduce regulatory burden.
- Updating and refining emission factors for oil and gas equipment (like pipelines) will reflect newly integrated emission controls.
- Data visualization packages combined with accurate scientific data can improve communication with regulators and the public.

## NATURE OF THE PROBLEM

- There is no single “silver bullet” measurement method or technology that exists today. Technology and air sampling methods must be customized by operation and by facility. Communication gaps exist between industry, regulators and researchers regarding measurement methods that work best.
- Current emissions factors in USEPA’s Greenhouse Gas Inventory (GHGI) and AP-42 publications are outmoded, lacking the equipment-specific disaggregation required to accurately characterize emissions.
- Atmospheric modeling results are typically displayed in complex graphs that are difficult to understand by regulators, media and the public.



## PROPOSED SOLUTION

- GSI Environmental will create a technical advisory steering committee to improve communication during each emission measurement campaign to ensure results of the study are understood and supported by industry, regulators and the public.
- Data sets will be used to create or refine emission factors so that new emission control technologies are reflected in those factors.
- Data visualization packages such as animated plumes and easy-to-read graphics will be developed for each measurement campaign so that complex results can be easily communicated and defended.

## HOW IT WORKS

Measurement technology is combined and customized based on facility type and operation. GSI specializes in many types of technologies to include:

- Open Path Fourier Transform Infrared Spectrometers
- Cavity Ring Down Spectrometers
- Hi flow Samplers
- Summa Canisters
- Optical Imaging Cameras
- Customized Flux Chambers
- On-site Meteorological Sensors
- Aircraft Mounted Sensors
- Hydrocarbon and non-methane analyzers
- Particulate Matter Sensors



## BENEFITS

- Accurate measurement combined with on-going stakeholder communication throughout the process yields results that are supported by industry, regulators and community leaders alike.
- The development of accurate emission factors will highlight the integration of emission control technologies and strategies. This will reduce regulatory burden.
- Data visualization packages such as simple graphics, animation and software tools will help promote, explain and defend complex atmospheric modeling results

## CONTACT INFORMATION

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