

# PETROLEUM REFINERY INITIATIVE

Currently an estimate of 80% of the total refining capacity of the United States is under some type of consent decree, order, or other type of settlement requiring total site emission reductions; revised new source review permits; and supplemental environmental projects mandating innovative projects, outside of the refineries, that present a benefit to the local communities. This activity is known as the Petroleum Refinery Initiative by USEPA and has resulted in settlements with 18 refiners and 86 refineries; \$4.5 billion in capital costs for new control technologies (USEPA estimates); \$66 million in civil penalties; 80,000 tons of NOx reductions and 235,000 tons per year of SO2 emission reductions (USEPA estimates). Approximately 51 refineries throughout the United States are currently not under settlement. However, indications from USEPA and pertinent agencies are to place all remaining refineries under similar settlement arrangements through state or federal actions.

## Professional Services

### Petroleum Refinery Initiative Monitoring Requirements:

Petroleum Refinery Initiative requires refineries to do the following:

- Install emission control systems for NOx, SO2, and benzene
- Implement the following strict source monitoring requirements to verify actual emission reductions:

Continuous Emission Monitoring Systems

Parametric or Predictive Emission Monitoring Systems (PEMS)

Stack Tests

### Petroleum Refinery Initiative Monitoring Solution

Let Providence be a part of the solution to resolving your issues. Providence has both the expertise and hands on background to help the refineries identify and implement systems that will meet these requirements.

Providence is a team of engineers and scientists that is guided by a vision of tomorrow. Our staff has a long history of providing cost effective and technically sound service to our clients with personal touch. Our professionalism, technical abilities and commitment to quality allows us to serve our clients with a huge degree of expertise and experience in the various disciplines of engineering and environmental science.

## Professional Services

### Cont'd

Providence is able to assist in multiple areas of air quality measurements. Some special areas that Providence specializes in are the following:

- Stack test planning and oversight
- Fence line ambient air monitoring
- CEMs data management and reporting
- Wind back-trajectory analysis
- SIP-related ambient monitoring
- Process parameters monitoring



## Professional Services

Providence's air group is not only capable of permitting, compliance management, dispersion modeling and measuring, but also provides the following engineering support in the key areas listed below:

- Economic and technical feasibility analysis
- Selection, design, and installation oversight
- Trouble-shooting

