

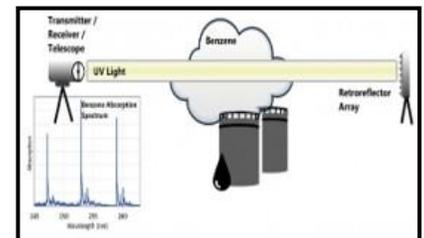
## Proposed Real-time Fenceline Monitoring/Alert System Legislation

- Evidence-based, protective, and cost-effective legislation requiring real-time monitoring/alert systems at Louisiana high risk facilities will save lives, prevent injuries, protect communities, and save millions of dollars.<sup>1</sup>
- Targets 117 highest risk major source facilities & pollutants
  - 99 Chemical Manufacturers, 18 Petroleum Refineries
  - 17 Toxic Air Pollutants
- Helps first responders address risks & prevent/reduce impacts
- Provides residents with accurate real-time information, early warnings
- Reduces Industry Costs
  - Enables faster leak detection & repair
  - Reduces worker deaths/injuries, property damage, product loss
  - Prevents EPA & OSHA violations, penalties
  - Reduces lengthy, expensive class action and worker lawsuits



## Real-time Monitoring and Alert System Requirements

- EPA-Recommended Open Path Monitors
  - Light beams continuously detect/measure up to 100 pollutants
  - Measures fenceline lengths 500 - 1,000m (1640 - 3280ft)
- Data Platform
  - Collects, analyzes, & stores real-time data
  - Creates real-time & historical data visualizations
    - Graphs, maps, tables
- System Realtime Alerts
  - Generated when concentrations exceed health-based thresholds
  - Distributed to facility, first responders, local officials, residents
    - Texts, emails, or phone calls



## Real-time Monitoring and Alert System Costs

- Real-time Monitoring System
  - 4 – 10 Monitors & Equipment Shelters, Data Logger, Meteorologic Station
  - \$250,000 - \$630,000 Capital, \$25,000 Annual<sup>2,3</sup>
- Data Dissemination Website & Real-time Alert System
  - \$2,000 - \$3,500/facility Capital, \$40,000 Annual<sup>2</sup>
- Note: All refineries in California and Colorado and numerous chemical manufacturers - including Honeywell in Geismar, LA and three facilities in Texas,<sup>4</sup> have installed real-time fenceline monitoring systems. This demonstrates the feasibility and cost/ benefits of adopting such technology.



<sup>1</sup> Proposed legislation analysis and evaluation conducted by Vickie Boothe, Rosane Archery-McGowan, and Greg Gasperez (Greater New Orleans Climate Reality Project) and Scott Eustis (Healthy Gulf).

<sup>2</sup> USEPA Handbook. Optical remote sensing for measurement and monitoring of emissions flux. 2018.

<sup>3</sup> Mitro T. Santa Barbara APCD Proposed Staff Report for: Rule 364 Refinery Fenceline and Community Air Monitoring. April 17, 2020

<sup>4</sup> Chevron chemical plants in Cedar Bayou, Port Arthur, and Sweeney, Texas. <https://www.justice.gov/opa/pr/chevron-phillips-chemical-company-agrees-reduce-harmful-air-pollution-three-us-chemical>