

Trinity Consultants' Trusted Guidance Ensures Success for U.S. Energy Leader



CHALLENGE

A leading U.S. energy provider needed a customized fence line monitoring solution that included advanced open path, point monitoring, and meteorological systems to meet new statewide emissions regulations.

SOLUTION

Trinity Consultants advised the client on appropriate open path systems and provided ongoing monitoring solutions, including on-site inspections and oversight, to ensure proactive quality assurance and system reliability.

RESULT

Trinity's work resulted in a reliable monitoring network that operates with enhanced reliability and minimal downtime and exceeds regulatory standards. Trinity's proactive approach also ensured compliance readiness for upcoming audits.

A leading U.S. energy provider faced a significant challenge when new statewide air quality regulations required the company to implement an advanced fence line monitoring system at one of its petroleum refineries and associated facilities. As part of a broader effort to strengthen environmental standards, the client needed to implement a system that included advanced open path technology, as well as point monitoring and meteorological systems, to ensure a thorough, real-time assessment of emissions from industrial sites.

With regulatory deadlines fast approaching, the client went in search of an experienced partner that could offer a high level of technical consultation and ensure ongoing high performance through proactive monitoring and maintenance. Having developed a solid relationship with Trinity through previous air permitting projects, the client's leadership team quickly chose Trinity as the right choice to guide the company through this new regulatory landscape.

CHALLENGE

To ensure compliance with new statewide regulations, a leading U.S. energy provider had to adopt a comprehensive fence line monitoring solution at one of its many petroleum refinery plants. This system needed to include advanced open path technology for accurate, broad-area emissions detection, point monitoring systems for detailed analysis at specific locations, and meteorological systems to account for environmental variables such as wind speed and direction. Together, these elements would form a sophisticated network to detect and report fugitive emissions in real time.

The project presented several challenges, including selecting the right technology, integrating it into Fenceline Monitoring System, and maintaining a high standard of performance to meet regulatory requirements and avoid operational disruptions. The client needed a partner with deep expertise, a strong focus on client needs, and a flexible, proactive approach to help the company navigate stringent new requirements. Having previously worked with Trinity Consultants for environmental permitting, the company's leadership knew right away that Trinity was the best choice for this challenging project.

SOLUTION

The Trinity team quickly adjusted to the company's precise way of working, taking the time to understand the unique requirements and constraints of the energy provider's operation. Instead of offering a packaged, off-the-shelf solution, Trinity acted as a trusted advisor to develop a customized monitoring strategy able to address both regulatory compliance and operational efficiency.

The experienced and field-tested Trinity team provided guidance on evaluating and selecting the appropriate open path system as part of the broader fence line monitoring network. This involved considering factors like detection limit, system reliability, integration capabilities, and the ability to meet the specific data capture goals outlined by the new regulations. The solution had to work seamlessly alongside point monitors and meteorological systems, creating a cohesive network capable of providing a complete picture of emissions activity.

The Trinity team also helped develop the monitoring plan, ensuring that the various components would work together harmoniously. With over 15 years of field experience and proficiency working with a wide range of industry-specific instruments and solutions, Trinity's experts were uniquely positioned to consult on this portion of the project, offering insights that only extensive real-world experience could provide.

Trinity's value was also evident once the selection and implementation phases were completed, and Trinity's role expanded to encompass regular maintenance and quality assurance. Unlike previous providers that had offered generalized maintenance packages, Trinity applied a proactive, preventative approach to system monitoring that provided a higher standard of equipment operation.

Trinity's commitment to maintaining high operational standards meant that potential issues were identified and addressed before they could impact operations or compliance, ensuring that the monitoring system consistently exceeded regulatory expectations with minimal downtime. Trinity's ISO 9001 certification emphasized the team's focus on quality management and consistent standards, providing additional assurance that every aspect of the monitoring solution would be managed with precision and reliability.

RESULT

The impact of Trinity's expertise was immediately evident in the performance of the monitoring system. The network functioned as a well-integrated whole, providing comprehensive, reliable emissions data. The advanced setup and associated field monitoring ensured that the new system was not only compliant but also performed significantly above regulatory standards.

The success of the project has also furthered the long-standing relationship between the two companies. The client has recommended Trinity to many other facilities facing similar regulatory changes and extended Trinity's contract to cover ongoing operations for as long as the plant remains active.

ABOUT TRINITY CONSULTANTS

Trinity Consultants, a leading global environmental consulting firm, provides services and solutions in the EHS Regulatory Compliance, Built Environment, Life Sciences, and Water & Ecology markets. Founded in 1974, Trinity has the technical expertise, industry depth, and capabilities to help clients achieve their goals across the natural and built environments.