

Tetra Tech BAS

CLIENT SUCCESS



ORGANIZATION

Founded in 1984, Tetra Tech BAS installs, operates, and maintains landfill gas collection systems for large municipal landfill sites. Company headquarters are in Diamond Bar, California, with offices throughout California and Arizona.

CHALLENGE

Modernize on-site data collection processes. Give users better control over how information is managed, viewed, and shared. Provide clients with access to information about their sites.

STRATEGY

Develop an iOS application that enables field users to enter data directly onto iPads on site. Build a central online database that instantaneously receives data from field readings. Create a web application that enables internal and external users to easily generate reports about the collected data and visualize it using Google Maps.

RESULTS

The new solution gives the professionals at TT-BAS an advantage over industry competitors, expands and improves the services they offer their clients, provides more control over how they run their business, and reduces labor costs. It also provides TT-BAS the potential to take on more clients without adding personnel. The Visus solution was directly responsible for TT-BAS winning a multi-million dollar contract. Tetra Tech BAS (TT-BAS) needed more effective methods for acquiring, managing, and accessing data related to the operation and maintenance of landfill gas collection systems. With multi-million dollar contractrenewals at stake and a scant few months to oblige client requests about data management, TT-BAS sought a technology partner that could quickly deliver a solution to meet its unique and specific needs.

Visus LLC created a web-based management application that streamlines the way TT-BAS collects and shares information. The new solution gives the professionals at TT-BAS an advantage over industry competitors, expands and improves the services they offer their clients, provides more control over how they run their business, and reduces labor costs.

"We saw a clear difference in the level of dedication and service that Visus LLC offered us in comparison to other solution providers we were considering. The experts at Visus LLC spent the time to clearly understand our business and our needs. Thanks to them, we are now at the forefront of technology in our industry."

- Ghassan Andraos, President of the Methane Gas Group, Tetra Tech BAS

A Versatile Solution for Complex Needs

Tetra Tech BAS has installed, operated, and maintained landfill gas collection systems for large municipal sites since 1984. An important aspect of its business is monitoring the composition, temperature, pressure, and flow of gasses that naturally occur in landfills to ensure the sites are safe and that they comply with regulatory requirements. TT-BAS technicians collect readings using handheld gas analyzers. Previously, they had to manually transfer the collected data by writing down the readings on paper-based spreadsheets.

"We wanted to be able to digitize data immediately on-site instead of writing it down," Andraos explains. "And we wanted better control over how we manage, view, and share that data. A competitor had the jump on us with these capabilities. Major clients with contracts due for renewal specifically called out an online database management tool. We needed to modernize our processes very quickly or risk losing lucrative contracts."

Visus developed and deployed a web-based management application that makes TT-BAS more efficient and more competitive. Now technicians can enter data onto iPads on-site. Data collected in the field is uploaded wirelessly to a central online database. A web portal interface provides easy access to the data from any location using a web browser. Metrics that exceed regulatory requirements are automatically flagged visually by the system.

Developed with Microsoft ASP.NET and SQL Server 2008 R2, the new solution enables decision-makers to react immediately to the metrics that come from the sites. Because they now work with digital data instead of handwritten information, they can easily trend, analyze, and report on the data.



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The custom interface that Visus LLC created makes information easy to understand for a wide variety of users. Using Telerik Reporting software, the system can deliver a broad spectrum of reports and graphs, from general knowledge to highly technical, laid out in intuitive displays. Upper management and other non-technical users can get instant snapshots of the business, while engineers and environmental specialists can drill down into granular details to get the information they need.

The iPad application not only expedites the availability of site metrics for engineers, it also saves time and money for TT-BAS by making field calculations more accurate. It immediately crosschecks for errors and alerts technicians about parameters that exceed regulatory requirements. This type of proactive, "exception-based" reporting helps workers immediately spot anomalies and correct mistakes, minimizing return trips to the field.

The new system offers the potential for significant cost savings and provides an opportunity to grow the business. Through efficiencies gained by streamlining and automating core business processes, TT-BAS can add more client sites without adding personnel and still provide the industryleading quality of service it is known for. "Highly skilled professionals are expensive," Andraos says. "The ability to add more client sites without adding personnel is a huge business benefit for us."

The Visus solution gives TT-BAS a level of transparency with its clients that it did not have before. "If a client wants to see data about their site, they don't need to call us," says Lee Daigle, Project Engineer in the Methane Gas Group at Tetra Tech BAS. "They can log on via the web portal that Visus created and access everything that we have access to, on demand, 24/7."

"Clients love having that data at their fingertips. They can see when one of our technicians takes a reading at their site and get all the details from that reading."

– Lee Daigle, Project Engineer in the Methane Gas Group, Tetra Tech BAS

A Dedicated Technology Partner

Landfill gas is a unique industry with a narrow focus. Visus needed to get up to speed on the details very quickly in order to deliver the solution TT-BAS needed within a timesensitive deadline: an important client presented TT-BAS with a request for proposal only five months before its contract was due to expire.

"Through their diligence, the Visus team learned everything about our business and our industry with all its regulations and challenges. They gained a great understanding of what we monitor and why we needed the technology so they could deliver the solution in the required short timeframe. They were extremely dedicated to the job."

- Cy Chidiac, Project Manager in the Methane Gas Group, Tetra Tech BAS

Visus broke the project down into phases so TT-BAS could be confident it was on track to meet its deadline. "The Visus team worked overtime and after hours to make sure they could deliver the product we needed in time for our proposals," says Sami Ayass, Project Engineer in the Methane Gas Group at TT-BAS. "Ultimately, they delivered it on time and budget. And it did exactly what we needed. We had a problem, and they understood it and solved it for us. It was definitely a successful engagement and solution."

"Visus brought us up to speed with the most modern capabilities. Previously, we weren't even on the map in terms of data acquisition and data management technology. Now we compete with the major providers of these services. Our clients are very impressed with the technology we are able to offer. It helped us win a multi-million dollar contract."

– Sami Ayass, Project Engineer in the Methane Gas Group, TT-BAS

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