



## Flexible Monitoring System Helps Ohio Company Meet Daily EPA Measurement Requirements

The Ohio Water Equipment Company of Plain City, Ohio (OWEC) provides water plant operator services to facilities throughout Ohio, including several of the nation's largest travel center operations.

Since the rest-stop facilities are open and operating 24 hours a day, seven days a week, monitoring these and other facilities is costly and complicated, requiring them to provide the daily measurement information required by the Ohio Environmental Protection Agency (EPA) for variables such as flow rate; total gallons per day; free and total chlorine levels; pressure; wet floor sensing.

All of OWEC's water plants, for example, must maintain at least 20 psi water pressure at all times, and chlorine residuals must be at least 0.2 mg/l free and/or 1.0 mg/l combined. To monitor these critical conditions, the Ohio EPA required a minimum of five site visits per week by an EPA-certified water plant operator.

This daily monitoring became time consuming and costly, so OWEC sought a more efficient solution by investigating plant monitoring systems.

During the original evaluation process, OWEC compared literature, specifications and prices for various systems. Of the products considered, SCADA systems appeared most effective, but most provided more features than OWEC required for most of its applications. However, one product — the Sensaphone® 2000 from Phonetics, Inc. of Aston, Penn. — offered a flexible monitoring system that allowed OWEC to choose just the features it needed without forcing the company to purchase extra features it didn't need (or want).

The Sensaphone line comprises around-the-clock alarm autodialing systems for the remote monitoring of water plants, labs, and other facilities.

Operators in the water, wastewater, and environmental remediation industries use Sensaphone equipment to monitor water and wastewater treatment and management, pumping stations, operating equipment, labs, and office facilities. When environmental conditions in these facilities deviate from optimal, users are notified immediately via the units' alarm and autodialing capabilities. Immediate, remote notification helps minimize contamination, overflow, disruption, and repairs. In addition, Sensaphone users can phone into their system at any time, from anywhere, to access data reports on all monitored conditions.

"Based on the results of a six-month field test of a Sensaphone 2000 model, we determined that the Sensaphone equipment was extremely reliable, user friendly, and a valuable addition to our overall plant operation," explained Ron Jordan, president of OWEC. "We were also impressed with the Sensaphone SCADA 3000 model, which is an outstanding value for the money ... gives small to medium municipal water and wastewater plants the capabilities that would have cost \$10,000 or more just a few years ago."

Using Sensaphone equipment, the company overcame its primary chal-

lenge — meeting Ohio EPA daily measurement requirements — with a cost-effective, efficient solution. Now, the company is required to visit a site only once or twice a week versus the previous situation, which required five visits per week.

This saves the customer money while providing greater water-system reliability. "With the Sensaphone 2000 or SCADA 3000, the end-user benefits from a more reliable system, which allows for the identification of potential problems before they become emergencies," Jordan added.

The company also appreciates the Sensaphone's data monitoring/logging and trend analysis capabilities; one of the key benefits for the OWEC is that the equipment takes a reading every half-hour (instead of once a day), and the system monitors around the clock, 365 days a year, which results in more precise readings. Furthermore, the Ohio EPA was pleased with the performance and accuracy of this monitoring system.

The reduction in on-site staffing and subsequent fewer expenses has proven to be another key benefit for Jordan and his company. "Now we can provide customers with more reliable, trouble-free service, while at the same time decreasing our labor costs," said Jordan.

Future benefits are already clear. "As of February 2001, the federal government has mandated that all private water systems serving more than 25 of the same people in a six-month period will be required to hire the services of a certified water plant operator. The states are required to enforce this mandate and will lose 20 percent of their EPA funding if they do not," explained Jordan. "Sensaphone systems will help to ensure compliance with the new federal regulations, while offering the end-user a way to accomplish this at a considerable cost saving over traditional methods."

Sensaphone 2000 can report on up to eight remote, analog or digital conditions, including room temperature, outside temperature, humidity, tank levels, tank temperature, pressure, flow rates, flooding, and HVAC controllers, plus power failure. It can be programmed to communicate with up to 32 destinations to deliver alarm messages or status reports in real-time, and user programmability allows customization.

Sensaphone 2000 also has extensive built-in data-logging features capable of storing up to 32,000 records. It has the most flexible dial-out capabilities of all Sensaphone models — from any combination of telephones, fax machines, pagers, e-mail accounts, or computers. Plus, alarm and critical data point information can be formatted automatically into a Web page and uploaded to a specific Web site for online access.

With Sensaphone SCADA 3000, everything including the software comes in one comprehensive package. Standard is a powerful 32-bit software system complete with critical built-in features, including a real-time screen builder, program editors, alarm functions, and a communications manager. Through this Windows-based software, users can program units, develop Ladder and C-programs, retrieve data, analyze event logs, and print a variety of reports.

And, like the Sensaphone 2000, alarm and critical data point information is automatically formatted into a Web page and uploaded to a specific Web site for online access.

For further information, contact Phonetics, Inc. at 610-558-2700 or write in 1133 on this issue's Reader Service Card.



The Sensaphone product line includes SCADA 3000, centered above, and Sensaphone 2000, shown in the forefront.