



Hillsboro, Kansas Using SEMS Mobile to Consolidate Work Orders

As a widely-recognized and respected industry leader in providing asset management, maintenance and compliance software to water utilities, Georgia-based SEMS Technologies has been focused on creating new technology water and wastewater utilities can use to navigate the twists and turns of industry regulations.

SEMS, which began as an emergency response and vulnerability assessment tool, has developed software to help utilities and public works departments manage their inventory, fleet maintenance, backflow, drinking water data and wastewater data, and an easy-to-use software tool that assists utilities in producing both an Emergency Response Plan and Vulnerability

Assessment. But it's one of SEMS newest developments that could prove to be one of the most beneficial for industry professionals. The city of Hillsboro, KS is among the first to use that new technology.

SEMS Mobile is an application that directly integrates into the Asset Management-Work Order system and gives administrators the opportunity to streamline their work process and go completely paperless. Kurtis Warne, senior account manager with SEMS Technologies, LLC, says that reaction in the water utilities industry to the new app, which was just introduced this July, has been outstanding.

“They get to utilize phones and/or tablets that they already have available, and there is no more need to come back to the office to manually enter the data back

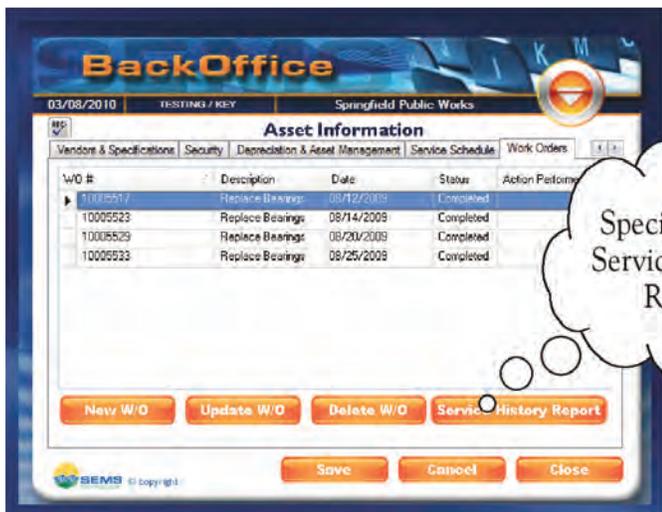


into SEMS,” he said. “And as new jobs or call-ins come in, they can be dispatched out electronically without the need to come back to the office for the paper copy.”

In addition, SEMS Mobile gives administrators the ability to easily discern the status of all work orders, and schedule and track maintenance work and associated costs. With detailed tracking, work orders don't end up missing or uncompleted and it's much simpler to recognize the usage and cost of inventory and parts.

For the past six months, the city of Hillsboro has been utilizing the SEMS Mobile application in its utilities department. Larry Paine, City Administrator, says that in addition to the other many advantages the app offers, he finds the ability to document the beginning of a project among the most valuable.

“We use it primarily to send out work orders from the office to the field, so that our guys know what to do,” he said. “The key part is that the guys don't have to get in the truck and drive down here and ask if we have work orders for them. The advent of this technology is giving the ability to



Specific Asset Service History Report

Hillsboro, KS Putting SEMS to Heavy Use

The city of Hillsboro is using SEMS software to organize and maintain its backflow and cross connection program. All of the city's backflow device customers (and all the details about their devices) are loaded into the database. SEMS generates letters and reports regarding the devices and will advise the city staff when a particular device needs to be tested or rebuilt. This year was the first year that the data was inputted into SEMS as it was being collected by the device testers and as they were sending in the reports.

Operator Tom Richards has been using SEMS in the field to complete work orders from city hall. In the good old days, city hall would fax a work order, then call to let Tom know they faxed the work order; Tom would complete the work; Tom would take the completed work order form to city hall and then a copy would also be filed at the water plant. Now, the work orders go directly from city hall to his iPad in his truck; he completes the work order and hits "send" and the work order gets sent back to city hall. No paper copies needed.

When Tom uses a piece of equipment for the work order, it is processed through SEMS so the city can keep track of how many man hours, vehicle hours, equipment hours, equipment and parts used for each work order. A data base is created that shows the administrator what type of work is being done with what equipment. When

there is a water leak, it is filed as a work order so that if a clamp is taken out of inventory in the database and a notice is given by SEMS to reorder a clamp. On the work order for the water leaks, the city keeps track of time spent, gallons used, equipment used, vehicles used. etc.

Water Plant Superintendent Morgan Marler reports that she has inputted all of the water department's equipment – "every little last piece of equipment", as she muses – into the SEMS database. "The information includes contact information about the company that provided the equipment; who services equipment, contact information, date of purchase, useful life expectancy, cost to purchase new, and cost to purchase at end of life expectancy.

"That information is particularly helpful to our city administrator because he can generate a report for our city council that will help them see the amount of funds that need to be set aside for replacement of equipment," Marler comments. She adds, "It's very difficult to do that in a municipality. We tend to wait until equipment breaks down before we think about replacement. But, the administrator and city council can see that even though we had a rebuild in 2005, some of the equipment that we replaced during the rebuild is coming up on ten years of useful life expectancy. We haven't even begun to finish paying off that debt service, but we're going to

have to start replacing equipment that was installed during that upgrade. Setting up an Equipment Reserve Fund seems to be one of the hardest things for a council or board to do. There are always so many projects that need to be tackled, and nobody wants to raise rates to pay for a reserve fund. So, we all end up trying to do as much as we can with as little as possible. I think SEMS can help administrators show councils how to change that," she concludes.

Marler says that she is going to incorporate the city's mapping system into SEMS so that valves, hydrants and pipelines are all incorporated into the program and then uploaded onto a pictometry program. The result will be that all of the valve and hydrant data and customer water meter data will be in SEMS.



Hillsboro operator Tom Richards inputs information concerning a work order using an iPad. The information is transmitting directly to the SEMS database at the city office.

do more things and keep track of them.”

Once the work order is sent to the field technician, on either a Smartphone or a tablet, the tech can review, complete and then send back to the office everything via an Internet connection. The work order information is then automatically updated back into the SEMS database.

Additionally, if the technician sees an item while in the field that would require a work order, it can be created right there in the field and sent to SEMS, saving the time it would usually take to submit paperwork to the office.

Paine says that he is already seeing other ways that he can use the application, including in an Emergency Management capacity. Though he hasn't implemented it yet, he said he believes he could use the app as FEMA documentation for service calls, if tragedy should strike.

Warne said Paine's idea is right on target with SEMS Technologies' future plans.

“We are working on releasing our compliance mobile component by end of year 2014, which will eliminate the paper process bench sheets currently used,” he said. “They will be able to enter in the plant's process data in the mobile device and then send it back to SEMS.”

“This type of technology is changing the way we think,” he said. “And I know that the ways we provide services for the public are going to be changing, too.”

The technology that SEMS Technologies produces is designed to make government regulation less burdensome and easier to complete, but they're also committed to

providing that service at a reasonable cost to their clients. SEMS' executive management team has a combined total of more than fifty years of experience automating regulatory initiatives, and much of that has involved interacting and collaborating with different levels of government agencies to further public private partnerships.

Paine said that the city of Hillsboro's utilization of SEMS Mobile is what he considers to be a step in the right direction for the city's future.

“This type of technology is changing the way we think,” he said. “And I know that the ways we provide services for the public are going to be changing, too.”

KRWA continues to use SEMS software to update Emergency Response Plans.

For more information about SEMS Mobile, and other SEMS software components, visit the Web site at www2.semstechnologies.com, or call 678-845-0243.

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