

monitoring. Whether that's the development of new wastewater plants, or getting testing capabilities up to Western standards, there's considerable investment."

In the more developed world, "we're seeing an increased focus and interest in the whole area of industrial hygiene and air monitoring, with a lot of local government jurisdictions in the U.S. and Europe wanting better regulation of indoor air quality as it relates to schools or companies."

Another trend is the movement of laboratory-level capability out of the lab and into the field, for a number of reasons, including improvement of overall productivity. "The more you can do sampling and analysis at the site, the faster you can make better decisions," Rasmussen says. There's also an increasing need for screening tools that can do the traditional initial, "quick and dirty" analysis in the field at a higher performance level.

Although there have been no "significant paradigm shifts" recently in improvements in instrument detection limits, "we're definitely seeing a cry from customers for improved productivity and efficiency, and we're taking that seriously," Rasmussen says. The above-mentioned trace metals analyzer, for example, has an auto-sampling function that also accelerates the sampling at the front end. In addition, PerkinElmer's Clarus 600 "is the fastest GC on the market," Rasmussen says, allowing users "to shave anywhere from 2 to 10 to 15 minutes on a chromatography run." In general, "there is a lot you can do to improve productivity, both at the front end in terms of sample prep to the back end in terms of data analysis. Our focus on the market allows us to get that insight from customers, in terms of what they need and what their pain points are."

Going forward, the company's biggest challenges will include staying abreast of new regulations in various national jurisdictions, Rasmussen says. "Another challenge comes in addressing the very wide breadth of the technical expertise of the operator in these markets. In some cases, you have technically competent users, and in some cases, you have true entry-level operators—not chemists." Clearly, there's a need to be knowledgeable, nimble, and patient.—GEORGE STUBBS (gstubbs@zweigwhite.com) ■

SITEHAWK POSITIONS FOR ADVANTAGE AS GLOBALLY HARMONIZED SYSTEM FOR CHEMICAL REPORTING UNFOLDS

In 1992, the United Nations (U.N.) launched an initiative, called the Globally Harmonized System for Hazard Classification and Labeling (GHS), to develop a global standard for identifying and tracking shipments of chemicals around the world and conveying information about the potential environmental and human health hazards posed by these chemicals. As of the end of last year, the U.N. had gone through at least its second iteration of the GHS, and the planned deadline for substance classification according to GHS standards was Dec. 1, 2010.

Chemical tracking and hazard reporting, through material safety data sheet (MSDS) and other chemical data management tools, has been a core component of the product and service offerings from many developers of EHS information management software. Any company identifying MSDS management software as its flagship offering may thus be expected to regard the rollout of the GHS standards as a major opportunity.

One such company is SiteHawk (Smyrna, TN; www.sitehawk.com), an EHS software developer specializing in the management of MSDSs and chemical information. Executives at SiteHawk firmly believe that the company's development of *SiteHawk (M)SDS Engineer*, an MSDS authoring software tool that supports the GHS format, gives it a distinct advantage in the market for GHS information management support.

"We started looking at (*SiteHawk (M)SDS Engineer*) four and half years ago, which has really given us a leg up in the market, because it allowed us to introduce a product early in the GHS development process," says SiteHawk President Kim Stier. "We project growth beyond what competitors are estimating because of this new product."

Revenue growth at privately held SiteHawk has been impressive, ranging from 20% to 30% annually over the past two years, Stier says. The current economic climate is expected to dampen growth rates somewhat, but the company is still project-

ing annual growth of 15% to 20% over the next few years, Stier says.

SiteHawk got its start in 1993 with a focus on chemical information management. Today, it uses the Software as a Service (SaaS) model to deliver a range of products, including *SiteHawk Professional* for advanced chemical and regulatory management; *SiteHawk Global* for international regulatory management; *SiteHawk Select* for basic chemical and regulatory tracking; *SiteHawk Express* for searching, viewing, and printing MSDSs; and *SiteHawk VeriScan* for a more advanced, accurate, and efficient level of managing chemical inventories. *SiteHawk Complete* rolls these resources up into a single offering, and, of course, *SiteHawk (M)SDS Engineer* addresses the GHS tracking and reporting requirements.

"Our offerings range from basic MSDS management up to advanced indexing and reporting to chemical inventory management, all the way up to MSDS authoring and distribution on a global scale," says R. Scott Williams, SiteHawk's director of sales. "Our system has branched out to other EHS areas," he says. "We index the data our clients need to meet reporting requirements, and so we've built out functions to allow them to keep that information up to date."

Williams says SiteHawk's target markets as the pharmaceutical, heavy manufacturing, automotive, chemical producers, and the metals industry from aluminum to steel. Customers also include electric utilities and government organizations, such as municipal and state agencies, but the top two client categories are the pharmaceutical and petrochemical industries.

The drivers for SiteHawk's business obviously begins with the need for these companies to comply with chemical management regulations and to manage all the risks associated with handling potentially hazardous substances. Those pressures have become all the more acute in today's market, as a broad range of stakeholders, including workers, customers, communities, and investors, raise the "green" bar in terms of corporate sustainability and operating in an

environmentally responsible manner. Such pressure translates into the need for information management systems that can quickly collect and organize the key data and allow clear communication of the data to all these stakeholders, Stier says.

Williams says another driver that has become more prominent in today's market is the lack of human resources in-house to manage the EHS function. Companies are reducing the headcount in their EHS departments, but "the compliance requirements are still there," Williams says. "Clients need a resource like ours to meet those requirements."

Citing as SiteHawk's top competitors data products and information services provider **3E Company** (Carlsbad, CA; www.3ecompany.com) and environmental information provider **Dolphin Software Inc.** (Lake Oswego, OR; www.dolphinmsds.com), the latter of which was recently acquired by **IHS Inc.** (Englewood, CO; www.ihs.com), a global provider of management, planning, regulatory, and standards information products and services (see page 11 of this issue), Williams says "we differentiate ourselves mainly in our service—the method we index data and make it available." SiteHawk prides itself in "meeting the facility's specific needs, as opposed to fitting a round peg in a square hole," he adds, noting that customer retention exceeds 98%. "Secondly, our application provides an intuitive, easy-to-use workflow allowing access to accurate and current data," Williams says. "Inevitably, when we get people to see that application, we win the business. Seeing is believing."

It is the unique and site-specific needs of each client facility and the sophistication of the EHS domain knowledge today that renders the offerings from large business and enterprise resource planning (ERP) software houses like business software company **SAP** (Newton Square, PA; www.sap.com) and enterprise software company **Oracle** (Redwood Shores, CA; www.oracle.com) short of what's needed, Stier says. "Whereas SAP and Oracle have modules in those areas, content is critical. That's the area where the larger providers tend not to fulfill the requirements."

As for competition from environmental consulting and engineering firms, some of which have dabbled in EHS software devel-

opment from time to time, today's market is quite mature and requires more robust applications than the environmental firms can develop without altering their basic business models and making major investments to move outside of their core competency, Stier says. "I think there's a small part of the market that they could penetrate without having all of the required features, but it is very difficult to get volume," she says.

Then there's the free content that's available from the U.S. Environmental Protection Agency (EPA) and other sources—content that is focused more on regulation and regulatory updates. The site-specific EHS content still needs to be entered into the environmental management system, and that's where companies like SiteHawk come in, Stier says.

Indeed, integration of all the required information is one key challenge facing the EHS software industry and its client base, Stier says. The other challenge is globalization, as reflected in the development of the GHS standard and the variations in its implementation. "Every country is adopting its own version of GHS, so it's not as simple and straightforward as one might hope," Stier says. "As the U.N. created new and updated standards, you have some countries that retained compliance with the old version and some that adopted the new version. They took a building-block approach, so as a software provider, we've had to build a sufficiently flexible product to work with all those different variations."

That challenge, of course, means opportunity, as nations line up to adopt the GHS standard. The U.S. has not adopted it yet, but the Occupational Safety and Health Administration (OSHA) has issued a notice of proposed rulemaking (NPRM) addressing GHS implementation, "and with the administration change, it will be high on OSHA's agenda to move on the NPRM soon," Stier says. Meanwhile, Europe, Japan, and Australia have adopted their versions of the GHS. "It's a global initiative," Williams says. "The growth will be significant."

"We're in a very good position as a company," Stier says. "I think there's lots of opportunity on the horizon, and we're very much looking forward to what the next few years will bring us." —GEORGE STUBBS (gstubbs@zweigwhite.com) ■

WATERS CORP. DRAWS FROM STRONG APPLICATIONS KNOWLEDGE TO BRING LC AND MS TO ENVIRONMENTAL MARKETS

Compared with other instrument makers of comparable size, **Waters Corporation** (Milford, MA; www.waters.com) considers itself to be more tightly focused on certain key technologies rather than as a provider of a broad range of products in order to be all things to all people. Serving the environmental markets primarily through its Waters Division, the company has chosen to specialize in liquid chromatography (LC) and mass spectrometry (MS) as "the most critical of technologies for most of our application areas," says Rohit Khana, vice president of worldwide marketing for the Waters Division.

"You could look at each of the instrument vendors as a potential competitor, but there are certain ones that focus more heavily on the environmental world," he says. The difference is, whereas some of these vendors, such as environmental industry manager at **Agilent Technologies Inc.** (Santa Clara, CA; www.agilent.com) and instrument maker **PerkinElmer, Inc.** (Waltham, MA; www.perkinelmer.com), tend to provide a wide spectrum of technology, with many different products, "we are very, very focused on providing LC- and MS-based solutions, and the overall data analysis to make those solutions easy and successful. The focus may be in one sense a disadvantage because we don't provide the full array of instruments, but we will help customers find the best solution. We consider ourselves to be very successful there."

Khana says Waters' applications knowledge is another attribute that separates the company from the pack. Whereas competing organizations have a structure that's split approximately evenly between product sales and service, one-third of the Waters organization is devoted to sales and two-thirds to service, Khana says.

Waters Corporation consists of two units—the Waters Division, which accounts for approximately 90% of the