

your company over the next two to three years? The next five years? How about for the industry overall.

J.R.: We expect growth over the next two to three years to be about 25%. Over the next five years, we're projecting growth of 50%.

By comparison, we see no growth for the industry overall through the next two to three years. Over five years, we see about 10% growth.

EBJ: Is there still a "war for talent" out there, or has it abated somewhat because of the recession? What are your most pressing personnel issues? Have you managed to hold on to your people, or have you implemented some layoffs?

J.R.: We are seeing talented applicants looking for a better work environment and career opportunities. With the exception of 2007, we have held onto our people through a system of management and peer review aimed at retention of our most talented people and direct management of poor performers.

EBJ: Has the flow of bid opportunities and proposal activity increased throughout 2011, decreased, or stayed about level? How much increase have you seen in the number of competing firms bidding on opportunities?

J.R.: Government bid opportunities at both the state and federal levels have leveled off or declined. We have seen increases in bid opportunities in industrial and private sectors.

EBJ: What is the ratio of old clients to new clients for your firm? What steps are you taking to ensure a high level of client retention?

J.R.: Approximately 10 to 1. We have implemented company-wide customer service training and customer feedback surveys to ensure high client retention.

EBJ: What do you think differentiates you most from your competitors?

J.R.: We have greater size, geographical footprint, service diversification, vertical integration, and tradesmen than our competition.

EBJ: How many acquisitions have you done in the past few years? How much added revenue do these acquisitions represent, and what was your principal strategic goal in undertaking them?

J.R.: We completed one acquisition in the past year, another four over the past five years. These acquisitions have added about 9% to our revenue. We undertook them primarily for geographic expansion,

to match the expanding footprint of our major customer base.

Our most recent acquisition was completed in July 11, when we acquired **Mid-South Petroleum, LLC** (Tulsa, OK), a petroleum services provider. The addition of MidSouth is providing our customers in the region with greater resources for petroleum construction and a broader range of petroleum equipment. ■

3E MOVES TO ADDRESS INCREASINGLY COMPLEX EHS, CHEMICAL MANAGEMENT, SUPPLY-CHAIN ISSUES GLOBALLY

3E Company (Carlsbad, CA) is a provider of information technology (IT) products and services to help clients manage their environmental, health, and safety (EHS) compliance issues, their chemical data reporting requirements, and the environmental impacts of their supply chains and product life cycles on a global basis. The firm has continued to introduce new product and service lines—most recently adding a new suite of Chemical Data Reporting (CDR) services—and to upgrade existing products and services. In December 2010, 3E was acquired by Verisk Analytics, Inc. (Jersey City, NJ), a provider of information about risk to professionals in insurance, healthcare, mortgage, government, and the risk management field. Robert Christie is 3E's president and CEO.

EBJ: What specific drivers, requirements and success factors do you see in the chemical and regulatory data and services market in 2012?

Robert Christie: As the business and regulatory environment becomes progressively more complex, the associated data and processes become more difficult to manage in house and demand increasingly specialized domain expertise. In this environment, the successful service providers are those who are uniquely able to aggregate vast amounts of regulatory and product data from disparate sources and then deliver solutions that help companies manage both business and compliance processes. In addition, successful service providers need to show deep domain expertise that reflects true thought leadership in addressing these complex problems. The successful providers must bring scalability, breadth, and accurate data within comprehensive and timely solutions, all in the framework of a truly global platform.

Given the rapidly growing importance of accurate information, the most successful service providers will be those that provide the most robust data available, in the

sense that it is broad, updated, high quality, and accurate. This information must be developed, managed, and maintained by highly qualified regulatory and geographic specific experts. The solutions brought by the most successful service providers will support comprehensive and mission critical applications across the full supply chain and product lifecycle.

Finally, companies are looking for service from providers that have at their core highly specialized data and experts in fields such as regulatory and product information and risk management.

EBJ: What has been the principle aim of your strategy over the past couple years? What factors are driving growth?

R.C.: We see the path to global growth as our primary opportunity right now. We have been promoting globalization on multiple fronts: by helping U.S. companies become compliant in various international jurisdictions; by helping European and Asian companies become compliant with U.S. laws and regulations; and in general by helping global companies achieve global compliance. We have seen addition-

al opportunities with expansion into new product and vertical markets where there is strong demand for our data and expertise.

3E's services and solutions are used by customers around the globe. Our growth comes from an increasingly international footprint, seeing our data employed through an expanding range of compliance and business processes, heightened attention to stricter regulations requiring data and support, continued development of new offerings, and enhanced penetration of new industry segments. Our vision for the future includes deeper integration, new content, geographical expansion, and partnerships. Our thought leadership and established data platforms have positioned us for sustained growth.

EBJ: Are any of your customers pursuing product stewardship and sustainability initiatives?

R.C.: The emergence of explicitly defined corporate initiatives in product stewardship and sustainability have made the goals of EHS regulatory compliance management even more far-reaching. In fact, EHS regulatory compliance is now being recognized as a key foundation for a broader corporate social responsibility program. Companies are increasingly adopting policies that are stricter than the standards that are actually required by the states or countries in which they do business. They are doing this as a way to demonstrate their commitment to their sustainability strategy. It's not only about compliance anymore—it's about a demonstrable commitment to safety and the environment.

EBJ: What do you think are the key issues facing CEOs today in terms of broader external industry-wide issues?

R.C.: As the regulatory environment becomes increasingly onerous, the risks and costs of non-compliance continue to rise, which in turn makes chemical management a more strategic issue. The regulatory landscape is expanding in vastness and complexity, and for chemical companies this encompasses not only specific chemical regulations, but other regulations that extend across the enterprise and across boundaries, including those related to the workplace, transportation, the envi-

ronment, security, and local, national and global jurisdictions

Regulatory and business complexities now include changes in requirements associated with material safety data sheets, exposure limits, storage requirements, reporting, permits, notifications, labels, and transportation. These requirements in turn drive a host of new business issues that must be covered in strategic planning, including how rules differ across markets, how employees and customers are protected, environmental impacts, concerns about upstream and downstream supply-chain partner compliance, and data localization.

In summary, chemical management, especially those aspects related to EHS compliance, has clearly become mission critical and strategic. The risks of non-compliance are hugely significant, and successfully navigating the complexities requires resources, domain expertise, and vigilance, and the need for data, applications, and experience is critical.

Companies are focusing more executive mind-share on chemical management and EHS regulatory compliance in general. Non-compliance with EHS regulations can pose a serious setback for any business. This in turn can cause serious damage to a company's brand value and overall reputation. Companies today are increasingly under scrutiny for non-compliance. A key to success is being proactive in compliance efforts and extremely thorough and diligent in developing EHS regulatory compliance strategies.

This will be quite challenging given the recent introduction and expansion of global regulations. The European Union's Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and the United Nations' Globally Harmonized System (GHS) for the classification and labeling of chemicals are stunning in their breadth and sheer complexity, making EHS compliance a complex, time-consuming, resource-draining, and often expensive task. Because of the complexity of the requirements—and because of the financial and human cost of non-compliance—companies are now increasingly directing their board and ex-

ecutive focus to EH&S compliance. Companies often need assistance in navigating the new regulations and in developing a strategy to achieve compliance with them. 3E supports them globally with these regulatory issues and challenges.

EBJ: How can companies ensure data quality?

R.C.: Data for EHS compliance is increasingly difficult to manage in house and requires deep domain expertise. Finding, maintaining and acting on that data can be difficult and painfully time-consuming.

Identifying, tracking, maintaining, and complying with international regulatory data related to chemicals has never been more important—or more complex. Companies of all sizes face challenges that result from globalization in the marketplace and an increase in international initiatives to protect the health and safety of employees and consumers, as well as the environment. The regulations, initiatives, and directives devised and enforced by regulatory and governing bodies throughout the world are individually published in a variety of formats and locations.

This information is scattered among hundreds of disparate sources and is not easily shared among the various personnel within a company who need to reference it. Having centralized access to comprehensive, current global chemical and regulatory information can significantly reduce the amount of time spent by EHS, regulatory and R&D professionals researching and maintaining this information. Their time is better spent on more strategic functions

It is important that service providers use documented best-practice methodologies and direct relationships with regulatory bodies across the globe, to gather, refine, and maintain data. 3E, for example, develops its own content, the underlying technology, and the people who deliver the ultimate product.

Data should be obtained from providers who have as their core competence the researching, sourcing, aggregating, enriching and maintaining of EHS compliance-related data. The associated data access and decision support products should make

the data available to customers in a format that is easy and practical to use, and based on their specific needs. The data should be broad, dynamically updated, of the highest quality and accuracy. Substance-level regulatory data and product-level MSDS data should be integrated together to provide a view into the impact of regulatory changes across inventories in the enterprise.

Substance-level data encompasses regulations, along with the rules, phrases, and templates required for meeting legal requirements and providing accurate documentation for chemicals and products, based on their compositions, where they are produced and how they are used and distributed.

This data should provide extensive coverage of hundreds of thousands of regulated chemicals, substances, mixtures, generics, food additives, and flavors throughout the world at multiple levels of jurisdiction. Constant updates are critical, since this data is constantly changing and expanding, as it encompasses hundreds of complete regulatory lists covering thousands of data elements spanning dozens of countries around the world.

At the product level, from its inception to the present day, the MSDS has evolved into a document that goes far beyond its original purpose, now serving as a source, foundation, and clearinghouse for a range of safety and regulatory compliance data, including classification, transportation, environmental, ecological, and disposal considerations. MSDS product-level data should be continuously updated with a service provider's dedicated team, advanced documentation, information and search technologies, documented best-practice methodologies, and through direct data obtainment relationships with raw material and other chemical product manufacturers.

EBJ: What are the key qualities and considerations when a company is selecting EHS solutions for product safety and stewardship?

R.C.: Companies should ensure that the vendor's platform provides all the necessary tools for effective compliance management. Ideally, this means that the

vendor can provide not just software but also the critical data, content, and support. This includes key data elements such as document templates, data, phrases, calculations and classifications, and rules. The solution must provide constantly updated support features for emerging regulatory frameworks such as REACH and GHS.

Sophisticated formulation management capabilities are critical. The vendor and platform should be global in functionality and capabilities. Finally, the vendor should be able to provide related outsourced services such as MSDS distribution and emergency response.

EBJ: What are the key qualities and considerations when a company is selecting a regulatory and MSDS data services provider?

R.C.: Unique and compelling factors when selecting a regulatory and MSDS service include the vendor's knowledge base, which should be broad, large, and dynamic and provide maximum coverage for critical

information such as product MSDSs and regulations on substances. Constant support is critical, including round the clock (24-7-365) customer service, highly accessible on-call experts, and global coverage.

Data provided by the vendor should be of the highest possible accuracy and quality, and continually updated. Solution breadth should cover the full product lifecycle and supply chain, support both upstream product stewardship and downstream workplace safety, and support relevant technical environments such as SAP EHSM. Experience and expertise are critical, including domain experts with relevant degrees and certifications in areas such as environmental health, environmental sciences, environmental engineering, chemistry, law, hazardous materials management, and toxicology. Finally, recognition of industry expertise through awards, speaking engagements, analyst reports, and published technical articles are often seen as an objective sign of strong thought leadership in the field. □

BLUEWATER BIO EXPANDS GLOBAL FOOTPRINT TO UNITED STATES

Bluewater Bio (London, U.K.) is a global specialist in the treatment of wastewater and other water technologies. The company's principal product is a proprietary wastewater treatment system called Hybrid Activated Sludge (HYBACS) for municipal and industrial applications. A nutrient removal technology, HYBACS was developed from a process originating in South Korea and has been proven commercially in over 25 applications, including a wide range of high-strength organic industrial wastewaters from food or beverage production, leachate generation, and livestock waste treatment. According to the company, HYBACS saves up to 40% in energy usage, up to 50% in plant footprint, and up to 25% in capital expenditure when compared with competing performance treatment processes. Daniel Ishag is Bluewater Bio's CEO.

EBJ: Please describe the global reach of your product sales.

Daniel Ishag: Bluewater Bio currently has a presence within Europe (United Kingdom, Spain), the Middle East (Bahrain, Saudi Arabia), South East Asia (South Korea), North America (USA) and Africa (South Africa). This presence has been achieved via acquisitions or licensing and other collaborative agreements.

The company recently expanded in to the North American market via an agreement with **Infilco Degremont, Inc.**, a

unit of **SUEZ Environnement**. Under the agreement, Infilco will provide HYBACS to municipal and industrial waste water treatment plants across North America.

This expansion is driven by the need to replace overburdened water infrastructures and legislation requiring wastewater treatment plants to additionally remove inorganic nutrients in some countries. Developed in particular for upgrades and retrofits, HYBACS is often able to leverage between 80% and 90% of existing infrastructure and is therefore able to be installed 50% cheaper than other technol-