

# EBJ's 2005 Business Achievement Awards

Note: The 2005 EBJ Business Achievement Awards will also be presented in edited fashion in Environmental Business Journal, Volume 19 Numbers 1/2 to be released near the end of January 2006. The annual EBJ Awards are part of EBJ's annual Executive Review issue that also contains Q&As with prominent environmental industry executives.

## About the EBJ Business Achievement Awards

Between October and December of 2005, EBJ solicited the environmental industry via email, website and word-of-mouth for nominations for the **EBJ Business Achievement Awards**. Nominations were accepted in 200-word essays in either specific or unspecified categories. Categories or size designations may be altered depending on the volume of nominations or of the number of worthy recipients. The 2005 EBJ awards were determined by a committee of EBJ staff and EBJ editorial advisory board members. The 2005 EBJ awards will be presented in a special ceremony at EBJ's Environmental Industry Summit IV in Coronado, Calif. On the evening of March 1, 2006, The Environmental Industry Summit is an annual three-day event hosted by EBJ on March 1-3, 2006 and award recipients are invited to attend to receive their award. Congratulations to the 2005 winners and EBJ encourages all interested companies to participate next year. *(Disclaimer: Company audits were not conducted to verify information or claims submitted with nominations.)*

## SMALL FIRMS (<\$10 MILLION)

**Gold Medal: ES&H, Inc.** for its growth from a single employee with revenue of less than \$100,000 in 1997 to a current full-time and associate staff of 65 professionals, technicians, craft, and skilled labor, and projected revenues of \$8.5 million for 2005. Over the past four years, revenues have grown from \$700,000 to the current \$8.5-million level. The firm received a Small Disadvantaged Business 8(a) certification in March 2002, and it has been recognized as one of the fastest growing Hispanic-owned firms in the United States. ES&H provides construction/remediation, environmental and regulatory compliance engineering, training/administrative and industrial hygiene services. Headquartered in Knoxville, Tenn., ES&H performs work in all 50 states, U.S. territories, and several foreign countries. The firm maintains prime contracts and subcontracts with the Army Corps of Engineers, the Department of Energy, the Tennessee National Guard, the U.S. Navy, the General Services Administration, the Department of the Interior, as well as numerous private-sector clients.

**Silver Medal: Sovereign Consulting Inc.**, a Small Disadvantaged Business 8(a) minority-owned business, for successfully implementing a strategic plan to break into the federal cleanup market with three prime contracts from the Army, Navy and U.S. Military Academy. These awards have prompted significant growth in staff and revenue over the firm's past fiscal year. Sovereign was awarded a five-year contract to provide the full range of remediation services

to the Navy Engineering Field Activity, Northeast. The firm was one of five small business contractors selected for this indefinite-quantity contract with firm fixed-price task orders. The total value of work performed over the contract period could reach \$30 million. Sovereign was also awarded a \$3.66-million contract by the U.S. Military Academy for the Cragston Landfill Closure in West Point, N.Y. Under this contract, the firm will provide engineering, environmental, construction and other technical services. Finally, Aberdeen Proving Ground in Aberdeen, Md., awarded Sovereign a seven-year, \$7.4-million performance-based contract to provide guaranteed fixed-price remediation in support of the U.S. Army's Installation Restoration Program (IRP).

**Bronze Medal: Entropy International**, a U.K.-based developer of environmental software, for increasing sales volume by better than 50% during 2005. The company has seen steady growth and expansion since its start-up in 1996. In August, it opened a new office in Ottawa, Canada, to meet the needs of a growing client base in the North American market place. Its product, the Entropy System, is a modular, web-based application for risk and compliance management. The Environment module meets the requirements of ISO 14001 and the European Eco-Management and Audit Scheme (EMAS); it provides a fully functional environmental management system that helps to ensure the continuous improvement of environmental performance. The Entropy System is now in use at thousands of sites around the world, and the firm's client base includes such multinational companies as Aggregate Industries, AIG, Barrick Gold, ConocoPhillips, Diageo, GlaxoSmithKline, Toyota and Wrigley. The firm recently received the 2005 Green Apple Award for Environmental Best Practice, which recognizes the company's contribution to improving the environmental performance of commercial and public sector organizations.

**Bronze Medal: Thermal Remediation Services, Inc. (TRS)** for significant and sustained revenue growth since 2000, with revenues increasing from \$150,000 to \$6.5 million and projected revenue of \$10 million in 2006. TRS has completed more than 75% of the world's cleanup projects using Electrical Resistance Heating (ERH) remediation. TRS is a leader in guaranteed fixed-price remediation contracting using ERH techniques based on its successful remediation of sites on public, retail, industrial, and military facilities, covering a broad range of subsurface conditions and logistical challenges. TRS has also recently developed patent-pending processes to facilitate heat-enhanced *in situ* degradation utilizing both biotic and abiotic mechanisms. TRS's equipment fleet is valued at over \$3 million with a capacity to perform eight full-scale projects simultaneously, or three times the capacity to perform ERH projects than any other provider.

**Honorable Mention: The Phylmar Group, Inc.**, an international environmental, health and safety consultancy, for reaching \$1.2 million in revenue during 2005 using an innovative business model first rolled out in 2001. Phylmar has formed a new industry legislative reporting group, the Phylmar Regulatory Roundtable (PRR); also, it has added overseas offices and broadened its scope of services to include high-end strategic advising and environmental consulting. Headed by Mark Katchen and staffed with senior experts in the EHS field, many of whom came from Fortune 100 companies, Phylmar has consistently grown since its inception in 1997 as a result of a "holistic" approach to EHS consulting. The company now boasts a network of more than 500 affiliates in 44 countries that are regularly called upon to address client needs. The firm has recently expanded its service offerings, which include assistance

related to social responsibility and code of conduct issues. Phylmar attributes its success to understanding client requirements, finding the best local resources to perform EHS work, effectively managing affiliates through satellite offices and performing experts review, and offering recommendations for action in advance of the emergence of new issues or the introduction of new legislation.

#### **SMALL FIRMS (\$10-25 MILLION)**

**Gold Medal: Enviance** for 2005 revenue growth of 77%. Enviance continues to expand its business of delivering software that helps automate and improve the management of environmental, health and safety compliance activities. As a leading operator of Internet-based compliance software as a service, the Enviance System requires no hardware or software installations, and is sold on a subscription basis. This provides customers and partners with the flexibility to scale as their needs change over time. Leading customers include AEP, Arcadis, Chevron, Dixon Environmental, DuPont, Fujicolor Processing, Malcolm Pirnie, Montenay Power Corp, Questar, sanofi pasteur, Shaw Group, Southern Company, the U.S. Navy, Valero Refining, California, and Weston Solutions.

**Silver Medal: PPC Industries** for generating profitable operations every year for 25-plus consecutive years with current sales ranging from approximately \$10-15 million; this is a feat virtually unheard of for manufacturers of air pollution control (APC) equipment. In the highly volatile APC market, PPC Industries says that under the leadership of President Bill Fisher, it has weathered each annual storm by designing reliable products and maintaining a low overhead operation. PPC's product line has historically included dry electrostatic precipitators and wet electrostatic precipitators for particulate and opacity control, and in 1991 the company added biofiltration systems for the control of volatile organic compounds (VOCs) and odors. Customers include Weyerhaeuser, Owens Illinois, Nestle, Louisiana Pacific, Georgia Pacific, Packaging Corporation of America and ConAgra Foods. Providing a turnkey approach, PPC is one of the few suppliers of air pollution control equipment that design, fabricate and install their own equipment.

**Silver Medal: RJM Waste Equipment** for exceeding its revenue and profit projections and continuing its double-digit growth, reaching an annual run rate of more than \$25 million this year. Having started from scratch in 2002, RJM, manufacturer of the Mighty Mac line of non-mobile solid waste handling equipment (compactors, roll-off containers, front load containers, etc.), has grown through some turbulent times facing the waste equipment sector, which has been pummeled by rising steel prices. In 2005, RJM's strong financial performance enabled the company to attract a new senior lender, thereby lowering its borrowing costs and doubling its available working capital. In recognition of their performance in 2005, several members of RJM's management team were recipients/finalists of Wastec's employee of the year awards. In addition, RJM CEO Ron McCracken was recently re-elected to his third term as Wastec Chairman. To maintain and improve upon its excellent performance in 2005, RJM has added key personnel to senior positions in manufacturing, engineering and a proven sales manager to open a new territory. RJM serves customers in the southeastern, mid-Atlantic, southwestern, and west coast markets.

**Bronze Medal: Sullivan International Group, Inc.** for growing revenues from \$15.7 million to more than \$20 million in 2005, gaining 55 new employees, and expanding service offerings with new contracts from EPA, including the EPA Streams Contract and a major \$350-million contract (SulTRAC JV) in Region 5. Sullivan opened new offices in Chicago and Norfolk, Virginia. Sullivan was again named to the list of the “Fastest-Growing Privately Held Companies in San Diego” by the *San Diego Business Journal*. Sullivan received other major awards this year, including the 2005 “Top Diversity-Owned Business” from Diversity Business.com, recognition from the San Diego Chamber of Commerce for “Outstanding Community Involvement,” and the “Best Company to Work For” award by the *San Diego Business Journal*. CEO Steve Sullivan was honored with selection as a finalist for the “Winning Workplaces 2005: Best Bosses,” a competition sponsored by *Fortune Small Business* magazine.

**Honorable Mention: US Environmental, Inc.** for continuing its dramatic turnaround from near bankruptcy in 2001 to four consecutive years of growth through 2005. Revenues have grown from \$1 million in 2001 to \$11 million in 2005. For the second straight year, the company was ranked among the Philadelphia Business Journal & Wharton Business School’s “Top 100 Companies in the Greater Philadelphia Region,” and among *Entrepreneur* magazine’s “Hot 100” list. The firm has achieved this growth by solidifying its core transportation and disposal services while expanding its industrial services capabilities. Over the 2004-2005 time frame, US Environmental has invested over \$2 million to modernize its fleet and add equipment, which has expanded services and increased efficiencies. US Environmental also made key changes and additions to its staff, dramatically increasing its industrial services expertise. The staff and equipment expansion has enabled the company to develop new service lines such as hydro-blasting, hydro-jetting, UST/AST/lagoon cleaning, removal and closure, lab packing, site decontamination, and industrial cleaning.

#### **MEDIUM FIRMS (\$25-\$100 MILLION)**

**Gold Medal: Groundwater & Environmental Services, Inc. (GES)** for increasing its gross revenue by \$38 million over the past five years, from \$54 million in 2001 to \$92 million in 2005. The company is also on track for a 29% increase in gross fees this year. GES attributes this revenue increase to client-focused program management and sound geographic expansion and acquisitions. Successful relationships with existing clients, combined with the stable leadership of an experienced senior management team, helped propel the company’s growth. GES, a niche service provider for petroleum industry clients, has evolved from a northeastern-based company to a national service provider. Grassroots expansion and the acquisition of firms with similar environmental services such as EnecoTech, in April 2005, have enabled GES to add offices in San Diego, Denver, Phoenix, Houston, and Minneapolis. Even with this growth, GES has continued to work safely by incorporating the Loss Prevention System, a behavior-based safety program, as part of its quality management approach. Its 625 employees have worked 19 months without injury.

**Silver Medal: WRS Infrastructure & Environment, Inc. (WRS)** for achieving average annual profits of \$5 million over its eight years as a private company, and for three consecutive years of performance without a lost-time accident. From average annual losses of \$6 million during the ten years that the

firm was part of Westinghouse, WRS has since achieved the \$5-million profit level. This achievement represents a 66% increase over a previous five-year average of \$3 million in profits, thus the basis for the Silver Medal awarded to WRS by EBJ in 2002. Average gross revenues over the full eight-year period have been \$65 million. When EBJ recognized WRS in 2002, the company had just achieved its best accident prevention performance in its 20-year history. The firm has gone on to improve upon that performance in each of the last three years. WRS's accident prevention success has been recognized by the Florida Transportation Builder's Association and Georgia Department of Labor several times over these four years, as well as the National Safety Council's Industry Leader designation. WRS has now outperformed its industry (NAICS 562910) accident prevention record for the past 12 consecutive years.

**Bronze Medal: SCS Engineers** for increasing revenues by 20% per year over the past three years, in the relatively flat solid-waste consulting sector, for numerous business and project-related awards, and "top-firm" listings. Widely recognized for its commanding position in the management of landfill gas (LFG) and LFG energy recovery, SCS was ranked by *Engineering News Record* for the second straight year as the nation's number one solid-waste consulting firm. Also for the second consecutive year, SCS was rated as one of the 100 fastest-growing architectural, engineering, planning, and environmental consulting firms in the United States on the Zweig Letter Hot Firm 2005 list. The firm was honored in 2005 with two prestigious EPA Phoenix Awards for its involvement in two projects—the PETCO Park/East Village Revitalization Project in San Diego, and the Chesterfield Square project in Los Angeles. This marks the fifth award for the PETCO Park Project; the project has been attributed additional awards. These include a Alonzo award from the Downtown San Diego Partnership, a Brownfield Project of the Year Award from the California Redevelopment Association, a Smart Growth Award for Excellence from the Urban Land Institute (San Diego/Tijuana Chapter), and a Project of the Year award from the American Public Works Association (San Diego and Imperial Counties Chapter).

#### **LARGE FIRMS (>\$100 MILLION)**

**Gold Medal: ENSR International Inc.** for organic growth of 31% in 2005 and strong performance across all business lines and global areas of operation. ENSR achieved a corresponding increase in net income over the same period. Its U.S.-based revenue growth was up 28%, international revenues increased by 56%, and key-account business grew by 68%. This revenue growth and client service focus has also fueled strong staffing increases over the past two years. The firm credits its breakthrough performance to a three-fold business strategy: "employee engagement" to ensure a high-performing workforce; "seamless global delivery" of expanding technical services; and a steady focus on key accounts. A key component to ENSR's growth is its continuing investment in employee development and training, empowering staff to deliver superior client service. ENSR also developed survey tools to measure client satisfaction and employee engagement on a regular basis to ensure continuous improvement. In September 2005, ENSR merged with AECOM, making it part of a global design and management company, serving the transportation, facilities and environmental markets.

**Silver Medal: Kleinfelder, Inc.** for continuing its pace of 20% average annual revenue growth since 1998, and for its acquisition of Massachusetts-based Geologic Services Corp. (GSC), a \$45-million environmental engineering firm. The acquisition, Kleinfelder's largest to date, allowed the company to achieve its goal of becoming a coast-to-coast firm. The deal added 300 employees and nine offices to Kleinfelder. A \$185-million company before the merger, Kleinfelder now has more than 2,000 employees and 65 offices. Both GSC and Kleinfelder are employee-owned, and both companies were expanding.

**Bronze Medal: HNTB** for having passed the \$500-million revenue mark, continuing its rate of double-digit growth, and successfully riding the wave in transportation engineering. Emerging as one of the sector's leaders, HNTB has recently embarked upon an effort to enter the federal and security markets. Towards that end, it has hired a cadre of outstanding military leaders, which include about a half-dozen top-level retiring generals. Industry analysts give credit for HNTB's success to Executive Chairman Harvey Hammond, who has created a leadership model well-suited to the consulting/engineering sector—attracting talented people, empowering them, and effectively inspiring them to achieve high levels of performance.

**Honorable Mention: Tetra Tech Inc.** for significantly expanding its federal business through the award of numerous contracts from a broad spectrum of agencies in 2005. Contracts won include: a three-year \$100-million award from the Department of Energy to install integrated nuclear material detection systems at locations outside of the United States to minimize the risk of nuclear proliferation and terrorism; a Comprehensive Long-Term Environmental Action Navy (CLEAN) contract, with a potential value of up to \$125; a Remedial Action Contract (RAC) IV, with a ceiling of \$100 million, from the Naval Facilities Engineering Command, Southwest; two Superfund Technical Assessment & Response Team (START) contracts, with a combined value of \$90 million, for EPA Regions 3 and 7; a five-year, \$45-million contract for assessment and environmental restoration work on contaminated structures for the Federal Aviation Administration (FAA) and the National Park Service; a five-year, \$50-million award from EPA to provide Scientific, Technical, Research, Engineering and Modeling Support (STREAMS) for various agency offices and programs; and a five-year, \$43-million contract from EPA's Office of Wastewater Management to support the agency's water-quality and watershed protection initiatives.

**Honorable Mention: Environmental Resources Management (ERM)** for being voted the consultancy with the best reputation for corporate social responsibility and environmental reporting in a survey undertaken by EDIE.net, and for winning *Acquisitions Monthly's* prestigious "Environmental Advisor of the Year" award. A leading source of on-line information about environmental issues and environmental business, EDIE.net carried out a survey of environmental consultants and their clients around the world, 100% of whom recognized ERM's capabilities in the emerging "corporate responsibility" consulting sector. ERM works with companies that are coming under increasing pressure to look at the environmental and social impacts of their business operations. The sources of this pressure range from pension funds that are beginning to screen for social responsibility to consumers who have expectations on a range of ethical issues such as climate change and fair trade. ERM works with multinational clients to set up non-financial governance, reporting and assurance structures, prioritizing the most important actions, and providing them

with strategic advice on how they should communicate with their key stakeholders. *Acquisitions Monthly*, recognized ERM's global M&A practice as the market leader in providing technical, management, commercial and contractual EHS transaction advice. ERM undertakes thousands of due diligence audits a year for a wide range of clients, working closely with them to manage the EHS challenges that arise from mergers, acquisitions and divestitures.

**Honorable Mention: CH2M HILL** and its **OMI** unit for acquiring a major water/wastewater engineering firm, and for winning a broad-based municipal services contract for a newly incorporated Georgia city. In October 2005, CH2M HILL completed its acquisition of Ohio-based **BBS Corp.**, a firm specializing in planning, design, and construction administration of water and wastewater treatment, distribution, and collection systems. The firm has completed more than 200 water/wastewater system projects for a wide variety of clients, including the City of Columbus (since 1948), the Metropolitan Sewer District of Greater Cincinnati (since 1971), and the District of Columbia Water and Sewerage Authority (since 1986). Also last year, CH2M HILL-OMI was selected to provide comprehensive municipal services for Sandy Springs, Georgia, a community of 90,000 people near Atlanta. After a 35-year struggle to become a city, 94% of the Sandy Spring voters approved a referendum in June 2005 in favor of city-hood, thereby making Sandy Springs Georgia's seventh largest city. Striving to create the most efficient, responsive and cost-effective city possible, the Governor's Commission for the city opted to outsource all municipal services except police, fire and 911 emergency call services. CH2M HILL-OMI will handle such duties and facilities as public works, transportation, parks and recreation, and planning and zoning. This landmark expansion of typical public-private partnerships will draw from CH2M HILL-OMI's experience in providing full-service engineering, construction and operations for water, energy, environmental, transportation, communications, and industrial projects across the world.

## **INTERNATIONAL EXPANSION**

**Gold Medal: Inogen Environmental Alliance, Inc.**, a global environment, health and safety alliance organization, for achieving outstanding success in global markets during 2005. This includes the establishment of two joint ventures, the launch of its GlobalNetEHS membership network, the development and implementation of the Global Standards Program, and the award of a three-year master services agreement with BP International Ltd. in Europe, the Middle East and Africa. Inogen's innovative business model is responsible for its expansion from three original associate members to the current membership of 13 companies, four of which joined in 2005. These additions expanded Inogen's presence into Russia, the Netherlands, South Africa and Argentina. Inogen now has 90 offices worldwide, employing more than 2,800 professionals, and it has completed projects in more than 120 countries. During 2005, Inogen named Peter Penning of the BECO Group as new president and CEO to succeed Paul Goudreault of founding U.S. company Delta Environmental. Inogen also developed and hosted two WorldView Conferences—one in Mexico City and one in Washington, D.C.—launched a client newsletter, and introduced a new web site [inogenet.com](http://inogenet.com).

**Silver Medal: ESS**, a provider of Operational Risk Management software for environmental, health and safety (EH&S) and crisis management, for receiving a \$3.5 million round of venture capital investment. Led by Grayhawk Venture Partners, this investment helped ESS expand into new global markets. PetroChina Company Ltd., the largest oil and gas producer in the People's Republic of China, awarded ESS a contract to supply its fully integrated, browser-based Essential Suite products for, air, water, waste, fugitive emissions, crisis, and compliance management. It is the first such implementation in the country. Under the agreement, Essential Suite will be used in 41 regional branches, each with between two and ten factories throughout China. Essential Suite has also been introduced in Kuwait, where the Kuwait National Petroleum Company (KNPC) is using the package in the design phase of its fourth refinery. This facility is expected to increase daily production in the region by about 400,000 barrels when it comes on line at the end of the decade. Essential Suite will allow the company to build emissions-reducing characteristics into the facility itself by creating "what-if" scenarios that it can incorporate into BACT equipment and configurations. With its use of Essential Suite, KNPC becomes the first company in Kuwait to use an automated, fully integrated system to comply with the nation's increasing environmental regulation and corporate social responsibility standards.

**Bronze Medal: Mabbett & Associates, Inc.** for its success in exporting U.S. expertise in environmental science and engineering, leading to 40% average annual growth in revenues over the past five years. In 1996, M&A decided to expand internationally by establishing a "gateway" to non-U.S. markets rather than by working strictly from its U.S. base. M&A Ltd. was established from scratch in Glasgow, Scotland, and has since grown to a current staff of 17 personnel. According to the company, the offshore entity allowed M&A to compete for international projects more effectively; this is because it provides an unparalleled level of technical depth and expertise through teams consisting of both U.S. and U.K. professionals. M&A Ltd. has become one of M&A Inc.'s top ten clients and thereby has created new opportunities for M&A's U.S. staff. M&A Inc. in effect "cloned" its own strategic international partner. M&A Ltd. plans to open two new U.K. offices in 2006 and then expand to other areas of Europe.

## **EBJ Index WALL STREET AWARDS**

TO BE ANNOUNCED

## **HURRICANE RELIEF AWARDS**

**The Shaw Group** for its role in the recovery from the impacts of hurricanes Katrina and Rita. Shaw has been providing recovery-related work in Louisiana, Texas, and Mississippi for various federal, local, and private entities. Under contract to the Army Corps of Engineers, Shaw managed the un-watering of New Orleans, pumping 50-billion gallons of floodwaters from the city in 17 days instead of the predicted 80 days. The company's crews repaired more than 30,000 damaged residences under the Corps' Blue Roof Operation, managing 550 four-man crews in the field at peak performance. Shaw delivered temporary housing to affected residents under the Federal Emergency Management

Agency's (FEMA's) "Home Again" program, and developed and operated evacuee shelters throughout Texas for FEMA. The company restored power at the NASA Stennis Space Center, two days after receiving the request, and installed electrical systems at various temporary housing complexes. Shaw also monitored debris removal at collection points throughout several eastern Louisiana parishes and performed damage assessments at hundreds of properties owned by the Archdiocese of New Orleans. As 2005 drew to a close, Shaw was repairing levees in the lower Mississippi River delta, and it had signed a joint venture with KB Home to construct housing in Louisiana.

**HSA Engineers & Scientists** for the heroism and self-sacrifice of its employees during the late-summer hurricane season. When Hurricane Katrina struck the Gulf Coast, HSA responded to its insurance and petrochemical client base to provide immediate assistance with damage assessment. While the firm was staffing these services out of makeshift housing with satellite linkage, Hurricane Wilma hit south Florida, knocking out four of its offices and many of its clients' operations. Already stretched for cash flow to assist in the Katrina cleanup effort, HSA at that point had more than 75 displaced employees, as well as clients who had stopped paying invoices as a result of their own hardships. HSA's remaining staff rallied to provide cash and temporary housing to its displaced staff, forego remuneration to maintain operations in both regions affected by hurricanes, and found a way to survive as a company. HSA is a \$20-25-million Florida-based provider of full-service engineering, environmental, construction and litigation support services. It employs a staff of more than 200 professionals located in offices in Florida, South Carolina, Georgia, Alabama, and Mississippi.

**MHF Logistical Solutions** (MHF-LS), a provider of waste transportation, logistics, packaging and technical services, for innovations in the repair of New Orleans levees. Shortly after water surges, caused by Hurricane Katrina, broke the levees in New Orleans, MHF-LS was contacted by the U.S. Army Corps of Engineers to help in its emergency repair efforts. The Corps had been notified by a MHF-LS client who realized that the firm's large, 242-cubic-foot, 12-ton Lift Liners and other bulk materials packaging solutions would be well suited for use as sandbags. Within hours of the call, MHF-LS trucks were dispatched from the firm's manufacturing facility in Tennessee. Once in New Orleans, the bags were filled with soil, road fill, and other materials, and then lifted into place by military helicopters and barges. To date, more than 6,000 MHF-LS-supplied bags have been utilized in New Orleans.

## **TECHNOLOGY MERIT AWARDS**

**Weston Solutions** for developing and deploying GreenGrid, a "green roof" technology that provides energy costs and stormwater management benefits. The GreenGrid system is a modular green-roof technology that is designed and engineered to be simple and flexible, offering a cost-effective alternative to traditional built-in-place green roofs. Geared toward the requirements of industrial, commercial, and government facilities, GreenGrid's lightweight, recycled-plastic modules arrive pre-planted and ready for installation directly on the roofing membrane. Due to their insulating properties, green roofs can reduce heating and cooling costs up to 25% and 50%, respectively. Buildings are cooled naturally as plants and soil shade the roof and transform heat and soil

moisture into humidity. In colder weather, green roofs insulate against heat loss. GreenGrid roofs also provide sound insulation, extend roof life, and reduce the urban heat island effect. A GreenGrid system can absorb up to 99% of a 1-inch rainfall, reducing stormwater runoff, flooding, and sewer overflows. Weston has installed more than 100 GreenGrid roofs, and their popularity is increasing rapidly. Currently atop 500,000 square feet of public, residential, industrial, and retail roofs, including big-box stores, GreenGrid is scheduled for installation on several hundred thousand square feet of roof in 2006.

**Blue Water Technologies** for launching operation of the Hayden Wastewater Research Facility (HWRF) in Hayden, Idaho, in May 2005. This private, \$1-million facility, was built in collaboration with the University of Idaho to examine advanced wastewater treatment technologies. It is unique in the country for having been constructed at an operating municipal wastewater treatment plant. The facility has access to 1.5-million gallons per day (mgd) of domestic wastewater effluent, providing the optimum laboratory for scaling up new treatment technologies. Currently, the facility is operating an advanced phosphorus removal process that's achieving 90 to 95% reductions in total phosphorus concentration. An additional product train, which was slated to begin testing during the fourth quarter of 2005, will target emerging contaminants in wastewater, including endocrine disruptors and personal and pharmaceutical care products. Other scheduled research includes selenium removal and metals removal technologies. A University of Idaho senior design engineering team will also be conducting research sponsored by Blue Water Technologies on a laser-based particle size analyzer. Additional collaborative discussions on various technologies have taken place with Michigan State University, Drexel University, and Gonzaga University. There has been additional contact with PNL Batelle Laboratories and Idaho National Laboratories on arsenic removal technologies.

**Hydro International** for the development of the Up-Flo Filter for stormwater treatment. It is one of the first products to be designed, developed and brought to market as part of the EPA's Small Business Innovation Research (SBIR) Program. The Up-Flo Filter is a high-rate, modular filtration system designed to meet the most stringent stormwater treatment regulations. Originally conceived by one of the nation's leading stormwater researchers, the Up-Flo Filter was re-engineered by Hydro International's research and development team to become a commercially viable product. The re-design maximized treatment capacity while minimizing footprint and maintenance associated with traditional radial or down-flow filters. According to the company, the unit's compact design, high removal efficiencies, high treatment capacity, and multiple treatment train capabilities make it the most effective and economical filtration device available for stormwater treatment. Applications include new development and retrofits; catch basin or flow-through chambers; streets and roadways; parking lots; vehicle maintenance wash-down yards; industrial and commercial facilities; wetlands protection; and utility yards.

**Kleinfelder Inc.** for innovative technology deployment. When Governor Richardson of New Mexico announced his Water Innovation Fund to support innovative approaches to improving water resource utilization, he chose a proposal by Kleinfelder to be one of his showcase demonstration projects. Kleinfelder's Albuquerque office brought together the resources needed to win funding for the Veguita Ground Water Denitrification Demonstration Project. This first-of-its-kind project deploys enhanced *in situ* bioremediation (EISB)

technology for denitrification of groundwater at a scale appropriate for small communities. Previously, EISB had been applied only at field test scale.

**Rain for Rent** for developing a portable water-quality monitoring system to provide real-time monitoring and control of stormwater runoff. Managing stormwater runoff from large, environmentally sensitive public-works projects, like the one at Seattle-Tacoma International Airport, is challenging. The monitoring solution required for this high-visibility project demands continuous reporting of turbidity and pH in the discharge to local streams. The Rain for Rent system includes internal piping, flocculent storage, injection pumps, thermostatically controlled heating elements, and 110-volt power outlets. Based on turbidity measurements displayed by the controller, operators adjust the dosing of the flocculent to optimize treatment, and a second pair of sensors monitors effluent from the sand-media filters. The system automation allows the sensor controllers to send a signal to a set of control valves in the monitoring system to direct the stormwater appropriately. If influent is within prescribed turbidity and pH criteria for treatment, the sensor-controller directs it to the sand filters. If influent exceeds those criteria, the sensor-controller diverts it back to the retention structure. Similarly, sensor-controlled monitoring diverts stormwater that doesn't meet discharge requirements back for repeat treatment. In case of power failure, the system automatically diverts all stormwater back to the source to maintain compliance until power is restored.

**Philadelphia Mixing Solutions (PMSL)** for introducing an oxidation ditch technology called the HALO (High Aeration, Long Oxidation) System. Offering HALO with its Low Speed Surface Aerator, Brush Rotor, Directional Aerator, and Flow Boosted Diffusion technologies, PMSL has optimized the process for choosing aeration technology while minimizing the risk associated with planning and designing oxidation ditches. Based on the application of over 15 years of wastewater treatment data, the HALO Matrix has been designed to calculate the optimal biological treatment for any given aeration technology in any ditch configuration and size. Through the proprietary HALO Builder software program, every possible option can be modeled and evaluated before any construction or equipment purchase has been made. By removing risk and providing lab test data for each aeration technology, PMSL claims to have removed the "unknowns" from each step in the planning process.

**Panther Technologies Inc.** for its dedication to using innovative technologies for treatment of contaminated soils and groundwater in a compressed timeframe, as well as on-site re-use of remediated soils. Application of these technologies has provided Panther's clients with significant cost savings, and more importantly, rapid site cleanups; this clears the way for real-estate transactions and rapid redevelopment of brownfield sites. The technology is based on chemical oxidation, using a variety of specialized, site-specific chemical oxidants and activators. Panther's growth in the market is based on their skill at evaluating complex sites and designing full-scale application methods using specialized mixing equipment. Soil remediation is completed either in-situ or ex-situ using specialized mixing and injection equipment unique to Panther's operations. Groundwater treatment can include a variety of delivery mechanisms, including hydraulically controlled applications. This area of Panther's business has seen significant growth in the past three years, over 100% in this sector alone. Their processes have drawn attention to Panther internationally as well; several opportunities are currently being evaluated in Japan and the United Kingdom.

**Soil-Therm Equipment, Inc.** for the introduction of the Micro-THERM Ultra-Small Remediation System. Micro-THERM systems are designed to provide very small soil-vapor-extraction (SVE) and dual-phase-extraction (DPE) cleanup and thermal emissions equipment in a single system. The base skid size of the Micro-THERM system is 4x3 feet, and a typical unit weighs approximately 1,000 lbs. According to the company, it fits within the tightest locations and offers significant fuel savings compared with traditional SVE and DPE systems. Typical SVE and DPE cleanup operations require service station operators to provide two to three parking spaces for an SVE remediation system with a thermal/catalytic oxidizer for destruction of extracted gasoline vapors. Soil-Therm optimized its Jet-THERM burner technology to significantly reduce oxidizer size and achieve greater than 99% destruction efficiencies in order to allow these systems to effectively perform cleanups in locations with substantial space restrictions. The Micro-THERM systems are complete systems that include water knockout, vapor and dilution valves, powerful SVE or DPE extraction blowers, a thermal/catalytic oxidizer, gas train, and complete flame safety and temperature controls mounted onto a single 4x3-foot skid.

**O2Tube Technology Inc.** for using a new aerobic remediation technology to reduce a large groundwater BTEX plume by 95% in nine months. There are over 1,000 high-priority leaking underground tank sites in Illinois where a petroleum groundwater plume has formed around a leaking source in Midwest silts, clays and loams. Aerobic bioremediation can reduce the costs and achieve lower cleanup objectives than conventional technologies such as pump and treat systems. Aerobic remediation in Illinois clay is very slow and costly because of poor water movement; this inhibits the diffusion of oxygen-saturated water from injection of pure oxygen, ozone or oxygen releasing chemicals. The patented O2Tube system combines low-pressure water re-circulation with *in situ* electrolysis to re-circulate oxygen-saturated water around a 4-inch well in the tightest soils. At a site with a plume measuring 170x150 feet at a depth of 10 to 20 feet, O2Tube conducted a pilot field demonstration of its technology and achieved the following results in low-flow Illinois clay ( $1 \times 10^{-6}$  cm/sec) in just nine months: total BTEX reduced from 51,738 parts per billion (ppb) to 2,472 ppb (95 %); total benzene reduced from 24,212 to 1690 ppb (93%); average dissolved oxygen increased from 3.2 parts per million (ppm) to 5.86 ppm at distances of 30 feet from each well; average oxygen reduction potential (ORP) increased from 152 to 450 mV at distances of 30 feet from each well; and nitrite and nitrates were exhausted during the study—a first in Illinois silty clay.

**Ionic Water Technologies, Inc. (IWT)** for the development of the Rotating Cylinder Treatment System (RCTS). Applied in a cyanide activation role to enhance precious-metal recovery in heap-leach mining and to treat highly impacted acid mine drainage, the RCTS technology affords significant cost savings in water treatment, according to IWT. Currently, the RCTS is configured in both high-speed and low-speed systems. The high-speed RCTS-HS provides a high-volume, low-energy solution to treatment processes that primarily require a physical transfer of gases. Acid mine drainage treatment presents a different challenge and requires chemical reactions to treat the water, so for these applications, IWT offers the low-speed RCTS-LS; this alternative provides the residence time required for slower chemical reactions. When used in an aeration capacity alongside pre-existing technologies, the company says, the RCTS is more than three times as efficient as those technologies. Industrial compressed air aerations systems transfer approximately 3 lbs. of oxygen per driven horse power

(3 lbs of O<sub>2</sub>/hr per HP) to water. Utilizing the RCTS, oxygen transfer will range from 9 to 11 lbs of O<sub>2</sub>/hr per HP, an improvement of more than 260%. New applications include the recovery of ammonia from the wastewater streams generated by latex fabric plant, an application that will save the client hundreds of thousands of dollars each year in environmental compliance audits and waste discharge payments, according to the company.

**GGT Waste** and **Natural Biotechnology**, both affiliates of the holding company **Green Growth Technology Inc.**, for launching new technologies for pathogen removal, advanced soil washing and agriculture waste management. Verified in tests with NOVA, GGT Waste's Petroflo sludge and groundwater pathogen removal technology removed 99.9% of all measured pathogens in samples of New Orleans contaminated water. GGT Waste's patent-pending Ultra Soil Wash combines multiple GGT technologies to remediate soil in place. It separates oil substances from solids, recovering the oil, hyper-remediating the remaining oil residue in forced contact, and replacing the soil without the typically substantial D&T costs. Finally, in cooperation with Natural Biotechnology, GGT Waste has created an AG Manure System that essentially turns organic wastes to water, compliant with continuous discharge permit parameters of many states. Live testing at a farm in Michigan demonstrated a 60% reduction of solids in 22 days in 40-degree weather.

**Interface Flooring Systems** for developing a new carpet-backing process that significantly advances carpet technology towards an oil-free environment. Roughly 50% of a modular carpet tile has vinyl backing, which is a petroleum and energy-intensive component. Interface's Cool Blue backing technology can use as feed stocks current waste streams and other recoverable materials now destined for landfills, such as automotive industry waste. It will eliminate the separation of face fiber from vinyl-backed carpet systems and provide a way to close the technical loop on reclaiming carpet tiles from the post-consumer marketplace. The Cool Blue technology provides Interface with the flexibility to explore the use of renewable and other non-PVC plastics previously avoided because of technological constraints. This innovation will allow the company to greatly increase the recycled content of numerous modular carpet styles for commercial and residential markets. In addition, whereas today's recycling processes can degrade certain materials over time, forcing them out of a sustainable technical loop, Cool Blue is a highly controlled, low-energy process that is designed to address this issue. Half of its power for the process comes from renewable energy derived from a local landfill-gas project pioneered by Interface. According to the company, the technology has the potential to divert more than 20-million pounds of plastics from landfills annually.

**NYCORE** for the development of products made from 100% recycled post-consumer carpet. NYCORE currently manufactures a variety of building products, including tile backerboard and synthetic slate roofing; also it is planning to introduce other building products in the coming months. The company also produces custom products for industrial product or component applications. During 2005, NYCORE received two prestigious awards in recognition of its technology development work and the environmental benefits of its products. In November, NYCORE's tile backerboard product received the coveted Top-10 New Green Building Product award from Building Green at the GreenBuild Conference. Several months prior, the company received the prestigious Green Status award from Claes Nobel and the United Earth Foundation. NYCORE's production facility in Minnesota also received an award

from C.A.R.E. (Carpet America Recovery Effort) in recognition of its ongoing effort to find commercially viable uses for recycled carpet.

**C&A Floorcoverings**, a unit of Georgia-based Tandus, for the development of Ethos, a commercial carpet whose backing system is made from reclaimed polyvinyl butyral (PVB) film recovered from car windshield and safety glass recycling. Until the development of this technology, there had been limited applications for PVB film, and most PVB waste was destined for the landfill. C&A is the first manufacturer to recycle this thermoplastic resin into a high-performance carpet backing. The Ethos backing contains 76% post-consumer recycled content, and the recycled content of the overall carpet product ranges from 30 to 52%, depending on the style, with a minimum of 30% post-consumer content. The product has received Environmentally Preferable Product certification from Scientific Certification Systems, an independent third-party organization that certifies environmental performance claims. According to C&A, the Ethos product meets or exceeds the performance of similar carpeting made with traditional PVC backings but does not contain chlorine. It is also 100% recyclable today and is currently being recycled in C&A's existing closed-loop recycling process.

## **PROJECT MERIT AWARDS**

**Kaiser-Hill Company, LLC** for completing the Rocky Flats Closure Project at a savings of \$30 billion in expected project costs, and in a fraction of the projected completion time. The Rocky Flats Environmental Technology Site is a Superfund site located 16 miles northwest of Denver; it consisted of more than 800 structures on a 385-acre industrial area. From 1952 to 1989, Rocky Flats processed and machined plutonium and enriched uranium into triggers for nuclear weapons. In 1995, the Department of Energy (DOE) hired **Kaiser-Hill Company, LLC**, a joint venture between CH2M HILL and ICF Kaiser, to begin clean up of the facility. At the time, DOE had projected \$36 billion in cleanup costs and a 70-year closure schedule. In 2000, DOE and Kaiser-Hill signed a performance-based incentive-fee contract to complete the cleanup by December 15, 2006—60 years ahead of the initial schedule—at a cost of \$7 billion. Kaiser-Hill's mission was to stabilize, manage, and ship radioactive/hazardous materials; deactivate/decommission nuclear facilities; clean up contaminated sites; close Rocky Flats; and covert the site into a national wildlife refuge. Closure was completed in October 2005 at a cost of \$6.5 billion—more than \$30 billion under the initial budget. The Rocky Flats Closure Project was the largest, safest, and most cost-effective environmental cleanup of its kind in the world. In addition, it is considered one of the most successful incentive-fee contracts ever executed by the federal government. This accelerated closure contract is now a model used at other DOE and government sites that have cleanup and closure missions.

**Black & Veatch** for providing design, permitting, construction, commissioning and O&M support services in connection with the Tuas-Singapore Seawater Desalination Project. This seawater reverse-osmosis (SWRO) plant produces potable water directly from seawater; it was constructed at a cost of \$90 million U.S. According to Black & Veatch, the facility represents the leading edge in large-scale membrane desalination treatment and accommodates 10% of Singapore's national water demand. It also addresses

Singapore's future water needs with a flexible design that will accommodate any required upgrades. With a capacity of 136 million liters per day (36-million gallons per day), the Tuas-Singapore Seawater Desalination Project is the largest SWRO plant in Asia and one of the largest in the world. The facility features a compact pretreatment process with screening and combined flotation/filtration prior to extraction of dissolved salts by two stages of RO membranes, as well as additional treatment to improve water quality further prior to distribution and consumption. The contract incorporates price adjustments for inflation, exchange rate fluctuations and changes in energy costs. The first-year selling price of \$0.49 U.S. per cubic meter ( $m^3$ ) is the lowest of any comparable project anywhere in the world, Black & Veatch reports. In addition, the use of energy recovery devices allows the production of treated water at only 4.1 kWh/ $m^3$ , making the Tuas-Singapore facility one of the most energy-efficient SWRO plants in the world.

**Marstel-Day** for developing for the U.S. Marine Corps a prototype Installation Encroachment Control Plan (ECP). It allows military facilities to assess and respond to the impacts of encroachment on ongoing military operations. Encroachment from urbanization, environmental regulation, air space use, and radio-frequency management all threaten military operations, training activities and testing missions, thereby compromising national security. Marstel-Day's prototype ECP, a Defense Department first, identifies current and future encroachment issues impacting military installation's and the surrounding communities; develops an action plan that promotes joint actions for influencing compatible land uses; develops forward-looking alternatives for regulatory compliance; and informs and engages community partners and stakeholders. The ECP focuses on identifying solutions to potential conflicts between base and community requirements, making the plan both an installation and community planning tool. It better quantifies encroachment impacts, engages multiple partners and stakeholders for effective implementation, and constitutes the initial step in a challenging, on-going process to sustain the mission and community relationships over time.

**Golder Associates Inc.** for introducing a new service to assist the power industry in meeting a major new regulation. Three senior staff members led a national initiative to provide new services based on a Clean Water Act Section 316b regulation. Promulgated in November 2004, the initiative required power companies to minimize the effects of their cooling water intake structures. Through the technical development of resources, strategic meetings with power utility senior staff, and focused business planning, Golder won contracts for 32 power plants in the past 18 months, capturing more than 5% of the national market. In Florida, Golder was awarded more than 75% of the work at power plants affected by Section 316b. In Michigan, Golder was awarded contracts at 12 power plants, along with additional contracts in Louisiana, Minnesota, Ohio, and North Carolina. Golder's 316(b) team has grown to ten project managers in the Midwest and Southeast. The current awards of over \$3 million reflect the initial phases of this compliance program. This business initiative has led to the development of new services in fisheries biology in the Midwest to serve clients on the Great Lakes, and in the Southeast to serve coastal clients in the Gulf of Mexico and along the Atlantic coast.

**Compass Environmental, Inc.** for completing several successful projects implementing its *in situ* stabilization (ISS) for soil and groundwater treatment. Delivered through the company's new Geotechnical Division, which

provides a full range of *in situ* soil and groundwater control and treatment techniques, Compass's ISS services have broadened its capabilities for clients. This has resulted in increased revenue, and allowed expansion into new geographic markets. In 2005, Compass treated 29,107 cubic yards of soil at a LNAPL-contaminated site via single auger mixing, using a crane-mounted auger to drill 4- to 20-foot depths and uniformly mix contaminated soils with cement additives. The additives encapsulated the contaminants in a structurally sound monolith, minimizing migration. At another site, Compass treated 7,052 cubic yards of soil and groundwater contaminants at a Marine Corps base. After drilling to 20-foot depths, Compass injected and mixed additives to create a homogenous monolith, stopping the migration of soil and groundwater contaminants. In yet another project, Compass performed pilot- and full-scale ISS operations at an Air Force Station in Florida. The large-diameter auger drilled from 10- to 55-foot depths to treat soil and groundwater contaminants using hot air and steam injection.

**Prairie Resource Consultants Inc.** for successfully organizing and leading an environmental civic leadership project that created a "public-private" partnership to preserve historical open space surrounding the Jewel/Osco Corp. headquarters in Barrington, Ill. Organized and teamed with government entities and multiple private organizations in a three-year-plus effort, Prairie Resource served as co-founder of a 501(c)(3) group. This was to facilitate environmental, public affairs, legal, and engineering work under a successful \$12.8-million referendum; to preserve a 55-acre oak-hardwood natural area with planned passive recreation, educational; and civic areas adjacent 600 acres of public open space with connections to a downtown area, library, schools, local neighborhoods comprising approximately 7,000 residents.

**Natural Logic** for pioneering innovative strategies to assist companies and communities in initiatives that allow them to go "beyond compliance" and develop sustainable operations. By offering an innovative "risk and fiduciary responsibility" lens to clients and the public, the company says that it is changing traditional perceptions of environmental management by "deeply linking" environment, health, and safety issues to company strategy, risk management, and the mandates laid out in corporate charters. In one project conducted over the past year, Natural Logic, in partnership with StopWaste.Org, GreenBiz.com, What's Working, and SeaChange, completed the initial 18-month design and development cycle for the Sustainable Business Rating System. Also, the Washington State Department of Ecology has engaged Natural Logic to benchmark the performance of pulp and paper mills, and to help explore approaches to streamlined, performance-based regulatory regimes. In addition, Natural Logic is advising a large pharmaceutical company on the development of its next-generation environmental management information system (EMIS); also it continues its long-standing work with the City of Berkeley, California, which continues to raise the bar on effective civic action.

## **IT MERIT AWARDS**

**Atkins Consultants Ltd.** for developing a tool to assist organizations with the implementation of the European Union's 2005 Landfill Directive. This directive has fundamental implications for every organization connected to the production, transport, and disposal of waste. Prices for hazardous waste disposal have increased by up to 500%, resulting in a critical business need for companies

to classify wastes correctly and avoid the risks associated with non-hazardous wastes being expensively mis-classified as hazardous. Currently, the mis-classification of hazardous or non-hazardous waste can result in substantial fines or prosecution or both. With these issues in mind, Atkins developed an on-line waste classification tool ([www.catwastesoil.co.uk](http://www.catwastesoil.co.uk)) that enables rapid first-pass classification for use in the U.K. construction and regeneration sectors. The tool is based on the latest pertinent regulatory guidance and has the capacity to classify up to 100 samples in minutes; manual processing would take days. The model uses standard chemical data, providing the user with a compound-by-compound assessment of the likelihood of a hazardous classification. It also provides information on the compounds' properties, thereby assisting in the assessment and selection of an appropriate soil treatment process where applicable.

**BEM Systems Inc.** for developing and deploying PAECETrak, a versatile, multi-functional software management program for land management, designed to support large-scale operations such as rail and highway right-of-way acquisitions. BEM originally developed PAECETrak (for Property Acquisition & Environmental Cost Estimate Tracking) while helping New Jersey Transit (NJT) to acquire parcels for the new Hudson-Bergen Light Rail Transit System right-of-way. Acquiring land for a right-of-way is a complex process that typically involves hundreds of parcels and thousands of stakeholders. PAECETrak gives transportation and other infrastructure agencies an affordable, web-based system that facilitates tracking for the entire property management process, from initial identification of a preferred alignment and parcel selection through appraisal, negotiation, acquisition, and land management. BEM customizes PAECETrak to meet each client's specific organizational, regulatory and decision-making needs. The system includes a powerful, versatile database and numerous special features to help streamline property acquisition and management. Features include an integrated, easy-to-use geographic information system (GIS) for web-based mapping and reporting; built-in document management to store and manage correspondence, appraisals, environmental data, and other key documents; and automated push-button generation of custom reports and standardized documents such as letters, schedules, budgets and status reports, among many others.

**AMEC Earth & Environmental Inc.** for developing market leadership in the use of space-based Interferometric Synthetic Aperture Radar (InSAR) technology to locate and predict land subsidence and earth fissure threats to dams, utilities, mines, highways and other infrastructures. InSAR utilizes satellite data acquired at two different times along orbits of a similar trajectory to detect minute changes in the ground surface. Under a technology-demonstration contract with the European Space Agency and through the development of centers of excellence in Western Canada and the Southwestern United States, AMEC has assisted clients worldwide. AMEC's InSAR projects include Palabora Mine in South Africa, McMicken Dam near Phoenix, Ariz., a pipeline corridor in British Columbia, Hayden Hill Mine in California, an underground utility pipeline network in Arizona, railways in Germany for Die Bahn and in the United Kingdom for Network Rail, among others. AMEC is also using InSAR as part of an early-warning system for landslides at Turtle Mountain in Alberta, Canada. InSAR does not depend on the deployment of crews into the field and therefore is highly valuable for acquiring information at remote sites or areas considered unsafe for personnel to enter.

## **M&A MERIT AWARDS**

**AECOM** for acquiring not only ENSR but **EDAW Inc.**, a San Francisco-based specialist in urban planning and design, landscape architecture, and cultural and environmental services. In acquiring EDAW, AECOM added approximately 1,200 new professionals and \$150 million in annual revenues, as well as new strength in front-end consulting and planning. AECOM looks forward to leveraging the natural synergy between its transportation and facilities infrastructure practices and EDAW's urban regeneration work. Specializing in environmental studies, permitting, portfolio management and business processes, ENSR brings on board a global workforce of 1,600 people and yearly sales totaling about \$200 million. It adds a strong private-sector practice, particularly in the energy and industrial sectors, along with a complementary global operation. With these acquisitions, AECOM now has approximately 22,000 employees worldwide and \$2.5 billion in annual revenues.

**ARCADIS NV**, the Netherlands-based infrastructure giant, for several acquisitions that dramatically expanded its revenues and global reach. Most notably, ARCADIS acquired **Blasland, Bouck & Lee (BBL)** in September, thereby adding 900 people at 42 offices in the United States. BBL projected at the time that its gross revenues would reach \$170 million for 2005. Earlier in the year, ARCADIS acquired U.K.-based **AYH plc**, a 340-employee project management and consulting firm serving the lifestyle (hotels, sports), corporate accommodations (offices), commercial development, technology and industrial facilities, and public facility sectors. ARCADIS also acquired **Greystone Environmental Consultants** and its affiliated companies, which provide diversified environmental consulting services from offices in Colorado, California, Arizona, Wyoming and Alberta, Canada. Greystone employs about 130 people.

**Watts Water Technologies Inc.** for numerous acquisitions designed to expand both its geographic reach and its product offerings across a broad range of water handling and treatment equipment categories. Significant acquisitions during 2005 have included the following: **HF Scientific Inc.**, a \$5-million maker of a line of instruments, test kits and chemical reagents used for monitoring water quality; the water softening assets of **Alamo Water Refiners Inc.**, representing \$13 million in additional revenues; **Donald E. Savard Co.**, a \$6-million connector manufacturer; China-based **Changsha Valve Works**, a maker of large-diameter hydraulic-actuated butterfly valves for thermo-power and hydro-power plants, water distribution projects and water works projects; **Flexflow Tubing LLP**, a Canadian maker of PEX tubing; and the FEBCO, Mueller Steam Specialty and POLYJET assets from **SPX Corp.**, encompassing backflow prevention valves, large-diameter pipeline strainers and check valves, and customized sleeve valve representing \$57 million in additional revenues. At the end of the year, Watts also announced the signing of a definitive agreement to acquire the outstanding stock of **Dormont Manufacturing Co.**, a maker of flexible stainless-steel connectors generating annual revenues of about \$56.5 million.

**Golder Associates Inc.** for three acquisitions that expanded its service capability across several disciplines: **Conor Pacific/EFW**, an environmental consulting company specializing in geologic and hydrogeologic work at solid waste and hazardous waste disposal sites, and a provider of services in contaminant hydrogeology, risk assessment, and remediation to a broad base of

clients in the petroleum and industrial sectors; **Resource Technologies Group Inc.** (RTG), a Denver-based consulting firm specializing in water treatment; and **BRIDGES to Sustainability**, a consulting firm specializing in providing sustainability and corporate social responsibility services to the private sector.