

NEWS droplets



MARCH 2011

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e-Newsletter for Water & Wastewater Professionals

INDIA WATER EXPO 2011

Exhibition & Conference on Water & Wastewater Management

28-30 April, 2011

Chennai Trade Centre, Chennai



News

India: New Water Policy By 2011

Nine years after the last document, work is on to put in shape a new water policy that will by the end of the year not just lay down a framework for the allocation of water but also take into account the impact of climate change and the remedial steps that need to be taken. The National Water Policy, which lays down the framework for the government's plan of action and covers various aspects like allocation of water, groundwater conservation, rainwater harvesting and interlinking of rivers, was first formulated in 1987. It was reviewed in 2002. Another review is now under way. One immediate factor that hastened review of the National Water Policy 2002 is the issue of climate change. The review will assess the possible impact of climate change on water resources and the remedial steps required. A purpose of the policy review was to identify additional data for a study that looked at the likely impact of climate change in quantitative terms. It has been noted that the likely impact of climate change will be intensification of extreme events such as increase in peak floods in a particular area and reduction in number of rainy days in some other area. The water policy review is also aimed at ensuring basin level management strategies to deal with variability in rainfall and rain flows due to climate change. The 2002 National Water Policy envisaged that states would form their own water policies. The policy said that water charges for various uses should be fixed so as to cover at least the operation and maintenance charges initially and a part of the capital costs subsequently. It also suggested that water be made available to deficient areas by transferring from one river basin to another after taking into account the requirements of areas. The challenges in the water sector include depleting resources, reducing per capita availability of water, deterioration in water quality, over-exploitation of ground water resources, time and cost overruns in completion of irrigation projects and poor

maintenance of existing facilities.

India: Japan Will Extend Rs 2,557 Crore Aid

Japan is to extend an aid of Rs. 2,557 crore to India for three projects through its Overseas Development Assistance (ODA) window. The projects pertain to cleaning the river Yamuna in the national capital Delhi, crop diversification promotion in Himachal Pradesh and biodiversity conservation and greening in Tamil Nadu. Recently, notes were exchanged in this regard between DEA (Department of Economic Affairs) and Ambassador of Japan. Under the Yamuna action plan project, the aid is to be utilized to improve the water quality of by augmenting sewage treatment capacity through renovation, rehabilitation and replacement of the sewerage system. As for the Tamil Nadu biodiversity conservation and greening project, the soft loan has been extended to improve ecosystem and tree plantation outside the recorded forest areas while the assistance for the Himachal Pradesh project is to promote sustainable crop diversification in the state by development and rehabilitation of minor irrigation facilities and access farm roads. The current aid quantum is part of the 2010 Japan International Cooperation Agency (JICA) ODA loan package.

Maharashtra: Needs Rs 77,000 Crore for Irrigation Projects

Maharashtra government will need a whopping Rs 77,000 crore to complete ongoing 1,092 irrigation projects in the state. However, due to the limitations in the mobilisation of funds from budgetary allocation alone, the government is exploring various options, including long-term debt from the banks and financial institutions, public and private placement of bonds and private sector investment. So far, the government and its various undertakings have spent Rs 50,063 crore on these projects. The government is resolved to complete these projects. Cutting across party lines, legislators had pressed demand for raising Rs 30,000 crore at one go to complete various irrigation projects. Of the 1,092 projects, construction is in progress on 243 projects in Krishna Valley, 332 in Vidarbha, 122 in Tapi Valley, 80 in Konkan and 315 in Godavari River Valley. Maharashtra Economic Development Council (MEDC), which is a premier research institution in the state, has suggested there was a need for increase in irrigation outlay to 30% from the present level of 20% keeping escalation factor in view so that more funds become available for completing incomplete projects. Moreover, MEDC in its report said despite increase in the budgetary provision to 30% to complete incomplete irrigation projects, the government would have to tap private sector investment in the water resources sector. Investors need to have the confidence that they will get due returns on their investment. International experience in the area is limited and only in one project each in Brazil and Morocco has been tried. The state government had prepared guidelines in 2003 for private investment in water resources projects but with the setting up of the Maharashtra Water Resources Regulatory Authority (MWRRA) in 2005 in the context of the State Water Policy announced in 2003, it became apparent these guidelines need a review. The MWRRA Act has placed considerable responsibility on the authority in the areas of tariff and entitlements.

Bihar: Sanctions Rs 3,000 Crore For Sewage Plants

Rs 3,000 crore would be spent for setting up sewage treatment plants in 19 Bihar towns in the next five to six years under National Ganga River Basin Authority (NGRBA). Patna would have the biggest plant for which about Rs 1,500 crore would be spent. Besides, the Centre has sanctioned Rs 450 crore for four towns in Bihar for work under NGRBA and most of the amount would be earmarked for setting up the sewage treatment plants. The Centre has sought World Bank's support for 19 other States for having sewage treatment plants. NGRBA has launched the Mission Clean Ganga in Uttar Pradesh, Uttarakhand, West Bengal and Bihar which would ensure development of areas on the riverbank and set up sewage treatment plants. Bihar government had submitted a project of Rs 150 crore for the development of the Ganga river front in Patna and the Centre had raised certain queries. Initially, the river front in a stretch of five to six km would be developed. Efforts are on to preserve the endangered Ganga river dolphins, which are threatened by pollution. NGRBA with aid from World Bank would implement the action plan under Prof R K Sinha of Patna University to protect the dolphins.

West Bengal: ADB Approves Rs 1300 Crore For Kolkata

The Asian Development Bank (ADB) will provide a loan of Rs.1,300 crore to the Kolkata Municipal Corporation (KMC) to undertake different projects. The ADB has sanctioned a loan of Rs. 1,300 crore to the KMC to carry out sewage treatment, water supply and solid waste management projects. The Ganga beautification project will be carried out from Garden Reach to Corripore in the city, adding an MoU for this was signed among KMC, Kolkata Port Trust and the railways last year. The project area will be of more than 200 acres where the area will be used for commercial and residential purpose.

Uttar Pradesh: Centre Clears Rs 500 Crore Projects

The ongoing Ganga clean-up programme has got boost with the Centre clearing its four important projects, pending for a long time. These projects are estimated to cost around Rs 500 crore and will be funded on the basis of 70:30 ratio by the Centre and the state respectively. A decision to this effect was taken by the steering committee of the Ganga Basin Authority (GBA) held in New Delhi. The four projects cleared by the Centre are of Rs 279.91 crore for Moradabad, Rs 42.66 crore for Kannauj, Rs 142 crore for Allahabad and Rs 46.51 crore for Garhmukteswar. Conceived and formulated with a prospective plan for the next 20 years by the state government, these projects were pending for the last one year. The projects sanctioned envisaged strengthening of sewer networks (SN), sewage pumping stations (SPS) and sewage treatment plants (STP). By bagging these projects, UP has become the foremost among four other prime stakeholding states - Uttarakhand, Bihar, Jharkhand and West Bengal, in the Ganga Basin Authority projects. All these projects, would bridge the critical gap in the need for enhanced capacity for STPs and give a boost to the initiatives taken by the state. Varanasi had STP with capacity of 89 MLD as against the discharge of 228 MLD and Allahabad had a sewage treating capacity of 102 MLD as against its discharge of 292 MLD. Likewise, Kanpur can treat only 162 MLD sewage as against total production of 409 MLD. The remaining goes directly into the

river. Apart from these, there are 23 other big and small cities responsible for contaminating the Ganga.

Goa: Rs 371 Crore Water & Sewerage Projects Get Nod

The Corporation of the City of Panaji (CCP) has approved detailed project reports for a water supply network and sewerage network worth Rs 371 crore for the capital city. The water supply project includes construction of a 50 MLD water treatment plant, improvement in the current distribution system and a storage reservoir. The project will also see replacement of existing water meters by an auto meter reading (AMR) system, replacement of all existing service connections and providing flow control valves where required. The water supply project will cost Rs 174 crore, while the sewerage project will cost Rs 197 crore. The project envisages the creation of a Global Information System (GIS)-based online consumer grievance redressal module with all necessary software for development and installation. It will also see the development of online bill payment systems and creation of online consumer billing module with bank payment and web hosting. The other corporators were skeptical if the CCP would get the project through. They voiced their opposition together raising questions that if the CCP had failed to get a single rupee during the last five years, there was no guarantee that it could achieve the same with a month to go for the elections. It is learnt that JNNURM projects worth Rs 36 crore are still pending with the Centre for sanction. The opposition corporators cried hoarse as to how the CCP had issued tenders worth over 2cr, when it did not have the required funds in its coffers.

Orissa: To Implement Rs 305 Crore Irrigation Project

Exactly eight years after the ministry of environment and forest accorded stage-I forest clearance to Ong Irrigation Project, the Orissa government has decided to go ahead with the major project to be implemented at an estimated cost of Rs. 305 crore. Notification for land acquisition for the Ong project has already been made. The state government has also made budgetary allocation for the purpose. The project would irrigate about 30,000 hectare of land in Bargarh district. The drought prone areas in Baragarah district would get irrigation facilities after completion of the project. While Rs 10 crore was allocated for the project in the current fiscal, Rs 15 crore could be sanctioned in 2011-12.

Sikkim: Rs 100 Crore For Drinking Water Supply

Sikkim chief minister Pawan Chamling announced that Rs100 crore has been sanctioned to establish a proper and dependable drinking water supply line for Namchi, the district headquarters town of South Sikkim. A sum of Rs100 crore has been sanctioned to establish a water supply line for Namchi and the concerned departments has been directed to do the needful. Chamling inaugurated a multi-level car parking cum shopping plaza and a District Library cum Museum at Upper Singithang in Namchi. Plans were underway to set up Kisan Bazaars in all the four districts of the state and rural marketing centers, waste management, open theaters at the bigger bazaars and roadside amenities every 15km. The parking cum shopping plaza was constructed at a cost of Rs18.3 crore while Rs14 crore was spend in the

construction of the District Library cum Museum.

Punjab: Rs 64 Crore Project For Rainwater Conservation

The Centre has announced a Rs 64 crore pilot project for conservation of rain water, soil, vegetation and livelihood for seven districts of Punjab. The pilot project has been sanctioned by the Union Government for seven districts which include Tarn Taran, Jalandhar, Ludhina and Faridkot. In addition, watershed management programmes have also been sanctioned for conservation of rain water, soil, vegetation and livelihood in Kandi area of Hoshiarpur, Ropar, Gurdaspur and Nawan Shahar. The Rs 64 crore project will have 90% funding from the Centre while the rest will be shared by the State. Based upon consideration of views obtained from farmers, panchayat members and district and state officials, who are the primary stakeholders, the programme could be extended to the entire state subsequently.

Gujarat: May Replicate Lakshadweep Potable Water Project

With demand for potable water on the rise, the Gujarat state government may replicate the Lakshadweep water project, in which seawater is desalinated and used for drinking purposes. Gujarat has the longest coastline in the country and there is growing pressure on water resources due to rising demand. The state will check whether the project can be implemented in the state on a bigger scale. The pilot desalination project in Lakshadweep, has enabled supply of clean drinking water to 10,000 residents of Kavaratti. The project has been undertaken by the National Institute of Ocean Technology, Chennai, an autonomous body under the Ministry of Earth Sciences. The Low Temperature Thermal Desalination plant desalinates one lakh litres of seawater per day, which means a supply of 10 litres of potable water for each resident of Kavaratti. The desalination cost, at present, worked out to be around 10-12 paise per litre. The cost could be brought down significantly if the project was undertaken on a bigger scale. The project is also being replicated in some of the other coastal states of the country, such as Tamil Nadu.

China: Sanctions \$301 Billion On Water Projects

China will invest 2 trillion yuan (\$303.8 billion) over the next five years to build water-related infrastructure projects and improve rural drinking water quality. In 2011, Beijing will invest more than 20 billion yuan to push forward construction of key projects. The investment will also go into projects to provide 60 million more people with access to safe drinking water in rural areas, 77 percent of rural people will have access to safe drinking water by the end of the year. In China, authorities worry that thousands of reservoirs in need of repair could threaten nearby villagers with floods should the reservoirs burst their banks. Increasing industrial waste and sewage discharge, as well as heavy use of pesticides and fertilizer, has resulted in drinking water being contaminated in many parts of the countryside.

INDUSTRY

VA Tech Wabag: JV Bags 170 Crore Order From Oman

VA Tech Wabag Limited, a leading global player in water and waste water

management in joint venture with Nagarjuna Construction Company International LLC, bagged an order for a value of around Rs.170 crores from Oman based company-Majis Industrial Services S.A.O.C. With this the consolidated order backlog would be around Rs3300 crores plus. WABAG is scheduled to commence construction of Sea Water Desalination Plant on the basis of RO technology for Sohar Industrial Area, Oman from January 2011 and is expected to be completed in around 20 months time. The scope of the project includes the design, engineering, construction, installation and start-up of the Sea water Desalination Plant which will be followed by Operation and Maintenance. The plant will have a capacity of 4 x 4000 m³ per day will provide process water for Industrial users.

Aquatech & AECOM: Sign Agreement For Biological WWT

AECOM's design-build business in the UK has signed an exclusive agreement with Aquatech Systems Asia, for its biological treatment technology for industrial and municipal applications in the Indian market. Aquatech Systems Asia, based in Pune, India, is a wholly owned subsidiary of Aquatech International, USA. "Following extensive screening of the market for the most efficient and competitive Sequence Batch Reactor (SBR) technology, we have identified that AECOM's Cyclic Activated Sludge System fits our needs," commented Devesh Sharma, Aquatech's managing director. "We are pleased to be working with AECOM's design-build business. With this advanced SBR technology, we will enhance our position in the Indian wastewater treatment market." Cyclic Activated Sludge System (CASS), an advanced Sequencing Batch Reactor (SBR) process, is a combination of biological selector and variable volume reactor process. "We are very excited about Aquatech's capabilities and the enormous market potential for our CASS technology in India" said Malcolm Watchorn, programme manager for AECOM design-build. "Now we have found the right local partner we are looking forward to pioneering this technology together in India". CASS SBR technology has successfully been applied in a large number of varied industrial and municipal plants round the globe. Some of these references have capacities in excess of 150 million liters per day and have innovative constructional features. These projects underscore the superiority of this process in an impressive manner. The two partners have already secured a major job with Aquatech recently being awarded the integrated waste treatment and recycle-reuse project at Mumbai International Airport, which will feature CASS technology.

Jaeger Envirotech: Plans To Foray Into India

Jaeger Envirotech, a German firm into manufacturing of air aeration products for waste water management, will enter into the \$1 billion Indian market through partners and distributors. Jaeger Envirotech had been on the lookout for distributors in S-E Asia and after an in-depth study, it was unanimously decided that India would be best suited. The company would rope in partners who have a good distribution network among manufacturing plants across sector for waste water management in all major Indian markets. Following the appointment of distributors, the company would launch its entire product range in India sourcing directly from its manufacturing plant in Germany. The water and waste water treatment equipment market is currently pegged at \$one billion and growing steadily by over 20 percent. The market is dominated by a

large base of small and medium enterprises. The \$1 billion market is divided equally between water provisioning, municipal water treatment and industrial water treatment. Indian water treatment market is moving from chemical treatment and demineralization technologies to greater use of membrane technology.

Hollingsworth & Vose: Forms Filter Media JV In India

Hollingsworth & Vose Co has set up a joint venture with India's Nath Group with plans to build a new mill near Aurangabad in Maharashtra. Hollingsworth & Vose will be the joint venture's majority owner and managing partner. Warehousing facilities will also be set up during the planning and construction period to serve customers currently importing Hollingsworth & Vose products. The new mill will produce water and solvent based engine filter media, as well as selected products for HVAC filtration and battery separator applications. Hollingsworth & Vose CEO Val Hollingsworth said: "H&V has been active building our relationships and presence in India for many years. We are pleased to be taking this next step forward to better serve our customers in India and the surrounding region." Nath Group chairman Nandkishor Kagliwal, added: "We look forward to close collaboration with H&V as we work together to build this company."

Mahindra: Eyes Micro Irrigation After Acquiring EPC

Mahindra & Mahindra's farm equipment segment (FES) is eyeing the business of micro irrigation through the acquisition of EPC Industries Ltd. Micro Irrigation Systems (MIS), divided into drip and sprinkler irrigation, is a market growing at 40% annually. The size of this market in India is pegged at Rs. 2,700-3,000 crore, nearly three-fourths of which is for drip irrigation. Drip irrigation, also known as trickle irrigation, helps save water and fertiliser by directing them in a trickle to the roots of plants. Sprinkler irrigation is used in spraying water to irrigate the soil surface over a particular area. At present, Jain Irrigation Systems (JISL) is the biggest player that controls over one-third of the market, followed by Israel's Netafim. It was last year that M&M decided to enter this space and opted against an organic route. It took the company six months to close the acquisition process. EPC is a 30-year-old company based in Nashik. It has operations primarily in Gujarat and Maharashtra. It lacks a large manufacturing capacity (current annual capacity is 12,000 tonnes) and has limited working capital to support. Its distribution network consists of 600 dealers in a select number of states. M&M brings to the table sizeable investment in the working capital, expansion of the distribution network and technology upgradation. Over time, the number of dealers is expected to cross 1,000.

ERI: Completes Shipment To World's Largest Desal Plant

Energy Recovery Inc has completed delivery of 25 ERI TurboCharger energy recovery devices for the largest seawater reverse osmosis (SWRO) desalination plant in the world. Energy Recovery Inc, through its acquisition of Pump Engineering, has supplied the AT-7200 TurboChargers to Hyflux Ltd., the company that has designed, built and will operate the plant located in Magtaa in northwestern Algeria. The facility will be producing 500,000 m³/day of clean, potable water. The ERI AT-7200 TurboCharger line employs the most advanced computational fluid dynamic turbo

machine software (CFX) and five-axis machining technology used in the desalination industry today. The devices make capable powerful energy efficiency, ease of operation, simplicity and reliability. Unmatched in its class for delivering high quality and availability, the ERI line of TurboChargers for the Magtaa Desalination Plant will help aid the severe water shortages in the region by supplying much needed clean water. ERI's partnership with Hyflux and their involvement in the success of the landmark SWRO desalination facility in Magtaa underscores the Company's technical innovation and market leadership in providing the most advanced energy recovery devices for large 'mega-plants' such as this one. ERI's energy recovery devices, which include the TurboChargers and the PX™ Pressure Exchanger (PX™) devices, operate at up to the highest efficiency of any products in their class. These technologies reduce the energy consumption of SWRO systems significantly, making desalination a cost-effective solution for clean water supply. ERI devices also reduce the carbon footprint of desalination, saving more than 970 MW of energy and reducing CO2 emissions by more than 5.2 million tons per year worldwide. More than 10,000 ERI devices are currently deployed or under contract to be installed at desalination plants around the globe.

ABS: Supplies Pumps For Vietnam's Largest Stormwater Control Project

The Nhieu Loc Thi Nghe Canal Flood Control Project is in total worth 11.3 million Euros. Fifty percent of the 2095 square kilometer HCM City is vulnerable to flooding. A 58 meter wide sluice gate together with a pumping station system is expected to protect more than 600 hectares of low lying areas in seven districts from flooding during high tides along the Saigon River. The project is scheduled for completion in December 2012. The 12 pole ABS VUP units at 275kW is the largest size pump range manufactured by the factory in Germany. The good relationship between the End User and the Consultant was also key in securing the major project in the view of strong competition. The Deputy Minister of Agriculture and Rural Development Hoang Van Thang and Deputy chairman of the HCM city People's Committee Nguyen Thanh Tai, held the ground breaking ceremony for the Nhieu Loc Thi Nghe Canal Flood Control Project.

Doosan: To Build Largest MED Desalination Plant

The Saudi Saline Water Conversion Corporation has awarded a contract to Doosan Heavy Industries & Construction to co build what has been touted as the world's largest single multi effect distillation desalination unit. The USD 124 million agreement for the Phase 2 plant at Yanbu, 350 kilometers north of Jeddah was announced. The unit will have a capacity of 15 MIGD almost twice as large as the 8.5 MIGD Fujairah unit in the UAE. It aims to supply potable water to 150,000 to 200,000 people once it is completed by August 2012. Under the agreement, Doosan will carry out engineering, fabrication, installation, commissioning and all other related scopes of work on an engineering, procurement and construction basis. SWCC and Doosan will collaborate on advanced technology development through exchange of know how and technology sharing. The project order displays the market's recognition of the MED market which is growing due to low energy-consumption trends. The company is also building the world's largest single unit multi stage flash

evaporator for the Ras Azzour facility which it won last year. Doosan hopes to lead the future MED desalination plant market in partnership with SWCC. The MED market is growing due to "low energy consumption trends.

ABB: Will Provide Fresh Drinking Water In Algeria

ABB is providing a complete power, automation and mechanical solution for a large water transfer project in a remote and rainless region of the Sahara Desert. The project will pump and store water from deep underground, ready for transfer to a city of 115,000 people that is 750 kilometers away. Currently under construction and scheduled for completion in 2011, the Réseau de Collecte water transfer scheme in Algeria is one of the biggest water projects ever undertaken in the Sahara region one of the hottest and driest places on Earth, where temperatures can reach 50 degrees Celsius. About 90% of Algeria's 35 million population lives on the northern coastal belt close to the Mediterranean Sea, but several million live inland in oasis towns and cities, where rainfall is rare and water resources are limited.

GE: Completes \$3 Billion Acquisition Of Dresser Inc

GE has successfully closed its \$3 billion acquisition of Dresser, Inc., a global energy infrastructure technology and service provider, from funds managed by Riverstone Holdings LLC and First Reserve Corporation, Dresser management and its other stockholders. The move significantly expands GE's offerings for energy and industrial customers worldwide and is the latest in a series of acquisitions over the last 10 years that have transformed GE's global energy portfolio. Dresser, based in Addison, Texas, has 6,300 employees worldwide and delivers compression, flow technology, measurement and distribution infrastructure and services to customers in more than 150 countries. The Dresser businesses will be integrated into GE's Energy Services and Power & Water business units. Dresser has a global franchise with 60 percent of its revenues outside of North America. The company is a leader in providing highly engineered infrastructure products and services for the energy industry. Its portfolio includes valves, actuators, meters, switches, regulators, piping products, natural gas-fueled engines for compression, retail fuel dispensers and associated retail point-of-sale systems and air and gas handling equipment. The company has signed an agreement to acquire privately-held Lineage Power Holdings, Inc., from The Gores Group. The deal will open the door for GE Energy technology to be deployed in the \$20 billion per year power conversion space. In addition, GE announced its intention to make an offer for 100 percent of Wellstream Holdings plc, a leading engineer and manufacturer of high-quality flexible pipeline products for oil and gas transportation in the subsea production industry. Finally, GE purchased the assets of Calnetix Power Solutions, which expands GE's capabilities to recover waste heat from industrial processes for electricity generation and also complements GE's gas engine business.

Siemens: To Increase Flow Capacity At WWTP In USA

The Metropolitan Sewer District of Greater Cincinnati (Ohio, USA) will be installing four Forty-X disc filters from Siemens Water Technologies at its Sycamore Creek Wastewater Treatment Plant. Part of a wastewater treatment improvement project, the

filters will allow the plant to increase design flow capacity from 6 to 9 mgd (22,712 to 34,069 m³/d), with a peak flow capacity of 18 mgd (68,137 m³/d). The project also changes the plant's process from conventional activated sludge treatment to advanced biological phosphorus removal. The Siemens Forty-X disc filter allows a high flow capacity with a small footprint. The disc filters will replace the Sycamore Creek plant's current sand filtration system, which has reached its usefulness due to increased flow volumes. Three of the disc filters will be operational, with one remaining in stand-by mode. The Forty-X disc filters' small footprint and versatile hydraulic capabilities will allow them to be easily retrofitted into the sand filters' existing concrete tankage, using only four of the eight filter concrete basins to meet the increased plant capacity. The Forty-X disc filter's pleated filter media panel design provides 40% more filtration area, compared to flat panel designs. The inside-out filtration design offers many distinct advantages over the outside-in filtration technology. For example, all mechanical and functional hardware as well as the filtration panels are accessible from the top of the filter without draining the filter tank. The filter panel's spoke (housing) design discourages floatable materials from catching and impeding water flow through the filter. Additionally, for safety and convenience, permanently mounted sliding covers allow operators easy access to all the filter components as well as keeping blowing debris out of the tank and deterring algae growth within the filter tank.

Hyflux: To Develop Wastewater Treatment Plant In China

Hyflux Ltd has been awarded a concession by the People's Government of Zunyi City pursuant to an open bid to develop a wastewater treatment plant to treat up 150,000m³ of domestic wastewater per day for Zunyi City in north Guizhou province, China ("Project"). Hyflux, through its subsidiary in China, will develop the project on a Build-Own-Transfer (BOT) arrangement. Besides undertaking the design and engineering, procurement and construction works, Hyflux will operate and maintain the plant on a 30-year concession. The Project is scheduled to complete construction in the second half of 2012. The project's investment cost is estimated at approximately RMB 200 million. Hyflux will fund the investment through internal resources. The plant will be located in southern Zunyi City. The two main districts of Zunyi City have a combined population of about 800,000 people, and the whole region has a population of approximately seven million. China remains a key market for Hyflux. China's water sector faces the significant challenges of pollution and water shortage and Hyflux will continue to pursue suitable investment opportunities in China

Toray: Wins RO Membrane Orders For Chinese Desalination Plants

Toray Industries Inc has received orders to supply reverse osmosis (RO) membranes to seawater desalination plants in Qingdao (Shandong) and Caofeidian (Tangshan, Hebei) in China. Scheduled to be operational within the year, the two plants together will produce a total of 150,000m³ of water per day. The Qingdao plant, with a water production capacity of 100,000m³ per day is the largest desalination plant in China and is the country's first plant fully geared for producing drinking water. Qingdao Desalination Plant (Qingdao, Shandong) has production capacity of 100,000 m³/day

(26.4 million gallon per day), and is scheduled to start operations in 2011. The largest RO membrane desalination plant in China, it is currently under construction by Befesa of Spain jointly with Qingdao City in Jiaozhou Bay. The water produced at this plant will be used to provide drinking water to the 7.5 million residents of Qingdao City, who are suffering from water shortage. This is expected to be the first time desalinated water will be fully used as drinking water in China. Caofeidian Desalination Plant (Tangshan, Hebei) has production capacity of 50,000 m³/day (13.2 million gallon per day), and is scheduled to start operations in 2011. The quality of water to be produced at the plant will be at a level satisfying the national drinking water standards and it will be mainly used as industrial water at the Caofeidian industrial development zone and partly as drinking water. Water usage in China is growing at an exponential rate, as the country's industrialization gathers pace fueled by the rapid economic growth. Water supply shortage is acute in urban areas in particular where water demand is drastically increasing due to population growth, while in the northern part of the country the shortage is caused by droughts. Under such circumstances, demand for seawater desalination and reclamation of sewage and wastewater using water treatment membranes has been growing in China and the RO membrane market in the country has been expanding at a rate exceeding 20% a year. Toray is offering its high-performance RO membranes, based on its proprietary technologies, widely in the Chinese market and its products have been adopted by water treatment plants including the wastewater reclamation plant at Ningxia Coal Chemical (78,000 m³/day) and the sewage and wastewater reclamation plant at Tianjin Economic-Technological Development Area (TEDA, 30,000 m³/day).

Suez: Awarded Contract For Services In Australia

The Government of the State of South Australia has awarded SUEZ ENVIRONNEMENT and its subsidiary, Degrémont, in partnership with Transfield Services, a contract, generating a global revenue of 840 million euros, to supply water and waste water services to 1.1 million inhabitants in the city of Adelaide and its surrounding area. Adelaide is the fifth-largest city in the country. The contract will operate as an alliance contract¹, a public-private partnership which brings together SA Water, a State government enterprise, and a joint-venture between SUEZ ENVIRONNEMENT and its subsidiary Degrémont (holding 50%), and Transfield Services (50%). This contract represents a total of revenue of 420 million euros for SUEZ ENVIRONNEMENT. The Group and its partner will oversee the entire water cycle, which includes operating and maintaining six water treatment plants, six purification plants, the 16,000-km water network, as well as recycled water schemes and minor capital works. The contract will last for a period of ten years and includes an optional six-year extension. This first contract to operate and maintain water services in Australia represents a milestone for SUEZ ENVIRONNEMENT. Following on from the desalination plant in Melbourne, this new contract strengthens their position in the Australian water market and is in line with our long-term partnership strategy with the country's authorities. The Government of South Australia's trust demonstrates the Group's ability to offer expertise adapted to the State's water issues and to deliver on its commitments to transparency and efficient in these ambitious projects, in a true spirit of partnership. The contract will start July

2011. SUEZ ENVIRONNEMENT is one the leading groups in the water and waste sector and is involved in major projects such as the desalination plant in Melbourne, which is the largest plant of its kind in the southern hemisphere, as well as the most important public private partnership contract in the desalination sector. Five percent of the group's turnover is now generated in Australia, a sector currently recording a significant growth as a result of the environmental challenges involved.

Veolia Water: Awarded Contract To Manage Metering Services

Thames Water has awarded Vennsys Limited, a consortium led by Veolia Water UK, to manage all its metering services which include meter installation, meter reading and the implementation of automatic meter reading by radio communication. This 10-year (January 2011 to March 2020) contract awarded to Vennsys represents a total estimated revenue of around £240 million (€280 million euros). Vennsys will employ more than 200 people and is a joint-venture between Veolia Water's UK subsidiary Veolia Water UK (51%), H2O Water Services (34%) and Mace (15%). This contract is part of Veolia Water's continued strategy of growth in the United Kingdom, based on sustainable development and the use of the best technological innovations to protect natural resources. Twenty-eight percent of the 3.3 million properties supplied by Thames Water in the London region currently have meters. The company aims to increase this to 60% by 2020, with approximately 100,000 meters installed per year.

Emerson: Opens First Flow Calibration & Service Center

Emerson Process Management has opened a new Middle East Flow Service Center in Abu Dhabi. Representing an investment of \$3 million, this new center serves customers in the Middle East and Africa with the first, in-region VSL Calibration and Measurement Capability (CMC)-certified calibration facility. "The opening of Emerson's Middle East Flow Service Center represents Emerson's continued commitment to the region, while delivering much needed, local and certified services. Never before has an internationally-certified calibration facility been available to customers, locally, to eliminate lead time issues and reduce costs for flowmeter calibration. Previously, Middle Eastern and African customers faced limited options and high operational hurdles to validate flow device calibrations or provide required third party documentation associated with ISO9000 Quality or regulatory requirements. The result was often process shutdowns and delays while flowmeters were physically removed from operation and shipped overseas for calibration, service or performance diagnostics. For all customers, the new, local service from the Middle East Flow Service Center, Abu Dhabi means minimal process downtime and substantially reduced costs coupled with the quality assurance that calibrations are done with an internationally-certified standard. Emerson's Middle East Flow Service Center in Abu Dhabi operates using ISO 9001:2008 certified processes and is committed to ongoing process improvements to ensure superior quality. Metrological traceability and certification processes ensure reliable measurements in laboratories and facilities around the world. VSL, the National Metrology Institute of the Netherlands, has certified the calibration equipment's Calibration and Measurement Capability (CMC) with an uncertainty of 0.03%. This CMC reflects the traceability, technical competence and capability of the calibration equipment available at the new

Emerson facility. In addition to Emerson's flowmeter calibration, the Middle East Flow Service Center, Abu Dhabi offers a broad range of services including flowmeter diagnostics and evaluations, witness inspection services and documentation to establish the quality of calibration and testing, meter repair, and factory-designed training programs on-site or at the customer's facility.

Doosan: To Build MSF Units In Vietnam

Doosan Heavy Industries would be building three of the eight desalination evaporators required for the giant Saudi Arabian Ras Azzour desalination plant at its Vietnam subsidiary, Doosan Vina. Work on the three 91,000 m³/d multi-stage flash (MSF) units will begin shortly. Doosan Vina shipped its first MSF unit to the United Arab Emirates in 2009. The Ras Azzour project, for the Saline Water Conversion Corporation, will be a hybrid facility with 160 MIGD (727,000 m³/d) evaporation and 67.5 MIGD (307,000 m³/d) reverse-osmosis capacity. It will supply water from the Gulf to 3.5 million people in the Riyadh area. Doosan will carry out design, manufacturing, installation and commissioning of the entire process, which is scheduled to be completed by the end of 2014.

UV Company Trojan: To Supply Australia's Largest UV Disinfection System

Trojan Technologies and exclusive distributor in Australia, Aquatec-Maxcon PTY Ltd., have been selected by the Eastern Tertiary Alliance to provide the ultraviolet (UV) disinfection system for the Eastern Treatment Plant Tertiary Upgrade Project in Melbourne, Australia. Trojan will be supplying seven closed vessel (in-pipe) UV reactors equipped with revolutionary TrojanUV Solo Lamp™ Technology. The UV system will disinfect average and peak tertiary treated effluent flows of 380 and 700 million liters (101 and 187 million gallons) per day respectively, making it the largest UV installation in Australia. The objective of the upgrade project is to significantly improve the quality of treated water at the plant. This will further reduce the impact associated with the current discharge quality on the receiving marine environment Boags Rocks, near Gunnamatta Beach, as well as produce a high quality recycled water resource which can be used for a broader range of non-potable recycling applications. These include residential third-pipe schemes (e.g. toilet flushing, garden watering, car washing), watering public gardens, open areas and sports grounds, and irrigating food crops.

ITT Corp: Plan To Separate Into Three Independent Cos

ITT Corporation's board of directors has unanimously approved a plan to separate the company's businesses into three distinct, publicly traded companies. Under the plan, ITT would execute tax-free spinoffs to shareholders of its water-related businesses and its Defense & Information Solutions segment. Following completion of the spinoff, a highly attractive, standalone water technology corporation with a new corporate brand name will be formed through the combination of three of ITT's current businesses: Residential and Commercial Water, Flow Control and Water and Wastewater (including biological, filtration and disinfection treatment and analytics). These businesses are already known for solid operating results, leading market positions and strong product brand awareness, positioning the new water technology

company for significant growth. This company will be a global leader, with the broadest suite of innovative equipment, systems and applications. The portfolio will span the transport, testing and treatment of water - focusing on the residential, commercial, municipal, agricultural, construction, building services, dewatering, beverage and leisure marine markets, as well as analytical instrumentation for water and wastewater, environmental, medical and beverage applications. The company is expected to benefit from an already strong installed base, driving attractive aftermarket opportunities, as well as a diverse global footprint with approximately 55 percent of revenues coming from international markets and strong emerging market growth prospects.

PWN: Invests Millions In Innovative Pretreatment

PWN Water Supply Company North-Holland (PWN) is to build an innovative pretreatment facility in Andijk for the production of drinking water. The facility is based on a process which PWN itself developed. The new pretreatment process, based on suspended ion exchange (SIX) and ceramic membranes (CeraMac), not only results in higher water quality, but also in lower energy consumption and a lower environmental burden. The construction of the facility - which should be operational by the end of 2013 - marks an investment of several dozens of million euros. PWN Technologies is tasked with the construction project. This full subsidiary of the utilities company will be offering similar solutions to drinking water production companies worldwide. The new facility has generated great international interest. The existing treatment plant in Andijk dates from 1968 and is outdated. Moreover, the capacity in the longer term is insufficient. The plant has to be replaced within a few years in order to also guarantee the supply of drinking water in North-Holland in the coming decades. In recent years, PWN has itself been intensively researching alternative treatment of drinking water based on suspended ion exchange (SIX) and ceramic membranes (CeraMac). This forms an absolute filter that blocks all organic substances. In 2007, the Ministry of Economic Affairs also supported the research into a new treatment method. The process has been extensively proven and validated in recent years and is now ready for introduction.

Severn Trent: supports UK Water Industry Programme

Severn Trent Services Analytical Services is playing a key role in the UK Water Industry Chemical Investigation Programme (CIP), providing analysis to some of the UK's leading Water Companies. Severn Trent Services will be analyzing over 8,000 wastewater samples for customers including Yorkshire Water Services Ltd, Thames Water Utilities, Dwr Cymru Welsh Water, Southern Water and Scottish Water, as well as sampling for some customers. To meet the requirements of the programme, samples of sewage influents, sewage sludge, primary and final effluent will be analyzed. In addition samples from industrial, commercial and domestic properties will be analyzed to identify sources of potential pollutants. The programme, which has been developed by the UK water industry, working in collaboration with United Kingdom Water Industry Research (UKWIR), the Environment Agency and other regulators, has been designed to support the UK's understanding of the Water Framework Directive (WFD) and its potential impact with respect to the control of

hazardous substances. It will include the investigation of over 45 target substances, including metals, industrial chemicals, biocides, pharmaceuticals and endocrine disruptors. The first stage of the programme will determine if discharge of treated effluents could result in any of these substances exceeding Environmental Quality Standards, set out in the WFD. Where Environmental Quality Standards are exceeded, the Environment Agency will be responsible for identifying a Programme of Measures (POMs) to meet compliance. Proportional and effective POMs will be developed by identifying the sources of pollution and future stages of the programme will attempt to identify the source of any specific pollutants. The programme will also seek to identify potential water treatment options to remove pollutants from wastewater streams. The overall aim of the Chemical Investigation Programme is to provide a sound and technically justifiable basis for future measures to be taken that achieve good ecological status, in line with WFD requirements. The analysis provided by Severn Trent Services will be fundamental to the programme.

Inge: Reinforces Bond With Distribution Partner LG In Korea

As the economic strength of Asian growth regions increases, so too does their demand for efficient water treatment systems. The German ultrafiltration specialists inge wassertechnologies AG entered this market several years ago by signing a distribution partnership with the South Korean global corporation LG Chem. LG has now brought together its water market activities in its subsidiary LG Electronics and intends to invest 400 million dollars with the goal of becoming a top 10 global water treatment company. In terms of its ultrafiltration technology requirements, it will be sticking with its German partner inge wassertechnologies AG, and the two companies recently signed a new framework agreement. LG Electronics is a subsidiary of the South Korean LG Group and the world's third largest manufacturer of household appliances. The water treatment division that has now been grouped under LG Electronics will initially be focusing on industrial water treatment, followed by the wastewater business sector and drinking water purification. LG will be investing some 400 million US dollars over the next decade with the goal of becoming a top 10 global water treatment company. For its ultrafiltration technology needs, LG will be continuing to rely on its long-established partner inge wassertechnologies AG. LG is not only a distribution partner of the global technology leader from Germany, but also a good customer: The global corporation has equipped many of its own display manufacturing plants with inge's German-made ultrafiltration technology, an indication of just how important it is for high-tech industrial concerns to have constant access to their own clean water rather than just relying on local water supplies. inge wassertechnologies AG has already demonstrated the safety, efficiency and reliability of its Multibore membranes in several hundred industrial-scale plants all over the world, including plants run by LG.

Hyflux: Awarded Three Water Projects In China

Hyflux Ltd's subsidiaries have signed three concession agreements with the People's Government of Chongqing City, Hechuan District to develop respectively three water projects at the Hechuan Industrial Park in Chongqing City, China. Hyflux will invest approximately US\$45 million in these three Build-Own-Transfer 'BOT' projects,

underscoring the continued confidence the Group has in the potential of the Chinese municipal water business. Hyflux will fund the investments through internal resources. Hyflux through its subsidiary in China will operate and maintain the plants over the concession periods of 30 years. The projected completion of the three plants is end-2012. Established by the Chongqing municipal government in 2003, the Hechuan Industrial Park occupies a land area of about 38 square kilometers in the Hechuan District located at the confluence of three rivers - Jialing, Fu and Qu - in northern Chongqing, Sichuan Province. The industrial park's pillar industries include automobile, textile and garment, biopharmaceuticals, equipment manufacturing, and food processing.

RESEARCH

India: New Technology To Reduce Load On STPs

The Central Pollution Control Board (CPCB) has come up with cost-effective and eco-friendly innovative technology that would not only reduce the load of sewage treatment plants (STPs) but also restrict the entry of specific pollutants from going into the Ganga. While the technology aims at improving the water quality of the national river, it is not meant for the big cities as it takes into account the pollution caused by drains discharging pollutants into the river. "We call it In-situ Bio-remediation technology and it is very simple and cost-effective," said chairman, CPCB, SP Gautam. It creates checkpoints at the big drains and controls the discharge of pollutants apart from reducing the workload on STPs. "It works on simple technique of reducing pollution by promoting enzymatic activities and aeration. Also, application of specific bacteriophage (microbes killing harmful bacteria) for reducing total faecal coli and E coli has been introduced," he added. Saying that Ministry of Environment and Forest had already given approval for the technology, the chairman of CPCB informed that it was likely to be executed soon to reduce the heavy load on existing STPs in the country. "We are also looking at development of community STPs that would reduce the load on STPs beside bringing down the huge transportation cost involved in carrying waste from different places. It would be in the form of decentralised treatment centres and would not depend on major STPs for treatment," he added. Similarly, pinpointing the measures taken by CPCB to control pollution from tanneries based in Kanpur region, Gautam said the advent of new technology that worked on low refrigerated vacuumisation technique to get rid of harmful chemicals and heavy metal pollutants generated from tanneries. The STPs have been found to be effective against domestic sewage wastes but lots of industrial wastes are still going untreated while factories are still refraining from installing high cost treatment units in their vicinity. The new technology would provide a substitute for traditional preservation of skin or hyde, eliminating the use of salt and chance of water contamination with infiltration of chemicals. It is worth mentioning that as many as two machines using the technique are already working under CPCB while another two are likely to be set up in Unnao and Kanpur region in the next two months.

UAE: New Solar Powered Water Desalination Method

The Environment Agency of Abu Dhabi (EAD) is testing a new system to desalinate sea water using solar energy. The trials are being conducted at 30 locations across the Emirate of Abu Dhabi. The new solar desalination techniques is a zero-carbon process which helps reduce cost of water treatment, especially in desert areas where dust and high temperatures impair the efficiency of solar panels used in the existing desalination system. 'The experimental solar-powered desalination facilities put in Hameem and Sweihan show us that we can reduce the negative impact of water desalination on the environment as well as help to reduce the cost of water production,' the agency said in a statement.

USA: Study On Tungsten In Drinking Water

Scientists at Kansas State University and Tulane University, USA, are conducting a study to explore the reaction and transport of tungsten in drinking water. Scientists and health officials began connecting tungsten to clusters of childhood leukemia cases in the Western U.S. after finding high concentrations of the element in residents' bodies. People examined lived in towns near tungsten-bearing ore deposits and even hard metal processing plants. To find out how tungsten reacts and relates to groundwater and the surrounding environment, Assistant Professor of Geology Saugata Datta began collaborating with Karen Johannesson, professor of earth and environmental sciences at Tulane University. The project investigates the biogeochemistry of tungsten reaction and transport in the environment and, more specifically, it's an evaluation of how tungsten concentrations change along groundwater flow paths and modify the groundwater makeup.

USA: Quicker, Less Expensive Method For Cholera Detection

A technique developed by researchers at the University of Central Florida (UCF) utilizes a complex sugar to test water sources for cholera contamination. The method would allow relief workers in remote areas to test drinking water for the cholera toxin and ultimately limit the spread of the deadly disease, which claimed thousands of lives in Haiti last year. In the test, the sugar dextran is coated onto iron oxide nanoparticles and then added to a sample of the water. If the cholera toxin is present, the toxin will bind to the nanoparticles' dextran. The technique likely would be less expensive than those currently available, and it would provide results more quickly.

China: New Method For Making Deuterium-Depleted Water

Scientists in China have reportedly developed a less expensive, more eco-friendly method for making deuterium-depleted drinking water, according to a press release. Changgong Meng and Feng Huang note that natural water actually is a mixture of H₂O and tiny amounts of D₂O - about 150 parts per million (ppm). The scientists cited accumulating evidence that water with high levels of deuterium may have adverse health effects on animals and plants, while deuterium-depleted water may be useful in treatment of certain diseases. Existing ways of removing deuterium from water tend to be expensive, inefficient or environmentally harmful, the release stated. The new deuterium removal method involves a platinum catalyst that quickly and efficiently removes deuterium from water using a combination of cold and hot temperatures. In laboratory-scale tests, the new technique reduced the amount of

deuterium in water from about 145 ppm to 125 ppm, according to the release. The report appears in the American Chemical Society's journal Industrial & Engineering Chemistry Research.

USA: Study Indicates WWT Lowers Pathogen Levels

A recent study by a team of researchers at the University of Arizona, USA, indicates pathogen levels have dropped since the implementation of federal regulations on treating sewage in 1993. These treatment guidelines have proven to be extremely effective with 94 percent to 99 percent of all pathogens in biosolids eliminated after wastewater treatment, the release stated. The researchers tracked the incident of pathogens in biosolids over a 19-year period in one major U.S. city and also analyzed pathogen levels in biosolids at 18 wastewater treatment plants in the United States. Class B biosolids from the Pima County Ina Road Wastewater Treatment Plant in Tucson were analyzed from 1988 to 2006, according to the release. Additional samples were collected between 2005 and 2008 from wastewater treatment plants in California, Florida, Arizona, Michigan, Minnesota, Wisconsin, Nevada, Oregon, Washington and Wyoming. "This is the first major study of its kind since federal regulations for wastewater treatment were implemented in 1993," said Dr. Ian Pepper, one of the authors of the study and the director of the University of Arizona's Environmental Research Laboratory.

REPORTS

GIAI: Water Treatment Chemicals Market To Reach \$23.9 Billion By 2015

A new report by Global Industry Analysts Inc., USA, predicts the global drinking and wastewater treatment chemicals market to reach \$23.9 billion by 2015. Increasing demand for potable and fresh water for agricultural and industrial purposes and spurt in environment protection initiatives are primary growth drivers for the global water treatment chemicals market. In addition, mushrooming world population, rapid industrialization and recycling/reuse of limited water resources are also expected to aid in speeding long-term growth prospects. The main growth drivers in the U.S. market include rising environmental concerns and strict regulations at the national and state levels, pertaining to waterborne organic content, suspended solids and contaminants. Desalination, odor control and metal separation are the segments expected to record double-digit growth. As the reuse and recycling of water continue to rise, the demand for biocides as a water treatment chemical to protect from bacterial fouling is also expected to increase. The research report, titled 'Drinking and Wastewater Treatment Chemicals: A Global Strategic Business Report,' provides a comprehensive review of market trends, industry structure, competitive scenario, product overview, product introductions/innovations and recent industry activity.

Research Markets: Report Analyzes Market Opportunities In WWT

Research Markets' latest offering provides key information and analysis on the market opportunities in the global wastewater treatment and recovery systems market. 'Wastewater Treatment and Recovery Systems Market to 2020 - Tightening Wastewater Discharge Regulations to Stimulate the Growth of Membrane Based

Systems' provides the latest information on the global wastewater treatment and recovery systems markets revenues, with a detailed assessment of the forces influencing the market. The report also covers market analysis and forecasts for key geographies for the wastewater treatment and recovery systems market. Key topics include investment scenarios, key companies' information, technology analysis and regulatory frameworks.

AWARDS

Crompton Greaves: Receives National Energy Conservation Award

This award has been given for energy efficient pumps in the category of manufacturers of BEE star labeled Agricultural Pump Sets. This success is the result of rigorous effort of Crompton Greaves Team in achieving efficient utilization and conservation of energy with BEE star labeled pumps. CG manufactures energy efficient pumps for agriculture purpose as well as for domestic purpose viz. mono-bloc, bore-well submersible and open-well submersible pumps. Pumps division has wide range of Star labeled pumps. CGL is one of the pioneers in energy labeling in India and have associated closely with the Bureau of Energy Efficiency (BEE) since the inception of nationwide Standard & Labeling program. It is through the optimum hydraulic and overall efficiency, better operational excellence and user centric customized design approach CG could come up with wide range of star labeling products. In the financial year 2009-10, up to 4300 MWH (approx) per year energy has been saved for nation by providing energy efficient pumps to agricultural market. This will triple by the next financial year after many of our product range get converted to energy efficient range with dedicated, focused approach on pump design-development.

Jain Irrigation Systems: Wins APEDA Golden Award

APEDA (Agricultural and Processed Food Products Export Development Authority), Ministry of Commerce and Industry, Government of India has awarded Jain Irrigation Systems Limited (JISL) of Jalgaon, Maharashtra, India its prestigious Golden Award for impressive performance in export of Processed Fruits and Vegetables area, for 2009-2010. At a ceremony held recently in New Delhi by APEDA to celebrate its 25 Years Silver Jubilee Celebrations & its Annual APEDA Export Awards for 2009-2010, Mr. Jyotiraditya Scindia, India's Minister of State for Commerce and Industry presented the award to Mr. Suvan Sharma of Jain Irrigation Systems Limited. Jain Irrigation, a pioneer in drip irrigation technology in India started its fruits and vegetable processing business 15 years ago with a small beginning in export market in the products, processes and markets that were primarily dominated by large producers from North America, South America and Europe. With Jain Irrigation's continued efforts in research and development of crop varieties for processing and its efforts in drip technology in India to help farmers improve productivity and water saving, today Jain Irrigation is well recognized name in the global market of processed fruits and vegetables. In a statement issued by Mr. Sunil Deshpande, Sr Vice President Food Division of Jain Irrigation, he stated, "We at Jain are honoured by this recognition by the Government of India. What turned out to be a difficult

venture in first 2-3 years of startup is today an important segment in company's overall business. Company is committed to its food processing business and we are very pleased to see ourselves as the leading exporter from India in Processed Fruit and Vegetable category." Receiving the award, Mr. Suvan Sharma, Vice President, Food Division said, "This is our first Golden award in this category. Our company has been able to establish itself as a key supplier due to our product quality and good service in a challenging environment of fluctuating raw material prices, increasing input costs and protected markets. This award appreciates and recognizes our hard work."

Black & Veatch: Earn Business Achievement Award

Black & Veatch has earned a Business Achievement Award in the category of Industry Leadership from the Environmental Business Journal for its thought leadership series, titled "Overcoming Barriers to Water Reuse as part of an Integrated Water Portfolio". Black & Veatch organized and hosted the series of high-level roundtable discussions during six major global industry conferences from October 2009 through June 2010. The discussions brought together approximately 75 water industry leaders from 13 countries in various regions to discuss common themes and specific regional differences in reuse practices.

NanoH2O: Receives Multiple Awards For Desalination Innovation

NanoH2O, a global provider of reverse osmosis (RO) membranes for desalination, was the recipient of four distinguished awards in the second half of 2010 for its innovation that utilizes nanotechnology to significantly lower the cost of desalination. In less than six months, NanoH2O was selected by The Artemis Project™ as a Top 50 Water Company, won The Wall Street Journal 2010 Technology Innovation Award, was recognized as a 2010 Global Cleantech 100 and was named a finalist in the Los Angeles Business Journal 2010 Patrick Soon-Shiong Innovation Award.

PEOPLE

ERI: Appoints Thomas Rooney As New CEO

Energy Recovery Inc (ERI) has announced the retirement of its chief executive officer, G.G. Pique, and the appointment of Thomas S. Rooney, Jr. as its new chief executive officer, effective February 16, 2011. Mr. Pique served as ERI's CEO for nine of his 11 years with the Company. G.G. has been instrumental to ERI's success. His energy, commitment and industry experience have taken them from a small private company through a successful IPO in July 2008. He helped build a great company and launched an innovative technology that changed an industry. Mr. Rooney brings to ERI nearly 30 years of executive public and private company experience in industries such as renewable energy, smart grid technologies, water purification, waste treatment, engineering and construction. As ERI's new CEO, Mr. Rooney will leverage his broad management skills in leading companies through new stages of growth in order to expand the reach of ERI's existing technologies and products into new cleantech markets. Mr. Rooney will join the Company's board of directors on February 18, 2011, and Mr. Pique will remain with the Company as

needed to help with the leadership transition. Most recently, Mr. Rooney was the CEO of SPG Solar, one of the largest solar integrators in the United States. Under his leadership, SPG dramatically improved operational efficiencies, expanded to a national enterprise, and doubled its profits. Mr. Rooney is a member of the technical advisory board for Advanced Energy Industries. Prior to his role at SPG Solar, Mr. Rooney was president and CEO at Insituform Technologies, Inc., a global, publically traded company where he executed a progressive, multi-dimension growth strategy that significantly strengthened the Company financially, technically and operationally. Mr. Rooney has held positions on the board of Beijing-based Duoyuan Global Water, Inc., and was part of the team that helped guide the Company through its IPO in 2009.

AWWA: Charlie Anderson Named President Elect

Charlie Anderson has been chosen as the American Water Works Association's (AWWA) next president-elect. Nominated by the Texas section, Anderson is currently serving his final year on the AWWA Board of Directors as the section director and an association vice president. Anderson, who will assume his new position in June, is a management consultant with CDM and a former utility director and deputy city manager for the city of Arlington, Texas, USA.

Bentley: Names Gus Bergsma As Vice President

Bentley Systems, Incorporated, the leading company dedicated to providing comprehensive software solutions for the infrastructure that sustains our world, has announced that it has appointed Gus Bergsma as vice president of Bentley's newly formed regional sales organization (RSO) comprising inside sales, sales engineers, and Bentley Channel Partners serving small and medium enterprises (SMEs) worldwide. The RSO is a critical component in meeting the demands of Bentley's continued regional expansion and growth opportunities. Bergsma, who previously was VP of Bentley's water and structural products sales organizations, is responsible in his new role for bringing together all of the teams that make up the RSO. Bergsma began his professional career as a project structural engineer with Culp & Tanner, Inc., in Southern California. He joined Bentley as a vice president in 2005 following Bentley's acquisition of RAM International, the structural engineering software company in which Bergsma was a partner and served as vice president.

UltraViolet Devices: Promotes Richard Hayes To President

UltraViolet Devices Inc. (UVDI), a provider of air, surface and water UV-C disinfection and activated carbon filtration solutions, has announced that Richard Hayes, formerly vice president of sales and marketing, has been promoted to president of the company, according to a press release. Hayes has more than 25 years of experience in business management, executive and leadership positions. As UVDI's vice president of sales and marketing, Richard had already been a key member of UVDI's executive management team. In his new position of president, Richard's strong sales and marketing skills and broad management experience will be key assets in driving UVDI's continued success in today's rapidly changing global

economy.

Greenway Water: Makes Additions To Sales Teams

Greenway Water Technologies, Canada, has made two new additions to its sales team. Terry Robertson has been named national sales manager for the U.S., and Ken Simms was appointed as sales manager for Eastern Canada. Robertson has 15 years of experience in the water treatment industry, specializing in sales of ultraviolet water purification equipment for residential, commercial and industrial applications. A level V Certified Water Specialist, Simms has more than 35 years of sales and marketing experience in the plumbing wholesale, bottled water and water treatment markets.

Irrigation Association: Names New Marketing Director

The Irrigation Association (IA) Virginia, USA, a membership organization for irrigation companies and professionals, has appointed Kathleen Markey as its new marketing director. For the past several years, Markey has consulted as a strategic director for a Washington, D.C.-based marketing communications agency. Kathleen has two decades of experience with associations and nonprofits.

ROPV: Three Key Personnel Join The Company

Desalination membrane pressure-vessel manufacturer ROPV has added three key personnel to support and meet its international customer needs. Raul Ramos, formerly from Energy Recovery Inc, has been named director of marketing. With over 15 years of experience in various marketing and consultancy capacity, working with Siemens, Toshiba, Chrysler and GM, he will be responsible for all areas of global brand strategy and channel marketing. Rick Torres has been named director, technical service and support. Formerly with Bekaert Progressive Composites, he has over 20 years of experience in filament winding, product and technology implementation and R&D testing. Torres started with Advanced Structures, creators of Codeline, and later on became part of the co-founding team of Progressive Composites - Protec brand. Chris Gargiulo has been named director of manufacturing engineering. With over 15 years experience in filament-wound pressure-vessels, he was formerly manufacturing engineer at Bekaert Progressive Composites and was instrumental in establishing the Vista, California plant. Gargiulo started his career in 1995 with Advance Structures that later became Pentair Water, manufacturers of Codeline pressure-vessels.

PRODUCTS

Unilever: Will Launch Pureit Water Purifier In International Markets

FMCG major Unilever will launch its water purifier, Pureit, in emerging overseas markets in Asia, South Africa and Eastern and Central Europe. Pureit will be taken to multiple markets in due course, including several emerging and developing international markets. At present, Pureit is used by 15 million people and the company plans to take this number to 500 million across the globe by 2020. The product might also be taken to developed markets at a later stage. The company's rural marketing scheme, Shakti Experience, will also be expanded into emerging markets in South-East Asia. It has been introduced in Bangladesh and more markets

in South-East Asia, like Vietnam, are being assessed. The company is continuously evaluating new products and will launch them in relevant areas such as detergent concentrates. Unilever will strike a balance between judicial pricing to stay competitive, cost efficiency and broadening its markets to address the situation.

Kent RO: Launches Kent Tap Water Purifiers

Kent RO Systems Ltd has launched the Kent Tap Water Purifier that is supposed to purify water stored in overhead tanks, providing bacteria-free tap water that can be used to wash vegetables and fruit and can even be used directly for gargling. The purifier is based on twin purification technology of high-grade granular activated carbon, a de-chlorination agent that removes chlorine and unpleasant odor from tap water, and is further equipped with a multi-layered hollow fibre UF membrane filter which removes rust, bacteria, cyst, coliform bacilli, microorganisms, and microscopic impurities from water. The purifier has been priced at Rs 2,300 and is available at all major retail and home appliances stores.

Okaya Power: Launches Nasaka Water Purifiers

Okaya Power Group (OPG), renowned for its forte in innovative techniques, has now ventured into the water purifier segment under the brand name “Nasaka water purifiers”, a new concept water purifier, launched for the first time in India. It has a vast range of water purifiers which includes filters and RO purifiers. After extensive research and market survey, Okaya sees a huge potential in the RO purifier market and realize that RO purifiers available in the market provides demineralized water, they purify water but in the process eliminate minerals also along with impurities. To address this problem, Okaya, has launched RO purifiers, that not only provides purest water but at the same time, injects minerals in it in the right quantity, so that whatever minerals are lost during the purification process or are not found due to natural circumstances, gets available, a concept that was unknown hitherto.

Aquionics: Compact Open Channel UV Water Disinfection

The OpenLine UV disinfection systems by Aquionics, minimizes the impact that municipal and industrial wastewater treatment facilities have on local ecosystems. Using open channel, low pressure, high output UV amalgam lamps, the OpenLine destroys microorganisms’ reproductive abilities on a cellular level. Treated effluent is free of residual chemicals and can be safely passed into the environment, without the risk of pollution. The OpenLine is available in eight models, for treatment flow ranges from 15 to 1400 gallons per minute. The compact system offers a smaller footprint than similar products, with only one power source required. The unit’s UV lamps feature a 14,000 hour lamp life guarantee and an automatic quartz sleeve wiping system for reduced maintenance and optimal performance. OpenLine’s control unit comes with a lamp hour counter and status monitoring as standard. To accommodate future flow increases, the system can be expanded with additional UV modules without replacing the current UV channel and components. Additional UV modules can be added to smaller models without replacing the UV channel or other components. This allows customers to expand their unit if their future flow increase.

Emerson: Extends Capabilities Of pH/ORP Sensors

Emerson Process Management has released the Rosemount® Analytical Model 3900 general purpose pH/ORP sensor, designed to meet the broadest range of applications in the industry. It has the widest temperature operating range of any general purpose sensor and is the first to function at sub-zero temperatures, providing accurate measurements in applications from -10 degrees C to 100 degrees C. Each sensor is equipped for both ¾ inch and 1 inch mounting, allowing it to fit in smaller pipes, giving optimum mounting versatility in insertion, submersion and flow-through applications. The Model 3900 features the patented AccuGlass™ sensor glass formulation which has been field-proven in premium sensors designed for rugged environments. The AccuGlass formulation exceeds industry standards and resists cracking. In addition, a unique Teflon double-junction reference electrode protects the sensor from poisoning ions. The complete encapsulation of the sensor eliminates leakage or high humidity problems found in other pH/ORP sensors. The Model 3900 gives the user access to a wider range of more advanced diagnostics. In addition to glass diagnostics, a stainless steel solution ground allows reference diagnostics, simplifying maintenance and scheduling. The solution ground also reduces noise, makes for a highly stable measurement, and makes internal temperature compensation respond more quickly than with previous generation solutions. The Model 3900 is a combination sensor including pH, ORP (Oxidation Reduction Potential) and temperature within the sensor body. It is designed to measure aqueous solutions in pipelines, open tanks, or ponds. The sensor is compatible with all Rosemount Analytical analyzers as well as those from other manufacturers.

inge: Launches Compact Plug-and-Work Modules

inge watertechnologies AG has launched yet another innovative product that promises to give new impetus to ultrafiltration in the sector of in-house water supplies and small-scale treatment systems. The company's research and development team has developed a compact module that can be simply inserted in a standard pressure vessel and easily replaced whenever necessary. Compared to the elaborate proprietary designs marketed by many other manufacturers, this plug-and-work solution is not only easier to use but also significantly more cost-effective thanks to the use of standard pressure housings. Simply insert the 2.5 or 4 inch dizzer UF unit with its membrane surface area of between 0.5 m² and 6 m² (5.4 to 65 sq ft) into a standard pressure vessel and it is immediately ready for operation. Service technicians and maintenance engineers can easily remove the module whenever necessary and simply swap it for a new one. There is significant demand for ultrafiltration solutions for small-scale treatment systems and in-house water supplies, ranging from private households looking to treat their own well, spring or ground water through to small industry, hospitals and hotels. The Multibore ultrafiltration technology developed and patented by inge is suitable for all these applications and is the number one choice when it comes to safety and reliability, comfortably surpassing conventional treatment methods.

KSB Pumps: Pressure Booster Package Systems

The new Hya-Compact pressure booster systems will primarily be used in drinking,

service and cooling water applications for building services. The system's compact and attractive design allows space-saving wall or floor mounting, while integrated suction and discharge nozzles with pipe threads and direct connection to the mains via a plug make installation straightforward. The two-pump system generates a maximum head of 60 metres. Whenever necessary, the stand-by pump can be started up to meet peak load demand. The maximum system discharge pressure is 10 bar, the maximum permissible inlet pressure is 6 bar. As the Hya-Compact system is equipped with variable-speed, energy-efficient IE2 motors, users can save up to 35% of energy compared with conventional booster systems. Each of the two pumps has its own frequency inverter. As well as ensuring that energy consumption does not exceed the amount required to supply pressure to the connected hydraulic consumers, the frequency inverters also allow the pumps to be started up and slowed down smoothly, improving system reliability. The Hya-Compact's housing delivers low-noise operation, while the internal piping arrangement avoids regions where fluid can stagnate, thus inhibiting the growth of germs. The standard-equipped compact booster package system comes with a large display panel on which all important system data is presented in clear text. Standard fault messages can be transmitted to a building management system, and are joined by a further integrated function - the innovative leakage reporting feature.

Mouvex: Introduces SLC Series Disc Pumps

The SLC Series pumps by Mouvex provide pulse-free, slip-free, and low-shear flow, with varying viscosity and backpressure conditions. The pumps offer full product containment as there are no mechanical seals, a double bellows flexing system offers full containment in the event of a primary physical barrier failure. The series is suitable for applications such as tagential flow filters or in-line formulation/diluting systems. The pump is designed for CIP cleaning, and SIP sterilization, and includes versions with both 3A and EHEDG certifications for this purpose. The volumetric performance of the new SLC-Series pumps sustains high efficiency levels over time, resulting in productivity gains and energy savings. Used in multiple fluid-handling applications within the chemical processing and distribution industries, the new Mouvex SLC-Series eccentric disc pump is unlike any other pump technology in the world. Capable of delivering high-volume efficiency while completely maintaining its gentle fluid-handling nature, the new SLC-Series is used to move a wide variety of products and materials. The Mouvex SLC-Series pumps are designed to self-compensate for mechanical wear and maintain consistent flow over time. Other SLC-Series eccentric disc pump design benefits include seal-less construction, low shear and agitation of the pumped product, the capability of handling solids and abrasives, self-priming, line stripping, the ability to run dry for up to five minutes, and clean-in-place (CIP) capability. The eccentric disc technology produces the pumping performance of a positive displacement pump, creating a constant flow that is independent of both pressure and viscosity. New SLC-Series pumps are ideal for handling thin, abrasive, aggressive and higher viscosity fluids. With their stainless-steel construction and high volumetric efficiency, they are tailor-made for chemical transfer applications. The pump line is available in stainless steel and ductile iron models capable of handling up to 10,000 cst (46,000 SSU) liquids and working

pressures up to 130 psi (9 bar), depending on model.

MWH Soft: InfoSewer V7 with Enhanced Modelling Functionalities

MWH Soft's InfoSewer for ArcGIS platform has helped define the standard in the industry for GIS-centric sanitary sewer network modelling and design since 2003. This seventh version of the software introduces key enhancements requested by customers that increase engineering productivity, improves network analysis and design, and enhance the visualization, comprehension, management and assessment of modelling results. Certified by the National Association of GIS-centric Software, InfoSewer is powerful ArcGIS-centric software for use in planning, designing, analyzing, and expanding sanitary, storm and combined sewer collection systems. It can be effectively used to model both dry-weather and wet-weather flows and determine the most cost-effective and reliable method of wastewater collection. Built atop ArcGIS, InfoSewer enables engineers and GIS professionals to work simultaneously on the same integrated platform, commanding powerful geospatial analysis and hydraulic modelling in a single environment using a single dataset. In addition, users rely on these models to compute hydrogen sulfide generation and corrosion potential, analyze the rate of Biochemical Oxygen Demand (BOD) exertion, track sediment movement and deposition, trace pollutant contribution from source nodes, perform time of concentration pipe calculations, calculate the amount of pollutant transported to the wastewater treatment plant, and assess pollutants' impacts on receiving waters. Extensive scenario management functionality enables the analysis of existing or future sewer collection systems. The application also provides vital tools for meeting and exceeding environmental regulations and improving community relations via database queries and map displays.

Siemens: New Catalytic Carbon Water Treatment Products

Siemens Water Technologies introduces AquaCarb 1240CAT catalytic carbon, an addition to the company's Westates carbon product line for the North American market. It uses coconut shell-based carbon specially processed to offer enhanced performance capabilities over traditional catalytic carbons in water treatment. The new product can provide improved results in water quality targets for chloramine, hydrogen sulfide (H₂S), and hydrogen peroxide (H₂O₂) removal. The coconut shell base provides a higher adsorption capacity with extensive micropore structure for VOCs (volatile organic compounds), lower ash content and higher hardness/abrasion resistance, which results in longer effective carbon life, reduced replacement frequency and lower overall life cycle costs as compared to traditional catalytic coal carbons in the market. Siemens introduces AquaCarb 1240CAT catalytic carbon based on coconut shell to the North American market. Siemens AG Applications for this new product include H₂O₂ removal in semiconductor wastewater or groundwater remediation systems employing UV oxidation, H₂S and chloramine removal for the treatment of municipal drinking water, and chloramine reduction for process water treatment in the bottling industry. Previously, these applications were addressed with catalytic activated carbons based on bituminous coal. Siemens Water Technologies is a leader in carbon adsorption technology through the Westates line of activated carbons and equipment. As well, Siemens offers a wide range of technical and field

support services including analytical testing, removal and installation and spent carbon reactivation and recycling, all of which help ensure that adsorber systems continue to operate efficiently and downtime is minimized.

SJE-Rhombus: Offers VFD For Pressure Control

The VARIOspeed VFD is able to automatically control the pump speed and maintain a constant discharge pressure as the flow and head conditions change in the pumping system, and the desired set pressure is set using the user friendly VFD keypad. The pressure transducer measures the pump discharge pressure. The VARIOspeed VFD is available from 5HP to 150HP at 208-240V and 5HP to 250HP at 380-480V, single phase or three phase supply voltage. It features PID control, energy optimization control, adjustable electronic overload, automatic system restart, high and low pressure alarms. The standard VARIOspeed VFD is supplied in a NEMA 3R enclosure with a 0-200 PSI pressure transducer. It can be customized to suit specific requirements, including duplex, triplex and quadplex VFD systems with automatic alternation and lead/lag operation. The VFD is suitable for applications including booster pumps, deep well submersible pumps and irrigation pumps.

Vanton: Solar Powdered Chemical Dosing Pumps

The Flex-I-Liner model 12 pump by Vanton Pump and Equipment Corp, utilises a rotor mounted on an eccentric shaft to push fluid trapped between a flexible elastomer liner and a solid plastic body block. The self-priming design has no seals to leak or valves to clog and can run dry without damage. The body block is moulded of solid polypropylene, UHMW polyethylene or PTFE, and the liner is made of natural rubber, neoprene, Hypalon, Viton or Nordel, which helps eliminate the corrosion associated with pumps constructed of stainless steel and high alloys, and wicking and delamination associated with fibreglass and plastic-lined metals. The pump is suitable for flows to 7.6 lpm and pressures to 1.72 bar at temperatures to 85°C. It can meter a fixed volume of liquid over user-programmed time intervals. A throttling valve on the suction line to the pump allows flow rate adjustment. There is a 0.04 kw photo-voltaic solar panel which charges a 12 VDC deep cell battery that can power the pump's 0.12 kw DC motor on a single charge for three hours continuously, or cumulatively over several days of intermittent operation during which the pump is started and stopped manually, or automatically according to user-programmed dosing schedules. An optional manifold with nozzles is available to spray treatment chemicals such as alum, ferric chloride, hydrofluosilicic acid, polymer, sodium hydroxide, sodium hypochlorite or sulphuric acid over a desired area for control of odour, insects or algae in water treatment facilities, recreational areas, farms, deserts and other remote sites. The self-contained system measures 813 mm x 610 mm x 381 mm, weighs 102 kg and is available mounted on castors. Other Solar Powered Feeding Systems equipped with larger Flex-I-Liner pumps and larger solar panels handle flows to 38 lpm.

Equaris: Water Conserving Toilets & Greywater Treatment Systems

Ultra-Ultra Low Water Conserving Dometic/Sealand Toilets flush with between 2/10's and 1 quart of water per flush. Typically used in recreational vehicles and

marine applications, the all ceramic gravity or VacuFlush toilets can be connected to composting systems, holding tanks or portable restrooms to reduce water consumption and wastewater pollution to the environment. The Equaris Corporation's BioMatter Resequencing Converter (BMRC) composts and converts 90% of all toilet and organic kitchen resources into odourless CO₂ and H₂O. The remaining 10% is recovered as a soil amendment and liquid fertilizer. Typically installed in accessible vaults, attached or detached buildings the Equaris BMRC Tank separates the Blackwater from the remaining Greywater and further reduces pharmaceutical, nitrogen and phosphorus discharges by 95%. The Equaris Extended Aeration Greywater Treatment System biologically reduces wastewater pollution to the environment by 84%. Utilizing an 80 watt linear air compressor oxygen is supplied to the Surge and Aeration Tanks and an air lift returns settleable solids from the Clarifier Tank back to the Aeration tank for further treatment. The Equaris Enfinity Plus Greywater Recycling System filters, disinfects with ozone and supplies Reverse Osmosis water to every plumbing fixture to include drinking water. Milking as much permeate water as possible out of the concentrate and using the high TDS water to flush the toilets has documented a 99% reduction in the need for water by totally recycling the Greywater.

Halma: S30 Surveyors From FCS For Handheld Leak Detection

Leaking pipes in a water distribution network produce a distinct noise that travels along the pipe, through the water and sometimes to the surface. To detect and locate this noise, Fluid Conservation Systems (FCS) offers the S30 Surveyor leak noise amplification system. By placing the S30's sensor in contact with any access point (valve, hydrant, etc.) in the distribution system, sound from the pipeline is transmitted through the S30's aviator-quality headphones allowing the operator to listen for leak noise. The device's analog meter measures the noise intensity in the pipe and, by listening at several points in a given area, the user can determine the general location of a leak. The S30 is also supplied with a surface sounding plate, which attaches to the ground sensor and allows operators to pinpoint the exact location of the leak.

Hach Company: AquaChek Salt System Test Kits

Increasing numbers of pool owners are using Salt Chlorine Generators as their sanitizing solution. Maintaining ideal levels of Salt, Chlorine, pH, Total Alkalinity, and Cyanuric Acid (stabilizer) is important to the operating efficiency of these generators and ensuring clean and healthy pool water. Hach Company, the manufacturer of AquaChek® Pool & Spa Test Strips, long recognized as the leader in pool and spa water test strip technology, is introducing a convenient duo pack to make maintenance of salt systems fast, easy and accurate with the AquaChek® Salt System Test Kit. This double blister pack contains a (10) CT bottle of AquaChek White Salt Titrators to track the salt level, and a (10) CT bottle of AquaChek Yellow 4-way Test Strips to measure Free Chlorine, pH, Total Alkalinity, and Cyanuric Acid levels. The Salt System Test Kit - it's another great product from the makers of AquaChek®, and another great tool for your customers to use and keep things in check!

Infiltrator: EZflow For Modular & Gravelless Drainage Solution

The lightweight and easy to install EZflow by Infiltrator gravelless drainage systems save time and money while eliminating the problems inherent with gravel drainage systems. These flexible pipe systems composed of polystyrene aggregate enclosed in a woven geotextile mesh are ideal for trench, curtain, landscape, and foundation, retaining wall, and interceptor drains. The bundles come pre-assembled in 10-foot sections weighing only eight pounds and are available in 7, 10 and 15-inch diameters. These systems can be installed by a single worker without heavy machinery. The modular design is versatile enough to meet any design parameter and easily contours along sloped sites and around trees or landscaping. The engineered 30-sieve geotextile netting provides the necessary filtering of soil particles to prevent clogging. The polystyrene aggregate features over 50% void area for greater water movement and will not crush, degrade or breakdown over time. Infiltrator continues to meet increasingly stringent environmental and regulatory requirements with innovative product solutions like EZflow drainage by Infiltrator. Other Infiltrator products offering superior performance include the Quick4™ Plus Standard Chamber, TW™-series septic tanks, EZflow™ Drainfield System, EZset™ Riser Systems, Aquaworx™ by Infiltrator, and Infiltrator Corrugated Pipe (formerly Blue Diamond Corrugated Pipe).

Pumpex: Super High Head Dewatering Pumps

Pumpex has expanded the product portfolio with a new powerful high head dewatering pump: P3001 SH. The P3001 pump has a robust design with a 9.4 kW motor. It delivers over 80 metres of head and in combination with the low weight of 67 kg this pump provides easy handling without compromising high performance and reliability. The main advantages of Pumpex new P3001 SH are high wear resistance with hard impellers and polyurethane wear parts, simple maintenance by external plugs for oil and motor inspection, quick and safe service. No adjustments needed. All parts have fixed positions for reliable operation and maintained efficiency. Easy handling by low weight and plug-in start with built-in motor protection. The new high pressure pump P3001SH is made for the toughest applications at construction sites, in mines, for tunnelling jobs where easy handling, safety and reliability are crucial. The complete Pumpex dewatering pump range covers motor sizes from 0.48 kW to 56 kW. A key feature throughout the pump range is the modular design which provides the Pumpex unique easy service and maintenance.

Emerson: Introduces Multipurpose Industrial Regulators

Emerson Process Management has released the Fisher® Type MR105 pressure reducing regulator and Type MR108 backpressure/pressure relief valve for multi-purpose industrial applications. Fisher® Type MR105 pressure reducing regulator and Type MR108 backpressure/pressure relief valve ensure accurate and fast control with pressure set points up to 300 psig. Type MR105 and Type MR108 regulators provide a simple and durable design that improves flow performance without compromising shutoff or reliability. These regulators are ideal for demanding applications where large flow and a fast response are required. The Types MR105 and MR108 pressure regulators feature 1 to 4-inch body design for large flows and are available in cast

iron, steel, CF8M/316 stainless steel as well as a CF3M/316L stainless steel option. The direct-operated design can handle inlet pressures up to 400 psig and Cv up to 135. The cage guided plug provides excellent low flow stability as well as ANSI/FCI 70-3-2004 Class VI Shutoff. An optional easy drain valve is available for lube-oil applications.

Severn Trent De Nora: Introduces Solids Handling Systems

Severn Trent De Nora has introduced the use of a vertical self-discharging (VSD) centrifuge technology into its OMNIPURE™ Series 55 marine sanitation system's solids handling equipment package. The new CentraSep® VSD centrifuge technology, provided by Advanced Separation Technologies (AST), sets an industry benchmark for a "hands off" solids waste handling approach for the offshore marine environment, providing a sanitary solids handling system with minimal operator attendance requirements. The OMNIPURE technology utilizes a unique electrolytic treatment technology combined with electrocoagulation in a proprietary and certified treatment process to effectively treat wastewater and provide sanitary solids for handling. Effective solids management is imperative to marine sanitation treatment systems since it directly affects operator exposure to biological hazards. The operational benefit of incorporating the centrifuge technology into the OMNIPURE unit is effective processing of solids that are removed by the system with minimal operator exposure and intervention. The solids are handled automatically, minimizing the arduous maintenance duties required with other methods of solids handling. The system is also corrosion resistant. The OMNIPURE process does not require handling of waste solids from raw, untreated influent. Instead, concentrated solids are automatically removed in situ to the treatment process, producing dry, dewatered solids that can be easily handled and disposed of. The OMNIPURE Series 55 systems can accommodate treatment capacities up to 598 persons for black water and up to 197 persons for black and gray water. The systems range in capacity up to 65 m³/day (17,000 gal/day) as individual units that can also be combined for increased capacity.

Schlumberger: Introduces New Multipole Sonic-While-Drilling Service

Schlumberger has introduced the SonicScope 475 multipole sonic-while-drilling service. This logging-while-drilling (LWD) service provides multipole measurements to consistently and reliably deliver compressional and shear data in all environments. SonicScope 475 is the only service in the industry with a dedicated mode for acquiring Stoneley waveforms while drilling to ensure high-quality data before washouts can develop. SonicScope compressional and shear data, with the Stoneley wave acquisition, enable the assessment of rock mechanics and characterization of fractures. This is crucial especially in the North American shale plays for designing complex completions to optimize future production. In addition, a while-tripping mode provides multipass analysis and top-of-cement evaluation. In Romania, offshore Black Sea, SonicScope was successfully used on two horizontal wells to deliver measurements for geomechanical model interpretation. In a 100-well field test campaign, the new service supplied high-quality multipole data comparable to wireline sonic reference logs, even in highly damaged and unstable formations. In deepwater wells, SonicScope has been run successfully to enhance real-time pore

pressure monitoring, wellbore stability and seismic tie-in.

BASF: Foam Used For Insulating Hot Water Tanks

Hot water tanks can benefit from the energy-efficient potential of BASF's versatile foam Basotect®. The melamine resin foam is increasingly being used as external insulation for tanks made of stainless steel holding up to 500 liters of water. A key factor for this application is the foam's low thermal conductivity of less than 0.035 W/(m*K) and the resulting excellent thermal insulation. So energy losses can be reduced in the production of hot process water. Another advantage over conventional insulation materials is the BASF material's excellent resistance to temperatures of up to 240°C and its flame retardance. The lightweight Basotect material is cut into wedges and clad with a polystyrene jacket. Basotect makes processing and installation easier: it is flexible, fiber-free and can be cut with dimensional accuracy to fit the shape of the tank. With this combination of properties, Basotect shows its advantages particularly if the hot water tank is part of a solar thermal system. Because the foam is also suitable for insulating the solar collectors on the roof and the heat transfer pipes, it can considerably increase the efficiency of solar thermal systems. Basotect is an open-cell foam based on melamine resin with a unique range of properties. Because of the base material it is flame-retardant, abrasive and resistant to high temperatures, keeping its properties over a wide range of temperatures. Its open-cell foam structure makes it lightweight (9 g/l), sound-absorbing, flexible even at low temperatures and heat-insulating. Unlike conventional foams, the different combination of these properties makes it possible to use Basotect as a high-quality solution in a number of energy-efficient applications, with benefits from processing to end use.

EVENTS

Water Malaysia: 5-7 April 2011, Kuala Lumpur, Malaysia

Water Malaysia 2011, 5-7 April, Kuala Lumpur - Malaysia, is regarded as the most informational water event in the region. Organized by the Malaysian Water Association (MWA), the event is focused on finding the best and most efficient solutions for better water management especially in Southeast Asia. Buyers and sellers from every part of the world will have an opportunity to meet the right people to build strategic relationships and seal business deals. More than 5000 trade visitors and 250 exhibitors are expected to attend the Water Malaysia exhibition. The exhibition includes business matching, networking sessions, and product launches as part of its itinerary. Participants will be able to keep abreast of the latest trends and developments and benefit from a comprehensive spectrum of water and wastewater management industry players; including agents, distributors, retailers and contractors at Water Malaysia exhibition 2011. The conference will be discussing issues on Asset Management, Regulatory & Enforcement, Water Conservation & Environment Protection, Wastewater Resource Recovery, Catchment Management, Customer Services, Mass Communication in Water Industry and several areas of interest in the water industry. The pre-conference workshops will be focusing on two vital issues in water management, namely the Water Services Industry Act (Opportunities and Challenges) and Water Operator Partnerships (Sharing of Best Practices). Various

international keynote experts will be sharing insightful information on water and wastewater management with more than 500 delegates at the conference. The WaterInno Awards 2011, which will be held concurrently with the Water Malaysia Conference & Exhibition, is branded as one of the most prestigious water awards by industry players.

India Water Expo: 28-30 April 2011, Chennai, India

India Water Expo 2011 will be the 1st focused exhibition and conference on water & wastewater management in South India. The event will take place from April 28-30, 2011 at the Chennai Trade Center in Chennai, Tamil Nadu. India Water Expo 2011 will provide access to more than 200 exhibiting companies to discuss and explore the latest developments, research, regulations, solutions, and cutting-edge technologies in the field. The India Water Expo 2011 in Chennai will allow the South Indian community of water professionals to meet, exchange ideas, explore the state-of-the-art and debate the key issues underlying the science and practice of water. The 2011 focus areas include Water Treatment Plants, Water Storage, Transportation & Distribution, Equipments & Components, and Instrumentation & Control. The India Water 2011 Conference will feature inspirational international and national keynote speakers, numerous invited speakers, scientific and technical papers, case studies, workshops and panel discussions. With EverythingAboutWater as its Knowledge partner, the event shall be South India's largest water expo. Manufacturers specializing in water treatment, wastewater management and all other related industries can showcase and exhibit their products and expertise. More than 10,000 trade visitors will gain access to technological advancements in the fields of water harvesting, water & wastewater treatment, water conservation, irrigation, wastewater recycling, desalination etc that are crucial for sustained development of the industrial segment. India Water Expo 2011 is supported by the 'Southern Region Water Treatment Equipments Manufacturers & Traders Association', therefore visitors can be confident that they will be attending an event of the highest caliber covering topics related directly to their field of work. India Water Expo 2011 is supported by all the major product and service providers in the Water and Wastewater sector and therefore every stand, and every conference session will be of interest to every visitor who attends the event. Placed in the heart of the Chennai, India Water Expo 2011 will be easy to get to via road, rail or air. India Water Expo 2011 removes the hassle and costs from the visiting experience, as all pre-registered visitors gain free entry to the exhibition with free on-site parking.

IFAT CHINA + EPTEE + CWS: 5-7 May 2011, Shanghai, China

IFAT CHINA + EPTEE + CWS is Asia's most comprehensive trade show for the water sector and sewage treatment, for waste disposal and recycling, air-pollution control, environmental technology and renewable energies. The event, which provides a first-class business and networking platform for Chinese and international trade professionals, is also accompanied by a high-ranking conference program covering topical themes in research and technology. In 2010 IFAT CHINA + EPTEE + CWS attracted a total of 839 exhibitors from 26 countries and over 22,000 visitors from 84 countries. The next International Trade Fair for Water, Sewage, Refuse, Recycling

and Natural Energy Sources takes place from Thursday, 5 May to Saturday, 7 May 2011 at the Shanghai New International Expo Centre (SNIEC) in China.

INDOWATER: 14-16 July 2011, Jakarta, Indonesia

Indo Water Expo 2011, July 14-16, Jakarta, Indonesia, is one of the leading and significant events for water industry dedicated to water, wastewater & recycling solution, in Indonesia. The event will gather together well-known technology providers, service providers, engineers, distributors and end-users, under one roof. The 6th Water, Wastewater & Recycling Solution Expo is a superb platform for displaying latest technologies, building potential relations and develops business associations in the water sector. The exhibitors will display wide-ranging products and services, interact with prospective attendees and transform industry market into their brand favor. The show will offer international interactive platform for industry professionals to discuss various topics including hot issues in water industry, water management, production, wastewater management, water supplies and many more topics for the enhancement and growth of the water industry. Indo Water Expo 2011 is the biggest B2B platform for industry professional from Indonesia and other countries. It will share its arena with other events like 'Indo Waste 2011', 'Indo Renergy 2011', 'Indo Firex 2011', 'Indo Security 2011' and 'IVAC 2011'.

World Water Week: 21-27 August 2011, Stockholm

World Water Week is hosted and organized by the Stockholm International Water Institute (SIWI) and takes place each year in Stockholm. The World Water Week, 21-27 August 2011, has been the annual focal point for the globe's water issues since 1991. Each year the World Water Week addresses a particular theme to enable a deeper examination of a specific water-related topic. While not all events during the week relate to the overall theme, the workshops driven by the Scientific Programme Committee and many seminars and side events do focus on various aspects of the theme. The themes change each year, but each fits within a broader "niche" that covers several years. The grouping of themes within a niche is designed to develop a long-term perspective on a broad yet significant water and development issue. It also ensures that each year builds upon the previous years' outcomes and findings. The current niche for 2009-2012 is "Responding to Global Changes", which looks at the potential and necessary responses in water policy, management and development to address pervasive and increasingly impacting global changes. The themes within the current niche are: 2009: Accessing Water for the Common Good, 2010: The Water Quality Challenge, 2011: Water in an Urbanising World, and 2012: Water and Global Food Security (tentative).

9th EverythingAboutWater EXPO: 9-11 February 2012, Greater Noida, Delhi NCR, India

The 9th EverythingAboutWater International Exhibition and Conference on Water and Wastewater Management 2012, 9-11 February, at India Expo Centre & Mart, Greater Noida (National Capital Region of Delhi, India) is the perfect platform for companies and associations specializing in water treatment, wastewater management and all other related industries to showcase and exhibit their products and expertise

under one roof. Around 340 companies are expected to exhibit at the show attracting 18,500 trade visitors and 850 conference delegates. The presence of 25 countries from across the world makes the exhibition and conference the ideal place to interact with leaders and experts from the water sector. Attendees will have access to global technological advancements in the fields of water harvesting, water & wastewater treatment, water conservation, irrigation, wastewater recycling, desalination etc that are crucial for sustained development of the industrial segment in India. Organized by EA Water Pvt Ltd, India's leading knowledge solutions provider in the water sector, makes the 9th EverythingAboutWater Expo 2012 the only show by water experts.