February 10-16, 2014

'Our next-generation products blend in with urban ecosystem'

Wastewater treatment is gaining popularity as a source of usable water in different countries across the globe. In India, where the disparity in demand and supply is extremely high, wastewater management can be revolutionary with its economic benefits and importance as a coping strategy for the poor.

In the Indian infrastructure the cost of land, construction and maintenance of sewage treatment plants is quite high where still water and wastewater management don't seem to feature on its priority list.

The freshwater reserves are declining with each passing day as it becomes imperative for urban and rural areas to place a premium on wastewater treatment. This needs to be bridged by several initiatives ranging from national river linking projects, infrastructure rehabilitation, reducing transport losses to wastewater reuse.

Reuse and recycling have emerged as credible solutions to surmount the problems of water scarcity. If India is to ensure overall progress, it must manage its water resources efficiently and this is only possible if we take wastewater treatment seriously.

Tell us about the inception of the company, and your idea behind starting it?

Greywater is a collective brainchild of Harshad Bastikar, Founder-CEO, Jaldhara Technologies and the entire team. Having a collective industry experience of more than 108 years in the business of water and wastewater treatment, they identified three key pillars for founding a sustainable business in water and wastewater treatment space

Develop next generation products that solve real problems for endconsumer. The flagship product Grewa-R and Grewa-RS are disruptive next generation sewage treatment plants that come with some firsttime features such as capability to handle variable loads, minimum operating cost, fully automatic and simple operation, no noise and gas emissions. Our packaged treatment plants are aesthetically designed to blend in and can be erected within a week.



Provide best-in-class service support to customers post-supply: Our products are designed with a philosophy to provide consistent quality output year on year with minimal human intervention. The design ensures that post-supply the plant can be serviced in minimum time with a standard kit.

We have also developed a network of internal and external service trained service partners that can provide post-supply support to our customers pan-India.

Develop the best available team to sustain the above two pillars: Our experience has taught us those high standards that can only be fulfilled by highly capable people. From early on we have hired some of the best talents from India and abroad to join our team and strengthen our engineering, operations and sales.

What is Greywater technology, and the innovative application of wastewater treatment for residential and commercial buildings, etc?

Our urban infrastructure growth is outpacing the available municipal infrastructure needed for effective treatment of sewage and wastewater. Thus at Greywater we believe that decentralized treatment of sewage and wastewater at the source of generation is the way forward for urban ecosystem.

The treated water can be recycled and reused at the source of generation itself and thus minimizing the cost and complications of pumping. Thus we have invested in developing intelligent, next-generation products that blend in with the urban ecosystem.

We have developed our specialized fully packaged and fully automatic sewage treatment plants (Grewa-R, Grewa-RS and Grewa-M) by optimizing and re-engineering globally validated technologies such as SBR and MBR. Our products have up to 30-50 per cent lesser land footprint and 50-70 per cent lesser operations and maintenance cost.

While developing our products we have also kept in mind the specific requirements of various customer segments. For example, both in the

Wastewater treatment and reuse augments give dependability and sustainable resource for applications, requiring large volumes of water consumption. Urban and industrial India will have huge implications on the use of water and discharge

of waste. Arun Dubey, Head Strategy & Business Development, Jaldhara Technologies explains to Remona Divekar how wastewater treatment is gaining popularity as reliable source in infrastructure projects

residential and hospitality industry the occupation of facilities varies from time to time, thus our systems are equipped to handle variable loads. Both Grewa-R and Grewa-RS automatically sense the reduction in load and can operate from 25 per cent to 110 per cent of design capacity. For commercial and office

plants, prefabricated or civil, have single tank operations thus minimizing civil work required at site.

The land footprint of the plants is also considerably reduced. Most importantly the standard products can be erected at site with minimum piping and fixtures, thus reducing the project timelines considerably.

The plug and play philosophy of products also ensures that site construction work is simplified, thus leading to direct reduction in number of errors and cost run-offs due to errors. We also offer a feature to remotely monitor our plant that enables our clients to minimize their manpower requirement.

In what does the company create solutions to prevent pollution, control degradation through its products, services and activities?

We have ensured that all our products can perform consistently for long period of times. Thus our plants ensure continuous availability of reusable water for various client applications. One of our clients has been recycling 35,000 L of water per day for the past three years.

Another client in Mumbai reuses 40,000 L of water per day for flushing applications. There are many such success stories of our products where we have minimized the load on fresh water resources

Also, our plants are super efficient with respect to power consumption



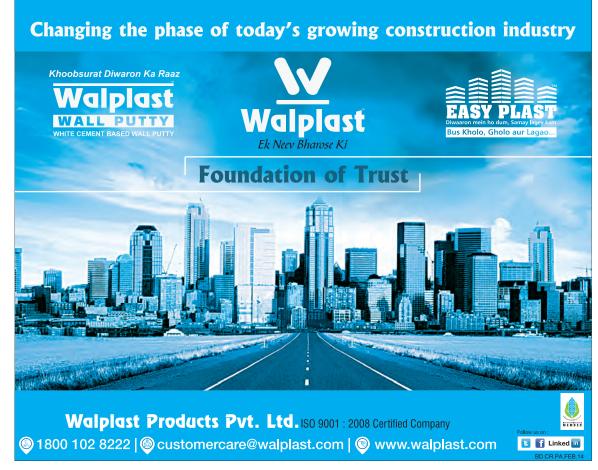
office complexes. How does your technology work for different construction operations such as residential and commercial buildings, which can also help

reduce construction costs? Our products are designed with a vision to minimize hassles for our clients. All our sewage treatment

and green house gas emission. Our plant consumes .8-1.5 KWh of energy per 1,000 L of water treated. The green house gas emission is negligible. The sludge generated by our systems is completely digested and there is no noise or smell generated in the







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Nagpur metro project worth ₹8,680 cr gets Maha govt nod

The Maharashtra cabinet cleared Rs 8,680 crore proposal for construction of two elevated metro rail routes covering a total distance of 38.2 km in Nagpur, the second capital of the state. Chief Minister Prithviraj Chavan made the announcement at a press conference after the weekly cabinet meeting.

The two routes would be Automotive Chowk to Mihan and

Prajapati Nagar to Lokmanya Nagar. The project would be completed in six years. The Nagpur Improvement Trust (NIT), the local civic agency appointed as the nodal body for the project, had appointed the Delhi Metro Rail Corporation as the consultant.

"The proposal has been now sent to the Centre for approval," said the Chief Minister. A Special Purpose Vehicle called the Nagpur Metro

Railway Corporation, comprising the state government, the Centre, Napgur Municipal Corporation and NIT, will be set up for implementation of the project. The Centre and state government would fund 20 per cent each of the total cost, while the NIT and the NMC will provide 5 per cent of the funds each. The balance 50 per cent would be raised through loan and other resources, said Chavan.



States to form JV for DMIC infra by month-end

The special purpose vehicles (SPVs) for implementation of six projects pertaining to development of trunk infrastructure under the Delhi-Mumbai Industrial Corridor (DMIC), including that in Madhya Pradesh and Greater Noida in Uttar Pradesh, are likely to be set up by the end of this month by the respective

A senior official said that all the required approvals before setting up of SPVs have been obtained along

with nod from the state governments. "The states have said that by February end the SPVs should be in place. On the part of the Delhi Mumbai Industrial Corridor Development Corporation (DMICDC), the trust will release funds to get the projects going," said the official

The Cabinet Committee on Economic Affairs (CCEA) nod required in cases where the funding is more than Rs 300 crore has already been obtained along with

the go-ahead from both the DMICDC and the state governments. States have completed the land acquisition process as well, the official said adding that Vikram Udyogpuri near Ujjain, MP; integrated industrial township at Greater Noida, UP; water supply project, MP; model solar power project, Neemrana, Rajasthan and construction of a new rail line between Bhimnath and Dholera, Gujarat, have received the requisite approvals.

20 road projects may go in for re-bid

As many as 20 road projects worth Rs 20,000 crore, awarded between 2011 and 2013, could be scrapped and might be re-bid if the Cabinet approves the recommendations made by a panel led by the Prime Minister's Economic Advisory Council Chairman, C Rangarajan, on rescheduling of premiums. The projects haven't taken off because of unfavourable economic conditions and lack of funding. Developers were seeking lenient premiumrescheduling norms.

According to experts, the projects have seen an escalation of 30 per cent on account of costlier land and raw materials. Earlier, the National Highways Authority of India (NHAI) Chairman R P Singh had also written to the Roads Ministry about the rising costs.

According to the letter, projects witnessed a 26 per cent rise in costs in the past two years and private developers were seeking the rescheduling to factor in the rising costs of construction, on the back of an economic slowdown. "In all likelihood, the developers would walk out of the projects. If they go for re-bids, that will essentially mean we will not see aggressive bidding or may have to seek the government to fund the projects," said a senior NHAI official.

PMG clears hurdles in 84 mega projects



The Project Monitoring Group (PMG), attached to the Cabinet Secretariat, could sort out problems for some 84 mega projects totaling Rs 3.71 lakh crore investments in the past seven months since the inception of the group.

Anil Swaroop, Chairman of the PMG, said that actually problems for more projects – about 137 – have been

"But, we have received clear information about 84 projects. Other project implementation agencies, mostly private sector ones, have been slow in filing updated inputs about progress of their projects", he added.

The PMG identified some 419 stalled projects worth almost Rs 20 lakh crore that had been pending for

He said projects related to coal mining and evacuation formed the biggest chunk of the stalled projects followed by ones that were stuck because of non-availability of forest or environmental clearances. Some 70,000 mw worth coal related projects have been cleared, added the PMG Chairman.

Swarup said that the Todi-Shibpur-Hazaribagh rail project work for coal evacuation would start this month after decades of delay.

Jica extends ₹1,267-cr loan for road project in Bihar

The Japan International Cooperation Agency (JICA) will provide Rs 1,267 crore loan for Bihar's National Highway Improvement Project. Under the agreement signed between the Jica and the Centre, the loan is being provided for upgradation of NH-82 connecting Gaya and Bihar sharif in Bihar covering 92.93 km, said a release.

The loan is at a concessional rate of 1.4 per cent, with a repayment period of 30 years and grace period of 10 years.

The funds will be used for widening the highway into four lanes and for constructing 3 bypasses circumventing congested areas. The project is to be completed by February 2019.

"The loan being given for upgradation of the highway in Bihar should cut travel time, promote tourism and lead to overall development of the state," said the Jica Chief Representative Shinya Ejima.

The Jica helps developing nations in promoting socio-economic projects.

in person

(contd. from pg. 5)

Tell us about your civil and fabrication work in water treatment solutions.

All our STP models (Grewa-R/RS) are available in either pre-fab or civil variant. The key USP of the products is that our system requires only single reactor tank, thus minimizing the land required for the plant.

We also use advanced equipment such as submerged aspirators rather than conventional blowers. Our power equipment are controlled by a programmed PLC that ensures the equipment are not running idle. All this collectively leads to minimizing the operating load/cost.

In waste water treatment solutions what is the company focusing on? What are your plans for expansion in India and overseas?

Since our inception, we have built up a good reference list of clients and installations. The focus now is on strengthening the sales and service pipeline pan-India and across our customer segments, that is, residential, hospitality, commercial and industrial.

We are also focusing on launching a few more products, focused on specific applications in our market segments. We have already initiated our plans for international expansion by identifying markets with similar demand drivers as India. We now plan to aggressively launch our products in these markets.

What are the company's business projections for the year?

This year has been very good. We have already more than doubled our order book from last year and hope to close the year at a significant raise. With elections out of the way in 2014, we are expecting markets and projects to start moving again. We are really bullish for FY'14-15.



