SPML continues its dedication to promote sustainable water management solutions

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RISHABH SETHI, Executive Director, SPML Infra Limited

SPML Infra is the only Indian company that featured in World's Top 40 Private Water & Wastewater Management Companies, what are the good practices and strategies SPML Infra has adopted to be in the list of World's Top 40Companies?

SPML Infra has consistently featured among the World's Top 40 Private Water & Wastewater Companies as per Global Water Intelligence, London. The vision for growth is driven by operational compliance, quality of service, efficient project execution and continuous business process improvements. SPML strives towards excellence in all operations through compliance with world-class quality systems in its specific fields of activities, ensuring a continuous improvement in project execution and quality management. SPML has also been gaining an edge by devising and adopting new technologies essential for growth such as use of ICT and Integrated Management Information System (IMIS) for smart utility management.

The company's extensive experience and knowledge of the water sector has led it to be among the top water management companies in the country and only Indian company in the list of World's Top 40 Private Water & Wastewater Companies.

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> Executive Director, SPML Infra Limited

What is your order book for 2016-17? How much revenue is expected to be generated from water and wastewater SBU?

We are just into the second quarter of FY 2016-17 and its 9 months to go for the year. Our current order book value is more than ₹ 5,000 crore.Water and wastewater are our main focus areas and almost 75 percent of our revenue comes from these sectors.

What is your target for 2016-17 for water and wastewater SBU? What are the water and wastewater projects in the pipeline?

We have set out a target to achieve the leading position in Indian water and wastewater sector and would be aggressively pursuing our goals. Our aim is to get another ₹ 10,000 crore worth of business in the remaining part of this financial year. The wastewater projects under Smart City development program, the AMRUT scheme National Mission for Clean Ganga and integrated water and wastewater infrastructure development projects in different states will be in focus this year.

SPML Infra has received the prestigious Digitizing India Award 2015 under the category of Smart City Solutions Provider for developing & implementing Integrated Management Information System (IMIS) for water utilities; please share with us the details of IMIS for water utilities?

SPML has developed a software solution for smart management of utilities with brand name, City Sonic, the Integrated Management Information System (IMIS). It is highly scalable system capable of handling the Metering, Billing, Customer Relationship Management, Network Analysis, Demand Forecasting & Management, Asset and Inventory Management, Business Intelligence, and Operation & Maintenance of the entire network. After implementing this system, the non-revenue water loss has been considerably reduced and revenue increased significantly with better consumer services in water utilities in Delhi and Karnataka. The success of this system has been recognized widely with a number of prestigious awards including Digitizing India Award. In going forward with Smart and AMRUT City development, the IMIS will be immensely helpful for water utilities to reduce water losses (Non-revenue water), improve consumer services, keeping track of all assets and increase revenue.

SPML Infra has emerged as leading players in the highly fragmented Indian water and wastewater market, how do you manage to tackle and overcome competitions from Indian and MNC water and wastewater players?

The Indian water sector is fragmented with numerous EPC and project management companies of varied sizes and capabilities. Among the leading companies, SPML has been steadily increasing its market share with expertise and legacy of more than three decades of managing and implementing over 600 world-class infrastructure projects for water supply and distribution management, wastewater management, environment and power transmission & distribution projects. As part of our strategy, we put dedicated efforts to complete all projects by implementing technologically advanced systems and processes, deploying modern and better equipment, well qualified team with experienced engineers, reducing cost on overheads, accurate and faster procurement of materials, and integration of several key departments. We did face challenges in execution, but due to our vast experience and good coordination between client, contractor and suppliers, we minimise the cost overrun and schedule delays. We act quickly on problems, drive for results, and ensure detailed follow-ups so to meet our commitments.

What are the challenges and opportunities that you foresee for water management from Smart Cities, National Mission for Clean Ganga, AMRUT, Water supply and distribution management and wastewater treatment?

Given the industry challenges, India, among the largest water markets in the world, presents numerous opportunities for water infrastructure development projects. The government's vision - not only to build basic water and sanitation infrastructure but also to build smart infrastructure - is fueling growth more than ever. Considering industry experience spanning more than three decades in water and wastewater segment, we are strategically positioned and equipped with the right capabilities to continue its growth in the market. The funding from states and resource generation from local bodies to match the central grant would be a bigger challenge apart from the key role state and local bodies has to play in the development of Smart Cities. The coordination between different local bodies for an integrated approach will be important. The understanding of the concepts of new development, retrofitting and redevelopment by the policy makers, implementers and other stakeholders at different levels will be factors determining the success of the Smart City Mission. The projects under Smart Cities, National Mission for Clean Ganga and AMRUT schemes will be more politically challenging to implement than others due to different government agencies and ministries involved in it. Strong political support, transparent policies and regulations, adequate financial support

and immediate solutions for issues will help overcome the challenges. The opportunities are immense; if the following steps are implemented in letter and spirit:Sequential clearances at various levels of government, especially land and environmental related matters need urgent attention and close coordination among all levels of government and appropriate delegation for quick decision making. Revision of total project cost when the project cost escalates, if the project cost is not revised then the investor should be entitled to recover his dues. Proper dispute resolution mechanism between developers and government agencies. Appropriate structuring of the projects, particularly of demarcation of risks and rewards between government and private sector. Adoption of innovative technologies, strategies, global best practices and newer business models. Incentive for before time completion of projects and better performance project based on power and land utilization, etc.

What are the latest trends, technologies and innovations in wastewater management?

It is estimated that wastewater from urban India may cross 1,20,000 million litres per day by the year 2050 and by that time, the rural India will also generate about 50,000 million litres. As India is projected to become a water stressed nation by 2025, there is an urgent need for better infrastructure with regard to wastewater treatment and management for sustainability. Wastewater treatment is becoming ever more critical due to shrinking water resources, increasing wastewater disposal costs and stringent regulations that have lowered permissible contaminant levels in waste streams. Wastewater treatment technologies are designed to provide low cost solution with benefits of environmental protection from the reuse of water. Energy management is becoming an essential aspect of the process of wastewater treatment facilities. Some operations, such as aeration in biological treatment consume large quantities of energy and consequently the selection of energy-efficient equipment and the design of energy recovery schemes are assuming greater importance. A single wastewater treatment technology would be inappropriate for a country like India which has different geographical and geological regions, varied climatic conditions and levels of pollution. It is more appropriate to address the potential by identifying appropriate solutions for different regions.

The solutions for wastewater treatment depends on several factors including: i) volume of wastewater; ii) availability of land; iii) proximity to residential area; iv) footprint required by technology; v) odour & pest tolerance required; vi) potential for treated effluent; vii) sustainability of water bodies in which effluent will be let out etc. With theever increasing urbanization and rapid population growth in our cities, Decentralized Wastewater Treatment Systems (DEWATS) that are locally organized and people-driven systems are more suitable for our country. Since the wastewater originates near the habitats, treatment should be done closer to the source of generation to make it a viable business model. The decentralized treatment plants in cities are the best option to address the issues. We have executed the decentralized sewage treatment project in Mira Bhayander, Maharashtra where it has created 10 decentralized sewage treatment plants and pumping stations to treat the collected sewage locally rather than transporting it to a large STP. We are using new generation technologies such as Membrane Bio Reactor (MBR) and Moving Bed Bio Reactor (MBBR) that can treat the wastewater near to the quality of river water. With suitable renovation this treated water can also recharge flood plains of riverine systems. If the treated sewage is recycled and transported to industry as a substitute of fresh water for non-process uses, the requirement for fresh water will reduce and revenue generation shall be significant.

What are the water and wastewater projects that you have taken up recently? Would you please share the details with us?

Presently, SPML is executing a number of projects for water supply and management, wastewater treatment, sewerage network, power transmission

and distribution, and municipal solid waste management. Some of key projects under execution are:First Smart City Project at VikramUdyogpuri, Ujjain, part of Delhi Mumbai Industrial Corridor (DMIC) project for 24X7 water supply with water treatment plant and pumping station, water supply conveyance from Shipra river to the site, complete sewerage network with sewage treatment and effluent treatment plants, storm water drainage system, solid waste management system, internal and external roads of 4 and 6 lanes, power transmission and distribution system, domestic gas distribution system, street lighting, CCTV and SCADA system, safety and security system, information and communication technology (ICT) network with peripheral boundary walls. Water distribution networks in Delhi for Mehrauli andVasantVihar and adjoining areas that involves rehabilitation and development of water distribution network, construction of underground reservoir to enhance the existing capacity from 4.3 million litres to 18.3 million litres, rehabilitation and replacement of 42,000 house service connection, non-revenue water management, installation of AMR & Non AMR water meters, 24x7 consumer care centre, metering, billing including operations & maintenance for 10 years. Six important ADB funded 24X7 water supply projects in Karnataka in Bellary, Raichur, Haveri, Hospet, Gadag-Betageri, and Sindhanur to serve combined population of about 1.3 million. The work involves rehabilitation and development of water distribution network; over 2500 kms of water supply pipelines, rehabilitation and replacement of 2,50,000 house service connections, non-revenue water management, installation of AMR & Non AMR water meters, 24x7 consumer care centre, metering, billing including operations & maintenance for 5 years. Pokhran Water Supply Projectwhich aims to provide sustainable source of clean drinking water to over 1.2 million residents of 580 villages and 4 towns of Pokhran, Falsoond, Balotra and Siwanaalong with industries and defence forces with 10 years of operation & maintenance. We are also executing a number of regional water supply projects in Rajasthan to provide drinking water facilities to millions of people in rural and sub-urban areas.

Operation and Maintenance of wastewater treatment plant has emerged as a lucrative business, what are the challenges, opportunities and growth in this space?

There are opportunities in the Operation and Maintenance of wastewater treatment plant but the regulatory framework for recycle and reuse is not yet clear. There is a need to have integrated water management in cities where the drinking water and sewage treatment is combined in a project with provisions to reuse the treated wastewater. Old technologies, traditional methods and ageing infrastructure present challenges with the existing facilities. In the absence of a proper discharge and reuse of treated water, in most cases the treated water is released to the drains carrying the sewage thus making the whole effort inept. The replacement or retrofitting of assets poses another challenge in operation & maintenance of wastewater treatment plants. Other issues concerning the sector are lack of legal and regulatory framework, lack of knowledge and understanding of the concept by the authorities, access to finance to carry out the project, political considerations, issues with legal and environmental clearances and land acquisition.

Smart cities, Clean Ganga, AMRUT! Indian water and wastewater market is all set to enter an exciting phase, what opportunities you foresee for the next couple of years? What is the annual rate of growth the industry is expected to achieve? What will be the market size?

The sector is poised to rebound with new opportunities. But growth of the infrastructure sector is dependent on solving some key challenges related to reducing regulatory uncertainty, developing appropriate financing mechanisms and ensuring efficient project management.As per an estimate, water and wastewater treatment market in India will reach around ₹ 22,000 crore by 2018. The wastewater treatment market in India is expected to grow at a CAGR of 18-20 percent. EPC World