

19 & 20, FEBRUARY 2019 | HYDERABAD, INDIA

International Conference & Expo 2019

HYDERABAD, INDIA

FEBRUARY 19 & 20, 2019

Hotel Marriott Convention Center

HYDERABAD, INDIA





SOUVENIR



CONCEPT NOTE ON WATER AND SOLID WASTE MANAGEMENT

India being one of World's largest populated Country has witnessed the fastest growth of the Urban Agglomerations in the recent years. Due to rapid urbanisation and the shift from agriculture-based nation to the industrial andservice oriented country. About 40 % of the Indian population is spread out in about 8000 towns/ cities. The urbanisation, industrialisation and the economicgrowth have resulted in increased generation of Municipal Solid waste percapita. The total solid waste generated in India (Lok Sabha Unstarred QuestionNo. 2974 for 04/01/2018) is 1,45,626 MT/Day or 531.53 Lakh MT/Annum. The total sewage generation in the Country i.e Towns/Cities is about 60000 MLDout of which only 30 % is treated and the rest is finding its way into the Riversand water bodies causing contamination of fresh water sources of the Villages/Towns/ Cities.

It is evident that there is a lack of a robust water and solid waste (MSW) management system to handle, monitor, coordinate, finance, plan and control the entire waste flow chain from generation, collection, transportation, disposal, treatment and re-use.



SOLID WASTE MANAGEMENT

Municipal waste and certain industrial waste have comparatively significant impact on environment. A substantial amount of these wastesis extremely dangerous to theliving organisms including human beings.

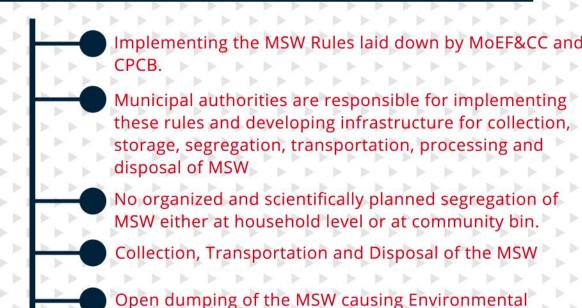
It may downgradegroundwater quality by leachate percolation also cause air pollution by emission of greenhouse gases through various course of treatment. Nowadays, E-waste and nuclear waste are other waste streams which are requiringattention due to fastest growing electronics & nuclear sector. To overcome this problem, effective solid waste management must be implemented. The objectives of solid waste management are to control, collect, and process, utilize and dispose of solid wastes in such an economical way, which protects health of human being and natural

Since last few years, the scenario of solid waste management has beenchanging continuously. Still, there is a long way to implement an effective solid waste management practices. Even today, only few portion of solid waste generated is disposed through proper btreatment. Lack of waste segregation is the biggest obstacle in implementing effective solid waste management. Though, Plastic and paper recycling sector is growing due to huge market demand for these commodities. Improper collection, unavailability of transportation in some areas, lack of advancements in treatment technologies, financial shortage in municipalities are other factors for poor solid waste management practices.

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MAJOR ISSUES IN MSW HANDLING



PRESENT SITUATION

The key issues relating to management of MSW in the country are;

Pollution.

The waste processing technologies reported in the country are; composting, vermin composting, biogas plant, RDF –palletisation and others. Some of these pelletization plants are associated with power plants for generation of electricity.





With the rapid urbanisation and population growth, the urban water supply and sanitation has become the greatest challenge to the Governments. The legislation on the other side wants the Government bodies to implement the laws and see that the environment is safeguarded.

Clean drinking water is a basic human need. Water is colorless, tasteless, and odorless. It is an excellent solvent that can dissolve most minerals that come in contact with it. Therefore, in nature, water always contains chemicals and biological impurities i.e. suspended and dissolved inorganic and organic compounds and micro organisms. These compounds may come from natural sources and leaching of waste deposits. The raw water quality available in India varies significantly, resulting in modifications to the conventional water treatment scheme consisting of aeration, chemical coagulation, flocculation, sedimentation, filtration and disinfection. However, Municipal and Industrial wastes also contribute to a wide spectrum of both organic and inorganic impurities. Inorganic compounds, in general, originate from weathering and leaching of rocks, soils, and sediments, which principally are calcium, magnesium, sodium and potassium salts of bicarbonate, chloride, sulfate, nitrate, and phosphate. Besides, lead, copper, arsenic, iron and manganese may also be present in trace amounts. Organic compounds originate from decaying plants and animal matters and from agricultural runoffs, which constitute natural humic material to synthetic organics used as detergents, pesticides, herbicides, and solvents. These constituents and their concentrations influence the quality and use of thenatural water resource.

In the country, the water source is mostly the rivers, streams, wells and lakes. Almost, 80% of the water supplied is turned into waste water after usage, either treated or untreated, is discharged into natural drainage system, rivers and other water bodies causing pollution in the water bodies. These wastewater needs to be treated by conveying to sewage treatment plants and treated wastewater must meet the aesthetic standards of ambient environment for receiving water bodies. There is a need to study the water treatment plants for their operational status and to explore the best feasible mechanism to ensure proper drinking water production with least possiblerejects and its management.



The following observations that be interpreted for the water resources and the treatment of water:



Long term, standardized measurement, observation, evaluation and reporting of the aquatic environment and treatment of water in order to define status and trends.

Survey:

A finite duration, intensive programme to measure, evaluates and reports the quality of water sources and treatment for a specific purpose.

Surveillance:

Continuous, specific measurement, observation, and reporting for the purpose of water quality management and operational activities.

Inventorisation:

Need for inventorisation of fresh water resources, treatment facilities, their contamination due to discharge of treated and untreated waste water.

Monitoring, survey and surveillance are all based on data collection, evaluation and reporting.

Present Status



In the country, different treatment technologies like ASP, UASB, Oxidation pond and advanced technologies like SBR, MBR are adopted for the treatment of sewage.

At present in the Country, the Urban Local Body's capacity to treat the sewage generated is about 24000 MLD with total no of STPs 820 out of which only 522 are functional. Thus, the total capacity for treatment of sewage in the country is only 25% of the total sewage generation of about 60000 MLD

Major issues in fresh water scarcity

Population increase and consequent increase in water demand

Most of the water sources have been tapped or being tapped and hence the future projects will be much more expensive.

Increasing social and environmental awareness, which delays project implementation time.

Increase in developmental activities such as urbanization and industrialization lead to generation of more and more wastewater that contaminates the available sources of fresh water.















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I invite your organization to participate in the International Water and Waste Management Conference and Expo to be held in Hyderabad, India during February 19 & 20, 2019.

India has 4% of the world's water resources but needs to supply water to 16% of the world's population which is 1.3 billion people. The conference and expo is organized by a group of experts from the USA and India in water and waste management and will be attended by municipal administrators, entrepreneurs, industry experts, and regulating agencies. The full details of the conference and expo can be seen at www.waterandwastemanagement.org.

The conference and expo will focus on water, storm water, lake remediation, wastewater, municipal solid waste, and specialty solid waste management. The water and waste management sector in India is one of the fastest growing industries with a market potential of over US \$30 billion. The Government of India has sanctioned a budget of thousands of crores of rupees for water and waste management sector in India for the current financial year and in addition to this the local municipalities have their own budgets.

The event will be held at a world-class conference and expo center with state-of-the-art facilities in Hyderabad.

Hyderabad is the capital city of the state of Telangana, and the fifth largest city of India with a population of over 8 million. Hyderabad is also the largest hub for software and pharma industry in India.

Several reputable companies from USA are participating in the conference and we look forward to the participation from Indian companies in great numbers.

This conference and expo is an excellent opportunity to introduce your organization to Indian customers and administrators. A list of sponsorship opportunities is enclosed.

> Frank Avila, P.E, P.L.S Commissioner

Frank aila

Metropolitan Water Reclamation District of Greater Chicago

Chairman of the Conference & Expo



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