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Indian Plumbing Today

Vol 05/ Issue 09/ December 2023

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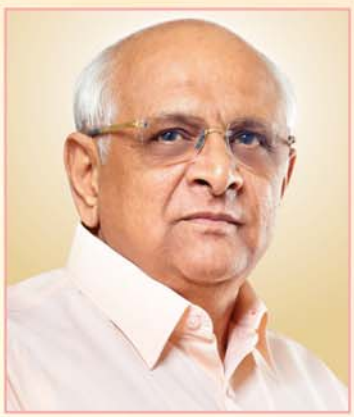
29th INDIAN PLUMBING CONFERENCE AHMEDABAD

NET ZERO WATER in BUILT ENVIRONMENT

Thursday 21 | Friday 22 | Saturday 23

DECEMBER 2023

YMCA International Centre, Ahmedabad



Chief Guest

Shri Bhupendrabhai Patel

Hon. Chief Minister of Gujarat

Guest of Honour

Shri Jagdish Vishwakarma

Hon'ble Minister of State Co-operation, Salt Industries, Printing and Stationery, Protocol (Independent Charge), Micro, Small and Medium Industries, Cottage, Khadi & Rural Industries, Civil Aviation, (State Minister), Govt. of Gujarat

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Sharatchandra Venkat Rao

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MY PAGE

Built Environment is the fundamental necessity of the present-day civilization which should not only meet the basic needs but also encompass elements of comfort and luxury. Water, being the most indispensable element for any built environment, holds a prominent position amongst all the services.

The 29th Indian Plumbing Conference revolves around the theme "Net Zero Water in the Built Environment". For decades, the building fraternity has been actively engaging in discussions and brainstorming on achieving net zero in water and energy to tackle global climate challenges and contribute to the UN's Sustainable Development Goals.

Various sessions with presentation of learned speakers from within the country and outside the country and the concurrent exhibition will showcase products with latest technology including participation from startups related to the 5 R's of water — Respect, Reduce, Reuse, Recharge, and Recycle.

Prominent personalities from the building industry, including architects, planners, builders, consultants, manufacturers, and service providers from within the country and around the globe, will participate in this conference.

Honourable Chief Minister of Gujarat, Sh. Bhupendrabhai Patel has consented to be the Chief Guest. Efforts are being made to ensure that every conference participant gains valuable knowledge and techniques to conserve water without compromising on user's comfort.

I appeal to all IPT readers to thoroughly explore this edition, focusing on the conference and exhibition, and to attend the 29th Indian Plumbing Conference and Exhibition with colleagues and team members.

Wishing you an enlightening reading experience!

Let us commit to Respect Water in the New Year 2024 in all of our activities.

Chandra Shekhar Gupta
National Vice President and IPA Founder Member
Member, IPT Editorial Board

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29th Indian Plumbing Conference

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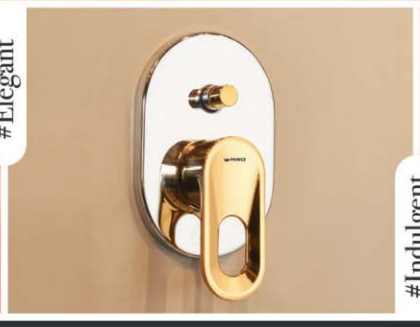

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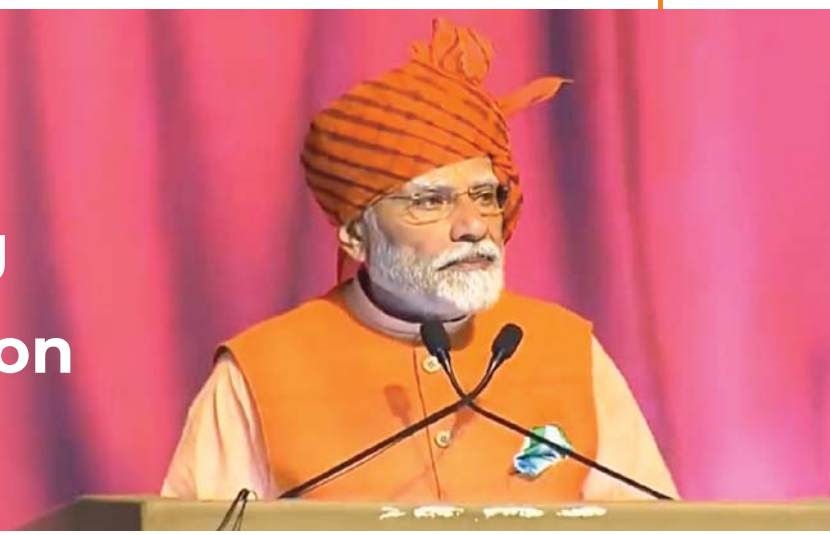
Prime Minister Modi's Pioneering Water Conservation Initiatives:



A Transformative Vision for India's Future

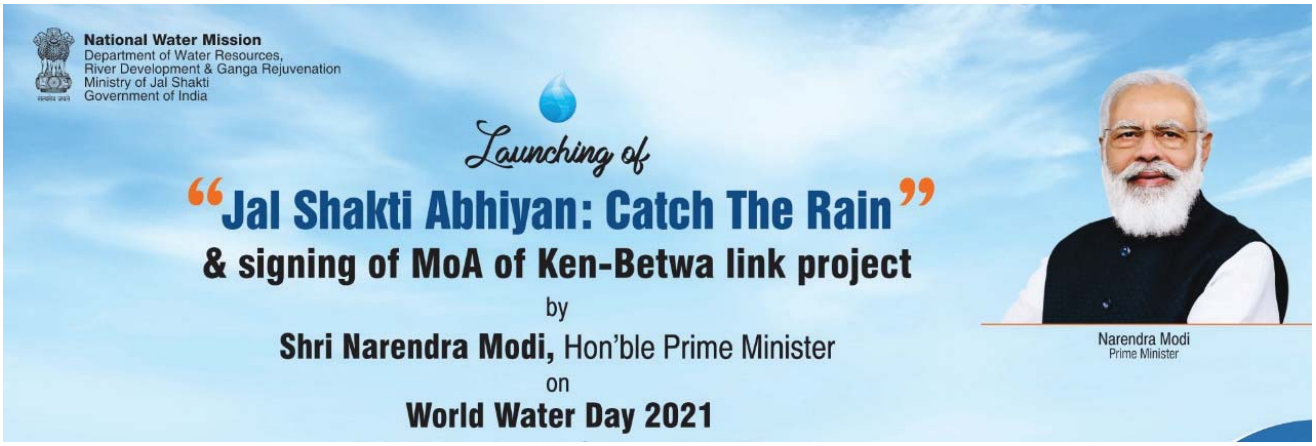
Prime Minister Shri Narendra Modi's Dussehra speech in 2023 marked a pivotal moment in India's water conservation movement. In a historic address, he outlined ten 'Sankalps' (resolutions), with the very

first one dedicated to the vital cause of saving water. Prime Minister Modi passionately urged his fellow countrymen to prioritize water conservation for the sake of future generations. His unwavering commitment to this cause was evident when, in 2019, he established the Jal Shakti Ministry by amalgamating three ministries to address water-related issues comprehensively. This move aimed to ensure India's water security in a world where 70% of the Earth's surface is covered by water, but only a mere 3% is potable. India, with a population contributing to 18% of the world's total, possesses a mere 3% of the planet's potable water. Notably, 80% of water consumption in India is attributed to agriculture, underscoring the urgency of efficient water resource management and conservation.

Prime Minister Narendra Modi's focus on water issues did not emerge suddenly; it has been a long-standing priority. His commitment to addressing this challenge gained momentum in 2019 with the introduction of several schemes aimed at water conservation. In a panel discussion on Sansad TV, Ms. Archana Varma, Mission Director of the National Water Mission in the Ministry of Jal Shakti, emphasized the Modi Government's initiatives concerning water issues and the essential role of the citizens in this water-saving movement.

Ms. Archana Varma commenced her dialogue by rightfully lauding Prime Minister Modi as a "Real Water Champion" who comprehends water-related challenges deeply, hailing from a drought-prone region himself. In 2019, PM Modi realized that tackling water issues required a holistic approach, and thus, he amalgamated the water-related ministries into one, marking the first crucial step toward achieving the goals of India's water-saving movement. Subsequently, several schemes were launched to bolster water conservation efforts.

The Jal Jeevan Mission scheme, for instance, aspires to provide functional water taps to rural households. In 2019, PM Modi inaugurated the Jal Shakti Abhiyan, later renamed "Catch The Rain," with the tagline "Catch the rain, where it falls, when it falls." The Atal Bhujal Scheme, launched in 2020, aimed at recharging



groundwater. The National Mission for Ganga sought to clean the Ganga River, while the National Aquifer Mapping and Management Program (NAQUIM) was initiated to survey aquifers. The Pradhan Mantri Krishi Sinchai Yojana (PMKSY) was launched to enhance irrigation investments, promote efficient water usage, and implement water-saving technologies, ensuring more crop yield per drop.

Ms. Archana Varma emphasized that PM Modi stressed that water conservation was not the government's sole responsibility; it required the collective efforts of the government and citizens alike. Wasting water is no longer an option, as India is already a water-stressed country, and by 2050, it may become water-scarce. It is crucial to unite communities, including youth and gram panchayats, to achieve this shared goal. PM Modi's India Vision@2047, which includes the Water Vision@2047, will play a pivotal role in the Amrit Kal. Community-led water conservation movements are the need of the hour, and we must not wait until a climate change crisis looms. Simple lifestyle changes, such as intelligent use of wash basins, shorter shower times, and a focus on rainwater harvesting, can significantly contribute to water conservation.

Ms. Archana Varma also highlighted the establishment of a game-changing institution under PM Modi's leadership, the Bureau of Water Use Efficiency (BWUE). This institution's primary objective is to promote the concept of the "5Rs" of water conservation: Respect, Reduce, Recycle, Reuse, and Replenish. Water is a finite

resource, and if demands are not curtailed, it could be depleted by 2050.

Irrigation is a significant consumer of groundwater, and the government's "Per Drop More Crop" scheme promotes efficient irrigation methods like sprinklers and drip systems. Such methods have the potential to make a significant impact in reducing water wastage. Technological innovations, such as mobile apps that enable farmers in Karnataka to monitor soil moisture and adjust water supply accordingly, are critical steps toward more sustainable water use. Diversifying crops and engaging local communities are equally important strategies. Preserving green urban spaces and safeguarding our water bodies must be central to our water conservation efforts.

In conclusion, Prime Minister Narendra Modi's unwavering commitment to water conservation and his government's comprehensive initiatives are commendable and demonstrate a transformative approach to address India's pressing water-related challenges. By recognizing the shared responsibility of government and citizens, implementing crucial schemes, and promoting innovative technologies, India can pave the way for a more water-secure future, one drop at a time. The time to act is now, and by embracing a holistic approach to water management, we can work together to safeguard this precious resource for generations to come.

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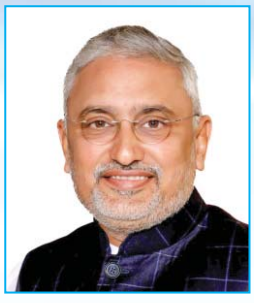

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Shri Jagdish Vishwakarma

Hon'ble Minister of State Co-operation, Salt Industries, Printing and Stationery, Protocol (Independent Charge), Micro, Small and Medium Industries, Cottage, Khadi & Rural Industries, Civil Aviation, (State Minister), Govt. of Gujarat

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Day 1, Thursday, 21st December

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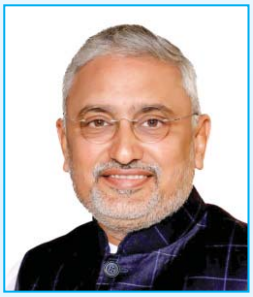

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Keynote Speaker

Dr. Bimal Patel
Director
HCP Design Planning & Management

Making India Water Positive

TECHNICAL SESSION I

Session Chair

Dr Mansee Bal Bhargava
Director
WforW Foundation and Research Entrepreneur Environmental Design Consultants

Session Speakers

Avinash Mishra
Former Adviser
(Water Resources, Environment and Forest, Climate Change, Tourism & Culture), Niti Aayog

Ashwani Kumar (IAS)
Principal Secretary
Urban Development & Urban Housing Deptt, Gujarat

Prof. Srinivas Chary
Chief Executive Officer
WASH Innovation Hub & Professor, Administrative Staff College of India (ASCI)

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Day 1, Thursday, 21st December

Reclamation of Water in Built Environment

PANEL DISCUSSION - I

Moderator

Ar. Jayesh Hariyani
CMD, Senior Principal
INI Design Studio

Panellists

Dr. Pawan Labhasetwar
Chief Scientist & Head
NEERI

Venkat Puranam
Wastewater Treatment
Consultant

Ar. Ankoor Sanghvi
Principal Architect
AMAS Architects & TC Member,
Indian Green Building Council

Dr. Malini Reddy
Director
Governance & Service Delivery,
Athena Infonomics

Water Use Efficiency

TECHNICAL SESSION II

Session Chair

Dinesh Mehta
Professor Emeritus,
School of Planning
CEPT University

Session Speakers

Dr. Alok Sikka
Country Representative (India),
International Water Management
Institute (IWMI), New Delhi

Madhurima Madhav
Scientist D and Joint Director,
Bureau of Indian Standards
(BIS)

Dr. Shireesh Pankaj
VP, Research & Development
Aliaxis India/ Ashirvad Pipes

Sameer Sinha
Managing Director
Savvy Infrastructure

Day 2, Friday, 22nd December

Zero Liquid Discharge

TECHNICAL SESSION II

Session Chair

S B Dangayach
Founder Trustee
Innovative Thought Forum

Session Speakers

Ajay Popat
President
ION Exchange

D M Thaker
Member Secretary
GPCB

Apurva Shah
Principal Consultant
Avani Enterprises

Day 2, Friday, 22nd December

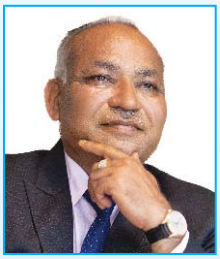
जुगल बंदी with Water-5R's
Respect, Reduce, Recharge, Recycle and Reuse

PANEL DISCUSSION - II

Moderator

Panellists

Ashish Rakheja
Managing Partner
AEON Integrated Building Design Consultants



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Rushabh Patel
Managing Director
Parshwanath Corporation

Ar. Hiren Patel
Principal Architect
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TECHNICAL SESSION III

Moderator

Panellists

Taral Shah
Managing Director
Shivalik Group

Dr. Sanjay Dahasahasra
Former Member Secretary
Maharashtra Jeevan Pradhikaran & Member CPHEEO

Dr. Rama Kant
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Motivational Speaker

Ambassador Dr Deepak Vohra

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Spot Registration	₹ 1475/-	₹ 1770/-
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Presence of plumbing & building industry professionals is expected to trigger meaningful interactions between the stakeholders of the Indian Construction Industry

3 Days Conference-cum-Expo at YMCA International Centre at Ahmedabad is expected to be attended by 1500+ Delegates, 80+ Exhibitors and 5000+ Visitors.

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CURTAIN RAISER

Water, the essence of life, is an indispensable element vital for our survival. Recognizing the paramount importance of water, the Indian Plumbing Association (IPA) has undertaken a passionate endeavour to illuminate minds about the significance of water and the imperative need to conserve it through its 29th Indian Plumbing Conference which is scheduled to be held in Ahmedabad from 21st-23rd December 2023 with the Theme, Net Zero Water in Built Environment. In pursuit of this mission, IPA orchestrated a spectacular Curtain Raiser event on Saturday, 2nd December, at Novotel Hotel, Ahmedabad. The occasion served as a prelude to the much-anticipated 29th Indian Plumbing Conference and Exhibition in Ahmedabad.

The Curtain Raiser event proved to be a resounding success, drawing over 100 delegates from across the building and plumbing industry. Minesh Shah, Chairman of IPA-AC, delivered a compelling overview of

Minesh Shah, Chair, IPA Ahmedabad Chapter delivering Welcome Address

the 29th Indian Plumbing Conference & Exhibition, articulating its grandeur.

Gurmit Singh Arora, IPA National President, shared profound insights into the event's importance, the

Gurmit Singh Arora, IPA National President speaking at the Curtain Raiser

essence of water conservation, and the imperative of "I Save Water". During his address, he said, "The Indian Plumbing Association (IPA) is thrilled to announce the 29th Indian Plumbing Conference, the flagship annual event of IPA. Scheduled from December 21st to 23rd, 2023, at the YMCA International Centre in Ahmedabad, the conference is set to be graced by the esteemed presence of Shri Bhupendra Bhai Patel, Honourable Chief Minister of Gujarat, as the Chief Guest, and Shri Jagdish Vishwakarma, Honourable Minister of State, Co-operation, Salt Industries, Printing and Stationery, Protocol (Independent Charge), Micro, Small and Medium Industries, Cottage, Khadi and Rural Industries, Civil Aviation (State Minister), Govt. of Gujarat as the Guest of Honour."

"The 29th Indian Plumbing Conference in Ahmedabad is a testament to Indian Plumbing Association's unwavering commitment to fostering innovation and sustainability in the plumbing industry. IPA remains dedicated to promoting excellence, redefining plumbing standards, and ensuring that our professionals are equipped with the knowledge and skills needed for a sustainable and resilient future", stated Mr. Gurmit Singh Arora.

Kajal Oza Vaidya, Guest Speaker

Guest Speaker for the event, Kajal Oza Vaidhya, a renowned personality, writer, and speaker, who shared profound insights on water conservation.

The Curtain Raiser also showcased the formidable lineup of IPA's leadership, Dipen Mehta, Co-Convener, 29th IPC, Ketan Parikh, Hon. Secretary, Harshal Parikh, Vice Chair and steering Executive Committee members, including Pratik Shah, Gaurang Patel, Shital Shah, Shailendra Mishra, Chetan Vyas, Haresh Patel, Avni Sikka and Pranav Shah standing as pillars of commitment.

Dipen Mehta, delivering the Vote of Thanks

Adding to the event's grandeur were revered dignitaries from various organizations. The presence of luminaries such as Dhruv Patel and Nilay Patel from CREDAI Ahmedabad GIHED, Girish Singhai, President AACEI, Aakash Patel, ISHARE Regional Director West, Urvish Shah, ISHARE National Chair Program, Ashutosh Vyas, President Ahmedabad Chapter ISHARE, Nimit Sheth, Regional Director West - FSAI, Dipika Goenka, Chapter President FSAI Ahmedabad, Mehul Dave from IIID, Chintan Shah - Treasurer IIA, Binjan Sheth - Co-Chair, Business Women Committee GCCI, and many more illustrious figures added an aura of collective commitment.

The entire session was masterfully orchestrated by Vinod Malaviya, IPA EC member. Dipen Mehta, Co-Convener, 29th Indian Plumbing Conference delivered the Vote of Thanks and urged all attendees to mark their calendar for the breakthrough 29th Indian Plumbing Conference and exhibition which brings an interesting line up of speakers and panellists who would be deliberating on topics of national importance with respect to water positivity of the nation.

The 29th Indian Plumbing Conference is envisioned as the largest confluence of plumbing and building industry experts globally in 2023, strategically hosted in Ahmedabad—a city witnessing rapid urbanization and steeped in heritage.

Audience at the 29th Indian Plumbing Conference Curtain Raiser

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29th Indian Plumbing Conference in Ahmedabad

Ahmedabad, The Indian Plumbing Association (IPA) is thrilled to announce the 29th Indian Plumbing Conference, the flagship annual event of IPA. Scheduled from December 21st to 23rd, 2023, at the YMCA International Centre in Ahmedabad, the conference is set to be graced by the esteemed presence of Shri Bhupendra Bhai Patel, Honourable Chief Minister of Gujarat, as the Chief Guest, and Shri Jagdish Vishwakarma, Honourable Minister of State, Co-operation, Salt Industries, Printing and Stationery, Protocol (Independent Charge), Micro, Small and Medium Industries, Cottage, Khadi and Rural Industries, Civil Aviation (State Minister), Govt. of Gujarat as the Guest of Honour. The theme for the 29th Indian Plumbing Conference is "Net Zero Water in the Built Environment," focusing on critical issues related to water conservation and sustainability for achieving a circular water economy in the construction sector. Honourable Prime Minister of India, Sh. Narendra Modi's commitment to making India carbon neutral by 2070 highlights the urgency for sustainable practices. Buildings are responsible for 40% of carbon emissions. There are 4 major elements of achieving carbon neutrality viz. water, waste, energy, and carbon. Water is the chief component, and it plays a pivotal role in achieving carbon neutrality. The conference aims to explore the energy and water nexus, emphasizing that saving water results in energy savings and reduced carbon emissions. (20-4)

Free Press Gujarat

29th Indian Plumbing Conference in Ahmedabad to Focus on Achieving Net Zero Water in Built Environment

Ahmedabad, December 2nd, 2023

The Indian Plumbing Association (IPA) is thrilled to announce the 29th Indian Plumbing Conference, the flagship annual event of IPA. Scheduled from December 21st to 23rd, 2023, at the YMCA International Centre in Ahmedabad, the conference is set to be graced by the esteemed presence of Shri Bhupendra Bhai Patel, Honourable Chief Minister of Gujarat, as the Chief Guest, and Shri Jagdish Vishwakarma, Honourable Minister of State, Co-operation, Salt Industries, Printing and Stationery, Protocol (Independent Charge), Micro, Small and Medium Industries, Cottage, Khadi and Rural Industries, Civil Aviation (State Minister), Govt. of Gujarat as the Guest of Honour.

Gujarat Business Watch

બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર હાંસલ કરવા અમદાવાદમાં ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ આયોજિત કરવામાં આવી છે.

(એજન્સી દ્વારા)

ઈન્ડિયન પ્લમ્બિંગ એસોસિએશન **(IPA)** ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ, **IPA** ની મુખ્ય વાર્ષિક ઈવેન્ટની જાહેરાત કરતાં ગર્વ અનુભવે છે. ૨૧મી ડિસેમ્બરથી ૨૩મી ડિસેમ્બર, ૨૦૨૩ દરમિયાન અમદાવાદમાં **YMCA** ઈન્ટરનેશનલ સેન્ટર ખાતે આયોજિત આ કોન્ફરન્સ મુખ્ય અતિથિ તરીકે ગુજરાતના માનનીય મુખ્યમંત્રી શ્રી ભૂપેન્દ્રભાઈ પટેલ અને આદરણીય શ્રી

જગદીશ વિશ્વકર્માની રાજ્યમંત્રી સહકાર, મીઠું ઉદ્યોગ, પ્રિન્ટિંગ અને સ્ટેશનરી, પ્રોટોકોલ (સ્વતંત્ર ચાર્જ), સૂક્ષ્મ, લઘુ અને મધ્યમ ઉદ્યોગ, કુટીર, ખાદી અને ગ્રામીણ ઉદ્યોગ, નાગરિક ઉડ્ડયન (રાજ્ય મંત્રી), સરકાર ગુજરાતના ઉપસ્થિતિ રહેશે.

૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સની થીમ બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર છે, જે બાંધકામ ક્ષેત્રે સર્કયુલર જળ

અર્થતંત્ર હાંસલ કરવા માટે જળ સંરક્ષણ અને સસ્ટેનેબિલિટી સંબંધિત નિર્ણાયક મુદ્દાઓ પર ધ્યાન કેન્દ્રિત કરે છે.ભારતના માનનીય વડાપ્રધાન શ્રી નરેન્દ્ર મોદીની ૨૦૭૦ સુધીમાં ભારતને કાર્બન તટસ્થ બનાવવાની પ્રતિબદ્ધતા સસ્ટેનેબિલિટી પ્રથાઓની જરૂરિયાત દર્શાવે છે. ૪૦% કાર્બન ઉત્સર્જન માટે ઈમારતો જવાબદાર છે. કાર્બન તટસ્થતા હાંસલ કરવાના ૪ મુખ્ય ઘટકો છે જેમ કે. પાણી, કચરો, ઊર્જા અને કાર્બન. પાણી મુખ્ય ઘટક છે, અને તે કાર્બન તટસ્થતા હાંસલ કરવામાં મુખ્ય ભૂમિકા ભજવે છે. કોન્ફરન્સનો ઉદ્દેશ્ય ઊર્જા અને પાણીના જોડાણની શોધ કરવાનો છે, એ વાત પર ભાર મૂકે છે કે પાણી બચાવવાથી ઊર્જાની બચત થાય છે અને કાર્બન ઉત્સર્જનમાં ઘટાડો થાય છે.

ભારત વૈશ્વિક સ્તરે સૌથી વધુ વસ્તી ધરાવતું અને વિશ્વના તાજા પાણીના માત્ર ૪% સંસાધનો ધરાવતું અને ભૂગર્ભજળનું સૌથી મોટું નિષ્કર્ષણ ધરાવતું હોવાથી, સસ્ટેનેબિલિટી અને જળ સંરક્ષણ માટે નિર્માણ વ્યૂહરચનાઓનું પુનઃમૂલ્યાંકન કરવાની જરૂરિયાત સર્વોપરી છે.

Tapobhumi

બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર હાંસલ કરવા અમદાવાદમાં ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ આયોજિત કરવામાં આવી છે

ઈન્ડિયન પ્લમ્બિંગ એસોસિએશન ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ, ની મુખ્ય વાર્ષિક ઈવેન્ટની જાહેરાત કરતાં ગર્વ અનુભવે છે. ૨૧મી ડિસેમ્બરથી ૨૩મી ડિસેમ્બર, ૨૦૨૩ દરમિયાન અમદાવાદમાં ઈન્ટરનેશનલ સેન્ટર ખાતે આયોજિત આ કોન્ફરન્સ મુખ્ય અતિથિ તરીકે ગુજરાતના માનનીય મુખ્યમંત્રી શ્રી ભૂપેન્દ્રભાઈ પટેલ અને આદરણીય શ્રી જગદીશ વિશ્વકર્માની રાજ્યમંત્રી સહકાર, મીઠું ઉદ્યોગ, પ્રિન્ટિંગ અને સ્ટેશનરી, પ્રોટોકોલ (સ્વતંત્ર ચાર્જ), સૂક્ષ્મ, લઘુ અને મધ્યમ ઉદ્યોગ, કુટીર, ખાદી અને ગ્રામીણ ઉદ્યોગ, નાગરિક ઉડ્ડયન (રાજ્ય મંત્રી), સરકાર ગુજરાતના ઉપસ્થિતિ રહેશે.

૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સની થીમ ×બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર×× છે, જે બાંધકામ ક્ષેત્રે સર્કયુલર જળ અર્થતંત્ર હાંસલ કરવા માટે જળ સંરક્ષણ અને સસ્ટેનેબિલિટી સંબંધિત નિર્ણાયક મુદ્દાઓ પર ધ્યાન કેન્દ્રિત કરે છે.

ભારતના માનનીય વડાપ્રધાન શ્રી નરેન્દ્ર મોદીની ૨૦૭૦ સુધીમાં ભારતને કાર્બન તટસ્થ બનાવવાની પ્રતિબદ્ધતા સસ્ટેનેબિલિટી પ્રથાઓની જરૂરિયાત દર્શાવે છે. ૪૦% કાર્બન ઉત્સર્જન માટે ઈમારતો જવાબદાર છે. કાર્બન તટસ્થતા હાંસલ કરવાના ૪ મુખ્ય ઘટકો છે જેમ કે. પાણી, કચરો, ઊર્જા અને કાર્બન. પાણી મુખ્ય ઘટક છે, અને તે કાર્બન તટસ્થતા હાંસલ કરવામાં મુખ્ય ભૂમિકા ભજવે છે. કોન્ફરન્સનો ઉદ્દેશ્ય ઊર્જા અને પાણીના જોડાણની શોધ કરવાનો છે, એ વાત પર ભાર મૂકે છે કે પાણી બચાવવાથી ઊર્જાની બચત થાય છે અને કાર્બન ઉત્સર્જનમાં ઘટાડો થાય છે. ભારત વૈશ્વિક સ્તરે સૌથી વધુ વસ્તી ધરાવતું અને વિશ્વના તાજા પાણીના માત્ર ૪% સંસાધનો ધરાવતું અને ભૂગર્ભજળનું સૌથી મોટું નિષ્કર્ષણ ધરાવતું હોવાથી, સસ્ટેનેબિલિટી અને જળ સંરક્ષણ માટે નિર્માણ વ્યૂહરચનાઓનું પુનઃમૂલ્યાંકન કરવાની જરૂરિયાત સર્વોપરી છે. નેટ-ઝીરો વોટર બિલ્ડીંગ્સ, જે તેમના વોટર ફુટ (કૅ) પ્રિન્ટને શૂન્ય સુધી ઘટાડવાનું લક્ષ્ય રાખે છે, તે મુખ્ય ચર્ચાનો મુદ્દો હશે. ઁજ ૧૭૬૫૦ ભાગ ૧ અને ભાગ ૨ મુજબ રેઈન વોટર હાર્વેસ્ટિંગ, ગ્રે વોટર સિસ્ટમ્સ, પાણી-કાર્યક્ષમ સેનિટરીવેર અને સેનિટરી ફીટીંગ્સ જેવી તકનીકોની શોધ કરવામાં આવશે જે નેટ ઝીરો વોટર બિલ્ડિંગમાં પાણીનો કાર્યક્ષમ ઉપયોગ અને ટ્રીટમેન્ટ હાંસલ કરવા માટે સક્ષમ બનાવે છે, બાહ્ય જળ સ્ત્રોતો પરનો બોજ ઘટાડે છે.. કોન્ફરન્સની શરૂઆત નેટ ઝીરો વોટર પર શિક્ષણ અને જાગરૂકતા વધારવાના આહવાન સાથે થશે, ઓછા પ્રવાહના સેનિટરીવેર અને ફીટીંગની સ્થાપના, વરસાદી પાણીનો સંગ્રહ, અને સર્કયુલર વોટર લૂપ સ્થાપિત કરવા માટે તમામ વપરાયેલ પાણી (ગ્રે અને બ્લેક) ના પુનઃપ્રાપ્તિની હિમાયત કરશે.

૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સની કલ્પના ૨૦૨૩માં વૈશ્વિક સ્તરે પ્લમ્બિંગ અને બિલ્ડિંગ ઉદ્યોગના નિષ્ણાતોના સૌથી મોટા સંગમ તરીકે કરવામાં આવી છે, જેનું વ્યૂહાત્મક રીતે અમદાવાદમાં આયોજન કરવામાં આવ્યું છે-જે ઝડપી શહેરીકરણનું સાક્ષી છે અને હેરિટેજથી ભરપૂર છે.

Times of Karnavati

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તા. ૨૧મી ડીસેમ્બરથી ૨૩ ડીસેમ્બર સુધી અમદાવાદ ખાતે

બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર હાંસલ કરવા ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સનું આયોજન

આ કોન્ફરન્સમાં ગુજરાતના મુખ્યમંત્રીશ્રી ભુપેન્દ્રભાઈ પટેલ અને સુક્ષ્મ, લઘુ અને મધ્યમ ઉદ્યોગના રાજ્યમંત્રીશ્રી જગદીશભાઈ વિશ્વકર્મા ઉપસ્થિત રહેશે

(પ્રતિનિધિ દ્વારા)

ઈન્ડિયન પ્લમ્બિંગ એસોસિએશન (IPA) ના રાષ્ટ્રીય અધ્યક્ષશ્રી ગુરમિતસિંહ અરોરા અને મુખ્ય પ્રબંધક આયોજકોએ અમદાવાદ ખાતે યોજાનાર ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ, IPA ની મુખ્ય વાર્ષિક ઈવેન્ટ વિશે ભારપુર્વક માહિતી આપતા જણાવ્યું હતું કે, તા. ૨૧મી ડિસેમ્બરથી ૨૩મી ડિસેમ્બર, ૨૦૨૩ દરમિયાન અમદાવાદમાં YMCA ઈન્ટરનેશનલ સેન્ટર ખાતે આયોજિત આ કોન્ફરન્સમાં મુખ્ય અતિથિ તરીકે ગુજરાતના મુખ્યમંત્રીશ્રી ભૂપેન્દ્રભાઈ પટેલ અને શ્રી જગદીશ વિશ્વકર્માની (રાજ્યમંત્રી સૂક્ષ્મ, લઘુ અને મધ્યમ ઉદ્યોગ) ઉપસ્થિતિ રહેશે. ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સની થીમ અને તેનો મુખ્ય હેતુ "બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર" છે, જે બાંધકામ ક્ષેત્રે સર્ક્યુલર જળ અર્થતંત્ર હાંસલ કરવા માટે જળ સંરક્ષણ અને સસ્ટેનેબિલિટી સંબંધિત નિર્ણાયક મુદ્દાઓ પર ધ્યાન કેન્દ્રિત કરે છે.

ઈન્ડિયન પ્લમ્બિંગ એસોસિએશન (IPA) ના રાષ્ટ્રીય અધ્યક્ષશ્રી ગુરમિતસિંહ અરોરાએ વધુ માહિતી આપતા જણાવ્યું હતું કે, ભારતના વડાપ્રધાન શ્રી નરેન્દ્ર મોદીની ૨૦૭૦ સુધીમાં ભારતને કાર્બન તટસ્થ બનાવવાની પ્રતિબદ્ધતા સસ્ટેનેબિલિટી પ્રથાઓની જરૂરિયાત દર્શાવે છે. આમ જોવા જઈએ તો ૪૦% કાર્બન ઉત્સર્જન માટે ઈમારતો જવાબદાર છે. કાર્બન તટસ્થતા હાંસલ કરવાના ૪ મુખ્ય ઘટકો છે જેમ કે. પાણી, કચરો, ઊર્જા અને કાર્બન. પાણી મુખ્ય ઘટક છે, અને તે કાર્બન તટસ્થતા હાંસલ કરવામાં મુખ્ય ભૂમિકા ભજવે છે. આ કોન્ફરન્સનો ઉદ્દેશ ઊર્જા અને પાણીના જોડાણની શોધ કરવાનો છે જે એ વાત પર ભાર મૂકે છે કે પાણી બચાવવાથી ઊર્જાની બચત થાય છે અને કાર્બન ઉત્સર્જનમાં ઘટાડો થાય છે. ભારત વૈશ્વિક સ્તરે સૌથી વધુ વસ્તી ધરાવતું અને વિશ્વના તાજા પાણીના માત્ર ૪% સંસાધનો ધરાવતું અને ભૂગર્ભજળનું સૌથી મોટું નિષ્કર્ષણ ધરાવતું હોવાથી, સસ્ટેનેબિલિટી અને જળ સંરક્ષણ માટે નિર્માણ વ્યૂહરચનાઓનું પુનઃમૂલ્યાંકન કરવાની જરૂરિયાત સર્વોપરી છે. જળ પરિપત્ર અથવા તટસ્થતા દ્વારા બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર હાંસલ કરવા પર ધ્યાન કેન્દ્રિત કરવામાં આવ્યું છે. નેટ-ઝીરો વોટર બિલ્ડીંગ્સ, જે તેમના વોટર ફુટ (foot) પ્રિન્ટને શુન્ય સુધી ઘટાડવાનું લક્ષ્ય રાખે છે, તે મુખ્ય ચર્ચાનો મુદ્દો હશે. કોન્ફરન્સની શરૂઆત નેટ ઝીરો વોટર પર શિક્ષણ અને જાગરૂકતા વધારવાના આહવાન સાથે થશે, ઓછા પ્રવાહના સેનિટરીવેર અને ફીટીંગની સ્થાપના, વરસાદી પાણીનો સંગ્રહ, અને સર્ક્યુલર વોટર લૂપ સ્થાપિત કરવા માટે તમામ વપરાયેલ પાણી (ગ્રે અને બ્લેક) ના પુનઃપ્રાપ્તિની હિમાયત કરશે.

શ્રી અરોરાએ વધુમાં જણાવ્યું હતું કે, આ કોન્ફરન્સમાં મુખ્ય સ્પીકર્સ અને પેનલિસ્ટો દ્વારા નિર્ણાયક વિષયો પર ચર્ચા વિચારણા કરવામાં આવશે જેમ કે મેકિંગ ઈન્ડિયા વોટર પોઝીટીવ, બિલ્ટ એન્વાયર્નમેન્ટમાં પાણીનું પુનઃપ્રાપ્તિ, પાણીનો ઉપયોગ કાર્યક્ષમતા, ઉદ્યોગોમાં ઝીરો લિક્વિડ ડિસ્ચાર્જ પર કેસ સ્ટડીઝ અને ૫ આરના મહત્વ (આદર, ઘટાડો, પાણી વ્યવસ્થાપનમાં રિચાર્જ, રિસાયકલ અને પુનઃઉપયોગ). ડૉ. બિમલ પટેલ, ડાયરેક્ટર, HCP ડિઝાઈન પ્લાનિંગ એન્ડ મેનેજમેન્ટ, જેઓ સેન્ટ્રા વિસ્ટા જેવા આઈકોનિક પ્રોજેક્ટ ડિઝાઈન કરવા માટે જાણીતા છે જે ઉદ્દઘાટન સત્રમાં મુખ્ય વક્તા હશે. અન્ય વક્તાઓ અને પેનલસભ્યોમાં ડૉ. પવન લાભસેતવાર (મુખ્ય વૈજ્ઞાનિક અને NEERIના વડા), શ્રી આલોક સિક્કા - (અધ્યક્ષ, ટાસ્ક ફોર્સ, BWUE અને કંટ્રી રિપ્રેઝેંટેટિવ', IWMI), શ્રી અશ્વિની કુમાર (IAS) (અગ્ર સચિવ, શહેરી વિકાસ અને શહેરી આવાસ વિભાગ ગુજરાત સરકાર), અવિનાશ મિશ્રા (પૂર્વ સલાહકાર, નીતિ આયોગ), પ્રો. વી. શ્રીનિવાસ ચારી (કેન્દ્રના નિયામક અને પ્રોફેસર, એડમિનિસ્ટ્રેટિવ સ્ટાફ કોલેજ ઓફ ઈન્ડિયા), ડૉ. સંજય દહસહસ્ત્ર (ભુતપૂર્વ સભ્ય સચિવ, મહારાષ્ટ્ર જીવન પ્રાધિકરણ અને સભ્ય CPHEEO), મધુરિમા માધવ (વૈજ્ઞાનિક, જોઈન્ટ ડાયરેક્ટર, BIS), ડૉ. રમાકાંત (નાયબ સલાહકાર, PHE, આવાસ અને શહેરી બાબતોના મંત્રાલય), અને એમ્બેસેડર ડૉ. દીપક વોહરા પોતાના વિચારો રજુ કરશે.

આ કોન્ફરન્સના મુખ્ય આકર્ષણોમાં ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ બિલ્ડીંગ ઉદ્યોગમાં વ્યાવસાયિકો માટે એક અનોખું પ્લેટફોર્મ પ્રદાન કરે છે, જે જોડાણ અને જ્ઞાન સંવર્ધન માટે અપ્રતિમ તકો પૂરી પાડે છે. પ્રતિભાગીઓ બાંધકામ ક્ષેત્રે ટકાઉ પ્રેક્ટિસના મોખરે સંપર્કમાં આવશે. કોન્ફરન્સ એક નોલેજ હબ તરીકે સેવા આપે છે, જે નેટ ઝીરો વોટર-કમ્પ્લાયન્ટ ઈમારતોના વિકાસ માટે નિર્ણાયક અત્યાધુનિક ટેકનોલોજી અને ઉત્પાદનોની ઊંડી સમજ આપે છે. પ્રતિભાગીઓ બિલ્ટ એન્વાયર્નમેન્ટમાં નેટ ઝીરો વોટર હાંસલ કરવા માટે સામેલ વ્યૂહરચનાઓ અને અભિગમોનું ગહન જ્ઞાન અને સમજ મેળવશે.

ભારતીય પ્લમ્બિંગ એસોસિએશનના રાષ્ટ્રીય અધ્યક્ષ ગુરમિતસિંહ અરોરાએ વધુમાં જણાવ્યું હતું કે, અમદાવાદમાં ૨૯મી ભારતીય પ્લમ્બિંગ કોન્ફરન્સ પ્લમ્બિંગ ઉદ્યોગમાં નવીનતા અને ટકાઉપણાને પ્રોત્સાહન આપવા માટે ભારતીય પ્લમ્બિંગ એસોસિએશનની અતૂટ પ્રતિબદ્ધતાનો પુરાવો છે. IPA શ્રેષ્ઠતાને પ્રોત્સાહન આપવા, પ્લમ્બિંગ ધોરણોને ફરીથી વ્યાખ્યાયિત કરવા માટે સમર્પિત છે., અને ખાતરી કરવી કે અમારા વ્યાવસાયિકો ટકાઉ અને સ્થિતિસ્થાપક ભવિષ્ય માટે જરૂરી જ્ઞાન અને કૌશલ્યોથી સજ્જ છે. ઈન્ડિયન પ્લમ્બિંગ એસોસિએશન એ ભારતમાં પ્લમ્બિંગ પ્રોફેશનલ્સની સર્વોચ્ચ સંસ્થા છે. પ્લમ્બિંગ અને બિલ્ડિંગ સર્વિસ ઉદ્યોગના વિકાસને પ્રોત્સાહન આપવાના ઉદ્દેશ સાથે ૧૯૯૩માં સ્થપાયેલ, IPA સભ્યપદ બાંધકામ ઉદ્યોગ સાથે પ્રત્યક્ષ કે પરોક્ષ રીતે સંકળાયેલા દરેક માટે ખુલ્લું છે.

Udhyog Shakti

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By Respecting, Reducing, Recycling, Reusing, and Replenishing water, all of us can collectively work towards a more sustainable and Responsible Water Management system. It is our responsibility to ensure that future generations have access to this vital resource, and by following 5R's, we can make a significant difference in securing the future of our planet's water supply.

Respect Water

Respecting water means recognizing its intrinsic value and treating it with the reverence it deserves. Water is a finite resource, and wasting it is not an option. We must use water judiciously and avoid contaminating it with pollutants. By showing respect for water, we acknowledge its significance and work to safeguard its purity and availability.

To Do

1.
Take only half a glass of water to drink, only refill it if you need.

2.
Turn off the tap while brushing your teeth.

Reduce Water

Reducing water usage is crucial in preserving this precious resource. Simple measures like fixing leaky faucets, using low-flow Taps, Flushing Cistern for toilets, and being mindful of water consumption can make a significant difference. Gadgets are available which can provide low flow without compromising on the comfort of the user. Reducing water waste is not only environmentally responsible but can also lead to cost savings for individuals and communities.

To Do

Install low flow tap/
aerator in your wash basin.

Recycle Water

Recycling water is a sustainable practice that must be practiced in daily life for various settings. Wastewater treatment and recycling can help in repurposing water for non-potable uses, such as watering the plants irrigation or industrial processes. It reduces the demand on freshwater sources and helps conserve water for essential needs.

To Do

Collect rainwater in a barrel for garden use.

Reuse Water

Reusing water involves finding novel ways to use it more than once. For instance, water used in vegetable washing can be used in plants, grey water from sinks and showers to water plants or after treatment flushing toilets. By reusing water, we reduce the strain on freshwater supplies and minimize wastage.

To Do

Use AC Reject Water for cleaning and mopping.

Replenish Water

Replenishing water sources is an essential part of sustainable water management. Protecting watersheds, conserving wetlands, and allowing natural processes like groundwater recharge to occur are vital for maintaining a healthy water cycle. Rainwater can be recharged into the soil by replenishing our water sources, we ensure a continuous supply of clean water for the present and future generations.

To Do

Instead of paved places in your gardens have lawns

Water is one of the most precious resources, essential for all living beings, and its scarcity can have dire consequences for both human and ecological systems. In light of the growing global water crisis, it has become imperative for us to adopt sustainable practices to manage and conserve this vital resource. This is where the 5R's of water come into play – Respect, Reduce, Recycle, Reuse, and Replenish.

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Manager, Communication and Publications, IPA

Nivedita Sharma is the Sub Editor of IPT. She has 12 years of experience in Marketing and Corporate Communication for various industries including Water, Agriculture and Education. She has been serving IPA for over 2 years now in her current profile where she handles Communication and social media. Nivedita has a Post Graduate Degree in Management from Dr. Y. S. Parmar University of Agriculture and Forestry, Nuani, Solan, HP. She can be reached on acep@indianplumbing.org .

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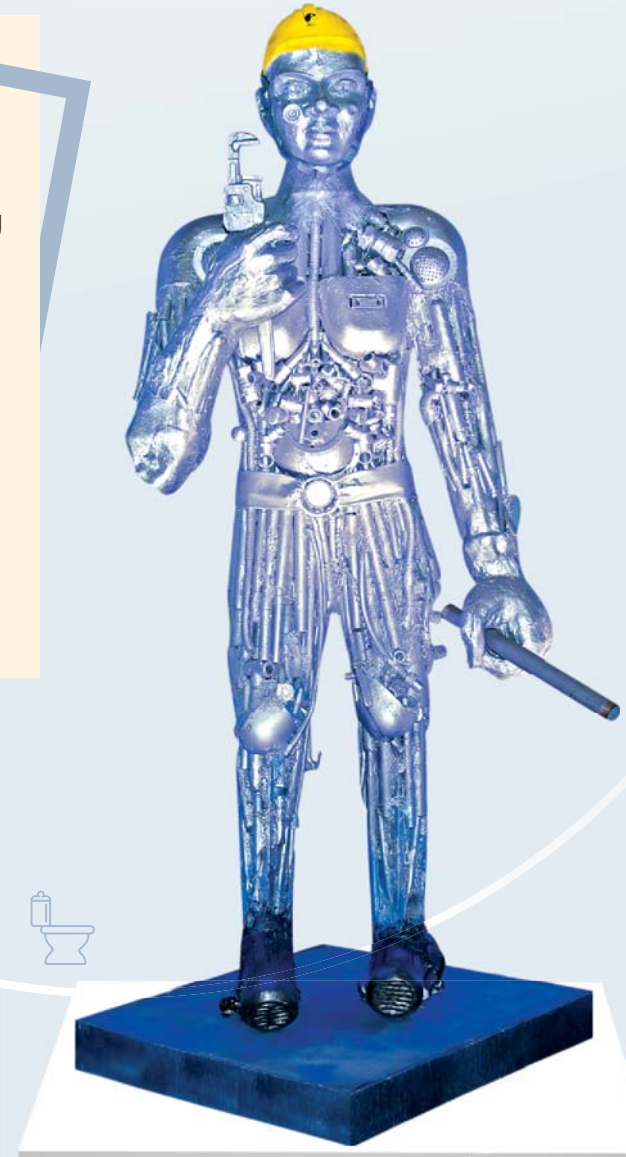

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Holistic View of Hyderabad Leakage Management Study

- Dilip G Sonwane

Abstract

The government of India launched various programs including Jawaharlal Nehru National urban Renewal Mission (JNNURM) and Atal Mission for Rejuvenation & Transformation (AMRUT) to address the basic requirements on water and sanitation. The recent launch of Jal Jeevan Mission (JJM) is aimed at providing piped water supply of adequate quality to rural households and remove the drudgery faced by women of travelling long distances to collect drinking water for daily household needs. Under these programs, many water supply projects have been implemented and under execution to achieve the connectivity to every hold. For the sustenance of the created assets, a system management plan is required to upkeep the plants, pipelines, machineries, civil structures, and its operations at desired level of efficiency. This article covers Leakage & Water Loss management for Hyderabad project covering all components of water system.

Hyderabad Case study

The Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB) appointed Tata Consulting Engineers to undertake rehabilitation, strengthening of water system and leak detection assignment under World Bank funded project.

General Information about the City

Hyderabad is the capital of Telangana and forms twin city along with Secunderabad. The city is an important commercial, administrative-cum-industrial centre of the state. The city is situated on the Deccan plateau at a fairly high altitude. The maximum rainfall is experienced during the months of June-September under the influence of Southwest monsoon and little rainfall also occurs during the month of October-November by the Northeast monsoon. The water supply system of Hyderabad is over 100 years old, belongs to late 19th and early 20th Century.

Components Covered under Leakage Management

1. Water Abstraction from the Sources
2. Water Treatment Plants, Transmission Network, Storage
3. Distribution System

Overall Water Abstraction

The flow measurements were carried out by installing Insertion type magnetic flow meters at treatment plant locations. The estimated drawl from the sources and the outflows measured from the treatment plants were noted as below.

Record of Flows Measured at Treatment Plants

Sr No	Source	Treatment Plant	Estimated Drawl (Mld)	Flow Measured (Mld)
1	Manjira I	Rajampet	82	70.69
2	Manjira II	Kalabgur	164	129.29
3	Manjira III	Peddapur	150	65
4	Manjira IV	Peddapur	150	63.21
Total			**546**	**328.19**

The total flows measured were noted to be much lower than the estimated drawls on account of the inadequate water availability at the sources due to failure of monsoon in1993. The supplies from other two sources namely Himayat Sagar and Osman Sagar were meagre and intermittent.

Meters Accuracy

Field measurements of the meters was carried out at the premises of the major consumers to establish the accuracy of the meter. A reconnaissance survey was carried out at the premises of major consumers to assess the availability of sumps, condition of sump, supply timings and condition of meter.

The initial and final meter reading and volume of the water delivered in the sump had been measured. The volume recorded by the meter was compared with the volume of water collected in the sump to ascertain the accuracy of the meter. The second visit was made after a gap of 50 to 150 days to repeat the same measurements. The meter accuracies or the condition of meter observed during testing of meters is as below.

Observations on Meter Accuracies of Major Consumers

Range of Meter Accuracy	Major consumers	
	Nos	Percentage
< +/- 2%	10	8
>+/- 2%< +/- 5%	25	19
>+/- 5%	6	5
Out of Order	53	41
Meter not Provided	21	16
Other Problems	15	11
Total	**130**	**100**

Field observations were carried out for about 643 domestic meters in various localities distributed over the twin cities to ascertain their accuracy. Meters were checked for their accuracy in their existing condition by collecting water in calibrated drums during supply hours and noting the meter readings. The volume recorded by the meter was compared with actual volume collected in calibrated drums.

Field Observations on Status of Domestic Meters

Range of Meter Accuracy	No of Connections	Percentage of total connections
< +/- 2%	113	18
>+/- 2%< +/- 5%	97	15
>+/- 5%	114	18
Out of Order	209	32
Meter removed	68	11
Inaccessible	42	6
Total	**643**	**100**

The results of the field tests were compared with Ledger records available with client. It was observed that only in 6 out of 25 cases, the consumption records were within 10% consumption calculated from the field data. The variation in other 19 cases was ranging between +/-10 to +/-95%. The consumption in ledger records was less by 40% than the consumption records of the field observations.

Water Demand Assessment

Water consumption surveys were carried out in localities with different housing categories and having adequate water supply and working meters. This data was compared with Ledger record and it was observed that the consumption as per ledger records was 25% to 30% less than actual consumption observed during field measurements.

Category	No of Consumers	Consumption		Variation (%)
		Observed in Field (Lpcd)	Leader Record (Lpcd)	
Bungalows with Garden	49	249.33	185.71	26%
Bungalows	216	216.39	162.13	25%
Traditional Housing	289	151.62	109.53	31%
Slum with PPC	152	100.49	96.76	4%
	706			

Water Treatment Plants

Flows were measured at inlet and outlet of treatment plants at Rajampet and Kalabgur. The usage of water at different units of treatment plant was also assessed.

Analysis of Flow Measurements at Treatment Plants

Item	Rajampet	Kalabgur
Flow Measurement at inlet (Mld)	72.41	135.48
Flow Measurement at outlet (Mld)	70.69	129.29
Estimated Usage (Mld)	0.65	2.86
Usage (%)	0.91	2.21
Estimated Losses	1.07	3.38
Losses (%)	1.51	2.57

From the above table, it can be noted that the losses at Rajampet were lower and losses at Kalabgur treatment plant were higher (about 5%).

Transmission Mains

Flow measurements were carried out by using Insertion type flow measurements at suitable locations on the transmission mains. The leakage losses estimated were as below.

Sr No	Location	Length (Km)	Estimated Losses	
			Mld	%
1	Rajampet (TP)			
	Patencheru (PS)	29	1.76	2.14
	Lingampally R	12	0.92	1.26
2	Kalabgur (TP)			
	Patencheru (PS)	30	12.97	9.93
	Hydernagar R	12	8.90	7.60
3	Peddapur (TP)			
	Singapur R	17	8.76	11.01
	Lingampally R	**26**		

The estimate of flows from online tapping had been approximate and hence above table more indicates order of losses rather than absolute value. However, it was certain that the Phase II main from Kalabgur to Hydernagar and Phase III main from Peddapur to Lingampally had appreciable leakage losses. Part of Phase II main from Patancheru to Jyothi theatre (4 Km) had 89 number of leak points.

Leak points observed were at the joints of two points of Prestressed concrete pipes. The Geotechnical investigations along stretches with concentration of leak points revealed the presence of clayey soil and no proper bedding for pipes.

Reservoirs

All the reservoir structures were inspected during normal operating conditions. It was reported by the operating staff during survey for apparent condition assessment that about 40 reservoirs were having leakages at the bottom or side walls. In addition, sluice valves at the outlet of reservoirs were checked by sounding and 53 valves were found passing requiring repair/replacement.

Distribution System

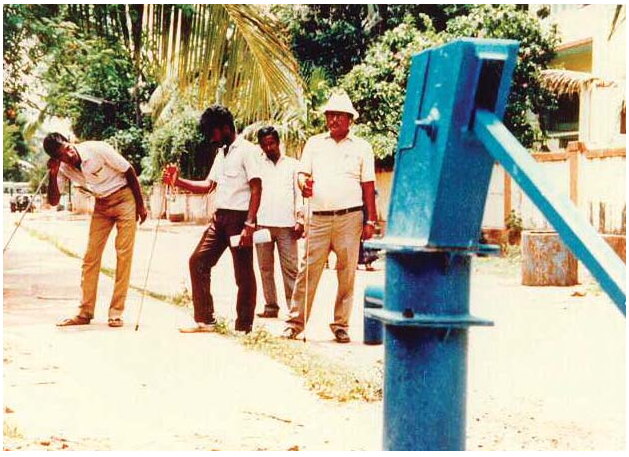
The available methods of leakage loss assessment and detection include Minimum Night Flow (MNF) technique, Mobile Tanker method, District Metering area method. The source of water supply and hours of supply during leakage assessment and detection plays an important role in these methods. The possible options of water source during leak detection are as below.

a) regular water supply for consumers

b) external water supply by connecting tanker

c) additional water supply from the same source but during different supply hours.

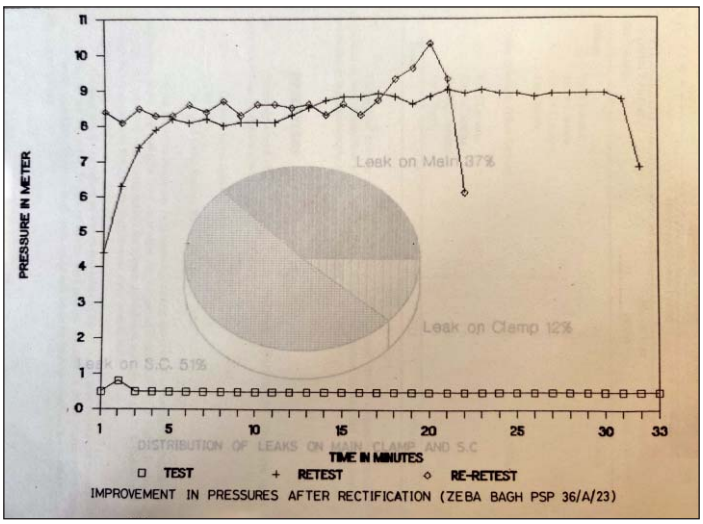
The selection of leak assessment & detection method gives many challenges due to intermittent water supply,

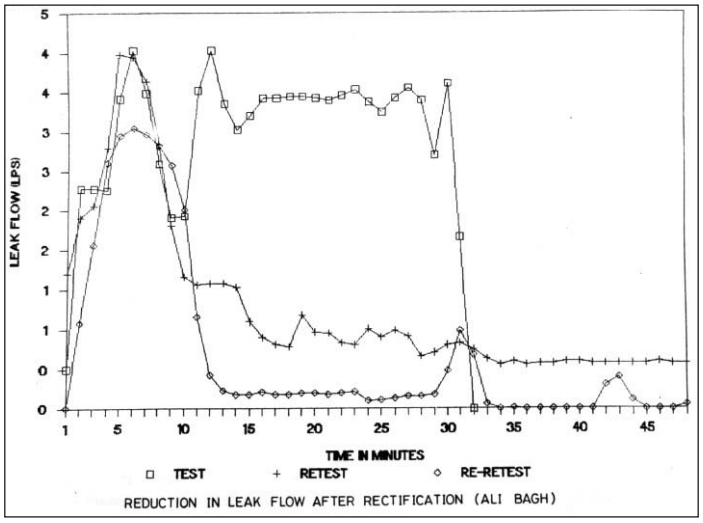


less supply hours, pressure patterns, availability of measurement units. Mobile Tanker method had been successfully used for leakage measurements and detection activities and TCE covered 10,000 house water service connections in 152 tests and leak flow water measured in each test. The average prevalent rate of leakage was found to be 142 liters/connection/hour.

Leak detection, repairs and retests were carried out to assess the possible reduction in leakage losses. Two cycles of tests, re-tests and re-retests were carried out. Leak points in areas covering about 2000 connections have been rectified and the areas retested and about 50% of the retested connections have been re-retested.

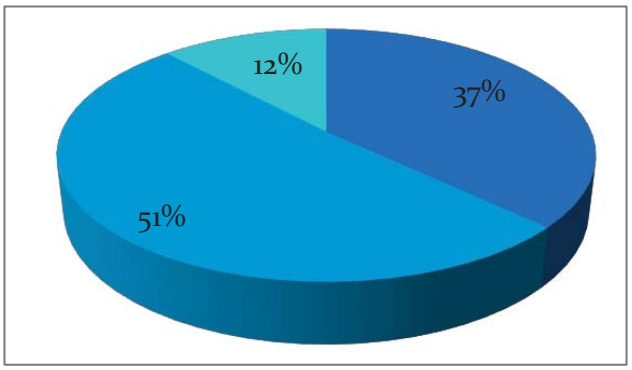
In 36 test areas, leak points identified during tests were rectified and retests were conducted. The reduction achieved was 41%. Nineteen retested areas, after further rectification, were re-retested. The reduction achieved was 58%. The average leak flow observed after repairs was 46 lit/connection/hour at 10 m pressure. Observed reduction in leak flow and Improvement in pressure for a typical test area is shown below.





Leak Repairs

For the rectification of leak, 463 points were exposed, out of which 232 leak points required repairs. The repaired leak points were identified by sounding/co-relator (118) and 114 were visual leak points. Leak points repaired were 51% on service connections, 12% on clamp and 27% on main pipes.



Leak Reduction Action Plan

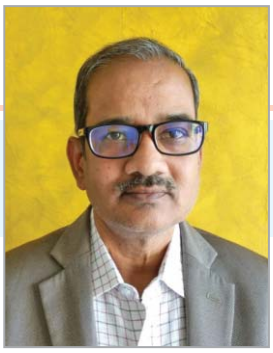
Based on the reduction in leakage losses achieved during re-tests and retests, an action plan to reduce leakage losses to 30 lit/connection/hour has been prepared. In order to have economically cost-effective option, nine alternatives were studied for the cost of implementation of leakage management program vis-à-vis increase in revenue with the reduction in leakage levels achieved. With the implementation of leakage control program, the overall leakage rate for the existing distribution system and new pipe networks was planned at 20 lit/connection hour (15% losses).

Conclusions

1. The total flows measured at WTP were noted to be much lower than the estimated drawls on account of the inadequate water availability at the sources due to failure of monsoon in 1993.
2. It was observed that the consumption by domestic consumers as per ledger records was 25% to 30% less than actual consumption observed during field measurements.
3. The average prevalent rate of leakage was found to be 142 liters/connection/hour. The reduction achieved was 41% after first cycle of leak detection & repairs. During second cycle of leak detection and repairs, the reduction achieved was 58%.
4. Majority of leak points repaired were 51% on service connections, 12% on clamp and 27% on main pipes.
5. For transmission mains, the leak points observed were at the joints of two points of Prestressed concrete pipes and presence of clayey soil and no proper bedding for pipes was observed in these pipe stretches.
6. An action plan to reduce leakage losses to 15% had been prepared along with economic options.

References

1. Water Conservation, Leakage Control and Use Management Studies for HMWSSB by Tata Consulting Engineers
2. CPHEEO Manual --- Manual on Water Supply and Treatment (Third Edition – Revised and Updated May 1999
3. Economic Aspects of Leakage Control in Water Supply – Kathmandu A Case Study - Presented in International Conference on Sustainable Habitat for Cold Climates Held at Leh



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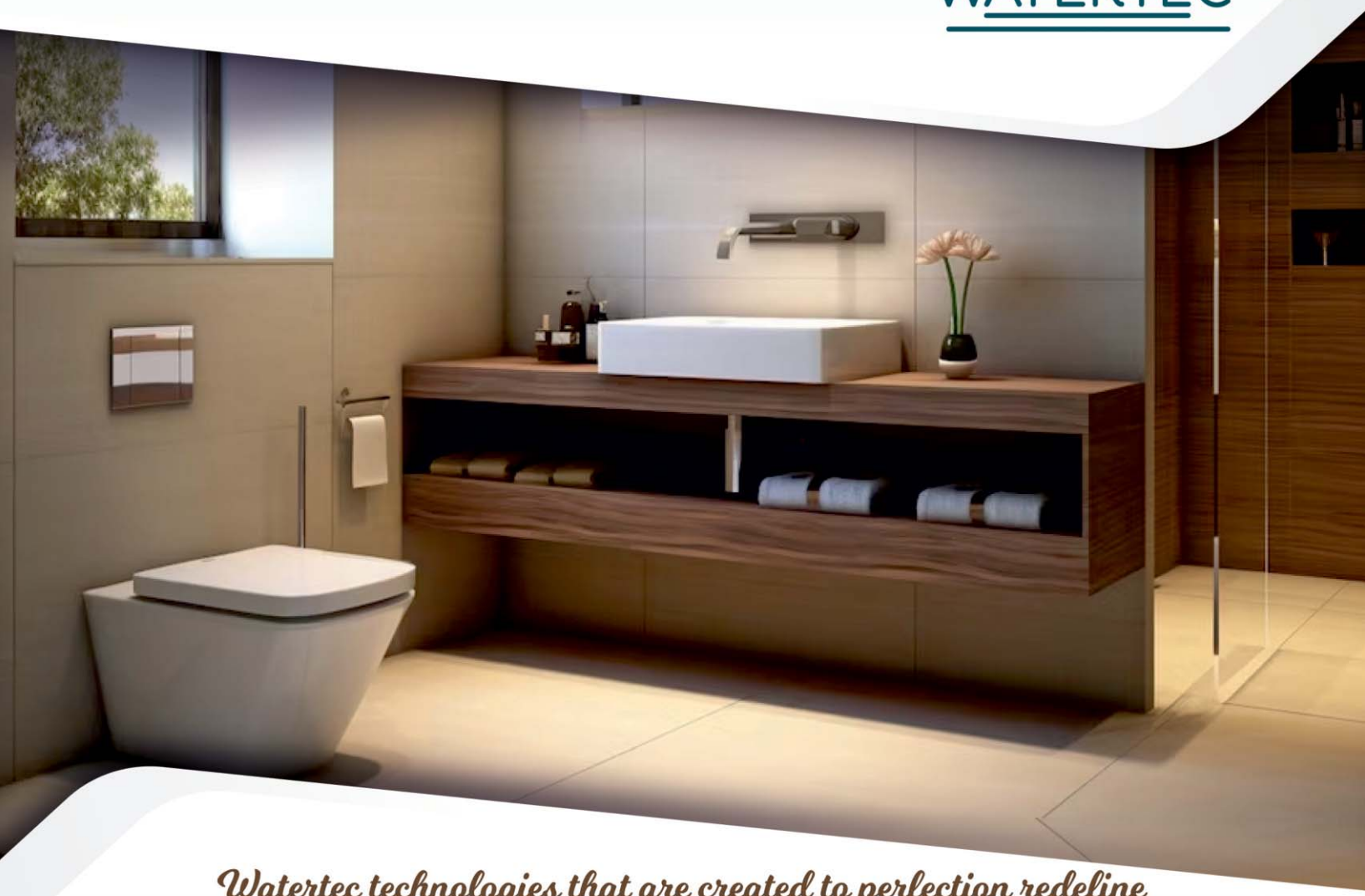

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TO THE FORE AUTOMATION A PRODIGIOUS CHOICE

Re-thinking Wastewater Treatment Post Covid -19 Pandemic

- Siva Prakash Kota

Overview:

Several studies have reported the presence of SAR's - CoV in both treated and untreated wastewaters with variable concentrations, stressing the potential impacts of the inefficient treatment processes during the pandemic. However, the pandemic took a toll on the public, killing many, which has become a major global concern. Studies reported the efficacy of wastewater treatment plants in inactivating the virus, whereas some confirmed inefficiency in treating the prescription pharmaceutical dosages used by the people.

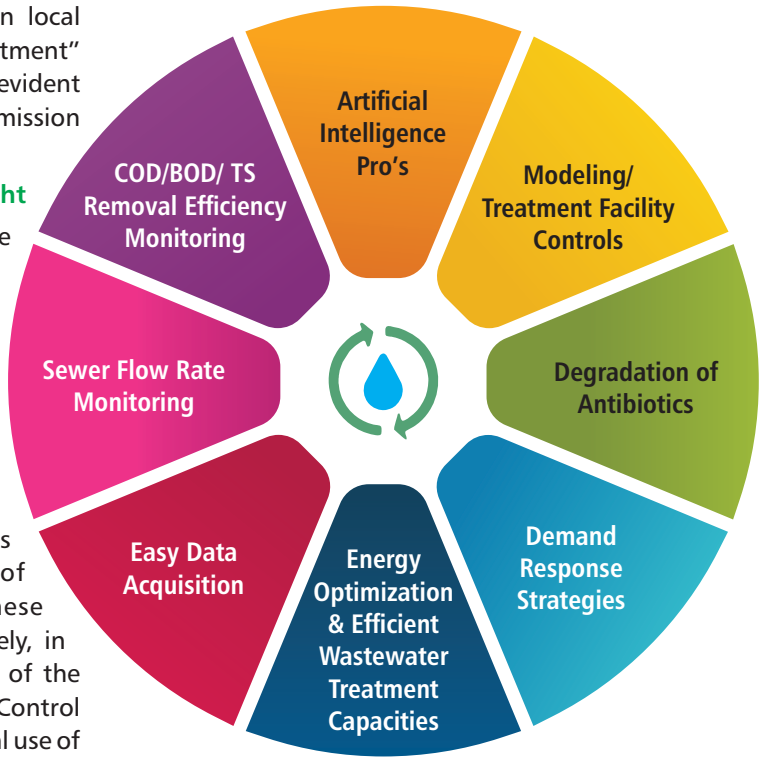
Thus, a well-organized and carefully automated wastewater treatment plant is the only inevitable requirement in the present time, which could lower the pressure on the concerned administrations, local bodies, and industries under demanding conditions. The treatment plants adopted in middle- and low-income countries is mostly manually operated, with a potential risk of human fecal contamination and further transmission. The pandemic and lockdown period caught the eye of many industries and urban local bodies to look for "Automated Wastewater Treatment" processes to overcome such challenges. It was evident that poor sanitation has led to increased transmission and death during the pandemic.

Exploring Automation in STP's: A Novel Thought

Since decades, sewage treatment plants are mostly locally managed and monitored with no remote operating facilities. With increasing complexity and lowering efficiency in treatment it has become mandatory to look for automated processes at every stage, lowering the burden on STP's as well as on the staff. The automation methods render energy efficient processes, thereby reducing the burden on electricity expenses as well as continuous monitoring of influent at various stages of treatment. Thereby, SCADA systems in these processes have taken a rise to operate remotely, in taking complex decisions based on the inputs of the system. Implementation of Instrumentation, Control and Automation (ICA) system helps in the optimal use of all units in a plant. "Membrane Technologies," which have proven to be eco-friendly options has a promising future with retrofitting of automation processes. Further, Artificial Intelligence (AI) assisted treatment plants certainly have many pros such as:

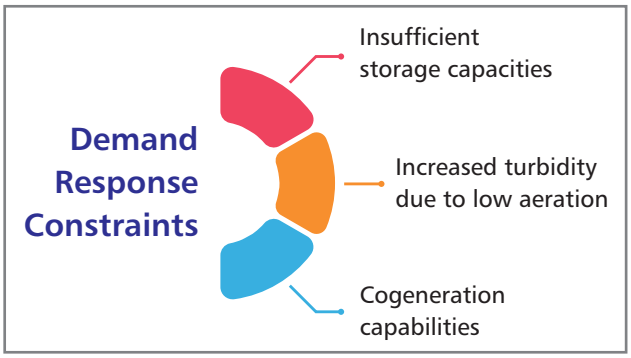
Demand Response Strategies (DR):

- **DO Sensors:** The biological processes which are usually dependent on aerobic bacteria get affected with their extreme low or high amplification rates influencing the DO levels in the wastewaters. Further the hydrogen sulphide gas generated is a corrosive agent hindering the whole process. This could be monitored by the DO sensors for timely action thereby reducing the power consumption by 50%.
- **Liquiline Control:** The effective and predictive control of nitrogen levels could be obtained using required amount of oxygen during the treatment to optimize the nitrification and denitrification stages. The liquiline control unit automatically assists in supplying oxygen based on the oxygen, ammonium, and nitrate



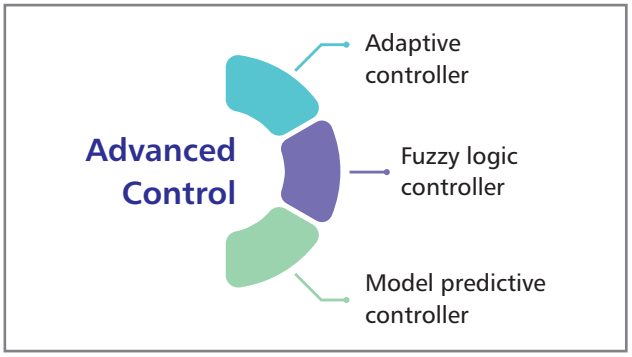
concentrations specific to the influent flow rates switching from intermittent to continuous aeration. Liquiline control is a PLC based automated process which helps in efficient removal nitrogen in the process.

- **Variable Frequency Drive:** Installation of VFD switches ensures individual process activity unaffected with the changing volumes, complexities which are connected to a single system operation. Each VFD placed in every chamber will be operated independently according to the flow levels, minimum and maximum capacities proactively to have a hassle - free treatment and lessening the burden on aged pumps.
- **Automatic Valves:** The physical operation of valves in STP's is now automated and remotely operated to reduce the manual intervention and pause of processes as per the influent loads. This comes in handy where frequent manual operating could not be possible (inaccessible regions etc). These actuators are advantageous in working under extreme weather conditions and temperature. These help in controlling water loads at multiple stages to have a sustainable and reliable STP management.
- **UV Light Control:** Plants operating with UV disinfection could be monitored regularly to reduce the burden of power consumption by automatic UV light control mode optimizing the disinfection process.



Automation of STP's is mostly dependent on the processes adopted in a plant which yet times, require a few or a combination of neural network system to have a sequential mode of process monitoring and management. This certainly demands expertise in the field which is one prime reason for denial of this idea in the first place itself.

A typical biological treatment unit depends on the DO content in the wastewater for the growth of microbes; however, the excess DO levels might amplify the growth of unwanted microbes while low DO levels would hinder the degradation levels of organic matter.



Nevertheless, the recent trends of Science & Technology and growing interest on sanitation global wide during pandemic is making cities and urban areas to think of **"Automated Wastewater Treatment Facilities"** owing to the inevitable disadvantages with the current processes which are hindered by the lack of personnel and staff. Thus **"Automation of Wastewater Treatment Facilities,"** has proven to be the lone option in future designing of STP's which include resource recycling and recovery. In this context, Biological Nutrient Removal (BNR) and Renewable Energy Production (REP) are gaining an impetus in recent days emerging as a sustainable option productive for the burgeoning population.

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BACK TO BASICS

Hydro-pneumatic system with submersible pumps

- Dhaval Shah

In today's time where all pump companies offer factory fitted Hydro-pneumatic systems, we have forgotten the real meaning of "Hydro-pneumatic".

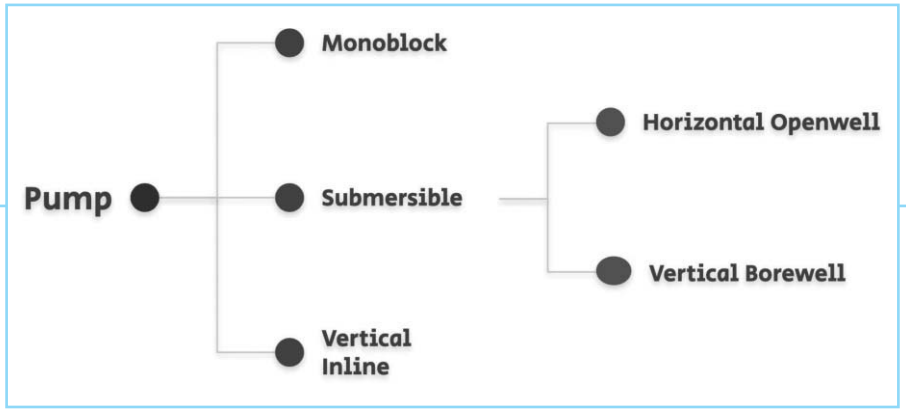
I have seen people confuse factory fitted pumping systems with hydro-pneumatic systems. In today's article, let's look at some clarifications of the above confusion.

Let's briefly look into the types of pumps available in the market.

Pumps

Pumps are essential mechanical devices designed to move fluids from one place to another. There are many different types of pumps available and they serve a wide range of applications and play a crucial role in various industries and everyday life.

Centrifugal pumps are used for residential and commercial applications and they are classified as below -



*We are only considering the pumps used for residential and commercial projects.

Monoblock Pumps

These are the pumps where the shaft of pump and motor is the same and there is no coupling in between. These are pumps where there is limitation for higher heads. As head increases flow correspondingly increases and there is very less chance for selection of a pump with higher head and lower flow. As head increases flow and HP of the pumps necessarily increases. But these are the most cost effective pumps provided you can select a model with required flow and head.

Submersible Pumps

These pumps are known for their uniqueness as the name states these pumps are submersed into the water. As these pumps always come in multistage they can be used for moderate to high flow and heads. There are two types of submersible pumps -

Openwell Pump

As the name indicates, a submersible pump is designed to be submerged within the fluid being pumped. They

are also known as Submersible water pumps or Openwell submersible pumps.

They measure up against jet pumps as they are not subject to variations in elevation. They work underwater and rest at the bottom of the well. Jet pumps are prone to cavitation. Openwell submersible pumps use significantly less power, as the fluid they pump is pushed and not pulled. The prime part of the pump, the motor is sealed with polymers, 'O'rings, oil seals, and sand to prevent ingress of well water or salt into the motor. This feature helps in extending the durability of the submersible pump. The motor is prefilled with a cooler which regulates the temperature of the pump. A rubber diaphragm acts as a pressure equalizer and guards the motor against pressure and volume variation. The three-phase motor gives additional protection to all the electrical components.

Borewell Pump

A borewell pump has a motor at the bottom and pumps on the top. The water entry is from the bottom of the pump and flows upwards through many stages. The impellers made up of stainless steel rotate inside the diffusers with inherent guide vanes. With the help of the diffusers, water is directed from one impeller to the next impeller suction. Such a flow through each stage of the impeller and diffuser increases the water pressure at each stage and finally, water is discharged through the outlet from the top.

The primary feature and a significant advantage of borewell submersible pumps is their capability to be submerged in water instead of being held above the ground. Since the water pumps are already submerged they don't need any priming. The water pressure itself moves the water into the pump instead of using energy to pump water. These borewell pumps can handle the fluctuation of voltage comparatively well and are capable of delivering water even at lower voltages.

Vertical Inline Pumps

Vertical Inline Pumps are pumps where the inlet and outlet are in line. This arrangement is typically used where space is limited such as smaller pump rooms. The pump has a vertical drive shaft and can be fitted with a priming pump to enable the pump to be self-priming. Vertical inline pumps can be made to various designs which include spacer couplings to enable maintenance to be carried out without removal of motors reducing downtime. They come in a variety of sizes, small to high head and flow.

Now lets understand the various automations in which we can use the above types of pumps especially in residential transfer or boosting applications.

As our subject for this article is related to submersible pumps and hydro-pneumatic systems, lets see the various types of automations available for transfer pumping system -

1. WLC - Water Level Controller
2. HPS - Hydro-pneumatic System

1. Water Level Controller -

The water level controller for an Overhead Tank (OHT) is an automated system designed to maintain the desired water level within the tank, ensuring a constant supply while preventing overflows. This system typically utilizes sensors to monitor water levels and employs control mechanisms to regulate the filling process.

Water level controller automation is a system designed to monitor and control water levels in tanks or reservoirs, ensuring that they remain within a specific range. This technology employs sensors and controllers to automate the process of maintaining water levels, offering several advantages:

Key Components:

Water Level Sensors: These sensors, such as float switches, ultrasonic sensors, or level sensors, are installed in the tank to continuously measure the water level.

Controller Unit: A controller unit processes data from the sensors and makes decisions based on the water level information. It typically contains a microcontroller or microprocessor.

How It Works:

Monitoring: Water level sensors continuously monitor the water level and send this information to the controller unit.

Setpoint Control: The controller compares the actual water level to a predefined setpoint, which represents the desired water level.

Decision-Making: Based on the comparison, the controller sends commands to the actuators to either start or stop the water supply. For instance, if the water level falls below the setpoint, the controller activates a pump to fill the tank.

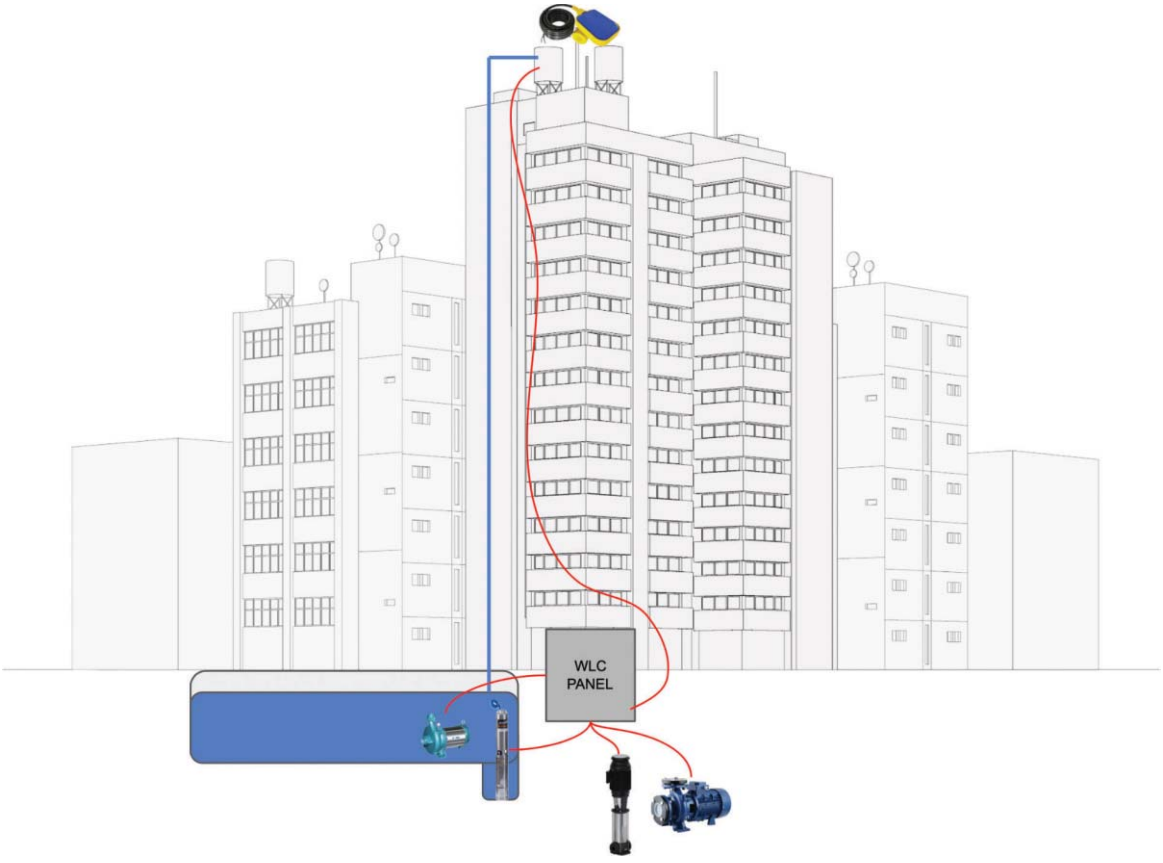
Feedback Loop: The system continually adjusts water flow to maintain the setpoint, ensuring that the water level remains within the desired range.

2. Hydro-pneumatic System -

The hydro-pneumatic pumping system (HPS) represents a seamless integration of automation within the realm of fluid mechanics. The system essentially uses pressurized air and water to create a consistent water supply without the need for continuous pump operation. This automation can be applied universally across various pump types, debunking the myth that HPS is confined to a specific pump type. Understanding this can lead to innovative applications, particularly with submersible pumps, which are often not recognized for their compatibility with hydro-pneumatic techniques.

What is a Hydro-Pneumatic Pumping System?

A hydro-pneumatic system is a method of maintaining water pressure in a distribution system without the pump running at all times. It involves a pressure tank containing air and water, separated by a flexible diaphragm. The pump fills the tank until a preset pressure is reached, and then shuts off. As water is drawn from the tank, the air pressure above the diaphragm forces the water out into the distribution system, maintaining a constant pressure. The pump only restarts when the water pressure drops below a certain point.



Automation, Not Pump Type

The heart of hydro-pneumatic systems lies in their automation controls, not in the mechanical design of the pump itself. It's a control strategy that relies on sensors and switches to regulate the operation of any compatible pump. Whether it's a centrifugal pump used in a well-system or a submersible pump deep within a borehole, the principle of pressurization and automated control is what constitutes an HPS.

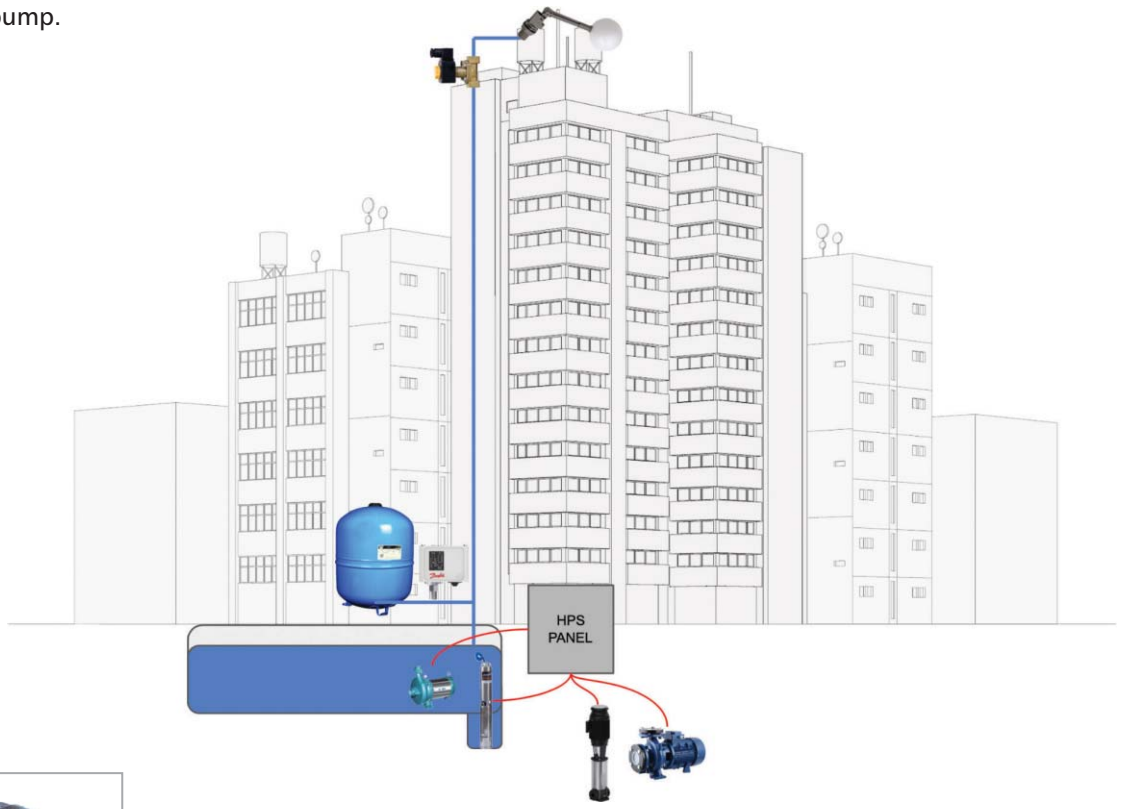
Submersible Pumps in Hydro-Pneumatic Applications

Submersible pumps are widely known for their direct placement within the fluid they are pumping, making them especially suitable for deep wells, boreholes, and sumps. When integrated with hydro-pneumatic controls, these pumps can deliver water at constant pressure, cycling on and off in response to demand – a system that is both energy-efficient and reduces wear and tear on the pump.

Manufacturers across the globe are producing submersible pumps capable of being integrated into hydro-pneumatic systems. The versatility of HPS automation allows submersible pumps to be used in diverse applications, from residential water supplies to complex industrial processes.

Conclusion:

Hydro-pneumatic pumping is not restricted to a particular pump type but is an advanced automation technique that enhances the operation of various pumps. This method has significant implications for the versatility and functionality of submersible pumps, in particular, suggesting that their use in HPS has been historically underestimated. As we embrace this automation across pump technologies, we can achieve greater efficiency and innovation in fluid management systems.



Dhaval Shah
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REPORT

ROUND TABLE MEETING ON BIOSOLIDS

FORMULATION OF GUIDELINES FOR TREATMENT AND REUSE

November 8, 2023, India Habitat Center, New Delhi

Global Sanitation Center of Excellence (GSCOE) and Technology Innovation Foundation (TECHIN) of the Indian Institute of Technology, Palakkad jointly organized a round table meeting on "Biosolids: A discussion on the formulation of guidelines for treatment and reuse"on 8th November 2023 at the India Habitat Centre, New Delhi.

The meeting was intended to foster in-depth discussions and collaborative brainstorming with key stakeholders working in the domain of biosolids, at the national level. The center of excellence at IIT Palakkad is playing a pivotal role in collating the efforts of various expert groups and broadening the horizon with stakeholders' inputs. This collaboration is expected to facilitate the development of national-level standards for the treatment and reuse of biosolids. The event was enriched with the launch of the Lab Alliance kick-off meeting, led by the Centre for Science and Environment, New Delhi and the Bill & Melinda Gates Foundation.

Distinguished personalities, including Prof. A. Seshadri Sekhar (Director, IIT Palakkad), Dr. M. Mohanty, FNAAS (Adviser/Scientist 'G' - Office of the Principal Scientific Advisor to the Government of India), Dr. V. K. Chaurasia (Joint Advisor, CPHEEO, Ministry of Housing and Urban Affairs), Dr Sapna Poti (Director, Strategic Alliances, PSA's office), Dr. Sunita Narain (Director General, Centre for Science and Environment), and Dr. Roshan Raj Shrestha (Deputy Director, Bill and Melinda Gates Foundation) graced the event with their presence and valuable deliberations among others. Representatives of various collaborating institutes and national agencies, such as WASH Institute, CDD, NIUA, BITS Pilani-Goa, Center for Water and Sanitation (CWAS), CRDF, CEPT University, Indian Plumbing Association, IIHS & Administrative Staff College of India (ASCI), were also present.

The meeting commenced with the welcome address by Prof. A. Seshadri Sekhar, Director, IIT Palakkad. Prof. Sekhar welcomed the gathering and gave an overview of the activities by GSCOE and TECHIN of IIT Palakkad, which are supported by the PSA office, BMGF, HDFC, CPHEEO, IAPMO, Toilet Board Coalition, and other organizations.

Event Highlights:

The roundtable meeting served as a catalyst for extensive discussions and collaborative brainstorming among key stakeholders in the biosolids sector at the national level. Participants engaged in insightful conversations, paving the way for the formulation of comprehensive guidelines for the treatment and reuse of biosolids.

One notable feature of the event was the launch of the Lab Alliance kick-off meeting, spearheaded by the Centre for Science and Environment in collaboration with the Bill and Melinda Gates Foundation. This initiative is geared towards propelling innovation in the field of sanitation. The collaboration is anticipated to play a crucial role in facilitating the development of national-level standards for the application and reuse of biosolids.

Mukesh Asija, Chair, IPA Delhi Chapter speaking at the Meeting

Distinguished Speakers and Attendees:

The event saw the esteemed presence and valuable deliberations of luminaries in the biosolids domain. Notable figures such as Prof. A. Seshadri Sekhar, Director of IIT Palakkad; Dr. Manoranjan Mohanty, Adviser/Scientist 'G' - Office of the Principal Scientific Advisor to the Government of India; Dr. V. K. Chaurasia, CPHEEO, Ministry of Housing and Urban Affairs; Dr. Sapna Poti, Strategic Alliance Division, PSA's office; Dr. Sunita Narain, Director General, Centre for Science and Environment; and Dr. Roshan Shrestha from the Bill and Melinda Gates Foundation, graced the occasion with their presence and insights.

In addition to these distinguished personalities, representatives from collaborating institutes and national agencies, including WASH Institute, CDD, NIUA, BITS Pilani-Goa, CWAS-CEPT University, and IIHS, were actively engaged in the discussions.

Perspectives from IPA:

Mr. Mukesh Asija, Delhi Chapter Chair of the Indian Plumbing Association (IPA), shared his views on the topic, providing insights into the initiatives undertaken by IPA concerning water and sanitation issues. His thoughts on low-cost sludge collection systems, extension of regulatory framework to sludge collection and handling and the transformation of regulations to layman's terms for the operators and sludge handlers. He also added that graphically explained systems will help easily reach the people working at the grassroot levels.

In conclusion, the roundtable meeting organized by GSCOE and TECHIN has set the stage for collaborative efforts, innovation, and the formulation of guidelines that will shape the future of biosolids treatment and reuse at the national level. The commitment of key stakeholders and the diverse expertise brought to the table ensure a comprehensive and forward-thinking approach to addressing sanitation challenges.

Source: https://www.iitpkd.ac.in/news/pioneering-innovation-biosolids-insights-national-roundtable-conference

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IPA DEBATE CLUB QUESTION 12

Is there any advantage in treating black water (wastewater from W.C's Urinals & Kitchen) and grey water (wastewater from showers & basins) separately?

If yes, should this practice be followed.

RESPONSES

Response 1

Greywater can be collected, treated, and reused for non-potable purposes such as toilet flushing and gardening. The treated water is free of biological bacteria and odour and can be directly harvested into the earth.

We also need to specify our requirements for the gray water treatment plant in the residential apartment building.

P. K. Murugesan
PKM Consultants
PHE & Firefighting design engineer,
L-4274

Response 2

We should follow the system of treating black water and grey water separately. Grey water is easier to treat as compared to black water as it contains less contaminants and pathogens as compared to black water.

Amit Lalit Shah
Partner, Shree Om construction
L-436

Response 3

Advantage of separate treatment of Septage (faecal sludge) and Gray water-

Septage Water: Wastewater generated from Toilet WC's, urinals and pantry or Kitchen. Storage shall be seven days and after mechanically dewatering followed by flocculation, 94.5 % BOD, COD and TSS correction possible. Centrate can be utilized after root zone (Phytoride) technology. Sludge to be dumped to pit with garden leaves and converted into good manure.

(No STP required for offices or institutions).

Gray Water: Hydraulically collected in a small tank, transferred to a sedimentation pit though coagulation channel, clear water disinfected with UV and recycled in gardening, Makeup water cooling water, Flushing and Car washing without any psychological thought.

Advantages: No huge STP required, No Blower for Secondary treatment, less power consumption (0.1 Kwh for 1 KLD used water) Utilization of 100% used water means one step towards Net zero.

Jeekesh Arora
IPA Jaipur Chapter
L 1044

Response 4

My response to the above question is "Yes" sir.

Because Black water comes into contact with faecal matter which is a haven for harmful bacteria and disease-causing pathogens. Moreover, this waste doesn't break down and decompose in water fast or effectively enough for use in domestic irrigation without the risk of contamination.

Grey water does not come in contact with solid human waste. This greatly decreases the risk of disease and increases the speed at which it can be broken down and safely reabsorbed into an active garden or lawn.

So in my opinion, definitely there will be an advantage in treating black and grey water separately.

Parasa Kameswara Rao
Sales Engineer - Building Services Products
L-3738

Response 5

Grey wastewater acts as dilution to black wastewater which has high organic load. Separate treatment of black & grey wastewater will need special efforts.

Due to concentration of organic load in black wastewater, treatment scheme to be adopted will have at least two stage biological units to achieve disposal standard. Maintaining the performance also makes it challenging to operator.

Furthermore, Grey wastewater which has lower biodegradable organic load with higher COD will be difficult to degrade with microbial processes hence chemical treatment will be the option available which results into generation of chemical sludge having its own environmentally safe disposal issues.

Also, separation of black & grey wastewater and transfer to treatment location will pose challenges if distance between source of generation and treatment is long. Since black w/w will have higher settleable (Faecal) solids, drainage slope needs to be high for self-scouring velocity in sewer line. At times, will need to provide flushing arrangement as chances of solids settling & fouling in sewer will be high due to diurnal variations / usages.

For lower quantity and shorter distances between source & treatment unit, separate treatment can be considered. However, selection of proper technology for grey wastewater treatment and safe, environmentally friendly disposal of bi-product needs to be reviewed before proceeding.

Mr. Sanjay Sharad Javanjal
Hon. Secretary (IPA – Pune Chapter), Director – Deccan Environmental Consultants Pvt. Ltd.

L-1414

Conclusion

Grey water treatment offers a promising solution due to easy public acceptance for reuse of waste for household use. Grey water obviously has less pollutant load in terms of organic load in the absence of faecal matter. The basic treatment will require coagulation, flocculation and sedimentation and may not require biological treatment with aeration.

The blackwater has to be separately treated and due to high organic load will require more aggressive treatment with emphasis on nutrient removal. Root zone technology would be beneficial.

Segregation of BW and GW also entails higher expenditure on account of duplication of pipework, chambers and dual STP. This call has to be taken judiciously. There is also possibility of mis-connections and BW entering into the GW network.

Combined system (BW + GW) when designed, operated and maintained diligently is also able to deliver the goods. Therefore, proper evaluation of the above circumstances with relation to cost and space needs to be done before arriving at any decision.

Sharat V Rao
Convener, IPA Technical Committee
Managing Editor, Indian Plumbing Today magazine

Note: Editorial Board appreciates the wonderful response of IPA members in answering this Debate Club Q and making the Debate Club as a interesting feature. We will send gifts to each of the respondents for their contribution.

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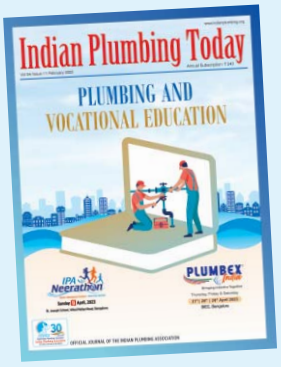

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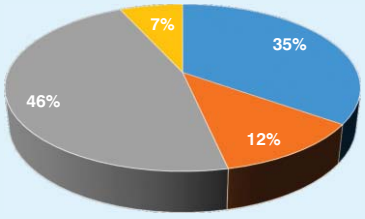

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