

Title: Discussion and Launch of Policy Brief on Pilot Implementation of TADOX® Technology in Textile and Dyeing Sector

Date: 8th February 2024

Time: 2:00-3:30pm

Venue: Gulmohar Hall, India Habitat Centre, Lodhi Road, New Delhi

The World Sustainable Development Summit (WSDS) (https://wsds.teriin.org/2024/) is the annual flagship event organized by The Energy and Resources Institute (TERI). Instituted in 2001, the Summit series has a legacy of over two decades for making 'sustainable development' a globally shared goal. The only independently convened international Summit on sustainable development and environment, based in the Global South, WSDS strives to provide long-term solutions for the benefit of global communities by assembling the world's most enlightened leaders and thinkers on a single platform. The 23rd edition of the annual flagship event of The Energy and Resources Institute (TERI)—the World Sustainable Development Summit (WSDS)—will be held from 7-9 February 2024 in New Delhi. The Summit deliberations will focus on the umbrella theme: Leadership for Sustainable Development and Climate Justice.

Within the WSDS framework, various Divisions of Teri organize **Thematic Tracks** where they showcase their successful projects with key findings and based upon these, come up with release of Policy Briefs, Discussion Paper etc. In this regard, the **NMCG-TERI Centre of Excellence on Water Reuse** (<u>http://nmcgtericoe-wr.in</u>) is organizing a thematic track which will present the outcomes of the successful project executed under the Namami Gange National Mission, funded by the National Mission for Clean Ganga (NMCG) <u>http://nmcg.nic.in</u> Ministry of Jal Shakti (MoJS), Govt. of India. This recently completed Phase I of the project involved the successful pilot

demonstration of TADOX[®] technology at 20,000 Liters per day (20 KLD) capacity TADOX[®] plant treating effluent from the Textile Common Effluent Treatment Plant (CETP) in Rooma Industrial Area, Kanpur, UP where 11 units discharge their effluent. This is **1**st of its kind demonstration in the World of UV-Photocatalysis based Advanced Oxidation Technology for treatment of Textile Effluent in a CETP at 20 KLD capacity.

The key results involve end-to-end TADOX[®] technology demonstration with complete removal of color, organics and improved biodegradability, which in turn, paves the way for TADOX[®] technology integration as part of Phase 2, at pre-biological treatment stage in the existing 1.55 MLD CETP, where this integration is expected to achieve adequate treatment, safe surface discharge norms as per NGT and reuse norms together with reduction in overall treatment time from current avg. 36-48 h to 14-16 h, less use of chemicals in treatment leading to reduced sludge from current avg. value of 20-35 kg/m³ to 0.4-2.0 kg/m³. Thus such an successful pilot demonstration of TADOX[®] technology at 20,000 Liters per day (20 KLD) capacity TADOX[®] plant treating effluent from the Textile Common Effluent Treatment Plant (CETP) in Rooma Industrial Area, Kanpur, UP where 11 units discharge their effluent.

Further the key highlight of the track is the release of Policy Brief on 'Integration of TADOX® Technology to achieve Net Zero in Textile Wastewater Treatment: Policy Recommendations based on Pilot Study & Life Cycle Assessment in a CETP'. Also, this Policy Brief brings in a few schemes already existing with the Ministry of Textiles to bridge the gap between early technology adopters and technology providers.

This thematic track thus aims to bring various **stakeholders** together like an R&D Organization and Think Tank like **TERI** where the technology was developed, **DST**, **Ministry of S&T**, **GoI** which provided funding support to develop the prototype of the technology, **NMCG**, **Ministry of Jal Shakti**, **GoI** which selected the technology for River cleaning National Programme like Namami Gange and financially supported Pilot scale demonstration in field, **Ministry of Textiles**, **GoI**, who is the ultimate beneficiary of the technology, while **Central and State Pollution Control Board**(s) are the regulators and **Industry partners** from Textile and Dyeing Sector. Such an engagement is expected to lead to an in-depth discussion, knowledge sharing, and practical insights related to the implementation of innovative approaches and advanced technologies such as TADOX® in order to meet the environmental safety norms, regulatory compliances like the ZLD and textile industry specific requirements for the newer and upcoming Textile Parks and CETPs.

Objective of having this Thematic Track:

• To share the findings of TADOX[®] technology implementation at a pilot scale in textile and dyeing sector under "Namami Gange" National mission.

- To facilitate in-depth discussions, knowledge sharing, and practical insights related to the integration of innovative approaches and advanced technologies such as TADOX[®] through a Panel Discussion.
- To release the Policy Brief on TADOX[®], offering policy recommendations for treating textile and dyeing wastewater, achieving Zero Liquid Discharge (ZLD), and enhancing water reuse based on the pilot demonstration study.

TENTATIVE AGENDA

	
Time	Agenda
12:30-1:00 pm	Registration at Gulmohar Hall, IHC
1:00-2:00 pm	Lunch at The Hub, IHC
2:00-2:20 pm	Welcome and Project Overview
	Dr. Nupur Bahadur
	Associate Director
	NMCG-TERI CoE on Water Reuse (NTCOE)
	Environment & Waste Management Division, TERI
2:20-2:30 pm	Inaugural Address
	Mr. G Asok Kumar*, I.A.S.
	Director General
	National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti, Govt. of India
	Keynote Address
2:30-2:40 pm	Mr. Rajiv Ranjan Mishra, I.A.S. (Retd.)
	Former Director General
	National Mission for Clean Ganga (NMCG), Ministry of Jal Shakti, Govt. of India &
	Advisor, NMCG-TERI CoE on Water Reuse (NTCOE)
	Release of Policy Brief
2:40-2:45 pm	'Integration of TADOX [®] Technology to achieve Net Zero in Textile Wastewater
	Treatment: Policy Recommendations based on Pilot Study & Life Cycle Assessment
	in a CETP'
	Policy & Strategy Perspective
2:45-2:55 pm	Ms. Prajakta L. Verma, I.A.S.
_	Joint Secretary
	Ministry of Textiles, Govt. of India
	Regulator's Perspective
2:55-3:05 pm	Mr Dinabandhu Gouda
-	Scientist-F and Director
	Central Pollution Control Board (CPCB), Govt. of India
	Textile Industry's Perspective
3:05-3:15 pm	Ms Chandrima Chatterjee
-	Secretary General
	Confederation of Indian Textile Industry (CITI)
	Environment Perspective

3:15-3:25 pm Ch. Vijay Kumar Managing Director Swan Environmental Pvt. Ltd.

3:25-3:30 pm Vote of Thanks

* TBC-To be confirmed

NTCOE ELITE PARTNERS









