

A FACT SHEET ON CHEMICAL MANAGEMENT IN ACCORDANCE WITH SDG GOAL 09

WHAT IS CHEMICAL MANAGEMENT?

Chemical management refers to the practices and regulations put in place to ensure the safe handling, use, storage, transportation, and disposal of chemicals in various industries and settings. It involves implementing measures to minimize risks associated with chemical substances and to comply with applicable laws, regulations, and industry standards.

ABOUT SOORTY

Soorty Enterprises is a renowned denim manufacturing company that has made significant strides in terms of sustainability. The company, based in Pakistan and Bangladesh, has recognized the importance of integrating sustainable practices into its operations and has taken proactive measures to reduce its environmental impact while promoting social responsibility.

ABOUT ZDHC

The Zero Discharge of Hazardous Chemicals (ZDHC) is a collaborative initiative that aims to eliminate the release of hazardous chemicals across the global textile, apparel, and footwear industries. ZDHC was established in 2011 by a group of leading brands, retailers, and suppliers who recognized the need for collective action to address the environmental and human health impacts associated with the use of hazardous chemicals in these industries.

BACKGROUND OF CHEMICAL MANAGEMENT

The Dirty Laundry campaign and the Detox campaign are interconnected initiatives that were started by Greenpeace, an international environmental organization, to raise awareness about the pollution caused by the textile and fashion industry and to push for more sustainable practices.

Dirty Laundry Campaign

The Dirty Laundry campaign was launched by Greenpeace with the objective of exposing the hazardous chemicals and water pollution associated with textile manufacturing, particularly in relation to major global clothing brands. By targeting well-known clothing brands, Greenpeace aimed to pressure them into taking responsibility for the environmental impacts of their supply chains and to encourage them to adopt more sustainable practices.

Detox Campaign

Building on the momentum of the Dirty Laundry campaign, Greenpeace launched the Detox campaign in 2011. Greenpeace challenged these companies to take a proactive role in driving industry-wide change, emphasizing the importance of transparency, chemical substitution, and responsible wastewater management. The Detox campaign called for clothing brands to publicly commit to the "Detox Commitment," a set of principles that outline the steps needed to achieve zero discharge of hazardous chemicals.

SOORTY INITIATIVES TOWARDS CHEMICAL MANAGEMENT

MRSL 1.0 LAUNCH

Soorty first started to utilize ZDHC MRSL 1.0 to restrict input chemicals, at the that time only supplier declaration was the only conformance document.

TRAININGS FROM ZDHC ACADEMY

Soorty Enterprises demonstrated its unwavering commitment by actively engaging with the ZDHC Academy to capitalize on valuable learning opportunities. Resourcing the ZDHC Academy platform, Soorty empowered its staff and workers through comprehensive training, instilling a steadfast dedication to chemical management practices and the preservation of the environment.

STZ FOUNDATIONAL LEVEL

Soorty achieved Supplier to Zero foundational level certification by completing required criteria of ZDHC.

SOORTY ZDHC CONTRIBUTOR

Finally to acknowledge the efforts by Soorty Enterprises ZDHC invited Soorty to join ZDHC as the 1st Contributor from PAKISTAN, this was marked as a significant milestone in our journey towards sustainability.

2014

2015

2017

2018

2020

2021

2022

MRSL 1.1 LAUNCH

By the time updated version of ZDHC MRSL Ver1.1 (Manufacturing Restricted Substances List) was launched, Soorty Chemical management team was established and ensured to share all substantial documents with suppliers and made certain to restrict non compliant products.

ZDHC GATEWAY MODULE

Soorty persuaded its raw material suppliers to join ZDHC Gateway in 2018. And since then Soorty is procuring safer and sustainable chemicals.

STZ PROGRESSIVE LEVEL

Later Soorty achieved Supplier to Zero Progressive level certification and was first ever industry in Pakistan to achieve this certification at that stage. This became our gateway to **ZDHC Contributor ship**

CHEMICAL MANAGEMENT TRAININGS FOR STAFF AND WORKERS

INTERNAL TRAINING SESSIONS CONDUCTED ON MONTHLY BASIS



THIRD PARTY TRAINING SESSIONS WITH CERTIFICATIONS



Chemical Management System (CMS) - Online Portal

The CMS online portal was meticulously designed with the goal of enhancing the knowledge and awareness of our workforce regarding chemical handling and safety protocols.

The screenshot shows the Chemical Management Information Portal for Soorty Enterprises Denim Unit 08. The portal features a navigation bar with an "ENTER" button and a "BACK" button. The main content area includes a grid of links to various documents and resources, such as the Soorty 08 Policy, CMP Ver 5.0, CIL (Chemical Inventory List), Improvement Plan for Chemical Management, Hazardous Chemical Reduction, Guidelines for Chemical Management, Organogram, Chemical Management Teams, RSLs & MRSLs Positive List Brands Manuals, Haz Chem Reduc Execution Plan, Internal Audit Status, Internal Training, and Articles & NEWS Updates. The portal also displays logos for ZDHC InCheck, ZDHC Gateway, and ZDHC ClearStream. The portal is developed by Amir Qureshi, Responsible Person for Chemical Compliance.

SUSTAINABLE PROCESSES

Soorty Enterprises has designed its production with the latest technology in our wet processing units. Improving our manufacturing processes has resulted in reduced byproduct generation, decreased production of contaminated water, and the development of environmentally safe products that pose no harm upon disposal.

Smart Foam Machine

- Stone-free machine.
- Foam as a carrier of chemical.
- Easily integrated with other machines.



Hand Made Stone (HMS)

- Reduced water usage by 20% per wash.
- Reduced stone sludge load at WWTP.



Up System Machine

- 56% water reduction compared to standard wash production.
- Reduced chemical consumption.



ECO Free 2 Machine

- O-Bleach process replaces the conventional Hypochlorite Bleaching and helps in reducing the pollution load at WWTP.
- It also saves the additional rinsing process.



E-Flow Nebulization

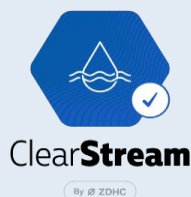
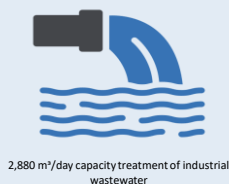
- Nebulizing System works with the help of compressed air and creates millions of nano bubbles, which react with the garments inside the machine and achieve the targeted outlook.



SUSTAINABLE OUTPUT

WASTEWATER TREATMENT PLANT

Soorty Enterprises ensures the thorough treatment of all industrial wastewater prior to its release into the environment through our cutting-edge treatment plant situated within our LEED platinum certified facility. The state-of-the-art technology utilizes the advanced Moving Bed Bio Reactor (MBBR), resulting in a discharged wastewater quality meeting the Zero Discharge Hazardous Chemical (ZDHC) standards.



WASTEWATER RECYCLING PLANT

Utilized at Soorty for water reuse applications for over a year, our advanced treatment techniques predominantly revolve around membrane systems. Employing a pressure-driven membrane filtration process, these systems effectively eliminate dissolved and suspended solids, with their efficiency determined by pore size. This innovation has significantly reduced the discharge load of treated wastewater into the environment.

SERIES OF TREATMENT

Multimedia Filtration + Ultra Filtration + Reverse Osmosis

40% Saving of ground water

SOORTY'S ACHIEVEMENTS IN WATER MANAGEMENT

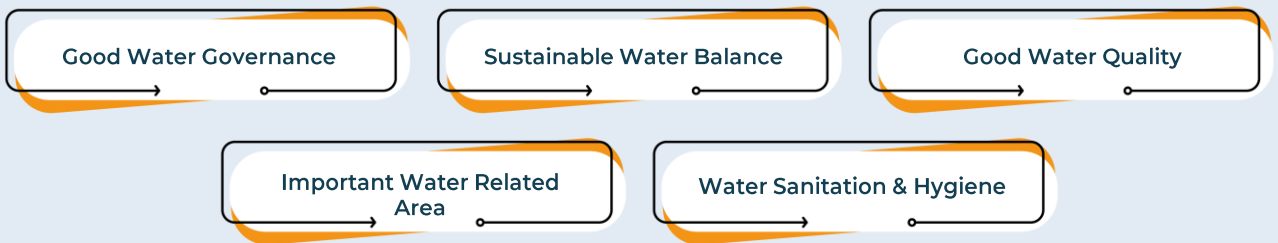
- GOLD certification of AWS standard.
- State-of-the-Art Wastewater Recycling plant.
- Water Sanitation and Hygiene training for staff and catchment community.
- Rainwater harvesting tank.
- Drip Irrigation system
- Separate tank for fire and safety

ALLIANCE FOR WATER STEWARDSHIP

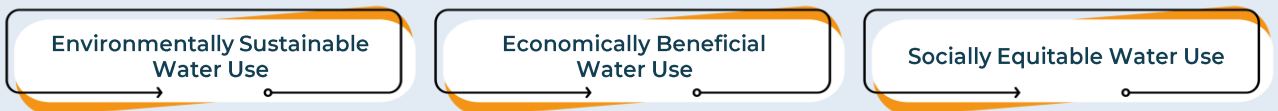
The AWS is a global membership collaboration that promotes a universal framework for more sustainable local water resources. AWS certifications are awarded on a points basis and cover three levels, including core (0-39 points), gold (40-79 points) and platinum (80 points or more). Soorty's GOLD Level certification indicates that the company has pushed its water stewardship performance to the next level.

We collaborated with a diverse range of stakeholders across multiple sectors, including government bodies, industries, schools, universities, NGOs, and various private sector entities.

AWS OUTCOMES



AWS IMPACT



WATER CONSERVATION PRACTICES AT SOORTY



Stakeholders Industrial Best Practices Awareness Session



Visited at Dhabeji Pumping Station



World Water Day 2023 "Be the Change"



AWS Stakeholders Awareness Session



Plantation Drive in School

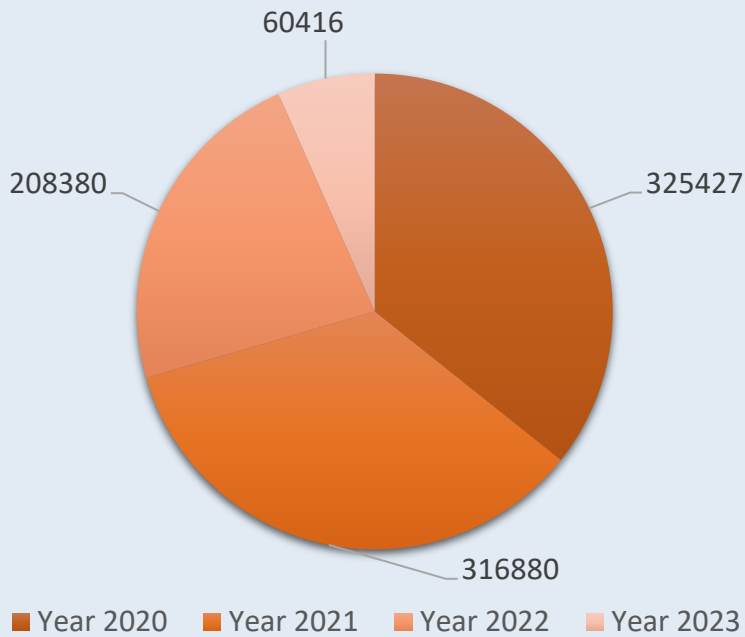


Donated Handwash Stations to Schools

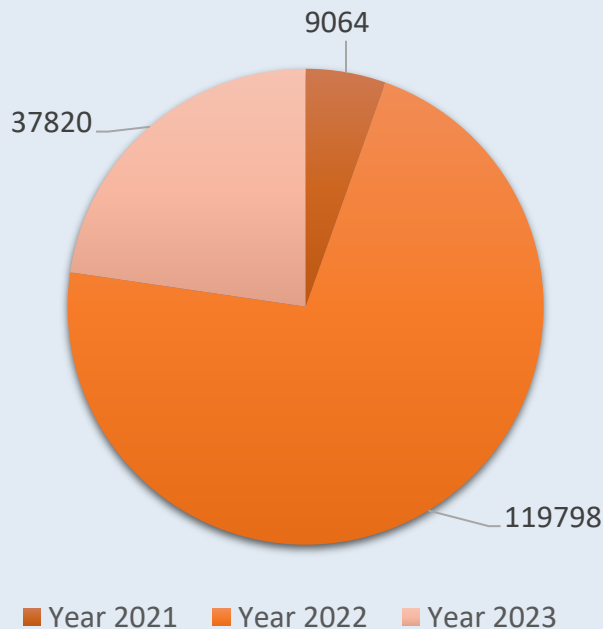
WATER DATA UNIT 5&6

Description	Year 2020	Year 2021	Year 2022	Year 2023
Ground Water	325427	316880	208380	60416
KWSB	21738	15398	69579	8645
Tanker	9860	6692	-	-
Rain Harvesting Water	2277	3554	2866	-
Recycled Water	-	9064	119798	37820

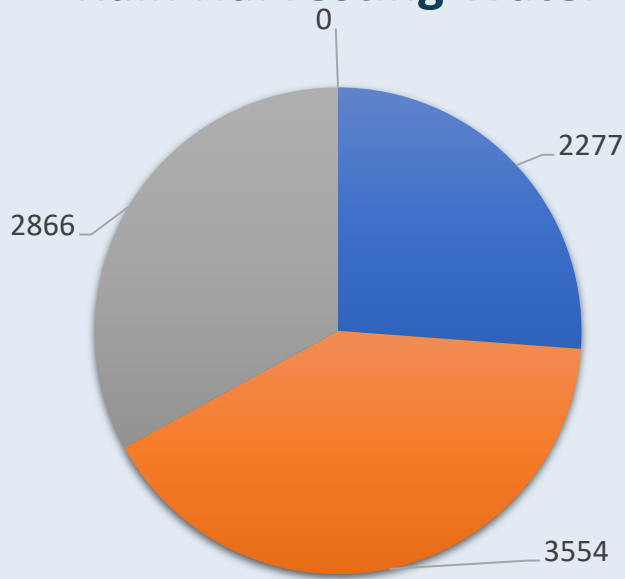
Ground Water



Recycled Water



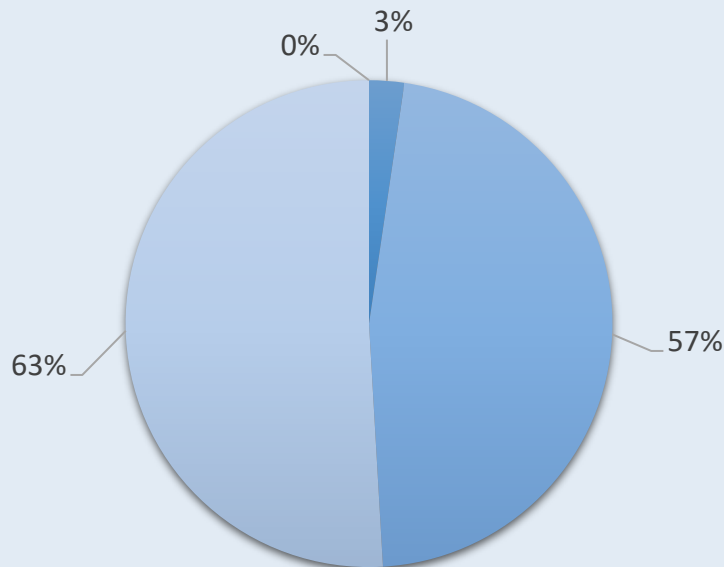
Rain Harvesting Water



■ Year 2020 ■ Year 2021 ■ Year 2022 ■ Year 2023

Description	Year 2020	Year 2021	Year 2022	Year 2023
Ground Water	325427	316880	208380	60416
Recycled Water	0	9064	119798	37820
Percentage Saving	0%	3%	57%	63%

Fresh Water Saving



■ Year 2020 ■ Year 2021 ■ Year 2022 ■ Year 2023