Case Study
Adopting safer chemical protocols in the fashion supply chain
SETTAVEX S.A. (EVLOX) Morocco

Context
As part of the regional EU-funded SwitchMed programme, the MED TEST III project supports industries in the Southern Mediterranean to improve their environmental performance and competitive advantage. Together with the Zero Discharge of Hazardous Chemicals (ZDHC) Foundation, a mission-driven multi-stakeholder initiative for the textile, apparel, leather and footwear industry, the United Nations Industrial Development Organization (UNIDO) has undertaken pilot projects in Egypt, Morocco and Tunisia to demonstrate the way forward for phasing out hazardous chemicals in the textile industry’s value chain.

This project aimed to demonstrate and document the business case of implementing a sustainable Chemical Management System (CMS) in the textile-finishing industry in line with the ZDHC Guidelines. An initial training on ZDHC Sustainable Chemical Management and Wastewater Management for company staff was rolled out (2020-2021) targeting 37 production facilities in the three countries, followed by the launch of six industry pilot project (2021-2022), offering technical assistance to improve chemical and wastewater management systems in the production facilities. Additional 15 companies have been supported through training and capacity building actions, leading to the preparation of country roadmaps to extend the adoption ZDHC guidelines within the textile-finishing sector.

Company overview
Main production processes:
Spinning, Weaving, dyeing of yarns, printing, special chemical finishing of fabrics.

Number of employees: 500
Number of staff trained: 20

With an annual production of premium denim, ranging between 12-13 million meters, SETTAVEX S.A. (EVLOX) is one of Morocco’s leading Moroccan denim producers. The production facility engaged in the MED TEST III pilot project is located in Settat, and the company is part of the global operating Spanish TAVEX EUR-OPE SL. Main drivers for joining the SwitchMed pilot activities were improving brand relations and better responding to rising regulatory agendas in the main export markets.

Improving chemical management systems, policies and safety procedures
At the beginning of the project, EVLOX’s Purchasing Policy, Standard Operating Procedure (SOP) for the Wastewater and the Effluent Treatment Plant were absent, and the Chemical Inventory List (CIL) did not comply with the ZDHC Guidelines. EVLOX adopted the ZDHC CIL template, a standard for the industry. The ZDHC CIL helps suppliers progress in their knowledge about chemicals stored and used in their facility and how to manage them.

Through the demonstration project, the company management has established and reviewed these procedures, installed a flow meter on the Effluent Treatment Plant (ETP) and improved handling and storage while reducing the quantities of chemicals stored in the factory.

A chemical product management system, from purchase to chemical product packaging disposal, has been established, which includes a purchasing policy fully in line with the ZDHC CMS Technical Industry Guide (TIG). This has encouraged the registration of the chemical suppliers, which deliver chemicals to EVLOX, on the ZDHC Gateway. Moreover, the hazard evaluation of chemical products has become a key decision criterion when buying chemical products. Finally, the use of Personal Protective Equipment (PPE) has been enforced. All these changes are key features of the ZDHC CMS TIG, which leads to systematically managing chemicals safely and effectively, and to safeguard the workers and the environment.

"Overhauling our chemical management by using processes and chemicals that are less harmful will benefit working conditions, our environment and better position our products on the global market, especially since some premium brands have set insufficient environmental standards as an exclusion criterion from their supply chain."

Khalid Kairouch, Production Manager

Visit SwitchMed.eu

As part of the EU-funded SwitchMed programme, UNIDO demonstrates in the MED TEST III project pathways for industries in the Southern Mediterranean to become more resource efficient and to generate savings for improved competitiveness and environmental performance.

This publication has been produced with the financial assistance of the European Union (EU) and SwitchMed co-funding partners. The contents of this publication are the sole responsibility of UNIDO and can in no way be taken to reflect the views of the EU.
Relationship with chemical suppliers and registration of chemicals on the ZDHC Gateway

The chemicals used in EVLOX's production were, at the beginning of the project, to some extent already registered on the ZDHC Gateway, a world-renowned database of safer chemistry for the textile, apparel, leather and footwear industry. During the pilot project, EVLOX contacted ten chemical suppliers to request data sheets of chemicals that were not yet registered on the ZDHC Gateway but were still in use at the facilities.

Due to the higher cost for alternative chemicals, EVLOX has managed to replace six hazardous chemicals among them Hugo Boss and Benetton, which allows the brands to monitor their CIL and Wastewater performance.

Nevertheless, the end of the SwitchMed technical support project, the percentage of ZDHC-certified chemicals has slightly increased with five new chemical formulators and 12 chemical products newly registered on the ZDHC Gateway. EVLOX operates now in conformance with the ZDHC Manufacturing Restricted Substances List (MRSL), which is a list of chemicals restricted from intentional use by manufacturing facilities in the textile, leather and footwear sectors.

Substitution of high-risk hazardous chemicals

Substitution is the best solution for reducing health and safety risks from chemical use and discharge. However, substituting chemicals requires time. Therefore, other actions that can further assist in the reduction of risks should also be taken into account and implemented, such as, better handling and storage conditions, reducing the quantities of chemicals stored in the factory, better monitoring of wastewater testing, and better use of PPE. EVLOX has fully exploited all such available options and has adopted them into their business practice.

The chemicals used in EVLOX's production were, at the beginning of the project, to some extent already registered on the ZDHC Gateway, and if so at which level. In contrast, the frequency score is evaluated based on the use frequency, the stored quantity and the quality of available PPE for each hazard. The resulting priority list revealed several instances for substituting chemical products. Although the substitution process was initially problematic for EVLOX, also due to the higher cost for alternative chemicals, EVLOX have, to this date, managed to replace six hazardous chemicals according to the adopted purchasing policy and the ZDHC MRSL Guidelines.

For more information contact:

United Nations Industrial Development Organization
Ms. Ulvinur Müge Dolun
Division of Circular Economy and Environmental Protection
Circular Economy and Resource Efficiency Unit
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
E-mail: u.dolun@unido.org Web: www.unido.org

ZDHC Foundation
Oudezijds Voorburgwal 316-B
1012 GM Amsterdam, The Netherlands
E-mail: training@zdhc.org Web: www.roadmaptozero.com