Benetton Group srl

2025 Detox Programme Guideline

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PREMISES and DESCRIPTION

Benetton Group cooperates with Greenpeace through the DETOX PROGRAMME in a joint effort to lead the textile industry towards the complete elimination of hazardous chemicals from manufacturing.
The complete text of BENETTON DETOX commitment is available at:
https://www.benettongroup.com/en/sustainability/nature/water/detox/

Recognizing that there are no environmentally safe levels for hazardous substances, in front of scientific uncertainty, Benetton decided to firmly believe in the precautionary principle.
Any supplier of Benetton has to put in place and undertake to maintain an adequate quality control processes to ensure that it can carry out all production (not Benetton's only) in compliance with and according to the stricter quality standards and the best professional practices for the sector.
Supplier warrants to work in compliance with all international agreements and with all applicable laws and regulations, especially those on chemical compliance of products and processes (including chemical used in input and released in output), identifying and implementing new compliance requirements or changing them.
The supplier has to guarantee the same also for any subcontractor used.

In line with its Detox commitment to achieve zero discharge of 11 priority chemicals by 2020, Benetton joins the ***Zero Discharge of Hazardous Chemical*** *(ZDHC)* group where international brands are cooperating to improve the environmental performance of supply chain and to devise methodologies to minimize and eventually eliminate the priority chemicals.
This program, named *"Joint Roadmap: Toward Zero Discharge of Hazardous Chemicals",* is published at http://www.roadmaptozero.com/

In addition to ZDHC, in 2017 Benetton Group became also a member of the ***Sustainable Apparel Coalition*** *(SAC)* recently rebranded to *Cascale* https://cascale.org/ and began using the *Higg Index Facility Environmental Module (i.e. Higg FEM),* actually under the *Worldly* platform *(*https://app.worldly.io/*),* to evaluate its suppliers.

Textile production is linked to water pollution because of a large use of chemicals, many of which are hazardous and persistent. The 'wet processing' of textiles, including dyeing, washing, printing and fabric finishing leads to the discharge of large quantities of wastewater containing toxic substances, that is the reason why Benetton considers, within the scope of this Detox Programme, only the wet process plants.
As a further clarification, they are:

- **Yarn Wet Process Mills**: suppliers involved in the making of yarn
- **Wet Process Mills:** suppliers involved in the making of fabric
- **Wet Process Factories:** suppliers involved in the washing/dyeing of finished garment
- **Printing Mills:** suppliers involved in the printing on fabric and/or garment
- Vertical finished goods manufacturing facilities where any of the above wet processes occur.

The DETOX PROGRAMME is constantly evolving according to the Cascale and ZDHC programs and it refers not only to the global facility's sustainability performance but also to the three production's steps involved in it (INPUT, PROCESS and OUTPUT) and on its capacity building

Actually, the running "*BENETTON 2025 DETOX PROGRAMME"* consists of the following activities:

1. INPUT – ZDHC MRSL conformance (chemical input) through the evaluation of the *Performance InCheck* following the *Performance InCheck Guidelines*
2. PROCESS – ZDHC Chemical Management System

3. OUTPUT - Wastewater analysis made by following the *ZDHC Wastewater Guideline* and the integration of *ZDHC Man-Made Cellulosic Fibre (MMCF) Guidelines*
4. TRAINING - Training on chemical management through the *ZDHC Academy*
5. SUSTAINABILITY EVALUATION - Assessment made by using the *Higg FEM*
6. Corrective Action and Improvement (if needed).

ZDHC MRSL Conformance

The ZDHC MRSL (https://mrsl.roadmaptozero.com/) establishes acceptable concentration limits for substances in chemical formulations used within manufacturing facilities. The intent of the ZDHC MRSL is to manage the input of chemicals to the suppliers and remove those hazardous substances from the manufacturing process.

Manufacturing Restricted Substances List (MRSL) & Conformity Guidance

A verification aiming to seek if the way products are made by restricting input chemicals rather than permitting their use and subsequently avoiding any environmental contamination, should take into account:

- Organizational responsibility
- Full inventory of the chemicals including: product commercial name, manufacturer and/or distributor, type of product (main use), monthly use, CAS and composition for MRSL verification.
  ZDHC made available a template named CIL (i.e. Chemical Inventory List) that can be used to create a basic inventory and can be downloaded at https://www.roadmaptozero.com/documents, in the "Process" section.
- MSDS of chemicals.
- Chemical Risk Identification and Analysis.
- Chemical Management System including purchase, storage, handling, traceability, disposal.
- Chemical hazard Emergency Plan
- Licenses and/or permits (if required) for storage and/or use of hazardous chemicals.
- Site plan including drainage plan and all areas for the delivery, use and storage of chemicals
- Staff safety training records

With the goal of moving towards a greener chemistry, as of today Benetton Group identifies as a pillar the

- ZDHC Gateway Chemical Module (free of charge after getting the ZDHC Gateway account)
- ZDHC InCheck report (available upon payment through the ZDHC Gateway) that shows how much your Chemical Inventory List (CIL) conforms to the ZDHC MRSL.

How to comply with

Supplier has to be able, at every time, to proof the compliance of its chemical inventory against the ZDHC MRSL and/or others positive lists, such as Bluesign, GOTS, etc. With reference to ZDHC Gateway Chemical Module, Benetton considers as compliant, only the products that are classified at least as level 1 conformance.

Wet processes suppliers are therefore invited to give evidence of the before mentioned tool's use, sharing with Benetton Group their respective ZDHC Verified InCheck at least once per year. As described in the Guideline available at https://www.roadmaptozero.com/input#Incheck-guidelines, the generation of the InCheck report consists of two steps:

1. Performace InCheck: self-assessment based on supplier's chemical inventory data useful to measure and improve the ZDHC MRSL compliance. It can exclusively be generated via ZDHC Approved Performance InCheck Providers.

2. Verified InCheck Report: an onsite spot check by a ZDHC Approved Verifier which supports building trust in the self-assessment done through Performance InCheck[1].

Starting from May 2024 ZDHC introduced the Commodity Chemicals. This are substances that are within the scope of the ZDHC MRSL but are excluded from the Performance InCheck Report and listed in the Guideline available at https://www.roadmaptozero.com/post/publication-of-the-commodity-chemicals-guide-v1-0

ZDHC Chemical Management System

In line with its Foundation's mission, vision, objectives, and tools, ZDHC provides direction for implementing a Chemical Management System (CMS) since it is one of the fundamental practices for ensuring continuous improvement towards the goal of zero discharge of hazardous chemicals. A good CMS, in fact, supports both worker safety and reduction of environmental impacts within the community.

The **ZDHC CMS Manual** consists of two components:

1. *ZDHC CMS Framework* (the Framework): document that lists the minimum requirements for a CMS according to the ZDHC.
2. *ZDHC CMS Technical Industry Guide* (TIG): document that provides more specific, technical information to support implementation of the ZDHC CMS Framework in a facility.

The *ZDHC CMS Framework* provides the textile, apparel, and footwear industries with a common starting point to work from. It can be incorporated in a wider management system, such as an Environmental Management System (EMS) and the scope of implementation, however, needs to be defined by each organization and may range from the organization's specific operating unit(s) to all parts of its value chain.

Kindly note that the ZDHC CMS Framework is complementary to any regulatory, operational, or product requirements and shall be used to measure the success of an organization's own chemical management system.

The *ZDHC CMS TIG* covers the implementation of a CMS in the supply chain.

Detailed information and documents are available at https://www.roadmaptozero.com/process.

How to comply with

To speed on implementation of the industry's leading chemical management system, suppliers have to participate to the **ZDHC Supplier to Zero Programme** (https://www.implementation-hub.org/supplier-to-zero), where they can learn how to implement ZDHC guidelines, platforms and solutions. Supplier to Zero is connected to the ZDHC Gateway, the industry's database of chemicals to use. All the certificates achieved within the STZ Programme have to be shared with Benetton Group srl.

[1] The updated list of the ZDHC Approved Performance InCheck Providers and InCheck Verifiers can be found at https://www.implementation-hub.org/providers

ZDHC Wastewater Guidelines

As many other members of ZDHC, starting from 2017, Benetton Group has adopted the *ZDHC Wastewater Guidelines,* available at https://www.roadmaptozero.com/output and invites its suppliers to follow it.

This document is a single set of expectations on wastewater discharge that goes beyond regulatory compliance, not only for conventional wastewater parameters, but also for hazardous chemicals.

Wastewater Quality

The *ZDHC Wastewater Guideline* has been developed in collaboration with multiple brands, non-governmental organizations, universities, and technical experts. It aligns all ZDHC contributors to a unified set of expectations related to sampling, test methods, pass/fail criteria, testing frequency and disclosure.

The ZDHC Programme acknowledges that conventional wastewater parameters are relevant for the textile industry. ZDHC proposes Foundational, Progressive and Aspirational limit values for conventional parameters as part of the wastewater guidance document. Where local legislation and/or permits do not cover one or more conventional parameters listed in these guidelines, the foundational level stated in these guidelines shall apply.

Benefits of the Wastewater Guidelines:

- The *ZDHC Wastewater Guidelines* define equivalence between US, EU, and Chinese standard methods for traditional wastewater parameters, allowing laboratories in each region to use their own standard methods.
- The data obtained per the *ZDHC Wastewater Guidelines* will help confirm that the facility does not intentionally use chemicals of the ZDHC Manufacturing Restricted Substances List (MRSL).
- Operational efficiencies: one test per the *ZDHC Wastewater Guidelines* is valid for all ZDHC Contributors working with that facility.
- It is a milestone for facilities, as its adoption enables data sharing across multiple external organizations to an aligned set of parameters, test methods and limits.

How to comply with

As indicated in the *ZDHC Wastewater Guidelines*, a wet process facility having as prerequisite:

- a valid license to operate
- consistent compliance with local wastewater discharge permits, at every time

should perform, as best practice, wastewater analysis on semiannual basis, i.e. two times per year.

In particular, the facility has to follow the below points:

1- appoint a ZDHC accepted laboratory[2] to conduct water sampling and analysis by following the *ZDHC Wastewater Guideline v.2.2*;
2- publish the water test report in the *ZDHC Gateway*[3] according to the defined deadlines, that are April 30th and October 31st;
3- upload the wastewater discharge permits in the *ZDHC Gateway*[2].

To fully comply with this activity, facility finding "not compliant" values in wastewater, should submit a corrective action plan with a defined completion date for resolution of the existing gaps, following indication suggested in the chapter Corrective Action Plan & Root Cause Analysis (Pag.7)

[2] The full list is available at https://www.roadmaptozero.com/output

[3] For information and updates please refer to ZDHC website (https://www.roadmaptozero.com/output#gateway)

Moreover because of its *Detox Commitment* with Greenpeace[4]:

4- only to its Chinese wet process suppliers, Benetton asks to prioritize the *IPE DETOX* website[5] as the recommended web portal in which disclose water test report, always by following the deadlines of April 30th and October 31st. Disclosure in the ZDHC Gateway is also accepted either additionally or alternatively.

5- all facilities (not only the Chinese ones) have to agree in disclosing the report also in the Benetton Group's website and, for this, they have to sign the document titled *Authorization to release information*.

Kindly note that separate wastewater guidelines are available for **Man-Made Cellulosic Fibre** (**MMCF**) suppliers. Please refer to the ZDHC website[6] for all related documents.

ZDHC Man-Made Cellulosic Fiber (MMCF) Guidelines

This document gives specific indication for discharged wastewater quality, emissions to air, and chemical recovery for manufacturing facilities producing Man-Made Cellulosic Fibres (MMCF) as Viscose and Modal Staple Fibres include Lyocell, Viscose Filament Yarn, Cupro and Acetate.

How to comply with

As indicated in the *ZDHC Wastewater Guidelines*, a wet process facility having as prerequisite:

- a valid license to operate
- consistent compliance with local wastewater discharge permits, at every time

should perform, as best practice, wastewater analysis on semiannual basis, i.e. <u>two times per year</u>.

In particular, the facility has to:

1. for MMCF Responsible Fibre Production
    a. Self- evaluating and monitoring
    b. Upload from October to December on the Supplier Platform the MMCF Module
2. For MMCF Air Emissions
    a. Self- evaluating and monitoring
    b. Upload from October to December on the Supplier Platform the MMCF Module
3. For MMCF Wastewater Guidelines
    a. appoint a ZDHC accepted laboratory[7] to conduct water sampling and analysis by following the *ZDHC Wastewater Guideline v.2.2*;
    b. publish the water test report in the *ZDHC Gateway*[8] according to the defined deadlines, that are April 30th and October 31st;
    c. Upload from October to December on the Supplier Platform the MMCF Module

[4] We point out that not all the ZDHC's brands signed the Detox Commitment with Greenpeace.
[5] For information and updating please refer to IPE website http://wwwen.ipe.org.cn/IndustryRecord/Regulatory.aspx.
[6] https://www.roadmaptozero.com/output#materials
[7] The full list is available at https://www.roadmaptozero.com/output
[8] For information and updates please refer to ZDHC website (https://www.roadmaptozero.com/output#gateway)

Higg Facility Environmental Module

The Higg Facility Environmental Module (Higg FEM) is a sustainability assessment tool that standardizes how facilities measure and evaluate their environmental performance, year over year.

The Higg FEM is designed to:

- Measure and quantify the sustainability impacts of a facility
- Reduce redundancy in measuring and reporting sustainability performance
- Drive business value through reducing risk and uncovering efficiencies
- Create a common means and language to communicate sustainability to stakeholders.

The Higg Facility Environmental Module can be considered as:

- A facility-level self-assessment tool that enables rapid learning through identification of environmental sustainability hot spots, existing level of performance and improvement opportunities.
- A starting point of engagement, education and collaboration among stakeholders in advance of more rigorous assessment efforts.

The ultimate goals of the Higg Index are to inform organizations of their strengths and weaknesses, drive business value throughout the value chain by presenting opportunities for cost-savings and innovation, and catalyze sustainability education and collaboration.

How to comply with

The facility has to:

1- get its own account from Worldly;
2- complete and post one Higg FEM per year, following the deadlines provided by Worldly/Cascale;
3- share its module with Benetton (Benetton's Worldly Account Name is **Benetton Group S.R.L.**)
4- reach at least level 1 in all sections and be aligned with all legal/local requirements.
5- Publish and share with Benetton Group S.R.L the FEM Verified by the end of June of the reporting year

Kindly note that since the FEM is a self-assessment, to have a "legal force" it has to be verified by a Cascale approved verifier, appointed by the facility. Verification can be made within a limited period, usually by December 31st, following the submission of the annual FEM.
Concerning the reporting period and/or any further information on the Higg FEM, please refer to https://cascale.org/tools-programs/higg-index-tools/facility-tools/.

Corrective Action Plan & Root Cause Analysis

Benetton records on failures of its suppliers and asks them to identify the root cause of the wastewater and sludge considering finding of non-conformance testing results. It also requires formulating corrective action plans to be implemented. Having the ZDHC Gateway account (free of charge), a template is also available at ZDHC Knowledge base website in which failures are clearly described.
When the supplier is unable to determine the root cause or the problem persists after the implementation of the corrective actions, it should contact the brand that will address it to one of the ZDHC's accredited experts.

Regarding the Higg FEM (especially when verified by 3rd party) continuos progresses are expected.

ZDHC Academy

The ZDHC Academy is a go-to platform to create awareness, build knowledge and enable skills on sustainable chemical management and ZDHC tools along the textile, apparel, footwear and leather value chains.

Training

As part of its commitment with ZDHC, Benetton monitors if its wet process suppliers assign adequate human resources responsible for the implementation of the chemical management policy including the ZDHC tools (such as the Training on Chemical Management). Dedicated personnel, including key tasks, minimum level of experience and knowledge, should be clearly identified (by facility's internal policy and/or HR job description) and documented upon request.

ZDHC Academy – Training on Chemical Management

The course "*Chemical Management in the Textile Industry"* is a 2-day program designed to improve the understanding of Chemical Management in the textile industry.
This course is considered as basic course for a wet process facility and it is aimed at Factory Managers and personnel responsible of dyeing, printing, chemical purchase, ETP, EHS, quality assurance and sustainability who work at the wet processing facilities (such as dye house, printing, laundries and tanneries).

How to comply with

Once created an account in the ZDHC Academy (https://academy.roadmaptozero.com/), facility has to:

1- select the course in the calendar and register to attend
2- attend the course
3- pass the final exam to obtain the Certificate
4- share the certificate with Benetton Group

Even if Benetton is actually requiring only the *Chemical Management in the Textile Industry* certificate, suppliers are strongly invited to attend all the trainings they are interested to and provide the proof of their participation to Benetton.

ZDHC Air Emissions Guidelines

This document aims to provide calculation models for suppliers in order to understand how they position themselves on key pollutants current situation and help them plan improvement actions.
It is focused on the input chemistry to manage chemicals for cleaner air.

Benefits of the ZDHC Air Emissions Guidelines

- Focus on VOCs to help suppliers gain insight into their baseline status and plan improvement actions to reduce VOC emissions into the ambient air.
- Provide a calculation model and it will be done on the basis of the 100% Potential to Emit (PTE) VOCs based on the chemical inventory used in their production processes.
- In relation to GHG, accounting their Scope 1 and Scope 2 GHG emissions and setting targets to reduce their GHG emissions.

How to comply with

- Calculate the 100% Potential To Emit (PTE) from the chemical inventory in the dedicated platform in ZDHC

- Report GHG emission data in ZDHC platform, minimum account scope 1 & 2 GHG emissions as per GHG protocol and voluntarily account scope 3 GHG emissions (accepted calculation from other existing platforms)
- By the end of Q2 2025 the supplier must have uploaded data in ZDHC Supplier Platform-Air emission module
- From Q2 to the end of the year supplier must set reduction targets and start improvement actions

Supply chain RATING

Benetton Group will evaluate its Garment Vendors' performances by taking into account the completion of the Detox activities of their Owned source wet processes involved in the production of the goods.
Indeed, even if fabric suppliers are out of the scope of the Detox programme, in their turn, they will be part of the evaluation because they are the "bridge" between their Wet Process Mills and the Garment Vendors. It means that fabric suppliers' supply-chain (only Wet Process Mills) will affect negatively or positively the rating of the Garment Vendors also if they are not directly managed by the Garment Vendors.

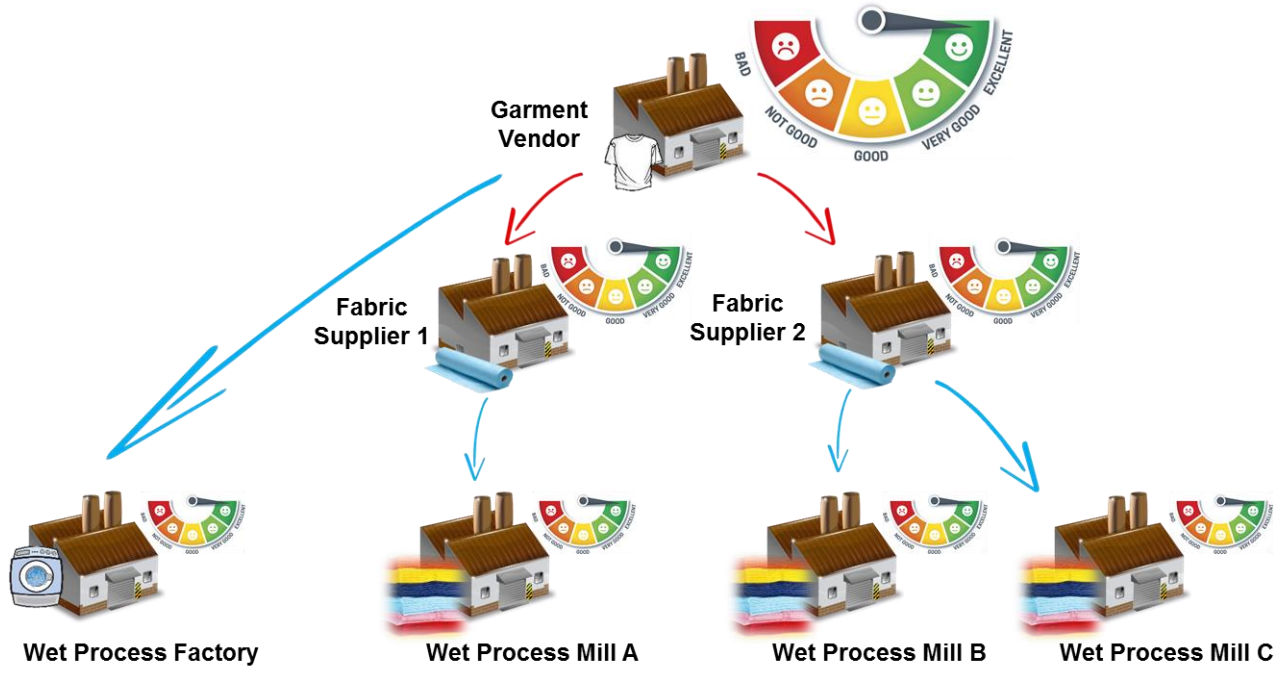

Figure 1: example of supply chain and impact of wet processes on vendor's performance

The rating system is based on the scores that each wet process (i.e., Factory and/or Mills) obtains in each activity by taking into account their efforts. Here below, all the components that will contribute to the evaluation are listed:

- ZDHC WW test and disclosure (one time per year)
- ZDHC WW test and disclosure (two times per year)
- ZDHC Corrective action on WW test
- ZDHC Training
- ZDHC MRSL
- Higg FEM Self-assessment
- Higg FEM Verification

Summary

Detox Programme activities will contribute for the supply chain rating (see previous chapter) and they can be summarized in the following main steps:

1. Signature of the Detox Authorization;
2. Wastewater test analysis according to ZDHC WW Guideline and publication in the ZDHC Gateway;
3. Root Cause Analysis and Corrective Action Plan if any detection in Wastewater analysis;
4. Fill and post the Higg FEM and share it with Benetton Group srl;
5. Verification of the Higg FEM;
6. Share the ZDHC InCheck Report;
7. Training on Chemical Management through the ZDHC Academy and provide the obtained certificates.
8. Air Emission calculation

Kindly note that steps 1-4 are considered **MINIMUM REQUIREMENTS** to work with Benetton Group srl.
If the supplier does not meet the minimum requirements it will be excluded from Benetton's supply chain unless it provides remediation within 6 months.

Step 8 is considered as best practice and it positively affect the supplier rating.

Moreover, kindly note that:

- all documents uploaded/published by supplier in the ZDHC Gatway are visible to the brand only if they are connected each other: therefore, it is necessary to accept/request the connection request;

- all wet process suppliers have to be registered in the ZDHC Gateway: registration is free of charge and can be made by invitation from a brand. Therefore, if you do not have a ZDHC Gateway account yet, please send your information (i.e., CONTACT NAME, ORGANIZATION NAME, PRIMARY EMAIL) to your local Benetton main contact and/or to detox@benetton.it;

- additional information on all ZDHC tools can be found at the ZDHC Knowledge Base's page: https://knowledge-base.roadmaptozero.com/hc/en-gb

- all wet process suppliers have to use the Higg Index Communication Guidelines to increase value chain transparency.