



Destination Zero:

seven years of Detoxing
the clothing industry

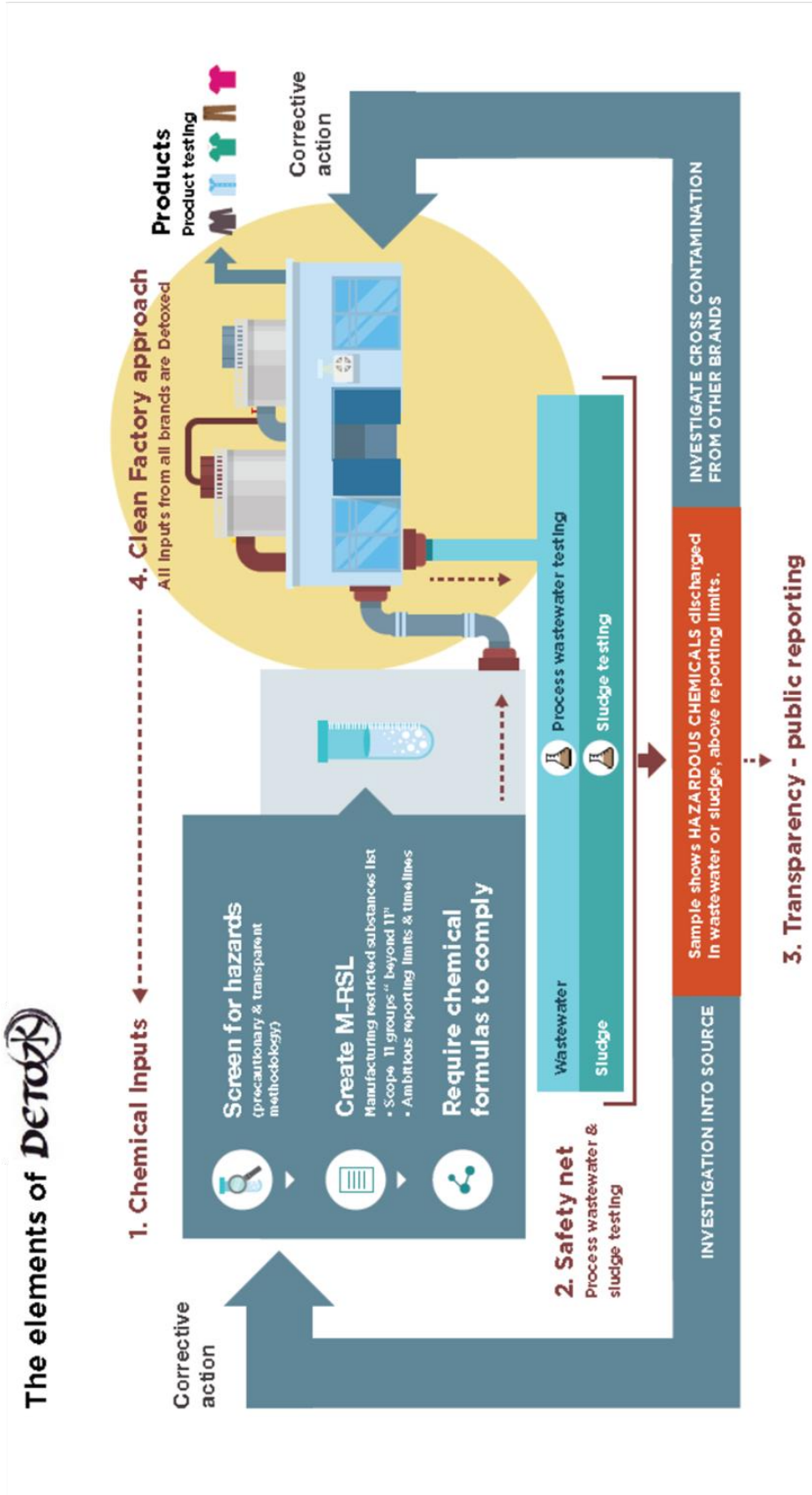
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Annex 1: Notes on Figure 1, the elements of Detox



1. Chemical inputs

1.1 SCREEN FOR HAZARDS

The first step for selecting chemicals for restriction on a Manufacturing Restricted Substances Lists (MRSL) is to screen them using a **credible and transparent hazard screening methodology**. *An example* of a best practice screening methodology is to endorse all hazardous chemicals derived from a GreenScreen full assessment, at least all Benchmark 1/Benchmark 2 - or derived from the GreenScreen List translator, all LT-1.¹

The hazard screening methodology should be based on the nine principles listed in Annex 1 of the Detox Commitment:

1. Hazard based: no 'risk based' criteria for excluding certain chemicals
2. Includes a broad range of hazardous categories (at least those under REACH regulation)
3. Using at least all publically available information
4. Cautious thresholds in hazardous criteria setting
5. Assessment of the effectiveness of the screening tool for hazard identification
6. Full transparency on criteria, methods, data, thresholds, information sources
7. Taking by-products and environmental fate into account
8. Recognize the importance of physical form e.g. nanomaterials, polymers, etc.
9. If no or missing information the 'hazardous until proven non-hazardous' assumption should apply + group approach

1.2 CREATE MRSL

The core task of the MRSL is to list **individual substances** (sorted by group with CAS number) and their **status** of elimination (ban/phase-out) and in the latter case, **associated timelines**

It should include:

- Associated Detection Limits for formulations AND raw wastewater, and sludge
- Associated testing method
- Guidance to suppliers on how to use the MRSL with **clear language on clean factory approach**, translated where necessary
- Clear mention of **lowest technically available detection limits**
- Any other information such as the terms of implementation, monitoring, quality control (eg. templates for testing) and additional useful references: the company's Detox roadmap, policies, etc.)

Any MRSL should include at least the 11 chemical groups prioritized by Greenpeace for its Detox campaign and extend to all hazardous chemicals used in textiles processing with the aim of their elimination by 2020 (derived by a hazard screening methodology described above). Examples of hazardous chemical groups beyond the 11 priority groups are:

¹ See GreenScreen® For Safer Chemicals <http://greenscreenchemicals.org/> and GreenScreen List Translator: <http://www.greenscreenchemicals.org/resources/entry/list-translator>

- chlorotoluenes, certain glycol ethers, PAHs, other metals such as antimony, copper, nickel, tin, certain other flame retardants, CMR dyes, certain disperse dyes, formaldehyde, o-phenylphenol, certain solvents/VOCs such as benzene, toluene, xylene etc.

Each brand or company should have **its own² transparent** list which implements proactive **preventive and precautionary** action:³ this recognises that a brand has limited influence on the actual chemical risk management of its supplier and the resulting occupational and environmental exposure (in particular in high-risk jurisdictions). The company has a better leverage on hazards elimination by commercially binding the suppliers to immediate bans and phase-out plans of hazardous chemicals listed on the MRSL.

1.3 REQUIRE CHEMICAL FORMULAS TO COMPLY

Implement the detection limits for formulations set out in the MRSL in the selection of chemical formulas. First a chemical inventory check is necessary, (based on the chemicals listed on the Material Safety Data Sheet (MSDS) for the formulation) against the MRSL to identify (report) any hazardous chemicals listed on the MRSL which are present. Currently, testing and /or auditing for chemicals in formulations against specific limits is not provided by any commercial auditor, (only use SDS data). Chemical formulas are also certified according to their hazardous chemical content. For a current list of the ZDHC's Accepted Certification Standards for ZDHC MRSL Conformance see the ZDHC Gateway's Chemical Module.⁴

2. Safety net: process wastewater and sludge testing

For each individual chemical on the MRSL, a no-detection limit for wastewater **before** treatment has to be set: this creates a safety net to check on compliance with the MRSL and to monitor progress in phasing out uses of hazardous substances.

Testing of sludge (if the facility has a dedicated wastewater treatment plant) is also important and will reflect the whole factory chemicals management.

If hazardous chemicals above the detection limit are found in either wastewater or sludge this should **trigger an investigation** into the likely source, which could include chemical inputs for processing, chemicals used for machinery or cleaning or

² Brands have to take individual action to ensure that the MRSL set up is at a credible level, in line with their detox commitment

³ This means taking preventive action before waiting for conclusive scientific proof regarding cause and effect between the substance (or activity) and the damage. It is based on the assumption that some hazardous substances cannot be rendered harmless by the receiving environment (i.e. there are no 'environmentally acceptable' / 'safe' use or discharge levels) and that prevention of potentially serious or irreversible damage is required, even in the absence of full scientific certainty. The process of applying the Precautionary Principle must involve an examination of the full range of alternatives, including, where necessary, substitution through the development of sustainable alternatives where they do not already exist.

⁴ ZDHC Gateway – Chemical Module: <https://www.roadmaptozero.com/index.php?id=119>

contamination in the input water. In addition, inputs from other brands using the facility should be considered (clean factory approach). Corrective action should be taken as a result.

3. Transparency – public reporting

This implements the **Right-to-Know**, giving the people the information on risks and impacts and empowering them with a capacity to influence. We, as global citizens, have a fundamental 'Right to Know' which hazardous chemicals are being used and discharged into the environment and where precisely this is happening (at which local facility and in which products).

The Detox commitment includes transparency on the discharge of all hazardous chemicals, to ensure that those responsible respond to public pressure and act rapidly and effectively to achieve zero use and discharge of hazardous chemicals.

Responsible Detox companies should ensure the regular publication of precise, relevant, up to date and locally accurate information on the discharge of hazardous chemicals from individual facilities in their supply chains, in a form that can be easily accessed by local communities, the general public and public interest organisations. This can be published either via the IPE (Chinese Institute for Public and Environmental Affairs⁵) global online platform⁶ and/or the ZDHC Gateway – Wastewater Module, which is a global web-based platform that is designed to share verified wastewater and sludge test data based on testing against the ZDHC Wastewater Guidelines, as well as the company's own website.

The publication of discharge data also seeks to further engage brands with their suppliers and support moves towards a clean factory approach.

Publishing data allows all stakeholders to follow, trust and challenge a company's progress and feed self-motivation. It can also significantly influence local legislation to adopt Detox water standards and chemical policy. Ultimately, it could inspire the establishment of a global standard for transparency and accountability across the whole textile sector and beyond.

⁵ The IPE online platform (based in China) is an existing well known and independent relational, and publicly accessible, database including a section that provides voluntarily disclosed data on company emissions, consumptions and pollutant discharges and also discharges and emissions of hazardous chemicals searchable by facility name, activity, date, location and/or individual pollutant. The Internet platform has direct data entry with the necessary procedures for security and data verification. The IPE disclosure platform is used to ensure the discharges data of various supplier facilities are easily accessible, centralized and searchable via consistent credible content and form. These data may additionally be shared via the brand and supplier's website. But, these additional forms of data distribution will not be a substitute/replacement for China supplier disclosure via the IPE platform. IPE is an independent non-profit, non-governmental organisation that, on occasion, may also work on similar issues as Greenpeace.

See: http://www.ipe.org.cn/En/pollution/discharge_detox.aspx

⁶ By publishing chemical discharge data via the IPE disclosure platform, a company's suppliers ensure that the data is credible, that it includes the necessary details to identify the individual facility concerned and that it covers at least the 11 groups of priority hazardous chemicals. Because much of the world's textiles production takes place in China, companies must ensure data from suppliers in China (including Taiwan) is disclosed, followed by other major suppliers in the Global South.

4. Clean Factory approach

A Clean Factory approach is not only about improving a brand's own production lines but the whole factory chemicals management. Without this approach there is a risk that different standards of chemicals management could coexist in the supplier's facility resulting in potential sources of contamination, loss of leverage on actual chemical safety, impossibility of monitoring progress, and on-going reputational risks.

Annex 2: Greenpeace survey of Detox brands and companies- 2018 - company responses in full

Fashion, sportswear and luxury brands

Adidas

Q0: Detox page - *Please provide here the main link to access your Detox information.*

Link: <https://www.adidas-group.com/en/sustainability/products/chemical-footprint/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1 a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

In our PFC-free approach we define PFCs as the chemical family PFAS (per- and polyfluoroalkyl substances). This includes both long and short chain PFC's (C8, C6, C4). Our full scope includes polymeric and non-polymeric PFC's.

We have committed to being 90% PFC-free as of 15 June 2014

We have committed to eliminating any other PFCs in any of the products adidas produces and/or sells across its global supply chain, and to be at least 99% PFC-free by no later than 31 December 2017

Since the end of 2017, >99% of our products are PFC-free.

More detailed information can be found in our chemical management progress report:

<https://www.adidas-group.com/en/sustainability/products/chemical-footprint/>

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

We are using the ZDHC-MRSL as an aligned Manufacturing Restricted Substances List within the industry to guarantee utmost outreach and credibility. We heavily contributed to develop an aligned, transparent and credible MRSL-update process including an independent expert group (MRSL Advisory Group – MAG) with highest expertise that guarantees a continuously updated and implementable MRSL.

In order to support our suppliers in selecting suitable and more sustainable chemistry, we work closely with bluesign technologies, a well-established world leading company that assesses chemical formulations in the textile and footwear industry. The bluesign system substances list (BSSL), which is the most comprehensive banned list in our industry, sets limits and bans on toxic substances to guarantee sustainable input chemistry.

Through their positive list - the bluesign® bluefinder, our suppliers choose the best possible chemicals and can reduce the use of hazardous substances step by step.

Therefore we are delighted about the recently announced collaboration between bluesign® and the ZDHC, which will significantly strengthen our chemical management program.

Find more information regarding the bluesign® and ZDHC collaboration under:
<http://www.roadmaptozero.com/news/post/zdhc-and-bluesignR-collaboration-bluesignR-is-the-first-established-level-3-accepted-certifier-for-zdhc-mrsl-conformance-in-zdhc-gateway/>

http://www.bluesign.com/downloads/news/180411_PressRelease-ZDHC_EN.pdf

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Adidas requires suppliers to perform wastewater tests according to the ZDHC Wastewater Guidelines twice per year. We closely monitor the test results and all results are publicly disclosed on the IPE DETOX platform.

In 2017, wastewater data of at least 80% of wet processing units across our global supply chain was disclosed on the IPE DETOX platform. Beside wastewater data, we also encourage our China facilities disclosing their environmental data, e.g. air emission and wastewater, on the IPE PRTR platform to enhance supply chain transparency.

With the release of ZDHC gateway wastewater module in last year, our facilities have been disclosing their waste water data in the gateway system and sharing the performance information among the industry.

From the latest wastewater results, 174 out of 195 DETOX analytes were not detected in wastewater samples. In general, the majority of facilities were able to fulfill the local legal compliances or requirements. Regarding those analytes detected (21 out of 195), we are working closely with suppliers to identify corrective actions.

We will continue to perform wastewater testing in our supply chain and review their performance twice per year. We will also closely communicate with our supply chain to further drive improvement.

1.2 a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We encourage our suppliers to disclose their wastewater data information on both: public and industry platforms, e.g. ZDHC gateway and IPE (PRTR and DETOX). We agree and realize that connecting brands and suppliers is important to accelerate the changes. In 2018, we committed to disclose the location of suppliers in the IPE green supply chain map (<http://wwwen.ipe.org.cn/MapBrand/Brand.aspx?q=6>).

The disclosed suppliers in the supply chain map will be linked to brands, and their updated environmental data will be disclosed in the map.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

To work towards our 2020 commitment, we provided various trainings to our supply chains to build up their awareness and competence on chemical management. For example, we conducted a chemical inventory list training to our suppliers to build up their competence on chemical input management. We also requested all our strategic suppliers to attend ZDHC trainings, e.g. Wastewater training and MRSL training.

To minimize hazardous chemicals entering our production processes, our strategic suppliers are required to use the bluesign approved chemicals and record their usage in their production processes. By using the bluesign® bluefinder (positive chemistry database), our suppliers can easily select more environmental-friendly chemicals for their production processes.

We believe alignment of chemical assessment throughout industry is a significant step to drive implementation of best practices at the suppliers. We are highly involved in the development and harmonization process of chemical management audit protocol of the Facility Environmental module (FEM) 3.0, which was officially

released in 2018 by Sustainable Apparel Coalition (SAC). With the implementation of a standardized and harmonized assessment tool, the chemical performance of suppliers can be evaluated consistently in industry.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

We see the need to fully align and implement the ZDHC-MRSL and the Wastewater Guidelines supported by the respective ZDHC Gateway-tools. To support this holistic approach the chemical industry needs to further drive innovation and ensure the availability of sustainable chemistry across all sourcing regions.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We successfully eliminated PFCs from our products - by the end of 2017, >99% of our products are PFC-free. Nevertheless we are still facing some remaining challenges where we are working on solutions:

High-performance products (poor stain repellency)

Oil contamination leads to a reduced water repellent/waterproof performance – in production and during consumer use

Color migration issues, mainly for dark colours

Yellowing issues especially on laces and webbings

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

As one of the first companies we have carefully addressed the issue of the intentional use of APs/APEs in our directly controlled global supply chain already in 2012.

As a responsible company, and in the frame of our regular continuous improvement and review processes we have continuously updated our material RSL specifications to the minimum of technical feasibility. This is aligned or already implemented as leading industry's best practices.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

In 2000, we were one of the first companies in the global consumer goods sector to decide to eliminate PVC from our products. Alternatives have been found and nearly all styles in our global product range are now PVC-free. However, in a few countries, alternatives are not available so some local production of athletic footwear products still uses PVC. We remain committed to finding solutions in the longer term. In 2003, we also eliminated the usage of polyethylene chloride for having a similar environmental footprint as PVC.

We are also encouraging a move to printing with phthalate-free inks. Some of our business units have made the changeover in their owned facilities and more and more of their suppliers are changing over, too.

In the frame of the VOC (Volatile Organic Compounds) reduction program adidas strives to completely substitute solvent based inks and dyes by e. g. water based systems. In 2017 we achieved an all-time low of 11.6 grams (2016: 14 grams) of VOCs per pair of shoes.

More information can be found under:

[adidas Annual Report 2017](#)

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

As a key supplier for adidas, Baikan Co., Ltd. fully supported our approach of implementing the precautionary principle by eliminating all PFCs (defined as all poly- and perfluorinated alkyl substances and their precursors and metabolites) by no later than 31 December 2017 (across all products adidas produces or sells globally). To the best of our knowledge Baikan has been the first company that identified the use of PFCs in "unexpected" areas", which is the use of PFCs during the production of PU-based synthetic leather to avoid unevenness of coated materials. In the meanwhile Baikan successfully removed the PFCs and produces wet-processed synthetic leather without any PFCs.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Our global supplier list is updated twice per year. We disclose our supplier name and its location in our corporate website: <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-structure/>.

The disclosed list covers at least 80% of all wet process units across our global supply chain. For China suppliers, you can find their detailed location in the IPE Green Supply Chain map <http://wwwen.ipe.org.cn/MapBrand/Brand.aspx?q=6>

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Please refer to 3.1.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Please refer to 3.1.

The global supplier list in corporate website: <https://www.adidas-group.com/en/sustainability/compliance/supply-chain-structure/>

IPE Green supply chain map: <http://wwwen.ipe.org.cn/MapBrand/Brand.aspx?q=6>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

n/a

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a how the sector as a whole is managing hazardous chemicals in the supply chain?

Very important is a holistic end-to-end approach, which has successfully been developed over the last years focusing on the three pillars: Input, Process and Output. From the input chemistry (ZDHC-MRSL, bluesign), through monitoring and tracking systems (SAC Higg FEM 3.0) and the output on a mill/factory level (Wastewater-Guidelines) to a robust end-product-control (AFIRM- RSL) - for all stages of the global supply chain the industry has created robust and mature tools, which we implemented globally.

Please find more information about the highly advanced ZDHC-tools under <http://www.roadmaptozero.com/>, about the SAC tools under <https://apparelcoalition.org/> and about the AFIRM Group under <http://www.afirm-group.com/>

4.1b other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

The adidas environmental program has been fully running across our global supply chain since 2009. In addition to chemicals, we prioritize energy, waste, water and materials. We have ambitious targets, 20% reduction in energy, waste, water and a further water target of 35% for T2. In order to holistically reduce our environmental footprint in supply chain, we are working closely with suppliers to capture their monthly environmental performance and identify their corrective action plan in all the areas. Please find more information under:

<https://www.adidas-group.com/en/sustainability/compliance/supply-chain-approach/#/supply-chain-structure/>

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The main challenge is the complexity of the global textile and footwear supply chain. International alignment and harmonization is crucial for the industry: through the aligned tools for input (MRSL), process (audit protocol & training) and output (Wastewater Guidelines) the industry has created powerful tools for a holistic chemical management system over the last years, which needs to be implemented from the brands and controlled by local and national authorities.

We see REACH in the EU as a possible role model for an effective and pragmatic chemical management with the potential to be applied globally. A reference here could be United Nations Environment Programme (UNEP):

<https://www.unenvironment.org/>

Another important aspect is the availability of sustainable chemistry across all sourcing regions to efficiently phase out hazardous substances. There the chemical industry needs to ensure “good chemistry” supply.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

The biggest driver for the success definitely is the collaborative approach in our industry: industry federations have created tremendous progress over the last

years by providing aligned and robust tools to cover the main focus areas in the global supply chain: Input, Process and Output.

Therefore we are heavily encouraged and truly believe in the future success of federations/associations like the AFIRM group, the SAC, the ZDHC.

Education of policymakers on meaningful regulation and a review of legislation in terms of elimination of old regulations e.g. flame retardants for baby gear (out of times when houses were still fired by coal) needs to be considered as well as lowering the boundaries for chemical innovations (e.g. transforming ECHA into an Innovation Agency after completing the registration process).

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

We are proactively raising our voice with the goal to continuously improve the global textile and footwear supply chain to the highest possible level. Of course we are a leading company in our industry federation engagements (AFIRM, SAC, ZDHC) and in addition to that we have:

presented our PFC Phase out approach to the Chemsec Business Group members in Kopenhagen 11/2016.

continuously shared our experiences on the phase out of PFCs including best practices with smaller brands that have not yet developed and/or implemented their phase out plan.

presented our holistic chemical management program on the Helsinki Chemicals Forum 06/2017: Panel 5 (Substances of concern (SVHCs) in products – whose job is it to control these in a free trade world?)

provided the German partnership for Sustainable Textiles with our environmental and chemical policies and guidelines in 2017 - as a guidance and pragmatic support to the other industry players within the partnership, especially for SMUs.

actively and regularly communicated with stakeholders to follow up on the status of our suppliers' corrective actions, apart from screening for supplier's environmental compliance via the IPE Blue Map Database.

continuously maintained our leadership position in IPE green supply chain #1 in textile/leather industry since 2016.

Benetton

Q0: Detox page - *Please provide here the main link to access your Detox information.*

Link: <http://www.benettongroup.com/sustainability/detox/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. *Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?*

Yes, within our MRSL we provide a full and detailed list including Substance name, CAS-Nr, Abbreviation and Detection Limit, of all chemical groups to be investigated in discharged wastewater.

As of today the list of PFC's includes 44 different compounds, of which 8 pertaining to the short chain PFCs (FTOHs and FTAs).

The updated list, translated in 5 languages (English, Italian, Chinese, Bengali, Hindi), can be easily downloaded at the following web page:

<http://www.benettongroup.com/sustainability/detox/restricted-substances-list/>

In order to qualify for a common strategy within the brands committed to Zero Discharge of Hazardous Chemicals, the *ZDHC Wastewater Guideline* is the document we adopted to investigate the use of hazardous chemicals in manufacturing processes; we are thus referring to the ZDHC documents too.

1.1b. *Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?*

Since the signing of the Detox commitment in 2013, Benetton added Cyanide to the 11 priority chemicals as additional compound to include in the verification of the manufacturing processes, then in the water.

With the adoption of the *ZDHC Wastewater Guideline*, starting from 2017 the existing groups listed in our MRSL (11 priority chemical groups + cyanide), have been incorporated with the here below described groups:

- Chlorinated Toluenes (added to the Chlorobenzenes group)

- *Dyes – Carcinogenic or equivalent (added to the colorant categories in which only AZO were present)*
- *Dyes - Allergenic (added to the colorant categories in which only AZO were present)*
- *Glycols*
- *Polycyclic Aromatic Hydrocarbons (PAHs)*
- *Volatile Organic Compounds (VOC)*
- *Anions (Sulfide and Sulfite)*
- *General Chemicals.*

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Benetton's group always reports the waste water testing data on annual basis.

- All the data published since 2013 can be found at the following web page:

<http://www.benettongroup.com/sustainability/detox/wet-process-list/water-test-results/>

that contains the list of wet process suppliers and their respective links to the waste water test.

In 2016 they were 37, whereas in 2017 they have been 61.

- In addition to Benetton's web portal, IPE platform is the main portal in which we suggest to our wet process suppliers to disclose data. Every year, we publish the list of wet process suppliers, with their respective IPE link, that have disclosed wastewater report in the IPE website. Also, in this case, year after year, the number of facilities disclosing data has constantly risen, reaching 50 units in the 2017.

- All the IPE links have been collected and listed from Benetton side and they can be found at the following web page:

<http://www.benettongroup.com/sustainability/detox/wet-process-list/ipe-disclosure/>

- At the present time, the percentage of the disclosed wet process plant, is more than the 80%.

<http://www.benettongroup.com/sustainability/detox/wet-process-list/>

- Status reports are updated every year and reported in our website at the following link:

<http://www.benettongroup.com/sustainability/detox/elimination-progress/>

Action taken - Globally in the period between 2013 and 2016, 158 studies have been conducted: 140 manufacturing facilities, located in 12 countries, were involved.

China is the most represented country, followed by Bangladesh, India, Turkey and Tunisia.

A facility global score (FGTS) was calculated (sum of the concentration of all analytes, weighted for their toxicity) for each facility and for each type of sample, and then facilities were classified into five impact categories (Minimum, Weak, Medium, Strong, Extreme). Those having Medium, Strong and Extreme impacts, have been informed and forced to investigate the source of the problem by checking the chemical inventory, with immediate removal of identified formulations and substitution with safer chemicals.

<http://assets.benettongroup.com/wp-content/uploads/2017/11/Report-and-Annex.pdf>

- 2018 onwards we plan to repeat and overcome the excellent quantity of data collected and disclosed during the last year, inviting the global supply chain (wet process) to annual or biannual test cycle following the ZDHC WW Guidelines.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Benetton invites its suppliers to disclose data on ZDHC Gateway, and it is continuously monitoring their registration status. As of today 58 Benetton's suppliers have already their own account in the ZDHC Gateway.

Yes, we agree that connection between brands and suppliers should be in place. Once this functionality will be available, we will make it as a priority condition to our supply-chain for providing Benetton products, as well as we support the project to make available a sharing data connection between the ZDHC Gateway and IPE website.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

In the 2014 and 2015 Benetton organized, including through the provision of a third party provider, two training sessions (Hong Kong & Shanghai) that were firstly addressed to the 1st tier suppliers, but open and well accepted also 2nd and 3rd tier suppliers, with the aim to start involving and increase awareness of the Detox programme.

Almost 50 different Chinese companies took part to those trainings.

At the end of the 2016, with the advent of the ZDHC Academy and the trainings that enable skill on sustainable chemical management, Benetton regularly invites (by forwarding the ZDHC newsletter and courses calendar) its global supply-chain to take part to the training made by accredited training providers, speaking local languages.

We are now collecting information of those (wet process) that have already taken part to the courses during the 2017.

With regard to the current 2018 year, Benetton continues inviting its suppliers to participate to the ZDHC training courses and it is available to organize training session for its suppliers by appointing ZDHC training providers, in view of the fact that the “Introduction to Chemical Management” course (that is the basic one) will become a compulsory requirement to remain part of Benetton’s supply chain.

Positive list are always available in the section of our web site:

<http://www.benettongroup.com/sustainability/detox/restricted-substances-list/positive-lists/>

We strongly encourage our global supply chain to visit the ZDHC Gateway – Chemical Module (<http://www.roadmaptozero.com/gateway/>) in which thousands of chemical products have been already collected and classified by using existing certification standards.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

There is still “supply-chain confusion” in terms of multiple different approaches that slow down efforts (suppliers are sometimes destabilized in front of different requests coming from brands committed to zero discharge), even if in the latest year, we have noted a further realization and alignment especially for those brands having similar strategies and common commitment.

Moreover, a common terminology amongst the brands should be defined (e.g. Tier 1, Tier 2, Tier 3) to classify the supply-chain in one way only.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We are very close to reach the total elimination of PFCs in products since we have got 98% compliance taking into account the riskiest categories in which PFC's can be found.

If in the calculation of the compliance percentage we include also those categories of products in which PFC's were never found and in which any PFC's use has no sense, the result grows to 99.75%.

Residual problems could be related to physiological impurities of the products or maybe deriving from previous contamination of the workplaces, environment, soil, water...

http://assets.benettongroup.com/wp-content/uploads/2018/04/Benetton_PFCs_Elimination_Progress_Dec_2017_4.pdf

2.2 Did you succeed in eliminating the use of APs/APEOs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Regarding the AP/APEOs elimination, we have reached 88% of compliance. The low presence of remaining AP/APEOs might be due to non-intentional use of the same substances and to the widespread use that have been made for many decades.

http://assets.benettongroup.com/wp-content/uploads/2018/04/Benetton_APEOs_Elimination_Progress_Dec_2017_2.pdf

Moreover, concerning raw materials, although most of the time there is a physical segregation between "virgin raw materials" and "recycled raw materials" (in which is more frequent to find traces of these substances), cross contaminations represent daily occurrence because dedicated "virgin" or "recycled" washing/dyeing plants do not exist yet.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Phthalates is one of the most important groups of banned chemicals in which Benetton has a long-standing commitment. A recent progress report has been published and it is here accessible:

http://assets.benettongroup.com/wp-content/uploads/2018/04/Benetton_Phthalates_Elimination_Progress_Dec_2017.pdf

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Our company has published two substitution case-studies on Subsport:

- *PFC's free alternatives combined with plasma treatment for increasing the water repellency performances in textile (2017).*

<http://www.subsport.eu/case-stories/431-en>

- *A biodegradable, protein-based biopolymer to replace acrylic resins and their additives in textile printing (2014).*

<http://www.subsport.eu/case-stories/369-en>

Both of them are published also in our Detox webpage and they can be downloaded at:

<http://www.benettongroup.com/sustainability/detox/case-studies-and-research/>

We would also invite you to consider two important researches made in collaboration with the Department of Environmental Science, Informatics and Statistics of Ca' Foscari University in Venice (available at the above mentioned link):

- *Integrated assessment of manufacturing facilities' and clothing's chemical-toxicological impact (2017).*

<http://assets.benettongroup.com/wp-content/uploads/2017/11/Report-and-Annex.pdf>

that continues to follow-up the previous research titled:

- *Environmental impacts research and smart monitoring strategy development focused on the Detox Programme" (2016).*

http://assets.benettongroup.com/wp-content/uploads/2016/05/Ca_Foscari_Technical_Report.pdf

The method to evaluate the chemical-toxicological impact of manufacturing facilities, used in the work of the 2016, has been optimized and extended to assess the chemical-toxicological impact of clothing. The research is based on data coming from test performed on more than 150 facilities all over the world and more than 50,000 products.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, we disclose the wet process suppliers list every year by publishing both a downloadable list (in pdf format) and an interactive map in our website.

The link is: <http://www.benettongroup.com/sustainability/detox/wet-process-list/>

A further list with 1st tier suppliers and manufacturer subcontractors is available at:

<http://www.benettongroup.com/sustainability/sustainable-supply-chain/>

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

It includes not only tier 1 suppliers (vertical suppliers having wet processes), but also tier 2 and tier 3 suppliers.

In fact, it contains the whole list of the plants that generally are involved in “dyeing or washing” processes related to yarns, fabrics and finished products (garments); many of those are suppliers of Benetton’s suppliers without any direct relationship with the brand.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

All information related to our wet process suppliers are publically available in our Detox webpage, under dedicated sections to be easily retrievable.

It is linked at: <http://www.benettongroup.com/sustainability/detox/wet-process-list/>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

N/A

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Since the first appearance, the Detox campaign has mobilized hundreds of brands (not only those that committed...) in the challenge to eliminate all releases of hazardous chemicals.

Specific elimination plans for the prioritized hazardous substances have been made, as well as awareness on banned substances has grown.

Lonely steps have been passed and fine-tuned thanks to transparency, involvement of chemical sectors and joint efforts amongst different bodies and stakeholders.

Collaboration between brands and supply-chain brought to more stable relationship and a physiological reduction of the supply-chain itself, sorting out those suppliers not compliant with MRSL brands' requirements and rewarding those engaged in a cleaner and sustainable business.

Collaboration amongst active contributors are now leading the textile sector towards a cleaner scenario having safer alternative compounds, driving global and local initiatives.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

In the 2017 Benetton decided to take a further step towards the environmental sustainability, joining the Sustainable Apparel Coalition (SAC) and adopting the Higg FEM (i.e. Facility Environmental Module) as additional tool for a complete evaluation of the wet process' sustainability performance.

Even if Benetton has already in place a meritocratic system to reward those suppliers that show and invest in environmental safeguard, starting from the 2018 the Higg FEM will become the tool to further harmonize and drive future choices.

Benetton's most important supplier Olimpias Group (<https://www.olimpias.com/en>), with its six facilities located in four different countries of EMEA (Croatia, Italy, Serbia and Tunisia), has already in place an Environmental Management System (E.M.S.) having as cornerstone its own RSL, including an MRSL.

Moreover, Olimpias Group is the project leader of WASATEX (Water Savings for Textile Production), supported by the European Union <http://wasatex.eu>, aiming to get water reusable into industrial production cycle through wastewater treatment considering it a prerequisite for reducing the environmental impact of industrial processes.

In 2017 Olimpias Group received the "National Energy Globe Award 2017"

<http://www.energyglobe.info/en/award/ceremonies-2017/>

Always in the context of its commitment, Benetton looked and found in the Higg Index not only a widely recognized indicator to measure sustainability performances of its suppliers, products and processes (based on environmental performance and labor practices), but also a suite of tools to evaluate materials and product design choices, in order to improve efficiency and enhance the impact of sustainability initiatives.

Benetton believes in the strength of a collaborative approach to sustainability and for this reason it is confident to make a positive impact on textile sector. This approach also covers raw materials and their environmental impacts. For this reason, the company is evaluating ways that will enable more and more sustainable raw materials to be used. Currently, organic cotton – grown following organic farming principles, without GMOs and with a lesser environmental impact – represents almost the 6% of the production of all our cotton garments, but it is expected to grow.

Moreover in the 2017 Benetton became also a member of the Better Cotton Initiative (BCI) aiming to make global cotton production better for the people who produce it, better for the environment it grows in, and better for the sector's future.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

To keep the pressure and momentum going, constant evaluation amongst the players should be in place, whereas it seems that the attention is fading: healthy competition – which already exists – has always benefited the consumers. Virtuous companies investing efforts but not having back the right gratification could let go the commitment.

As Italian brand, we would like to see a greater participation of the whole textile sector in the achievement of the Detox objectives. It could further speed up the elimination of the harmful substances, having experienced that there is strength in number.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

A general review of legislation is necessary, in terms of eliminating old regulations as well as a reduction of the existing gaps between the voluntary limits decided by the brands and the limits accepted by the laws. As it was demonstrated that best practices can be achieved with some good will, education of policy makers on

regulations is needed to recognize more stringent limits in the binding requirements.

Governments acts should restrict the sales and import of products containing hazardous chemicals, embedding the Detox into public procurement efforts and enhancing the campaign to other industries with strong overlap in supply chain.

In order to improve the industry transparency and to protect the competitiveness dimension, the REACH control should be enforced for imported products and there should be in place a principle of reciprocity amongst countries making possible the re-imports of the products.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Benetton Group is committed to the promotion and respect of human rights and the environment. The Benetton Group Code of Conduct is applied to all suppliers and subcontractors, and to anyone who wishes to work with the Group. This Code of Conduct is based on respect for human rights and protection of the environment.

http://assets.benettongroup.com/wp-content/uploads/2015/06/benetton_group_code_of_conduct.pdf

Benetton Group in the 2016 presented its first Integrated Report pursuant to the recently enforced regulations for listed companies, but above all because our employees, customers and suppliers, the territory and our shareholders are interested in the Company's results obtained in the social and environmental spheres, as well as production and distribution, in addition to the standard economic and financial data.

The Integrated Report is a concise communication about how an organization's strategy, governance, performance and prospects lead to the creation of value over the short, medium and long term.

It can be downloaded at the following web page:

<http://www.benettongroup.com/sustainability/integrated-report/>

As brand, Benetton always give the fullest availability in participating to events focusing on sustainability (in particular to talk about the Benetton's Detox Commitment and the experience towards zero discharge of hazardous chemical) for the sole purpose to make an ever greater insider's audience and shake the consciences of the textile sector, the Italian first and foremost.

Here below listed some of them:

- SERI.CO (next 9 May 2018, Como) - Sfide e progetti per valorizzare lo sviluppo sostenibile della filiera (i.e. *Challenges and projects to enhance a sustainable development of the supply-chain*)
- SAC and the ZDHC Roadmap to Zero Program co-hosted manufacturer forum in Milan, Italy (20 February 2017, Milano) - “SAC & ZDHC European Manufacturer Forum”
- UNIVERSITA' BOCCONI MILANO (03 October 2017, Milano) - “Il Salone della CSR e dell'Innovazione sociale - Moda e sostenibilità tra eco fashion e impegno per l'ambiente” (i.e. *The CSR show and social innovation. Fashion and sustainability between the eco fashion and the environmental commitment*)
- FONDAZIONE PORTOGRUARO CAMPUS (04 February 2017, Portogruaro Venice) “Il Salone della CSR e dell'innovazione sociale” (i.e. *The CSR show and social innovation*).
- MUSEO DEL TESSUTO PRATO (26 October 2016, Prato) - “Come la filiera del sistema moda Italiano sta affrontando la sfida della sostenibilità” (i.e. *How the Italian supply chain is facing the challenge of sustainability*), in which also Chiara Campione and Giuseppe Ungherese of Greenpeace were hosted and took part to the presentation.
- ITMA 2015 (12-19 November 2015, Milan) - “Textile Colourant and Chemical Leaders Forum”
- CONFINDUSTRIA PRATO (28 September 2015, Prato) - “Il distretto incontra i grandi brand della moda” as seminar to make preparation for Prato District DETOX Commitment signed with Greenpeace.

Burberry

Q0: Detox page

Please provide here the main link to access your Detox information.

Link:

<https://www.burberryplc.com/en/responsibility/policies-and-action-plan.html>

Please look at Chemical Management Section

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2016/Manufacturing_Restricted_Substances_List_Jan2016.pdf

Analyte list on page 6

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Using an analytical screening methodology for chemical formulations, which detects 430 analytes per test, Burberry has identified the most commonly found analytes which are not in the 11 priority groups (table 2). This data has been collected from over 1000 test results.

Please see the findings in the Burberry Annual Progress Review report here - page 9 and 10

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2016/burberry-annual-progress-review-2016.pdf

SUBSTANCE NAME	CAS NUMBER
Fumaric acid bis(2-ethylhexyl)ester	141-02-6
1-Methoxy-2-propanol	107-98-2
Ethylbenzene	100-41-4
Limonene	138-86-3
Butylacrylate	141-32-2
2-Ethylhexyl acrylate	103-11-7
Ethyl acrylate	140-88-5
Benzyl chloride	100-44-7

Table 2: Most frequently detected substances not in MRSL

1.2. Waste water discharges reporting

1.2a What's the regularity of waste water testing data reporting?

2 times x year per facility

1.2 b Provide a list of the dates that you published data since 2016

May 2016:

March – April 2016 disclosure of incoming water and wastewater before treatment results :

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2016/burberry-disclosure- water-test-overview.pdf

September 2016:

After performing analytical screening on the chemical inventories of facilities, and identifying MRSL non-compliant formulations in our supply chain, this report assesses the impact on wastewater at various stages of substitution of the non-conformant formulations (firstly, an initial assessment – where non-conformant formulations may be present, and then later, when 20% of any identified non-conformant formulations have been eliminated. A later report looks (July 2017) at the impact at 70% elimination, and complete elimination of non-compliant formulations):

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2016/disclosure_of_water_test_information.pdf

July 2017:

Report confirming that progressive cleansing of chemical inventories through MRSL Implementation delivers improvements on the output. However, the substitution process presented challenges, because of the lack of available information on alternative chemical formulations, which is something that the launch of the ZDHC Chemical Gateway can address:

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Input%20vs%20Output%20analysis%20report%20-%2020170719.pdf

September 2017:

Report showing an overall decrease in detected chemicals in wastewater over an 18- month period. The presence of chemicals detected in incoming water correlates to their presence in raw wastewater, and other chemicals detected can be related to chemical formulations used in production, or in previous processing of raw materials, highlighting the need to ensure that upstream suppliers implement the MRSL as well.

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Effluent%20testing%20Trend%20analysis_Final.pdf

December 2017/January 2018:

ZDHC Gateway – water data: Burberry contributed to the formation of the ZDHC Wastewater Guidelines through piloting the program, and adopting the Wastewater Guidelines across the supply chain in 2017.

May 2018: Disclosure of water test information - Summary

<https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Performance/Docs/Disclosure%20of%20water%20test%20information.pdf>

1.2c: Provide the portal(s) of publication (e.g. IPE, own website, other)?

https://www.burberryplc.com/en/responsibility/policies-and-action-plan.html#tabbedcontentitem_0

<http://wwwen.ipe.org.cn/>

<https://www.my-aip.com/zdhcgateway/>

1.2d: The percentage of the supply chain (wet processes) this represents for each set of data

50%+

1.2e: Links to status reports on the findings and actions taken as a result

See the above reports for September 2016, July 2017, September 2017 and May 2018

1.2f: Planned publication in 2018 onwards

August 2018: Chemical substitution case study

September 2018: Effluent progress update

December 2018: MRSL

2019: PRSL, Chemical elimination progress updates, Annual Effluent reporting

1.2g Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

57% of the wet processing facilities that Burberry uses regularly disclose their effluent data and 33% of them regularly disclose their effluent data with facility transparency through the ZDHC Gateway. We do not disclose the link between suppliers and our brand.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Training and Technical Support:

Burberry has developed and launched a capacity building program to facilitate the elimination of unwanted substances in the manufacturing processes. It includes various initiatives such as in- person training and workshops (including collaborations with other industry members), online training, the creation of a Chemical Managers Community and, in addition, Burberry offers external technical support through consultants to all its partners in need. Burberry has also led the accreditation of two training providers to support partners. This report details the activities and the achievements:

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/burberry_capacity_building_report.pdf

Spot checks:

To help determine whether the implementation of the MRSL and PRSL have been effective in eliminating the use of unwanted chemicals, Burberry regularly reports on testing trends of raw materials and finished product. In this last report, approximately 5000 different product samples were tested and the results were reported both in frequency of detection and concentration level:

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/burberry_capacity_building_report.pdf

[https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20\(Final\).pdf](https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20(Final).pdf)

Positive list:

To help partners implement the MRSL successfully, Burberry has adopted a specific tool in the supply chain. By creating an online network with better access to information (including analytical chemical formulation test results and data from ZDHC Gateway), partners can perform more efficient chemical substitutions, make informed procurement decisions, and be more engaged with Burberry and other tiers of the supply chain. The tool promotes transparency, as Burberry, along with other brands and other tiers of the supply chain, can access the profile of facilities and view their chemical consumption, the level of conformity to the MRSL, and the impact of changes being made in their chemical inventory.

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2018/Implementation%20of%20Chemical%20Inventory%20Management%20Tool.pdf

Process:

Burberry MRSL includes a set of implementation guidelines; a short recap of an extensive and robust implementation framework that guides partners through a structured workflow inclusive of clear Key Performance Indicators (KPIs). The framework is based on four pillars of implementation: 1. Commitment 2. Internal Implementation 3. Upstream Implementation

4. Achievement and review. A full report on this process is available here:

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/mrsl_apr_17.pdf

Materials and Product chemical restrictions:

The recently released document introduces several new restrictions applicable to recycled content to encourage and facilitate its use. This is not reflected in the MRSL as any new chemical inputted in the recycling process must meet the most ambitious requirements.

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Performance/Docs/2018_Burberry_PRSL_plc.pdf

1.4 Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

While the foundations and the tools to support Burberry's Commitment have been established and significant progress has been achieved, it is key for the global supply chain to be challenged through unified targets and processes.

Although the “Clean Factory” approach is broadening the impact of the Detox campaign, this principle leads companies to think that their responsibility is limited to the gates of their own facilities; factories need to take responsibility for their procurement and their suppliers instead (for example, assessing the supplier’s ability/achievement on the MRSL implementation). The same responsibility should apply to the factories upstream, particularly regarding the recipient of waste and untreated effluents (for example, taking accountability for the ETP ability to treat effluents to the best standard).

This is the approach that Burberry is promoting in the supply chain, and by training supply chain partners on chemical management practices, they can implement the MRSL autonomously with their upstream suppliers. This creates a “multiplier effect” and is the most effective way to increase Burberry’s sphere of influence.

It is of pivotal importance to instill awareness and accountability at all levels, especially where the decisions are not influenced/influenceable by the brands.

Regulatory bodies could have a tremendous impact by implementing the some of the tools developed within ZDHC, for example foundational limits of the Waste Water Guidelines.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

YES

Overall C8 detected reduced from 5% to 0% between Jan 2016 and Jul 2017

Overall C6 detected reduced from 40% to 1% between Jan 2016 and Jul 2017

Certain PFCs were detected in raw materials even when there are no water-repellency treatments, as a result of environmental contamination.

Residual C6 detected in synthetic fabric comprises the 1%

Large inventory of raw materials and finished product produced prior to June 2016 with PFC based chemistry. The utilization of such inventory contributes to reducing the environmental impact that would be generated by its replacement with new stock.

More details are provided in the following report (see page 8)

[https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20\(Final\).pdf](https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20(Final).pdf)

2.2 Did you succeed in eliminating the use of APs/APEOs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Significant reduction is achieved; Overall AP detected reduced from 8% to 5% between Jan 2016 and Jul 2017

Overall APEOs detected reduced from 25% to 14% between Jan 2016 and Jul 2017
Residual AP/APEOs are detected more frequently in natural protein-based materials.

Most importantly the concentration levels are showing a dramatic downward trend as reported in detail in this report (see particularly page 7 and 8):

[https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20\(Final\).pdf](https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2017/Chemical%20Elimination%20Progress%20Review_20171108%20(Final).pdf)

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11-priority hazardous chemical groups) you'd like to report on?

The screening methodology in use allowed Burberry to identify the list of substances that could be candidates to enter the MRSL; for a substance to enter the MRSL it is of pivotal importance to have preferred substitutes for the specific field of application.

In several instances we have been able to substitute Glycols, PAH and VOCs and DMF containing formulations. See detailed information on page 9 and 10 of this report:

https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2016/burberry-annual-progress-review-2016.pdf

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

1. Subsport Case Study Substitution of C8 to C6: <https://www.subsport.eu/case-stories/403-en>

2. Subsport Case Study Substitution of C6 to C0 PFC-Free: <https://www.subsport.eu/case-stories/423-en>

3. Subsport Case Study Substitution of AP/APEOs (1):
<http://www.subsport.eu/case-stories/427-en>
4. Subsport Case Study Substitution of AP/APEOs (2):
<https://www.subsport.eu/case-stories/415-en>
5. Subsport Case Study Substitution of Phthalates: <http://www.subsport.eu/case-stories/428-en>
6. Subsport Case Study Substitution of Synthetic Soaking Auxiliaries with Probiotics: <https://www.subsport.eu/case-stories/419-en>
7. Substitution of two softeners containing nonylphenol ethoxylates (NPEOs) in the garment washing process:
https://www.burberryplc.com/content/dam/burberry/corporate/Responsibility/Responsibility_docs/Policies_statements/Chemical_Management/2018/Substitution%20Case_APEOS_%20April%202018_Plc.pdf

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

57% of the wet processing facilities that Burberry uses regularly disclose their effluent data and 33% of them regularly disclose their effluent data with facility transparency through the ZDHC Gateway. We do not disclose the link between suppliers and our brand.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The wet processing facilities that Burberry uses which regularly disclose their effluent data are part of tiers 1, 2 and 3

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

All effluent analytical test results for these wet processing facilities are regularly reported on Burberryplc.com per the links listed above (see 1.2bA)

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

We do not disclose the link between suppliers and our brand.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

1. Global stakeholders are aligning and unifying.
2. Increased recognition of ZDHC as a driving force globally.
3. Increased capacity (resources) and chemical management knowledge.
4. Increased transparency and disclosure of practices, inventories and emissions.
5. Increased availability of practical tools that promote and accelerate the use of green chemistry.
6. Widespread awareness and increased collaboration between Supply Chain Partners.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

1. Sharing the same chemical elimination goal has increased the frequency/quality of interactions and strengthened the partnership with our Suppliers. This is translating in enhanced cooperation in tackling chemical issues.
2. The enhanced collaboration allows for more informed selection of materials based on chemical properties and environmental impact.
3. The stronger collaboration is enabling the identification of less energy, water and chemicals intense processing / technologies.
4. More awareness in the sector about the harmful impacts of hazardous chemicals on human health and the environment through the residues in waste, discharged water, air emissions and products.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

1. Capacity building: lack of specifically designed academic curriculums

2. There is an opportunity for more convergence and collaboration among NGOs for prioritization and knowledge sharing
3. Need to accelerate R&D and innovation investments to develop green chemistry
4. Need to continue developing a holistic approach that integrates chemical usage in relation to water quality, air emissions and resource conservation.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

1. Global and regional regulatory bodies need to align and rapidly develop/validate consistent formulations testing standard and methods to allow for
 - a. Formulation conformance assessment
 - b. Chemical regulations enforcement through formulations testing

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

We have worked with many of our suppliers to help them adopt the detox approach. We are expanding the influence of ZDHC to new geographies and supply chain segments, and we are encouraging other luxury brands to also adopt a proactive chemical management approach.

C&A

Q0: Detox page

Please provide here the main link to access your Detox information.

C&A are committed in the public reporting of our progress towards Zero Discharge of Hazardous Chemicals. This reporting forms an integral part of our annual sustainability report, published each year in June. A link to our 2016 report can be found [here](#).

The C&A 2017 Global Sustainability Report is due to be published in June 2018. We have attached the 'Chemicals' chapter as part of our response to this survey.

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1 a Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

C&A believe in standardization to ensure that the widest possible impact is created across the industry. As a founding member of the Zero Discharge of Hazardous Chemicals (ZDHC), C&A has adopted and implemented the ZDHC MRSL (version 1.1), that can be found [here](#). Within this list, both Perfluorooctane sulfonate (PFOS), and related substances, and Perfluorooctanoic acid (PFOA), and related substances, are banned from intentional use.

In addition, C&A is also testing the wastewater for PFOS, PFOA, PFBS, PEHxA, 8:2 FTOH and 6:2 FTOH according to the ZDHC Wastewater Guidelines (version 1). Each cas number is listed accordingly for each substance.

C&A have invoked a ban on PFCs since 2015, with this being widely communicated across the supply chain. The C&A Product Restricted Substances List (P-RSL) includes 33 substances with cas numbers under the PFC group, including 9 short-chain PFCs.

The below list sets out those PFCs with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers in ZDHC MRSL, ZDHC Wastewater Guidelines & C&A P-RSL.

C&A are deeply engaged with the ZDHC on the updating of the MRSL, expected in Q4, 2018.

ZDHC MRSL Version.1.1

CAS No.	Substance	Group A: Raw Material and Finished Product Supplier Guidance	Group B: Chemical Supplier Commercial Formulation Limit	Potential Uses in Apparel and Footwear Textile Processing	General Techniques for Analysing Chemicals
Perfluorinated and Polyfluorinated Chemicals (PFCs)					

<p>Durable water, oil and stain repellent finishes and soil release finishes (fluorinated polymers) based on long-chain technology are banned from intentional use. Long-chain compounds according to the Organisation for Economic Co-operation and Development (OECD) definition (http://www.oecd.org/ehs/pfc/) are based on long-chain perfluorocarboxylic acids (C8 and higher) and on long-chain perfluoroalkyl sulfonates (C6 and higher).</p> <p>The main contaminants of this technology include:</p> <p>Perfluoroalkyl sulfonates (PFASs) with carbon chain lengths C6 and higher (e.g., PFOS, perfluorooctane sulfonate) Perfluorocarboxylic acids with carbon chain lengths C8 and higher (e.g., PFOA, perfluorooctanoic acid)</p>					
Multiple	Perfluorooctane sulfonate (PFOS) and related substances	No intentional use	Sum = 2 ppm	PFOA and PFOS may be present as unintended by-products in long-chain commercial water, oil and stain repellent agents. PFOA also may be in use for polymers like polytetrafluoroethylene (PTFE).	LC8MS
Multiple	Perfluorooctanoic acid (PFOA) and related substances		Sum = 2 ppm		

ZDHC Wastewater Guidelines Table 2K

Substance or Substance Group	CAS	Reporting Limit (µg/L)	Standard Test Method
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PFOs	355.46-4, 432-50-7		0.01	DIN 38407-42 (modified)
PFOA	335-67-1			
				Ionic PFC: Concentration or direct injection, LC/ MS(-MS);
PFBS	29420-49-3		1	
	29420-43-3			
PFHxA	307-24-4			
8:2 FTOH	678-39-7		1	Non-ionic PFC(FTOH): Derivatisation with acetic anhydride followed by GC/ MS
6:2 FTOH	647-42-7			

C&A P-RSL

20	PERFLUORINATED COMPOUNDS	
TEST METHOD		
APPLICABLE	NORM TEST	KEY TEST PARAMETER

	METHOD	Solvent	Temperature [°C]	Time [min]	Sample Weight [g]	Analytical Instrument
No. 1-26	CEN/TS 15968:2014	MTBE (ultrasonic bath)	40	60	1	LC-MS
No. 27-33	CEN/TS 15968:2014	MTBE (ultrasonic bath)	40	60	1	GC-MS (GC inlet 130°C), LC-MS/MS (confirmation for No.30-33)
No.	RESTRICTED SUBSTANCE		CAS No.		C&A LIMIT [µg/m²]	REPORTING LIMIT [µg/m²]
1	Perfluoro-octanoic acid and salts (PFOA)		335-67-1		<1	1
2	Perfluoro-octane sulfonic acid (PFOS)		2795-39-3, 56773-42-3, 1763-23-1			
3	1H,1H,2H,2H-Perfluoro-octane sulfonic acid (1H, 1H, 2H,2H-PFOS)		27619-97-2			
4	Perfluoro-butane sulfonic acid (PFBS)		29420-49-3, 375-73-5			
5	Perfluoro-hexane sulfonic acid and salts (PFHxS)		3871-99-6, 355-46-4			
6	Perfluoro-heptane sulfonic acid (PFHpS)		375-92-8			
7	Perfluoro-decane sulfonic acid (PFDS)		335-77-3			
8	Perfluoro-octane sulphonamide 1H,1H,2H,2H H4PFOS; 6:2 (PFOSA)		754-91-6			
9	N-methylperfluoro-1-octanesulfonamide (MeFOSA)		31506-32-8			
10	N-ethylperfluoro-1-octanesulfonamide (EtFOSA)		4151-50-2			

11	2-(N-methylperfluoro-FASE 1-octanesulfonamido)-ethanol (MeFOSA)	24448-09-7	
12	2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSA)	1691-99-2	
13	Perfluoro-butanoic acid (PFBA)	375-22-4	
14	Perfluoro-pentanoic acid (PFPA)	2706-90-3	
15	Perfluoro-hexanoic acid (PFHxA)	307-24-4	
16	Perfluoro-heptanoic acid (PFHpA)	375-85-9	
17	Perfluoro-nonanoic acid (PFNA)	375-95-1	
18	Perfluoro-decanoic acid (PFDA)	335-76-2	
19	Perfluoro-undecanoic acid (PFUnA)	4234-23-5, 2058-94-8	
20	Perfluoro-dodecanoic acid (PFDOA)	307-55-1	
21	Perfluoro-tridecanoic acid (PFTrA)	72629-94-8	
22	Perfluoro-tetradecanoic acid (PFTeA)	376-06-7	
23	Perfluoro-3,7-dimethyl-octanoic acid (PF-3,7-DMOA)	172155-07-6	
24	7H-Dodecanefluoro-heptanoic acid (HPFHpA)	1546-95-8	
25	2H,2H-Perfluoro-decanoic acid (H2PFDA)	27854-31-5	
26	2H,2H,3H,3H-Perfluoro-undecanoic acid (H4PFUnA)	34598-33-9	
27	1H,1H,2H,2H-Perfluoro-octylacrylate (6:2 FTA)	17527-29-6	
28	1H,1H,2H,2H-Perfluoro decylacrylate (8:2 FTA)	27905-45-9	

29	1H,1H,2H,2H-Perfluoro-dodecylacrylate (10:2 FTA)	17741-60-5		
30	1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2	<10	10
31	1H,1H,2H,2H-Perfluoro-1-oktanol (6:2 FTOH)	647-42-7		
32	1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7		
33	1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1		
Long Chain PFCs				
Short Chain PFCs				
<p>1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?</p> <p>The ZDHC MRSL (v 1.1) includes Poly Aromatic Hydrocarbons (PAHs) and Volatile Organic Compounds (VOCs) which go beyond the initial 11 priority chemical groups.</p> <p>C&A has proposed for the following groups to be included or expanded: Organotin compounds, VOCs, PFCs, PAHs, Phthalates, Flame retardants and Short Chain PFCs.</p>				

The next ZDHC MRSL version would be an electronic, living document that is continuously updated using a defined model. This model allows absolutely anyone to propose new substances. These new substances will be subject to a technical review by a group of industry experts before a decision is made. Individual brands, including C&A and other stakeholders are able to submit chemical compounds through ZDHC online submission system.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- a list of the dates that you published data since 2016,
- the portal(s) of publication (e.g. IPE, own website, other)?
- the percentage of the supply chain (wet processes) this represents for each set of data
- links to status reports on the findings and actions taken as a result
- planned publication in 2018 onwards

C&A started conducting wastewater in 2013, with over 300 facilities having been tested for the detection of hazardous chemicals to date. In 2015, C&A communicated the requirements of its Sustainable Chemicals Management (SCM) programme, including the requirements to test wastewater twice per year. C&A utilizes the ZDHC Wastewater Guidelines (version 1) and requires the compulsory testing of raw wastewater. It is this sample that C&A use to identify if a facility is conformant to the MRSL.

Over the last two years, C&A has put great emphasis on expanding our SCM programme. February 2016

Date	Number of facilities conducting wastewater testing
February 2016	47
February 2017	108
February 2018	322

Today, the C&A SCM Programme covers 81% of our global business volume from our wet processing units in Tier 1 and 2, as well as, all nominated fabric mills. C&A will maintain this existing level of coverage until all these facilities have achieved the elimination of hazardous chemicals.

C&A remains committed to transparently reporting on our progress to eliminate hazardous chemicals. First, all the above facilities are required to publish their test report onto the Institute of Public and Environmental Affairs website, found [here](#). In addition to the disclosure of individual facilities performance, C&A also produces an annual wastewater discharge summary as part of our Global Sustainability Report. The latest version covering 2017 has been submitted as part of this response.

C&A's Sustainable Chemicals Management (SCM) team consists of 17 experts, strategically located in all major sourcing countries, purely dedicated to the elimination of hazardous chemicals in our global supply chain. As part of the SCM

'Output' programme, any facility that detects hazardous chemicals in a higher concentration than in the incoming water, fails C&A's requirements. All failed facilities are required to conduct root-cause analysis identify the source of the banned chemical and produce a phase-out plan. The C&A SCM team is on hand to provide expert technical advice, as well as, supporting the engagement with the chemical industry.

1.2 a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

As part of our commitment to transparency, C&A have been publically disclosing our supply chains wastewater test reports since 2014. As we continue to scale our Sustainable Chemicals Management programme, currently covering over 300 facilities, we identified that existing platforms of public disclosure and data sharing could be improved to further drive industry progress and impact.

C&A have been closely working with the C&A Foundation to establish an industry public disclosure platform that can better serve the needs of stakeholders, suppliers, brands and the wider industry. C&A believe that such a platform would drive further impact if it were an integrated system embedded into the industry's approach to hazardous chemicals, rather than a standalone system. As a result, C&A Foundation have funded the development of the ZDHC Gateway: Wastewater Module.

During 2018, C&A are disclosing into the ZDHC Gateway: Wastewater Module and the Institute of Public and Environmental Affairs (IPE). C&A are requesting for mutual data sharing between these two platforms to eliminate duplicative reporting and further expand the disclosure reach.

C&A has also recently agreed with IPE to participate in their Green Map, a public map that links facilities, along with their environmental performance, to a brand. C&A would agree to link supplier and brand within the existing scope of our public disclosure; covering Tier 1 (cut and sew) and Tier 2 (laundries, printers and embroidery) of our global supply chain.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

C&A's holistic approach to chemical management revolves around three areas:

1. Input management – identify safer chemicals, drive adoption and eliminate the usage of hazardous chemicals.
2. Process management – assess and verify on-site chemical management systems and performance.

3. Output management – validate the elimination of hazardous chemicals from wastewater and publically disclose.

In 2017, C&A created a Minimum Performance Standard as a tool to communicate our expectations in chemical management to our supply chain. All of our facilities under the SCM programme are provided with a rating, that indicates their level of performance against our standard or if remediation is necessary. The Standard is enhanced annually to drive continuous improvement towards ZDHC. All facilities included in the SCM programme are rated accordingly; Gold, Silver, Bronze, Needs Improvement and Unacceptable.

Input management

Input management is the cornerstone of the SCM programme. The objective of input management is simple: for C&A suppliers to procure chemicals confirmed as meeting ZDHC requirements. In practice, this means screening and testing chemical products against the requirements of the ZDHC Manufacturing Restricted Substances List (MRSL) and registering the results on the ZDHC Gateway. The Gateway acts as a global database for safer chemistry for C&A suppliers and the industry. C&A have replaced its positive lists, rather requiring suppliers source level one conformance chemistry or higher from the ZDHC Gateway.

To support the identification of safer chemistry, C&A implements a hazard-based Screened Chemistry program, alongside several other brands, to identify best-in-class and safer chemicals. Together, alongside the ZDHC Gateway, we provide our suppliers with information on safer chemicals so they can make informed decisions in procurement. To validate adherence to the MRSL at a facility level, the C&A Foundation has funded ZDHC InCheck. InCheck, which will be adopted by C&A at launch in Q4 2017, will allow us to assess the conformance of all purchased chemicals to the MRSL within any given timeframe. InCheck will greatly enhance the visibility into our true progress towards eliminating hazardous chemicals across our supply chain as we shift our reliance on wastewater testing results towards the source of the problem – input chemistry.

C&A is also working globally to engage with key chemical suppliers and formulators to increase the awareness of ZDHC and its requirements, with the aim of increasing the availability of safer chemistry and driving research and innovation to find suitable alternatives.

Process management

Process management is key to ensuring each of our supply chain partners has the necessary personnel, management systems, tools and expertise to reach ZDHC requirements. To do this, we have developed the SCM Audit, in which we send in technical experts to each of our wet production facilities to assess their current level of performance and create a joint action plan to drive continuous improvement.

Output management

C&A is committed to publicly report on its progress towards ZDHC. We conduct regular wastewater testing at our facilities, against the ZDHC Wastewater Guidelines, to validate the elimination of hazardous chemicals. By testing raw wastewater for chemicals listed on the ZDHC MRSL, C&A can validate the elimination of hazardous chemicals at individual facilities. If a detection is found, a phase-out plan is created with the facility that seeks to replace the chemical with a sustainable alternative within the shortest possible timeline.

C&A suppliers communicate publically their wastewater testing results on the Institute of Environmental Affairs (IPE) website, as well as the ZDHC Gateway. This ensures all relevant stakeholders have access to the progress we are making year-on-year.

Capacity building

C&A provide a comprehensive capacity-building programme for all facilities that falls under our SCM program coverage. This includes at least quarterly factory visits by our SCM Specialists to follow up on improvement progress of chemical, as well as in-depth technical training covering subject matters in collaboration with industry experts including chemical management, chemical operations, wastewater management and treatment, chemical safety and handling. To date, 600 people have completed our annual two-day training on chemical management conducted by external industry experts. In addition to these, we also utilize the training resources on ZDHC Academy, which provides an extended coverage in more niche sourcing regions where we have limited presence.

C&A also hold regular roundtables with supplier management to discuss outstanding challenges and brainstorm solutions, as well as, including the topic at our Annual Supplier Conference.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Whilst C&A has made great advances towards its vision of eliminating hazardous chemicals in our supply chain, there remain a number of challenges that impede progress:

1. A lack of full industry alignment on the approach to eliminating hazardous chemicals. This misalignment increases confusion in the supply chain, dilutes focus and can increase cost due to testing for multiple standards.
2. Knowledge in the supply chain regarding hazardous chemicals and their elimination has improved greatly since the Detox campaign, however, improving on-site expertise remains one of C&A's biggest challenges due to the complex

nature of the subject, the limited expertise in-country and the turnover of people in our suppliers.

3. Third party experts and consultants are limited, with those available in high demand.
4. In-country lab capabilities remains a challenge in some production countries whom cannot test according to the stated requirements.
5. The industries focus on 'Output' (wastewater testing) rather than 'Input' often means that investments are not spent on the solution.
6. Safer alternatives can have other barriers such as geographic availability (increasing lead-time's), cost, quality and performance.
7. The supply chain is dynamic with new PUs entering and existing PUs leaving the supply base frequently meaning there is a constant need to raise the performance as an industry as a whole.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

C&A has banned the use of PFCs since the 1st January 2015 across all product categories and regions as part of our commitment to ZDHC by 2020. No PFC failures have been detected during our product testing.

In 27th May 2016, C&A published "Approved Alternatives to Perfluorinated Compounds (PFC)" which sets out those chemical products that have been approved by C&A as an alternative. Only these chemical products from the list are allowed to be used as PFC-free substitutions. Going forward this list will be integrated with the ZDHC Gateway which will become the go-to source for conformant chemistry.

In 2017, 10 facilities detected PFCs in their incoming water and 16 facilities detected PFCs in their raw wastewater. C&A analyses the detected concentrations at both sampling points to identify if manufacturing processes are a contributor to this detection. Out of the 16 detections in raw wastewater, 3 could be attributed to incoming water contamination with 13 facilities found to be using PFCs during their production processes. C&A requires mandatory PFC testing for water repellent finished shell and lining material from who facilities not procuring their chemicals from C&A's "Approved Alternatives to PFC" list. None of these 13 facilities had any failure for C&A production; however, as part of our clean factory approach, whereby we drive the elimination of hazardous chemicals at a site level, we will continue to address these issues.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

APs/APEOs elimination remains a challenge for apparel and footwear industry because of the multiple ways for potential APs/APEOs contamination.

In 2017, 39 facilities detected APs/ APEOs in incoming water, 63 facilities detected in raw wastewater and 26 facilities detected in discharged wastewater. C&A analyses the detected concentrations at incoming and raw wastewater sampling points to identify if manufacturing processes are a contributor to this detection. Out of the 63 detections in raw wastewater, 3 could be attributed to incoming water contamination with 60 facilities found to be using APs/ APEOs during their production processes.

C&A has communicated to all wet processing facilities the requirement to source chemical products that are APs/APEOs free. To ensure our suppliers have the latest information on APs/APEOs free chemical products, C&A request our suppliers procure chemicals confirmed as meeting the MRS� requirements and have a conformance level of one or higher on the ZDHC Gateway: Chemical Module.

In addition to these actions, C&A has a combination of capacity building programmes and phase-out plan implementation, which is designed to support facilities eliminate APs/ APEOs. C&A are also supporting the engagement with the chemical industry to further drive the elimination of APs/ APEOs.

2.3 Are they any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

C&A is one of the signatory brands in ZDHC and actively engaged with various programs that identify safer alternatives. At C&A, we utilize the Screened Chemistry Program. This program requires the facilities to disclose their chemical products and its ingredients, on which a streamlined platform for chemical hazard assessment is then performed and rated to identify best in class chemicals or better alternatives. The results on this will then be built into the ZDHC Gateway - Chemical Modules, expected in Q3, 2018.

C&A fully implement the ZDHC Gateway - Chemical Module which is an online database to assist brands, suppliers and chemical companies to find safer alternatives to the substances listed in the ZDHC MRS�. The ZDHC Gateway - Chemical Module works by mapping chemical products against existing chemical accreditation and provides facilities with documentation to determine a chemical products conformance level. C&A is regularly assessing chemical conformance each facility.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

C&A has published a case-study on per- and polyfluorinated (PFCs) chemicals on our website and have submitted this to Subsport for review and publication.

Q3: Disclosing list of suppliers with wet processors

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, C&A's public disclosure of its suppliers' production units covers 100% of our tier -1 and tier-2 suppliers' factories for all markets, globally. We define Tier 1 as cut and sew production units, tier 2 as printing, laundries, and embroidery and tier 3 as fabric mills, spinning mills, and dye houses. As a signatory of the Transparency Pledge, our disclosure details Name, Address, Country, Product Category, Number of Workers and Tier. The list is updated at least every Quarter.

Our objective of disclosing our suppliers' factories is threefold:

1. Be completely transparent about where our products are made, so our customers and stakeholders can feel confident we're making good choices.
2. Improve worker rights and increase worker voice within our suppliers' factories.
3. Provide a channel so that we can be alerted when issues are observed in our suppliers' factories and take immediate corrective action.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Our public disclosure on our suppliers' production units now covers 100% of our tier-1 and tier-2 suppliers' factories (and number of our tier-3 vertically integrated production units that include spinning, fabric production and dying) for all markets, globally.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

We make this information available on our website, through our annual sustainability report: <http://sustainability.c-and-a.com/supplier-list/> The sustainability team has an open channel of communication with any stakeholder that wishes it, through the contact us link on the website. The team regularly receives and responds to inquiries.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Not applicable.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Since the launch of Detox campaign in 2011, the industry had progressed rapidly in all aspects related to more sustainable chemistry in textile and apparel business. Below are the impacts we have seen across the industry since the launch of the campaign and the establishment of the ZDHC:

Increased awareness

Firstly, we have seen the increased awareness on the chemical hazard in product and manufacturing processes. Although the Detox campaign directly targets brands and customers, it has an immediate impact on the manufacturers as well, who had not been entirely aware of the overreaching impact of their use of chemicals as part of their operational routine towards the end user of their products. C&A is actively developing the knowledge and technical capacity of our supply base through the implementation of our SCM Program.

Chemical transparency and safer alternatives research and development (R&D)

The chemical industry supplying chemical products/formulations to apparel and textile manufacturers are also impacted by the market drive to develop safer alternative products as the apparel manufacturers began to inquire the chemistry behind the formulations that they acquire and use for production. The manufacturers communicate the MRSL (Manufacturing Restricted Substances List) to the chemical formulators, who in turn need to ensure the listed substances are not used in the formulation they produce. This has led to the development of new formulations that are designed to cater to this market, and at the same time have less negative impact to the environment throughout the entire product life cycle. The chemical formulators are also increasingly engaged in the Detox discussions through local/regional industry associations as well as the ZDHC. C&A is actively engaging with the chemical industry through implementing the screened chemistry program in collaboration with our manufacturers. We had identified the major chemical formulators in our supply chain and are conducting dialogue with

them to reinforce the importance of transparency of their formulations and continuous R&D for scalable safer alternatives. We also utilize the ZDHC Gateway Chemical Module as a tool to increase transparency in chemical data and encourage our manufacturers to engage in dialogue with their chemical formulator to upload their chemical product information onto the Platform.

Going forward, C&A has launched SCM Minimum Performance Standard, which also includes requirements around chemical transparency and the usage of MRSL conformant chemistry. This is aimed to maintain and accelerate our supply chain's continuous shift from traditional practices onto sustainable chemistry and zero discharge goals.

Building expertise and technical capability

Over the past 7 years since the launch of Detox campaign, the industry has developed expertise and raised technical knowledge in all aspects related to sustainable chemistry, chemical management, and the environmental impact related to the traditional chemicals used in textile industry. We have seen a growth in demand and availability of expertise in this subject matter especially in key sourcing regions. However, such talents remain a niche as compared to the other more mainstream fields such as environmental management, or energy management, considering the depth of technical knowledge and experience required to become a well-rounded expert in this field. This is one of the challenges that we face as we are looking to expand our program operations and support implementation at facility level.

Shift of focus from product safety to worker and environmental safety

Traditionally the industry's focus is on the safety of the final product that enters the market. Chemical safety of the final product is regulated by many government authorities of the regions where the product is sold to consumers. However since the launch of Detox campaign, the industry has increased focus towards the manufacturing phase of the products, which concerns the workers safety and environmental impact. Hazardous chemicals may be removed from the final product through washing process, rendering the product safe for consumers' use but leaving the substances in the wastewater. By improving chemical management and input control at manufacturing level we are addressing the issue of chemical safety from the roots and minimizing the impact of textile manufacturing towards the environment.

Strategic priority and integration into board-room discussions

Rolling out implementation of a holistic sustainable chemical management program in a complex supply chain spread across globally requires a strategic prioritization and integration into the brand's business practice. Since the launch of Detox campaign in 2011, the industry has responded with a shift in business practice where great deal of investments are made in research, knowledge and tool development, implementation and roll out of sustainable chemical

management programs. Considering the scale of investment required for such programs, these strategic decisions are made and backed by the upper management of companies including board of directors, C-suite management, and are incorporated in the customer facing as well as supply chain facing business strategies.

Making scalable progress through ZDHC

C&A is actively working with the ZDHC, alongside its almost 100 active contributors in implementing the MRSL on a global level. The ZDHC has expanded its operation through offices in China and India with strong collaboration partners like the German Partnership for Sustainable Textile, CNTAC and other partners to drive global and regional progress. The ZDHC MRSL reflects substances for which safer alternatives are available and the organization is working hard to address other hazardous chemicals in the MRSL update process. This process includes the provision of substitution scenarios rather than just updating the list with new substances. C&A is also heavily involved in the update process of the MRSL, contributing our implementation experiences to support the development.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Since its launch in 2011, the Detox campaign has helped accelerate the industry progress towards sustainable chemicals management. C&A has taken it further to other aspects of our business, including our raw material selection, our transformation to circular fashion, our customer awareness, and our overall partnership with the supply chain as well as other stakeholders in our industry.

Raw Material

C&A focuses on ensuring that our most important raw materials – cotton, man-made cellulosics and polyester – are the best they can be. In 2017, Textile Exchange named us for the fifth time the largest buyer of certified organic cotton globally. In 2015 we joined the Better Cotton Initiative (BCI) and helped to found the **Organic Cotton Accelerator**, an initiative to help create a prosperous, stable market for organic and more sustainable cotton that benefits everyone. Today, already more than 70% of the cotton we source is certified organic cotton or grown as Better Cotton. Read more about our organic cotton or Bio Cotton: <https://www.c-and-a.com/biocotton/>. We work with Better Cotton Initiative, Organic Cotton Accelerator, Textile Exchange, Cotton Connect, Canopy, Four Paws, C&A Foundation, Fashion for Good, Leather Working Group in making sure that we are on top of the curve in development towards circular fashion.

In 2020 we aim for 100% of our cotton to be more sustainable and 67% of all of our raw materials to be sourced from more sustainable sources. We report our progress towards our 2020 goal in our annual sustainability report.

Circular fashion

C&A is pioneering the transformation to circular fashion. In Spring/Summer 2017 C&A was the first retailer worldwide to launch a Gold Level Cradle to Cradle (C2C) Certified™ T-shirts. Since then we have added more Gold and Silver certified products for women, men and children to our C2C collection and more C2C Certified items are going to follow. Our C2C Certified products are designed as nature intended, with products considered as biological nutrients - designed to be reused or recycled into new products. Our solid Gold Level Certified T-Shirts can be even safely composted.

This Cradle to Cradle approach to product design means that organic cotton farmers can grow their crops without hazardous fertilizers and pesticides, and those involved in the production processes are not exposed to harmful chemicals because none are used. In addition, by using renewable energy, offsetting carbon emissions and cleaning the water used in the production process, C2C Certified products support both the health of the ecosystems and communities in which they are manufactured and the overall health of our planet.

C&A has partnered with **Fashion for Good** - created with an initial grant by founding partner C&A Foundation - to unite apparel producers, retailers, suppliers, non-profit organizations, innovators and funders in the shared ambition of circular, sustainable fashion. Learn more on: www.fashionforgood.com.

Supply chain consolidation and transformation

C&A's Sustainable Chemicals Management (SCM) program has been one of the important driving force for maintaining a strong long term relationship with our manufacturers. One of the key learnings we have had so far in our SCM journey is that - although we all agree that this is the right way to go from industry perspective - our supply base has limited knowledge and expertise to fully implement the program, and therefore relies on the rest of the industry to successfully achieve the program goals. The implementation of SCM program requires a multi-year collaboration between C&A and our manufacturers to ensure progress is made at the production level, coupled with the development of knowledge resources, new chemistry and innovative technology. Investments need to be made in the periodical facility assessments, the improvement measures and capacity building. Through incorporating the SCM performance into our sourcing scorecard we have a straightforward method to inform our Sourcing colleagues about the manufacturers covered in our program and their progress. This naturally leads to the consolidation of our supply chain, which allows our team as well as our suppliers to prioritize and focus on making progress towards our goals.

Industry partnership and environmental sustainability

Since the launch of Detox campaign in 2011, it immediately become clear that the issue needs to be tackled through an industry-aligned effort instead of individual brand. There has been a significant increase in industry collaboration through ZDHC, Sustainable Apparel Coalition (SAC), and other regional organizations to share experiences and best practice, develop the necessary knowledge resources, and share implementation efforts. Over the past years, these collaborations have also expanded towards other aspects in environmental sustainability, such as energy and water efficiency, solid waste, wastewater and effluent treatment technology, and general environmental management practice at the facility. C&A has adopted a more holistic approach in our SCM program implementation as well. We will be one of the largest adopters of the Higg Index Facility Environmental Module (FEM), which is an all-around environmental assessment tool for facilities in apparel industry. It targets 10,000 facilities to adopt the tool by 2018 and by far the most widely adopted industry- aligned facility assessment tool for environmental sustainability. The tool covers 7 impact areas: Environmental Management System (EMS), Energy, Water, Waste, Wastewater, Air Emissions, and Chemical management. Over the past years C&A has invested resources to co-develop the latest version of the tool, Higg Index FEM 3.0. which was launched in November 2017. Our SCM audit, implemented across our supply chain for the last 3 years, is designed as a stepping-stone to the FEM and will be made redundant upon its adoption.

Water Footprint

C&A also has been focusing on decreasing our water footprint. We have made a significant water savings in blue and green water footprint, primarily driven by our more sustainable cotton and raw materials goals. In 2016, we have set new goals to continue to reduce water in the production of our raw materials by 30%, and to further reduce the water we use in stores, distribution centres and head offices by 10%.

Almost a third (29%) of our total water footprint (blue, grey and green) is consumed in fabric manufacturing process. The major impacts in this stage of production are in the dyeing, laundering, and finishing of fabric. C&A partners closely with the Better Mills Initiative (BMI), which is working to improve the textile wet processing industry in China. The BMI addresses a wide range of issues at mills, including water and energy consumption, wastewater and chemicals use. Since the project began in 2013, the 38 mills that are part of the BMI's programme have saved a total of 6.3 million tons of water and reduced their impact across the board.

C&A is also a member of PaCT – the Partnership for Cleaner Textile. Through training, on- site support and access to funding, PaCT has introduced cleaner production methods to over 100 factories and mills in Bangladesh, including 52 that supply C&A. In 2016, PaCT's work saved 18.4 billion litres of water and avoided

15.9 billion litres of wastewater. We are working with the International Finance Corporation to help shape the next phase of the programme.

Consumer awareness

Earlier this year C&A launched the #wearthechange campaign that highlights our sustainability efforts, from circular fashion product line, sustainable raw material selection, to our partnership with our suppliers in making sure that the products that our customers purchase are made responsibly with regards to safe labor practices and environmental sustainability. As part of the #wearthechange campaign we have also launched the 'we take it back' recycling program. For one bag of our customer's unwanted clothes and shoes we offer a 15% voucher in return (<https://www.c-and-a.com/uk/en/corporate/company/sustainability/wetakeitback/>). The #wearthechange campaign has been successfully rolled out in XX countries and has gained positive response from our customers.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The lack of regulation and law enforcement in major sourcing regions

Although certain regulation exists in a few sourcing regions regarding wastewater management and discharge, there is little oversight and enforcement of the rules, which lead to the common cases of non-conformances in this aspect. The regulations are also not as comprehensive and leaves many grey areas e.g. unregulated parameters, lax regulation for testing firms performing the routine wastewater test. Moreover, regulations related to input chemistry specifically for the common chemicals used in textile industry are also lacking.

These lead to challenges in implementing the ZDHC program because we are operating fully 'beyond regulatory' requirements. As one of the earliest and largest adopters of sustainable chemical management practice in our supply chain, C&A has experienced reluctance from our business partners to collaborate and fully implement the program. This has gradually change as other brands in the market follows suit and start their ZDHC program roll out, however a stronger regulation in the sourcing regions would be a significant push forward.

Lack of alignment of the implementation approach in the industry

We share some overlapping supply base other industry players, and the implementation of our program is sometimes faced with challenges around the lack of alignment in the approach across the industry. C&A is proactively seeking opportunities to collaborate with other brands to align approach and communication with common suppliers. This way we eliminate redundancy and maximize the positive impact we bring to the suppliers.

Progress with chemical industry

One of the main challenges in the implementation of the program is the lack of safer alternatives, and the limited knowledge/experience in the application of the alternative chemicals. C&A is continuously working with our chemical suppliers to provide safer alternatives to our manufacturers.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Currently, we focus our efforts on voluntary structures that support the reduction of hazardous chemicals in our supply chains through many organizations. We hold Board-level seats in the Zero Discharge of Hazardous Chemicals (ZDHC) and the Sustainable Apparel Coalition (SAC). We also hold Board-level seats in the Organic Cotton Accelerator (OCA) and Textile Exchange (TE), both of which focus on the cotton and textile industry, including the reduction of hazardous chemicals as one of their main areas of focus. Additionally, we actively participate in the Better Cotton Initiative (BCI), the Cradle-to-Cradle Product Institute (CCPI), the Dutch Covenant, and Textil Buendnis. Within each of these organizations, there are work groups that focus on the reduction of hazardous chemicals in the apparel supply chain. Across these organizations and structures, we seek alignment in direction that will allow us to implement the best practices that are needed across the sector in order for them to become industry practice.

Aligning brands, brand requirements and best practices will only move us forward so far. We still need regulation and enforcement that evens the playing field in the production countries and across multiple actors (beyond brands), such as wastewater testing at wet processing facilities.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

C&A speaks externally on our sustainability strategy, and thus our commitment to zero discharge of hazardous chemicals and our transparency efforts, on a regular basis. In these talks, we advocate for support of the organizations and efforts we have outlined in Q4.2b, as well as, call other brands to action through collaboration and sharing of best practices.

Examples of these speeches from 2017, are two panel discussions on transparency and sustainable products at GreenBiz 2017, a keynote speech at the Friends of

ZDHC December 2017, and an update of C&A's sustainability actions at an internal C&A meeting with all of our tier 1 suppliers in February, 2017.

Beyond C&A's advocacy in speeches, we leverage our membership and participation in multi-stakeholder groups (listed above) to advocate for the actions we believe are necessary in order to level the playing field and ensure that, as an industry, we can reduce hazardous chemicals in apparel production.

C&A has also worked closely with the Chinese National Apparel and Textile Council and aligning their approach to hazardous chemicals as part of their remit in implementing the China 5 Year Plan.

Esprit

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.esprit.com/sustainability/planet/detox/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

We have updated our combined MRSL & RSL with the CAS numbers for each substance. Please find the document here:

https://www.esprit.com/press/sustainabilityreport/Esprit_RSLMRSL_Manual_incl_Wastewater.pdf

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Currently, we follow the agreed ZDHC MRSL. To make the implementation process for our suppliers and wet process mills as stable as possible and allow them to comply with the requirements of different customers using a single set of requirements, we did not add other substances.

We are working with other ZDHC brands on the extension of the MRSL in different working groups. For example, one potential substance for an extended MRSL is dimethylformamide (DMF). Here we are already working on synthetic leather alternatives and set our own target to eliminate DMF by 2025. More information about Esprit's DMF program is included in the answer of questions 2 & 3. Also we are diving into a coming project to produce more sustainable leather by replacing CrIII salts with other tanning agents.

We will report progress in both DMF-free PU and non-chromium tanned leather on our website. The case studies will be online in May under this link: www.esprit.com/sustainability/detox.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- a list of the dates that you published data since 2016,

- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

List of dates

- The first round of wastewater testing according to the ZDHC Wastewater Guidelines finished in October 31, 2017. Prior to that time, there was no harmonized standard available.
- The second round will be finished by April 30, 2018.

Portal used

The results of each supplier are publicly available on the IPE website. We also use the ZDHC Chemical Gateway for test report upload. As the Gateway is not publicly available yet, we require suppliers to upload on both platforms.

Number of suppliers

123 of our suppliers uploaded their test reports, which is around 62% of our wet process suppliers. This figure was the most accurate at that time. After the first big push to encourage wet process suppliers to have wastewater testing, our Tier 2 supply chain data changed: Master suppliers have deactivated mills due to unwillingness to conduct wastewater testing despite our efforts to encourage them. The main reason for mills declining to conduct testing was our small business volume with them. Additionally, we also found that not all master suppliers disclosed all of their Tier2 suppliers accurately. During our chemical audits and ongoing mapping process, we found more wet process mills than had been initially reported. This caused drastic changes in the percentage of total wet process suppliers that have conducted testing as the number of suppliers who did the testing became a smaller percentage of a larger total number of mills. For the future, after the third round of testing, we expect this process to be much more stabilized and also expect an increasing accuracy and transparency. We are pushing all our suppliers to achieve 100% testing of wet processes. We also engaged our Buying and Sourcing department in pushing the suppliers to conduct wastewater testing. In many factories, we have to date been the only customer pushing for testing, which has made it difficult to persuade factory management to conduct testing where our volume is not large.

Status Report

In May 2018, Esprit will publish the result of wastewater testing completed by October 31st 2017 in an aggregated report with additional information on corrective actions in two selected factories, where APEOS have been found in the

discharged water. The report will be available on our website under the Detox chapter (www.esprit.com/sustainability/detox).

Planned publication from 2018 onwards

After every round of testing, which is conducted in a semi-annual cycle, we will upload an aggregated publication of the results. The target of having 100% of our wet process mills conduct testing and upload their test reports will remain. The target has yet to be achieved, but we expect increasing fulfilment over time. We hope to see a greater uptake of the ZDHC wastewater program in the future, which will persuade factory management teams that are not yet fully engaged to start a testing program. If more customers ask for testing in the entire wet process mill supply chain, the number of mills participating will naturally increase even where Esprit lacks production volume to drive the process. This is the reason that we seek a common approach for the whole apparel industry.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We expect full ZDHC Gateway functionality to be ready by August 2018. As the wastewater data is owned by the suppliers, a “legal handshake” is required to publish the data on the ZDHC Gateway. However, Esprit encourages all wet process mills in our supply chain to conduct the testing and publish it on the Gateway and additionally on the IPE.

In cases where available wastewater data does not fulfil the requirements of the ZDHC Wastewater Guidelines, suppliers tend to be more reluctant to publish their reports. In this case, we show our connection to these suppliers and encourage them to work on their chemicals used in the production and the right methods to clean the water before discharge.

Esprit already discloses our connection with suppliers on our publicly available factory list, as well as the IPE Green Supply Chain Map (<http://www.ipe.org.cn/MapBrand/Brand.aspx?q=6>).

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Step 1: Internal alignment

In 2015 Esprit established an internal process to ensure that our Detox commitment (among others) is implemented in all internal processes and becomes one goal throughout our entire organization.

We established the Esprit Minimum Requirements Steering Committee (EMRSC) in order to develop synergies among the following departments: Quality

Control, Product Safety, Supply Chain Management, Buying, and Sustainability. All these departments have significant overlap in the supplier information that they compile, maintain, and use. By bringing them together, we created transparency and alignment within our organization, which supports our objective of creating a sustainable business throughout our supply chain.

One of the targets of the EMRSC is to review our [RSL&MRSL](#) requirements on an annual basis based on our process for [Hazardous Screening Methodology](#), both of which are publicly available on our website, as well as in our Vendor Portal.

Step 2: Supply Chain Mapping Process

Over the past five years, Esprit has focused on mapping our supply chain. As part of that process, we drastically reduced the number of suppliers (Master Vendors) that we work with. In order to have real influence on our supply chain, we need to reduce the number of partners to create a real community with the remaining ones.

In a next step, we started a monitoring process, to learn more about our supply chain in depth. Therefore, we created a clear definition of Tier1, 2 and 3:

Tier	Definition
1	Place of fabrication: garment sewing, linking, garment finishing, packaging and storage
2	Spinning, weaving, dyeing, printing, fabric finishing, knitting
3	Raw materials providers: Chemical suppliers, sewing yarn suppliers, machinery suppliers, filament and staple fiber suppliers

Every six months we contact our Tier1 suppliers and require all information on their supply chain. This is how we got to know in depth our Tier2 suppliers, especially the ones with wet processes. Despite the cut of Master Vendors, tier 2 suppliers are much wider partners net that is also alive and actively changing. We make wastewater testing mandatory in our supply chain, in addition to our internal technical audit program. We are working hard with our Master Vendors to convince suppliers to get the wastewater testing done, which implies that those not willing to make improvements will be removed from our supply chain. This is the main reason for a close mapping each six months, we expect to be stabilized in coming year.

Step 3: Supplier Capacity Building

We also work closely with chemical suppliers and learn from the technical audits that we conduct in the wet process mills, and learn which chemical formulators they use. To make sure that they have the knowledge to understand the MRSL and how to implement it, we created the [Esprit RSL&MRSL Supplier Guidelines](#) that is publicly available on our website, as well as on our Vendor Portal. In this guideline, we explain which are the most relevant chemical groups, how to use the Guidelines in our production processes, and the potential chemical formulations and production steps where those hazardous chemicals could be found. Beyond that, we advise how to lower the risk of having hazardous chemicals through proper chemical management.

We are convinced that we must focus on using better chemicals at the onset instead of product and waste water testing at a later stage. The root cause of any non-compliance with Esprit's RSL & MRSL is the chemical formulations that are used. Proper chemical management implies good communication, good chemical suppliers who provide the knowledge of chemical risk assessment and proper training to the staff using those chemicals.

In our Vendor Portal, our suppliers have access to the "Chemical Corner". This section of the site provides root cause analysis of non-compliance issues. In the Chemical Corner we share examples of chemical formulations that cause RSL (black list) and MRSL non-compliance and their safe alternatives within the same chemical supplier portfolio (green list). Each non-compliance issue that we have found is very unfortunate, but we try to make the best of it by sharing the learning experience and the knowledge gained with our suppliers. One example for such is the [PFC Case Study](#) which is also publicly available on our website.

We invite all our wet process mills to obtain access to the ZDHC Chemical Gateway to find safe chemicals. We also participate in the Gateway's development along with some of our suppliers on the different pilots and functionalities of the platform.

Additionally, we invite chemical formulators that are often used in our supply chain to access the ZDHC Chemical Gateway and upload their compliant products.

Step 4: In person-trainings and audits

In June 2016, Esprit began conducting a series of more than 150 Tier 2 wet process supplier audits that included the three areas: environmental management (waste water, solid waste and energy management), chemical management, and process control (more related with internal controls on technical quality parameters, as CF). Factories were given the results of these audits and asked to address problems found, and follow up audits are on-going to assure continued progress. In FY16/17 (financial year 16/17) we conducted a total of 154 audits. We were focusing first on dyeing, printing and fabric finishing mills, as they have the biggest consumption of chemicals used in the production and therefore they have the

largest impact on our Detox commitment. In FY17/18 we have so far conducted 133 audits and 45 re-visits to follow-up on corrective actions. We must highlight that this figure includes suppliers that, in spite of our efforts, were ultimately deactivated due to their lack of support of our Detox work, which contributes to the fluctuation of the number of Esprit's Tier 2 facilities.

On our website, we have released a study on the results and findings of our audit program.

We also promote the ZDHC trainings and trained our staff according the ZDHC Guidelines to be up to date.

Our Master Suppliers are requested to participate actively in implementation so that we are training them together with their Tier 2 suppliers in VC trainings, Vendor Summits, and through requiring them to participate in Tier 2 technical audits. Inside our Vendor Portal we have all the relevant training materials: MRSL&RSL Guidelines, ZDHC Wastewater Guidelines, and specific chemical trainings (How to avoid MDA, how to avoid CrVI), etc.

Step 5: Wastewater testing

To complete our Detox program, we started in late summer 2017 with wastewater tests in our wet process mills. This was the first time that harmonized guidelines had been available. As the wastewater testing has to be a solid process, a stable and harmonized standard had to be available. As our target is 100% of all wet process mills (and wastewater discharge), we had to make sure to reach our entire supply chain. We therefore arranged a Vendor Summits in Dhaka, Istanbul, Hong Kong, Shanghai, and our headquarters in Ratingen, Germany to explain the requirements and assure that factories understand the reasons for testing. In total 179 suppliers participated in the Vendor Summits (12 in Ratingen, 46 in Dhaka, 15 in Istanbul, 48 in Hong Kong, 58 in Shanghai). We were very glad that Greenpeace participated in the Summits in Ratingen and Hong Kong and that the IPE spoke at the Summit in Shanghai. In addition,

Intertek explained in all Summits how to complete the actual requirements of the ZDHC testing. Attached to this document, you will find the agenda, which was roughly the same for every Vendor Summit.

Besides the Vendor Summits, we engaged our buying and sourcing team to push the wastewater testing in each meeting and communication with our suppliers. It is one goal for the entire organization.

Step 6: Wastewater Improvement

We have already established sound procedures for steps 1-5; step 6 is in the pilot stage. After the testing, we gathered all results, analyzed them and informed our suppliers about any alerts. During this analysis we found that testing had not been made in a consistent way, as some mills tested too many parameters and others not enough despite having one single standard. For the next round we expect this

to be improved, as we took corrective measures in our communication with testing labs and suppliers. We have selected one supplier with a comparatively larger number of alerts in treated waste water and APEOs for more intensive work. In the next step, we will visit them and develop a plan to improve their procedures and chemical inventories, which we expect to make publicly available soon.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Non-Transparency

We see not enough transparency from chemical formulators, including missing letters of confirmation for MRSL-compliance, standardized technical data sheets and material safety data sheets as the main risks holding back our Detox work.

Too often we face the challenge that chemical formulations are not clear enough to determine compliance with the MRSL. This problem is particularly serious when dealing with smaller, local chemical formulators. With upgrades to the ZDHC Gateway, we hope that more chemical formulators - larger as well as small- will join and upload their chemical data. We are supporting this effort by inviting the most commonly used chemical formulators in our supply chain to join the ZDHC Chemical Gateway.

Non-compliant chemicals

Another point is that beside the development and release of compliant chemicals, formulators still offer formulations that do not comply with the Detox program without clearly mentioning the risk in terms Detox compliance that they may cause due to improper handling or specific ingredients. This is a critical situation, as we would like to see the phase out of non-compliant substances and focus on a wider variety of better and compliant products. When we are a single customer of a mill and the other customers are not all committed to Detox, the non-compliant chemicals will not be used in Esprit production but will end up in the facility's wastewater anyway. Our major challenge is to convince those mills where our business volume is not high to completely phase out non-compliant formulations from their chemical inventories.

Variety of legislation

Another risk we have identified is the variety of different legislation in sourcing countries. Some legislation is less strict than the MRSL and ZDHC Wastewater Guidelines, which is then only a voluntary standard for mills in those countries. We face particular problems in those countries, as we are not the only customer of our suppliers. Customers who have not made or are not keeping their Detox commitment, are focused on the best price, so suppliers have chemicals in their inventory that are not MRSL-compliant, and their discharged water is therefore not free of hazardous chemicals even though they may be compliant with their national legislation. As mentioned before, for brands like Esprit that are neither

small nor very large, this situation is rather difficult. We are not big enough to fill the factory's capacity, which limits the leverage we can exert. These multiple approaches in supply chains cause ongoing confusion and slow down efforts. Within Esprit, our policy is not "cut and run". We want our suppliers to commit to change their business practices. We would like to see that policy and legislation makers support us here with stricter requirements. Another solution would be to have more brands in the ZDHC and committed to Detox, especially SMEs.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, as of December 2014, our suppliers do not use PFC-chemicals for Esprit products. As a first step, our Fabric Management team undertook technical research on alternative chemistry to PFCs in early 2014. We have identified several residual problems.

1. Polluted incoming water

During our waste water testing, we learned that at least 3 wet process mills have PFCs in their incoming water. All are based in China, where PFC chemistry is not forbidden. When the incoming water is already contaminated, it is very likely that the final product could be contaminated as well, even though the mill is not purposely using any PFC chemistry.

2. Use of MRSL non-compliant products for other customers

Another problem we identified during our audit program for wet process mills is that they are still using MRSL non-compliant products for other customers (especially local) who have no Detox commitment. We have found mills that have these chemicals still in their inventory.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We found APEOs in wastewater testing on 14 occasions: 4 times in the incoming water, 11 times in raw wastewater and 3 times in treated wastewater. In total we found 13 suppliers with detections of APEOS. Thereof, 8 mills are based in China, 4 in India and 1 in South Korea.

Based on the results of the wastewater testing, we cannot say yet that we have phased out APEOs in production. We are now working in depth with the mills where we found the chemicals to identify the root causes and solve the problem. We will continue monitoring APEOs closely through technical audits as well as through wastewater testing.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

In the past two years we worked with our polyurethane (PU) mills and chemical formulators to find alternatives to PU solutions produced with the organic solvent dimethylformamide (DMF). We have nominated three mills to join a pilot to phase out of DMF that was conducted together with the ZDHC and the China PU Association. During these trials, we audited one mill and conducted a risk assessment. Additionally, we audited 2 more mills that can potentially produce solvent-free PU. From March 2017 onwards, we did sample trials, comparing conventional PU with water-based PU. As the product quality came out rather poor in the beginning (e.g. embossing failures, poor wrinkle recovery) we saw fast improvements. Therefore, in August 2018, we will have the first synthetic leather articles in stores, made out of water-based PU. It is our targets to phase out DMF by 2025 and we are confident to achieve this target within that time frame.

We are also working deeply with our tanneries to change the CrIII tannery system for a more sustainable solution that eliminated CrIII from waste water and the CrVI risk in the final product. This project is not yet so developed as the PU solution but we are confident to change more and more our tanneries to a more sustainable production process.

We will publish the two business cases in our website to explain these two topics. They will be available in May under www.esprit.com/sustainability/detox.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

PFC Case Study published in December 2016:

https://www.esprit.com/press/sustainabilityreport/PFC_Case_Study_.pdf

DMF Case Study: will be published in May 2018 under

https://www.esprit.com/press/DMF_Case_Study.pdf

Chromium Case Study: will be published in May 2018 under

https://www.esprit.com/press/Chrome_Case_Study.pdf

Technical Audit Case Study: will be published in May 2018 under

https://www.esprit.com/press/Esprit_Capacity_Assessments_Case_Study.pdf

Wastewater Case Study: will be published in May 2018 under this chapter:

http://www.esprit.com/press/sustainabilityreport/Esprit_Wastewater_Casestudy.pdf

We also have a Black-white list with examples of hazardous chemicals and replacements on our Chemical Corner in our Vendor Portal, which has been published since 2016. This is not a huge list, as it is based on the root-cause-analysis of non-compliance cases due to our testing process (RSL and MRSL). Luckily, due to all our preventive measures, we have not yet detected many cases of non-compliance. Please find attached a screenshot of some examples.

Q3: Disclosing list of suppliers with wet processors

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Esprit discloses 100% of known suppliers since August 2016. We publish 100% of our Tier1 suppliers and 100% of our Tier2 suppliers (all we know of; ongoing monitoring process that results in an updated list every 6 months). In February 2017, we also aligned the list in accordance with the Human Rights Watch Transparency Pledge. From August 2018 onwards, we will also start to add our viscose producers (Tier3) to the list.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

First, we would like to come back to our definition of Tier 1,2 and 3 in questions 1.3 of this questionnaire. We publish all our known Tier 2 suppliers. As already mentioned, we will publish from August 2018 onwards also all viscose producers who belong to Tier3 according our definition.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Our supplier list is available on Esprit's Sustainability website:

<https://www.esprit.com/sustainability/overview/where-esprit-is-made/>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

As described above, we have accomplished this step. In addition, we are working on internal IT solutions, and encouraging our peers, to be able to display additional

information of all our styles on our e-shop, among them including their specific supply chain. This includes also Scope Certificates and Transaction Certificates for certified materials (e.g. organic cotton, recycled materials).

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

In the past five years many changes happened in the textile industry, especially when it comes to chemical management. The ZDHC has almost 100 active contributors who support the implementation of the MRSL globally. Strong collaborations, such as CNTAC, the German Partnership for Sustainable Textiles, and the Dutch Agreement on Sustainable Garments and Textiles, drive change and ensure that additional brands and stakeholders become aware of the Detox program.

The MRSL includes compounds for which safer alternatives are available. Together with the ZDHC, we are working on adding more hazardous compounds to the list. This process is smoother now than it was in the beginning because more chemical formulators are ready for Detox and more ambitious to find alternatives for their hazardous products. However, we can only achieve our target- zero discharge of hazardous chemicals- when all chemical formulators participate (including smaller, local ones) and more sustainable alternative formulations become normal. Therefore, we would like to see more brands commit to Detox and join the ZDHC as a member to put more pressure on the market.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Higg Index

Suppliers and their subcontractors working for Esprit are required to use the Higg Facility Environmental Module (FEM) 3.0. We believe that the FEM 3.0 is a comprehensive tool to go beyond chemical management and focus also on water saving and energy saving. As the FEM starts with a self-assessment, it gives suppliers the chance to take ownership about their own program. This is different from the audit approach, where suppliers have to answer questions asked by the auditor. Rather than having their customers set the agenda, conduct audits, and send suppliers a list of corrective measures, the suppliers themselves will learn to analyze their own performance, identify areas for improvement, and develop plans to improve their processes. In a next step comes verification of the results in the

self-assessment. Esprit will consider verification in the near future. We promote the use of the Higg Index among our suppliers by including this parameter into our Vendor Score Card. With our Vendor Score Card we evaluate our suppliers bi-annually. By incorporating sustainability measure as a clear KPI for our supplier performance, we are able to track progress and benefit suppliers who are already on the right path.

Besides that, Esprit participates also in the Social and Labor Convergence Project, run by the SAC, that has the same approach as the FEM 3.0 and steps back from the classic audit process.

More sustainable materials

We encourage our product teams to use more sustainable fiber alternatives. We are increasing the amount of more sustainable cotton (Better Cotton, organic cotton and recycled cotton) to reduce the amount of pesticides and synthetic fertilizers that are used in the conventional cotton production. We aim to achieve 50% more sustainable cotton by 2020. Additionally, we are steadily increasing the amount of water-based PU (target: 100% water-based PU by 2025) and have joined an initiative by the ZDHC, Canopy, viscose producers, brands and other stakeholders to change viscose production into a more sustainable process.

Additionally, Esprit is committed to Circular Fashion. To enforce this, we signed the 2020 commitment for Circular Fashion by the Global Fashion Agenda. Of course, Circular Fashion is a long journey and will continue beyond 2020. We have set a target for each of the four action points. These targets (please find them [here](#)) are only a starting point for us. We have already started to with concrete measures.

- We will train our suppliers on Circular Fashion in the summer of 2018.
- We have targets for more sustainable materials.
- We carried out a pilot on an initial more sustainable collection for spring 2017 and took the learnings to other collections. Since then, we have been increasing the amount of organic cotton and recycled materials used.
- We include post-consumer recycled cotton in our denim range.
- For around 90% of our denim collection we use the Environmental Performance Management (EIM) Software by Jeanologia. This software allows us to measure the impact of new technologies, such as ozone, laser and nanotechnology to achieve the same outcomes as conventional methods, but reducing the volume of of water, chemicals and energy needed for production. In our next Sustainability Report we will publish more results.
- We made a capsule collection that re-spins and reuses cotton cutting scraps from our own production in additional Esprit products.

- We work with Packmee to give our customers in Germany (50% of our market) the opportunity to send old garments to Packmee, where the garments are re-used or recycled with 50% of the turnover generated going to the German Red Cross.
- From May 2018 onwards our returns that cannot be sold again will be sent to a refinisher to be repaired and re-sold on the second-hand market

For more information, see our website:

<https://www.esprit.com/sustainability/product/>

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The following challenges that might hamper the Detox achievements:

1. Alignment on testing

It required great effort on the part of the ZDHC to develop the Wastewater Guidelines with clear instructions on how to test. However, we still see large variations in how different brands apply the Guidelines. This is confusing, not only for the mills but also for testing laboratories. Greater alignment is needed to avoid duplication of testing and make sure that the wastewater testing is done properly and consistently. Brands need to have the same understanding on the program and its KPIs (e.g. what is a “key supplier”, clear definition of wet process, questions whether leather is included or not and from what production level onwards, how to handle trim suppliers, etc.). Effort for further alignment is needed in the near future in order to establish a solid and transparent standard to provide all customers with the same set of information upon which to act.

2. Testing costs

Another issue is the costs for the testing, which are quite high. Smaller mills, especially, hesitate to undergo testing for cost reasons. The ZDHC Wastewater Guidelines must be accepted as an industry standard in order to maximize efficiency and optimize cost.

3. Program Scale

As already mentioned in point 1, the testing has to reach the next level, and assure that all areas of the apparel and textile industry are covered (leather, embellishment, metallic trims, worker security). This target will have to extend beyond 2020. Also, if the commitment is only within the big brands working with best practice suppliers, many mills will fall behind by working with brands with no commitment. In other words, the commitment to Detox still needs to extend much further in our industry. It is also important to expand the Detox campaign to other

industries with strong overlap in supply-chains (e.g. leather that is also used in the automotive industry).

4. Involving all mills

Focusing only on mills that are already best in class is no solution to the wider problem. We see our mills as partner and we want to give them the opportunity and chance to change their practices and provide full support, rather than cut and run. We have to find a way to make the industry sustainable but not losing the perspective on social impacts. We need to make a transformation in the industry that ends up in a sustainable process that is not leaving workers behind by having losing their jobs.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

In our globalized world where “globalization” focuses mainly on trade in goods, we have to find a way to spread stricter policies and regulations on pollution among all countries. We sometimes forget that the water cycle is planet-wide, so pollution from Bangladesh will end up in Europe or other regions of the world and more and more people will be affected. Water pollution is not simply an issue “over there.” Governments have a responsibility to assure that companies do not pollute their waters, and their failure to deliver on that responsibility has put us into the position where we currently find ourselves. Other governments must scrupulously enforce their own laws, and encourage other producing countries to do the same. Having governments require companies to conduct reasonable due diligence would be marginally helpful, but encouraging good corporate behavior is no substitute for governments’ fulfilling their fundamental role of regulating the market and enforcing the law. Due diligence requirements on EU companies can never be as effective in cleaning up China’s waterways as the Chinese government could be by enforcing its own pollution regulation. We also see that policymakers need more education to develop meaningful regulation. Some regulations still in place are outdated (e.g. flame retardants for baby gear dating from the time when houses were still heated with coal). Also the process to bring new, safer chemical innovations to market needs to be faster, while ensuring that new alternatives are, indeed, safer than the old.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Esprit is a member of the Sustainable Apparel Coalition, the ZDHC, the German Partnership for Sustainable Textiles and an Associate Member of the Dutch Agreement on Sustainable Garments and Textiles. We cooperate with the IPE's CITI Index and all Chinese factories (Tier1 and 2) we work with the Green Supply Chain Map, where discharges are publicly disclosed in real-time.

Within this network of collaborative organizations we sit on the following committees and task groups:

Steering Committee of the Bangladesh Accord on Fire and Building Safety

Steering Committee of Act on Living Wage

Partnership for Sustainable Textiles Living Wage Working Group

SAC Policy Task Team

SAC Higg Brand Module Task Team

Social and Labor Convergence Project pilot team

As a member of Amfori, we are pushing them to better align their advocacy work in Brussels and other European capitols to better align with Esprit's values regarding environmental sustainability and supply chain due diligent.

We also have public commitments in place and work closely with non-profit-organizations:

CanopyStyle commitment: [Protecting Forests Through Fabric Choices](#)

Changing Markets: Esprit is committed to the Changing Markets Roadmap towards responsible viscose & modal fibre manufacturing (to be announced soon). We are also a member of a working group by the ZDHC to work together with other brands, viscose producers and other stakeholders on a more sustainable viscose production

Internally, we have our own standard operating procedure (SOP) for the approval of suppliers and mills to onboard. The SOP is a first step to prepare a policy. We have started the new process in 2016 and have now a better idea of our supply chain. Therefore, we are now ready to create a policy as we understand our supply chain better.

With regards to supply chain transparency, Esprit was one of the first companies to sign the Human Rights Watch Transparency Pledge (<https://www.hrw.org/news/2017/04/20/more-brands-should-reveal-where-their-clothes-are-made>). Meeting the Pledge requirements was relatively simple, since our Detox Commitment included publishing our supplier list by August 2016.

Additionally, we are participating in panel discussion, facilitated by multi-stakeholder- associations or NGOs. For example on March 20th, 2017 Esprit

participated in a panel discussion by the Clean Clothes Campaign, ICAR and Human Rights Watch on corporate transparency.

Attachments:

Screenshot of Black-white-chemical list from our Vendor Portal Agenda Vendor Summits (Dhaka, Hong Kong, Shanghai)

Fast Retailing

Q0: Detox page

Please provide here the main link to access your Detox information.

Access to Fast Retailing Detox information is available at:

http://www.fastretailing.com/eng/sustainability/supply_chain/environment.html#04

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Fast Retailing has published a detailed list of PFCs in our MRSL, including short-chain PFCs with CAS numbers. The list is available at:

http://www.fastretailing.com/eng/sustainability/supply_chain/pdf/restricted_substances_list_2017_04.pdf

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Beyond the 11 priority chemicals, Fast Retailing has added a number of additional substances to its MRSL, including:

Disperse dyes

Carcinogenic dyes

Organic solvents

VOC

Glycols

PAH

Pesticides

Nitrosamines

More details about the Fast Retailing restricted substances are available at:
http://www.fastretailing.com/eng/sustainability/supply_chain/pdf/restricted_substances_list_2017_04.pdf

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Fast Retailing's wet process suppliers are subject to wastewater testing by external professionals on a regular basis, with a target testing schedule of twice a year. At the conclusion of each test, partner factories are required to submit test results through the IPE platform as soon as available. Though upload dates for supplier data are not visible on IPE, we can confirm that the suppliers who have uploaded wastewater testing results since 2016 account for about 70% of our wet processes. We are working to increase this to 80% by the end of 2018. In April 2018, we published information about wastewater testing results, issues and improvements on our website:

http://www.fastretailing.com/eng/sustainability/supply_chain/pdf/CaseStudiesonWastewaterQualityMonitoringandImprovement_eng.pdf

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Currently, Fast Retailing is not planning to disclose its suppliers' wastewater testing data on the ZDHC Gateway. However, as described in 3.4 (below) we are planning to start publicly disclosing a list of our wet process suppliers by the end of 2018.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Fast Retailing requires partner factories to comply with its Restricted Substance List and to perform regular product and wastewater testing. Our in-house experts on dyeing and fabric production regularly visit factories and take prompt action whenever a hazardous chemical is detected. This involves meeting with the factory and chemical manufacturers that produced these chemicals, visiting the site to identify root cause, and leading improvements around those findings. At its core fabric manufacturers, Fast Retailing verifies the status of environmental protection

measures, including management of such chemicals, while monitoring factory conditions.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

While banning the use of hazardous chemicals in all of our processes is a major advancement toward our Detox objectives, we will still need to overcome situations where traces of hazardous chemicals may already exist in the surrounding environment or site, even if not used by our suppliers in any process.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Fast Retailing banned the use of PFCs in all products, commencing with products created for the Fall/Winter 2017 season. As of 2018, we have not encountered any residual problems.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We still have cases where APs/APEs are detected in products and in wastewater. An example of the root cause is where we find contamination in upstream processes beyond wet processes e.g. knitting oil used for knitting processes. In this case, we replaced the previous knitting oil with APs/APEOs-free oil.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

N/A.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Fast Retailing has published a number of substitution case studies, available at:

PFCs

http://www.fastretailing.com/eng/sustainability/supply_chain/pdf/pfc_eng.pdf
NPEOs

Q3: Disclosing list of suppliers with wet processors

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Fast Retailing began disclosing its supplier lists from 2017, which include the names and locations of partner factories. Supplier lists are published for the UNIQLO and GU brands, which together represent a very large majority of Fast Retailing production. Each is a list of UNIQLO and GU core partner factories, accounting for around 80% of garment production at each brand. These lists are updated and published at least once annually.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

These supplier lists do not include tier 2 or tier 3 wet processing suppliers.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Our supplier lists are disclosed and updated via the Fast Retailing website:
http://www.fastretailing.com/eng/sustainability/supply_chain/disclosure.html

As one of the world's largest apparel companies, the Fast Retailing supplier list generates significant interest in the public domain. As outlined in 3.4 below, we will also start to disclose a list of wet process suppliers by the end 2018.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Fast Retailing recognizes the best practice of publishing wet-processing supplier lists with the names and locations. Accordingly, we are planning to start publicly disclosing a list of our wet process suppliers by the end of 2018.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

We have seen active development of alternatives by dyestuff manufacturers in response to brand initiatives.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

We launched the Responsible Mill Program where goals have been set for our core fabric manufacturers to reduce water and energy consumption by 15% and 10%, respectively, of the 2016 levels by 2020 - the effort spanning three years from 2018 to 2020.

In addition, we joined the Sustainable Apparel Coalition in 2014 with the goal of improving environmental performance. From 2015, we introduced the Higg Index, an environmental assessment tool developed by the coalition, at core fabric manufacturers. The assessments cover seven areas, including environmental management systems, energy consumption, greenhouse gas emissions, water consumption, and chemical substance usage amounts. Also, we promote OEKO-TEX® certification by the suppliers.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

While banning the use of hazardous chemicals in all of our processes is a major advancement toward our Detox objectives, we will still need to overcome situations where traces of hazardous chemicals may already exist in the surrounding environment or site, even if not used by our suppliers in any process.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

The creation of international standards would help brands to increase expectations throughout their supply chain and motivate cross-industry collaboration. In addition, we would like to see the introduction of systems that support and/or reward brands with good chemical management.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

No, we do not have any experience of environmental policy advocacy.

G-Star

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain

Please scroll down to (1) DETOX Commitment and also click (2) downloads for yearly progress and all links to e.g. Subsport

1) DETOX Commitment

DETOX COMMITMENT

In 2013 we publically committed to eliminate industrial releases of hazardous chemicals into the environment, and set the target to reach zero discharge of hazardous chemicals (ZDHC) from all our products and production processes by 2020.

A few important achievements in line with our Detox commitment:

1. Elimination of APEOs since the end of August 2013
2. Elimination of Phthalates since the end of September 2013
3. Implementation of the G-Star MRSL (Manufacturing Restricted Substance List) in October 2014
4. Elimination of all PFCs (short and long chain PFCs) since 1 January 2015

DOWNLOAD LATEST REPORTS

↓ DETOX COMMITMENT
(PDF - 92KB)

↓ DETOX PROGRESS REPORT
(PDF - 205KB)

More results and progress made can be found under [downloads](#)

2) DOWNLOADS for all progress & reports per year

2015	
↓ MRSL 1.0 - 2015 (PDF - 100KB)	↓ MRSL 1.1 (PDF - 67KB)
↓ ZDHC ANNUAL REPORT 2015 (PDF - 610KB)	↓ DETOX PROGRESS REPORT 2015 (PDF - 164KB)
2016	
↓ ENVIRONMENTAL GUIDELINES (PDF - 80KB)	
2017	
↓ ENVIRONMENTAL GUIDELINES (PDF - 80KB)	↓ DETOX PROGRESS REPORT 2017 (PDF - 205KB)
↓ G-STAR WATER DISCHARGE REPORT 3 (PDF - 845KB)	↓ G-STAR WATER DISCHARGE REPORT 3 - AP... (PDF - 170KB)
↓ G-STAR WATER DISCHARGE REPORT 3 - AP... (PDF - 444KB)	↓ GUIDE FOR LEATHER MANUFACTURERS (PDF - 407KB)

3) MODE tracker results in our manufacturing cube on chemical, water, energy and waste:

<http://g-star.modetracker.org/cube/manufacturing>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

G-Star has realized their PFC phase out in 2015. In order to maintain and control the processes, we have listed the following CAS number on G-Star's MRSL. After a thorough investigation, we have nominated a safe alternative from Rudolf Chemie to achieve water repellent properties on our products. Chemistry is based on Dendrimers: <https://www.rudolf.de/technologien/bionic-finishreco/>.

Perfluorooctanesulfonates (PFOS)	1763-23-1
PFHxA	307-27-4
Perfluorooctane acids (PFOA)	335-67-1
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	27905-45-9
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-05
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7

1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH)	865-86-1
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1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

In line with the precautionary principle G-Star has listed other chemical groups on our MRSL which go beyond the 11 priority chemicals.

Polycyclic Aromatic Hydrocarbons, Allergenic Disperse Dyes, Carcinogenic Disperse Dyes, Other Colourants (including Navy blue and others), Glycols, Volatile Organic Compounds, Polyvinylchloride

We are currently investigating on alternatives in order to realize a complete phase out of Potassium Permanganate. By the end of 2018 latest, we will be ready to have this substance included in G-Star's MRSL. We also plan to report this study on Subspport by end of 2018.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

We have a Test Cycle following the ZDHC Wastewater Guidelines. All our information about waste water testing can be found on our website under the downloads button or end of the page as part of the DETOX section :

https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain

An example is shown below of the relevant reports on our website:



In the Water Discharge report and relevant appendixes; the test results can be found and we explain which suppliers publishes on IPE and/or ZDHC Gateway. The data accounts for 84% of our global production volume.

As per ZDHC we move to test twice a year and upload them on the Chemical Gateway.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes, will do that. And we connected brand and supplier in our waste water report.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

G-Star has implemented a strict RSL testing program. This way we are able to monitor and control our suppliers when it comes to the final product and we are fulfilling our due diligence and assuring consumer safety.

Additionally we have implemented our MRSL version 1.0 in 2014 and have just published and distributed version 3.0. In order to make sure all suppliers understand the principle and requirements of our MRSL, we visit our supplier on a yearly basis to provide individual tailor- made supplier training on MRSL implementation and compliance, Chemical Management best practices, Waste Water requirements and Environmental compliance.

In 2016 we have implemented our first Environmental Guideline for suppliers, which combines all necessary requirements in order to achieve our Detox goals. This Guideline has been made public on our webpage and also contains the requirements for Waste Water testing.

Beginning of 2018 we have created a new version of our inventory sheet which we distributed to our supplier. With this information we want to monitor which chemical formulations are used/purchased from which supplier in order to improve control on the MRSL requirements.

In future this data will be included in the ZDHC Gateway.

As G-Star is a member of ZDHC, SAC and a bluesign system partner we actively work together in a combined effort to Detox our supply chain. Via ZDHC we provide ZDHC Trainings and invite our suppliers to the regional Supplier Events.

Last year more of our suppliers have become bluesign system partners, 3 more denim mills are now bluesign system partner.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

We have seen that collaboration in our supply chain with our brands is key and therefore being part of ZDHC, bluesign and SAC is an advantage. Next to that our long term supplier relationships are positively influencing reaching our goal and give us the opportunity to jointly invest in improvements in this field. Though key remains collaboration and partnering with other brands to implement a standardized efficient system/ approach to reach the achievement.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we have achieved our goal of PFC elimination as per our Detox commitment, back on 31 December 2014. Since we have found an alternative substance (from Rudolf Chemie: <https://www.rudolf.de/technologien/bionic-finishreco/>), we have not seen any problems with residuals. Our latest waste water testing results are confirming this fact.

The study has been published on Subsport.

<http://www.subsport.eu/case-stories/408-en>

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we have achieved our goal of APEO free chemical formulations by end of August, 2013 as per our Detox commitment.

Since we have found an alternative substance, we have not seen any problems with residuals. Our latest waste water testing results are confirming this fact.

The study has been published on Subsport.

<http://www.subsport.eu/case-stories/370-en>

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

By the end of 2017 we finalised our RFTPi Elwood collection for which we took a holistic approach to denim design and created our most sustainable jeans ever. We looked at all the design elements of creating and using a pair of jeans and optimized them through a sustainable lens. We were able to design and develop the world's

1st Cradle to Cradle Certified at gold level Denim Fabric, implement the most sustainable manufacturing & washing techniques, removed all rivets and zippers to make our garments 98% recyclable post customer use. Instead of zippers we used eco-finished metal buttons which were designed to use no electroplating. Furthermore, we educate our customers how to care for their garment, how to prolong the life of the garment and how to part from it in a responsible way.

The RFTPi in this collection stands for Raw for the planet indigo; we worked with DyStar and Artistic Milliners and developed the cleanest indigo technology to date which is formulated using 15% less indigo, 70% less chemicals, requiring no hydrosulphates and producing no salt by-product during the reduction and dyeing process, consequently saving water and leaving clean and recyclable water effluent. Having undergone the CtoC certification, material health portion of certification our denim fabric is platinum which means there is 0 risk for people and environment in the chemistry of our fabric.

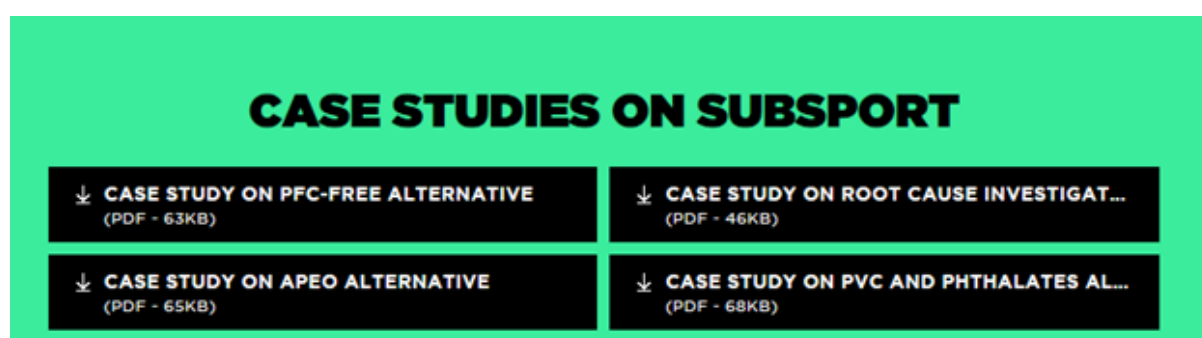
Furthermore, by being in Cradle to Cradle Product Innovation Institute's Fashion Positive Materials Library, we offer an open access to our learnings and processes to the rest of the denim industry and by that encourage them to adapt the cleanest indigo practices.

<https://www.c2ccertified.org/products/scorecard/g-star-denim-fabric-g-star-raw-c.v>

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

All cases can be found on our webpage under the download section at the bottom of the page:

https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain



Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

All information can be found on our website under https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain in the manufacturing list.

All we state is verified and published via the MODE tracker sustainability progress report which can be found via <http://g-star.modetracker.org/>

In line with our Transparency pledge you can find our manufacturing list under the paragraph Transparency on https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain and find out where your product is made via our online manufacturing map.

In the recently released Fashion Transparency Index of Fashion Revolution we are listed 2nd of all 150 brands in the section Traceability for all the detailed information about our suppliers.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

We have disclosed in line with our Transparency pledge our processing facilities in the manufacturing list which includes also wet processing facilities and lists detailed names and locations. Also see this link: https://img2.g-star.com/image/upload/v1514557481/CSR/PDF/G-Star_Manufacturing_List_Dec_2017_v.1.pdf

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

We signed the Transparency pledge which is published on our website to show our commitment. Next to our online manufacturing map since 2014, we also published by end of 2017 a manufacturing list. Please also see our answer on 3.1. and hyperlinks to the documents.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

https://www.g-star.com/nl_nl/about-us/responsibility/responsible-supply-chain

https://img2.g-star.com/image/upload/v1508930348/CSR/transparency_pledge_1_pager.pdf

https://img2.g-star.com/image/upload/v1514557481/CSR/PDF/G-Star_Manufacturing_List_Dec_2017_v.1.pdf

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

We see a lot of progress is made since the start of the campaign and it does have the needed effect and positive impact on chemical management in our industry.

The ZDHC Foundation is an example of an initiative of the brands (of which we are member) to collaborate and improve in this area collaboratively and implement its MRSL on a global level.

It has presence in China and India, has built strong collaboration partners like the German Partnership for Sustainable Textile, CNTAC to drive global/ local efforts. It is a vehicle to get alignment, collaborate and provides tools to improve management of hazardous chemicals.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Chemical management does not stand alone and is part of our environmental policies. So improvements are broader than chemical management alone as you look at water, energy etc.

For us the C2C certified denim fabric at the gold level is an example of other positive impact as this product reached a platinum level for Material Health.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

The momentum is there already since your campaign started and remains until 2020. Towards 2020 more education for *Policy Makers* is needed to get *meaningful regulation*.

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Faster development of certain green chemicals and solutions to remaining challenging chemicals. We push by innovation but also need partners in that area to innovate on fast pace.

Next to that we should have a look at other industries with strong overlap in supply-chains

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Regulation should be amended and would help to keep the level we reached now.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Awareness creation forms a part of a change-oriented communication and mindset in which sustainable goals, developments, visions and missions will be communicated to other organizations, manufacturers, designers and consumers. G-Star strongly believes that learning through capacity building of different stakeholders will create understanding, sensitization and awareness in moving forward towards zero discharge of hazardous chemicals.

Throughout 2016 and 2017 G-Star took the opportunity to participate to some of the major trade shows around the globe in order to raise attention and understanding on the critical points when it comes to chemicals used within the textile industry and how to achieve the fashion industry's Detox goals.

Texfor Barcelona, Spain June 2016

<https://texmeetingbytexfor.com/programa/>

Kingpins Transformers Amsterdam, Netherlands November 2016

<http://rivetandjeans.com/target-deliver-keynote-kingpins-transformers/>

Munich Fabric Start, Germany January 2017

<http://www.sportswear-international.com/news/stories/Trade-Show-G-Star-and-Edelkoort-among-top-guests-at-Munich-Fabric-Start-12925>

<http://rivetandjeans.com/g-star-raw-produce-line-bluesign-products/>

DenimandJeans Ho Chi Minh City, Vietnam June 2017

<https://www.denimsandjeans.com/events/denimsandjeans-vietnam-schedule-june-7-8-2017/26765>

Sustainable Apparel Coalition, 2017 Full Member Meeting, Bangalore, May 2017

Frouke Bruinsma presenting on the 23rd of May 2017. Topic: Transparency: Our Driver for Change: <https://apparelcoalition.org/full-member-meeting-page-bangalore-2017/>

Frouke Bruinsma in Board of Directors ZDHC

<http://www.roadmaptozero.com/about/>

H&M

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://sustainability.hm.com/en/sustainability/commitments/use-natural-resources-responsibly/chemicals.html>

At this page, below reports can be found.

<http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/HM%20Towards%20zero%20discharge%202011-2015%20summary%20report.pdf>

http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/HM%20Towards%20zero%20discharge_2016_2017.pdf

2018 progress report (which covers 2017) will be published in Q2.

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

H&M group MRSL contains a detailed list with CAS numbers and include short chain PFCs. Link:

<http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/HM%20Chemical%20Restrictions%20Manufacturing%20Restricted%20Substances%20List%202018.pdf>

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Other dyes, Disperse (Sensitizing) dyes, Navy Blue Colorant, Aniline, Glycols, Arsenic (As), Beryllium and Beryllium oxide, Cobalt and Cobalt compounds, Nickel and Nickel compounds, Antimony and Antimony compounds, Polycyclic Aromatic hydrocarbons (PAHs), Polyvinylchloride (PVC) and similar chlorinated polymers, e.g. Polyvinylidenechloride and Polychloroprene (neoprene), N-nitroso compounds, Petroleum distillate (classified as CMR), Biocide (Metam sodium, Safrole (5-allyl-1,3-benzodioxole], Cycloheximide), Solvent based Glues (Organic solvent based systems shall be exchanged to water based system), Solvent based Polyurethane,

PU (Shall be exchanged to water based systems in cases where it is technically possible).

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Individual test reports is published on IPE and a Discharge Summary data report on the findings and actions, is published annually and can be found at our own website: <http://sustainability.hm.com/en/sustainability/commitments/use-natural-resources-responsibly/chemicals.html>

<http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/Discharge%20data%202016.pdf>

http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/HM%20Discharge%20Data%20Report_2017.pdf

2016 version covers discharge result analysis 2015.

2017 version covers discharge result analysis 2016.

2018 version covers 2017. To be published Q2.

In 2016, 67 production units uploaded the discharge data in IPE platform.

In 2017, 124 production units uploaded the discharge data in IPE platform.

H&M requires minimum 1 waste water testing each year in accordance with ZDHC waste water guideline.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

The aim is to have our suppliers 'wastewater testing data on the ZDHC Gateway. Data integration between IPE and ZDHC Gateway will be available end of June 2018. We agree that all published data should connect the supplier and the brand.

1.3. Suppliers implementation: *Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.*

The environmental emission evaluator (E cube/BVE3) is a measurement and monitoring tool from Bureau Veritas that was launched in 2016. It helps suppliers assess their performance and proactively improve their chemical usage and discharge performance. In 2016, we started a pilot project at 29 suppliers in China, Bangladesh, Indonesia, India, Pakistan and Turkey to test the online version of this tool. In 2017, we scaled up to 49 business partners to use environmental emission evaluator (E cube/BVE3) for chemical usage and discharge performance.

In 2017, all H&M supplier units were trained on BCMP Guideline (Best Chemical Management Practices).

For factories that have wet processing or high use of chemicals we targeted higher level training for Hazardous Substance Control, HSC (Indonesia, Ethiopia, Turkey, Cambodia, Vietnam – China was covered in 2016).

HSC Workshop is designed to train personnel and professionals to attain an appropriate level of expertise in chemical management. The HSC Workshop is specially designed to solve the technical gap and a practical methodology Chemical Flow Management (CFM) will be introduced in the workshop.

There are two video clips of this HSC workshop:

1. SGS Hazardous Substance Control (HSC) Workshop Introduction

<https://www.youtube.com/watch?v=FKobEQk8Wdw&feature=youtu.be>

2. Hazardous Substance Control (HSC) Workshop Participants' Interviews

<https://youtu.be/juJVslQux7U>

2018: H&M has extensive internal trainer program on environmental topics, taking place on Week 16 and 17 (April). The training modules are Chemicals, Cleaner production, Energy and Water, and a train the trainer session. We are collaborating with external training company ISC.

The H&M environmental trainers will cascade the training to all our suppliers supporting them on chemical management, and ensuring they are using BCMP tools with a follow up visit.

We follow up the impact of training through HIGG Index Chemical questions.

On Q2 we will focus on training and implementation on H&M Positive List. This means in practice that our Quality and Sustainability teams can support units in utilizing positive listed chemicals, application based training, best practices, and Chemical purchasing policy update. (Chemical purchasing policy is Minimum requirement of H&M)

H&M Group Positive List contains all chemical products which conform to the latest H&M Chemical Restrictions (MRSL and RSL). This Positive List is a part of our efforts in securing Zero Discharge of Hazardous Chemicals by 2020. An updated

version of the positive list will be uploaded to our Supplier Portal and our public website at the end each month. Since our knowledge changes with the progress of scientific research, this Positive List will also change to reflect the most current state.

<http://sustainability.hm.com/en/sustainability/commitments/use-natural-resources-responsibly/chemicals.html>

<http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/2017%20Sustainability%20report/HM%20Group%20Positive%20List-March%202018-for%20the%20website.pdf>

1.4 Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

The lack of transparency in the chemical industry, of chemical formulations is a challenge. A challenge is also non-intentionally added substances, impurities. The level of impurities in chemical formulations could vary and therefore a challenge to control, depending on the quality of raw materials and the chemical manufacturer and chemical supplier. The problem on the consistency of the chemical product quality makes it very challenging to achieve the same level of clean production throughout the supply chain.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

From January 2013, the H&M Group put a global ban on Perfluorinated Compounds (PFCs). We can conclude that the PFCs are not intentionally added in our line of production. The H&M group also have a positive list of approved alternatives to PFCs. It is rare that PFCs are detected in the waste water, and in that case, found in trace amounts. In the very few cases, where PFCs have been found in the final product, the root cause is cross contamination, from other production lines.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We can conclude that APs/APEs are not intentionally added in our line of production. The H&M group has a Positive List with chemicals that are free of APs/APEs, see also response under 1.3. A challenge is that factories produce for different brands and not all brands have the same requirements as the H&M group, and in some cases, a challenge to achieve clean factory results, meaning it is

detected in the waste water. In the very few cases, where APs/APEs have been found in the final product, the root cause is cross contamination.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

We are working on sourcing better PU (water based) and working on elimination of DMF from our supply chain. We are also focusing on endocrine disruptors such as Bisphenols to be eliminated from our products. One example where we have succeeded is the phase out of Bisphenol A from thermal papers (receipts), substituting with phenol free alternatives.

We are also working on substituting chromium in the leather tanning process.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

May 2017 Case Study phase out of Perfluorinated Compounds (PFCs)

<https://www.subsport.eu/case-stories/429-en>

http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/Policies/HM_Case%20Study%20Phase%20Out%20PFC.pdf

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

The supplier list includes first tier manufacturing supplier factories that account for about 98.5% of all commercial pieces produced for the H&M group. Additionally, it includes all processing factories, which can be subcontracted by our first-tier manufacturing supplier factories for specific tasks. In 2015, we expanded the scope of the list further and now communicate the names and locations of the most important mills that provide our suppliers with fabrics and yarns. These are fabric and yarn mills making about 60% of the pieces produced for the H&M group. Our aim is to update the list every three months.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

See response under 3.1. In addition, we are working on a list, disclosing the names and locations of factories that supply our brand with viscose staple fibre and viscose filament yarn.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Available at <http://sustainability.hm.com/en/sustainability/downloads-resources/resources/supplier-list.html>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

N/A

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

The sector as a whole is moving in the right direction. The Detox Campaign directly resulted in the creation of the ZDHC group which in turn has resulted in many collaborations between the active brands and collaborations with the chemical industry. As an example, H&M is in close collaboration and dialogue with other ZDHC group member brands on positive list methodology, for example the Screened Chemistry approach which we are working together and share with Levi's and C&A.

Collaborations is the key to achieve clean factories and to find better alternatives to those hazardous chemicals that we want to phase out.

ZDHC chemical management framework is established and there is a holistic system of tools, standards, guidance for practical and effective implementation.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Overview on sustainability report:

https://sustainability.hm.com/content/dam/hm/about/documents/en/CSR/2017%20Sustainability%20report/HM_group_SustainabilityReport_2017_Highlights_en.pdf

Full report:

https://sustainability.hm.com/content/dam/hm/about/documents/en/CSR/2017%20Sustainability%20report/HM_group_SustainabilityReport_2017_FullReport_en.pdf

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Collaboration is the key for maintaining the Detox momentum and the key for implementation in the industry. It is the responsibility of the industry to put the MRSL into the procurement process and collaborate for successful implementation to achieve clean factories.

Inconsistency of the chemical product quality makes it very challenging to achieve the same level of clean production throughout the supply chain, see also response under 1.4.

It is important also to look beyond 2020. This year H&M have set a new chemical vision and long-term roadmap for our chemicals management, link:

http://sustainability.hm.com/content/dam/hm/about/documents/masterlanguage/CSR/2017%20Sustainability%20report/Chemical%20Roadmap_180410_FINAL.pdf

In the roadmap, we have identified important focus areas which we also believe is the key to achievements, also beyond 2020; transparency, traceability, policy engagement, best available chemistries, zero discharge, circular and collaboration.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

The industry need to push for stronger legislation, both on a local and global level. Many suppliers today are not aware of all legal requirements and the interaction between local governments and suppliers are in many cases lacking. There is a need for more engagement with regulatory bodies to drive changes with a common voice between brands and with a clear message. Organizations such as NGOs should take the lead to push it towards the governments.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

H&M, backed the European Commission proposal to restrict 286 carcinogenic, mutagenic and reprotoxic (CMR) substances in textiles.

<https://chemicalwatch.com/49692/hm-backs-restriction-of-cmrs-in-textiles>

We will during this year publish below quote together with ChemSec with the aim of pushing for stricter legislation of recycled materials and chemicals.

“At H&M group, we have set high ambitions for our business to become fully circular and renewable. Our goal is to use 100% recycled or sustainable sourced materials by 2030. In addition to our intensive work in this area, we call on the EU Commission to be ambitious in the implementation of Circular Economy and make sure the same requirements apply for virgin and recycled material, as a true circular economy will require the elimination of hazardous chemicals at the beginning of the process”.

During 2017, we were actively engaged in the EU public consultation in relation to the REACH REFIT Evaluation. The objective of the public consultation is to collect stakeholder views on strengths and weaknesses of REACH as well as any potentially missing elements. See our response below.

“REACH points in the direction of which substances to put focus on, regards to substitution but do not address groups of substances. As we apply the precautionary principle in our work and actively seek to substitute hazardous substances with better alternatives, focus has shifted towards the SIN-list and the SINilarity tool to avoid regrettable substitution, and to be sure we are focusing on the most hazardous chemicals. From our perspective, we would like to stress the importance of addressing group of substances for the identification of SVHCs to the candidate list, rather than individual substances. This approach would be in line with our proactive approach in the substitution process and a step closer to avoiding regrettable substitution. A true circular economy will require elimination of hazardous chemicals at the beginning of the product development process. The recycled materials must fulfil the requirements of REACH and to be able to do so they need to be free from hazardous materials. Traceability of those materials is essential. To be able to trace back materials from its origin, to make sure no hazardous chemicals has been used, REACH needs to evolve to include mandatory requirements of chemical traceability for all products produced and imported to EU.

H&M puts a lot of focus in controlling the chemical input in the manufacturing process. We are committed to eliminate the use, and hence achieve zero discharge, of hazardous chemicals in any production procedure by 2020. The phased-out chemicals need to be substituted with safer alternatives. The work in finding and assessing safer alternatives is dependent on the amount and quality of data we can retrieve from suppliers and the public domain, e.g. data in registration dossiers. The lack of information on the chemical composition of articles, produced outside EU is an obstacle as well as lack of toxicological data. Bad quality REACH registration dossiers make it very difficult to assess a chemical for its hazardous

properties and to know with certainty that we have succeeded to phase out the worst chemicals. As H&M have adopted the precautionary principle, that means we must be proactive. The most cost-effective and the only adequate control measure should be substitution – not to continue to use hazardous chemicals. Regulating chemicals based on the hazard they pose is preferable and should not be allowed for use even if they are adequately controlled”.

H&M, together with IKEA, Skanska, Kingfisher, The Swedish Construction Federation and COOP Denmark sent a joint letter to the EU Commission, calling for the EDC criteria to be put in place.

<http://chemsec.org/wp-content/uploads/2016/06/Company-letter-to-the-Commission-2016-06.pdf>

Inditex

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.wateractionplan.com/en/detox>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

YES

Please check

<https://www.wateractionplan.com/documents/177327/558146/Inditex+Manufacturing+Restricted+Substance+List+%28MRSL%29.xlsx/b6bf2f50-375b-f0b6-ac70-28e2812aab98>

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Inditex has added the following chemical groups beyond the 11 to the MRSL:

12. Disperse Dyes
13. Asbestos
14. Isocyanates
15. Glycols and Glycol Ethers
16. Petroleum distillates
17. Dialkyl (C12-C18) dimethyl ammonium chloride series

Additionally, as a Transitional Exception List, Inditex includes two chemicals:

1. Formaldehyde
2. Dimethylformamide

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide a list of the dates that you published data since 2016,

- May 2015
- May 2016
- May 2017
- May 2018
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- Own website: <https://www.wateractionplan.com/en/detox>
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- May 2015 reports covering Inditex's main suppliers
- May 2016 report covers 38% of the supply chain by volume
- May 2017 report covers 54% of the supply chain by volume
- May 2018 report covers 60% of the supply chain by volume
- *links to status reports on the findings and actions taken as a result*
- Own website: <https://www.wateractionplan.com/en/detox>
- *planned publication in 2018 onwards*
- Next publication will be in May 2019

The frequency of waste water data reporting is yearly, Inditex is disclosing aggregate data through our website www.wateractionplan.com and the report is compiled by an independent third party, University of La Coruña. The 2018 report covers 60% of the volume of purchases by Inditex, with a projected yearly increase of coverage of 20% until 2020.

MRS� parameters are tested on water samples taken before being submitted to the ETP and the visits by the inspectors are unannounced. The aggregate results of the wastewater tests are divided into 3 specified categories: non-detected parameters, low-detected parameters and statistically relevant "considered" parameters.

May 2017 reports shows 102 compounds as non-detected parameters, 23 as low-detected parameters and 10 as statistically relevant “considered” parameters. Four groups have appeared as directly related with textile industrial activity as they are the 4 main detected groups: phthalates, chlorobenzenes, heavy metals and APEOs.

Additionally, it is worth mentioning that, based on the data analysis even though heavy metals are included in emerging pollutants analysis, they are considered as a common pollutant related to the textile industry and its reduction should combine source control together with effluent treatment of facilities water discharge.

A new report of wastewater data has been disclosed in May 2018 once Inditex finished the Q1 sampling campaign on the 30th April.

This analysis shows a very positive progress as the detection ratios are decreasing before treatment in all the 11 groups for 2018:

Parameter	2012			2013			2014			2015			2016			2017			2018		
	An.	Det.	%Det.	An.	Det.	%Det.	An.	Det.	%Det.	An.	Det.	%Det.	An.	Det.	%Det.	An.	Det.	%Det.	An.	Det.	%Det.
Heavy metals	420	280	61.9%	1591	790	49.7%	858	421	49.1%	3372	1631	48.4%	4901	2346	47.9%	2576	1221	45.6%	4600	1871	40.7%
Phthalate esters	630	84	13.3%	1890	162	8.6%	1020	66	6.5%	3888	103	2.6%	5563	41	0.7%	3119	66	2.1%	5306	38	0.7%
Brominated and chlorinated flame retardants	369	1	0.3%	1116	0	0.0%	603	0	0.0%	0	0	0.0%	219	0	0.0%	982	0	0.0%	3008	4	0.1%
Azo dyes	1050	6	0.6%	3100	18	0.6%	1675	13	0.8%	0	0	0.0%	622	8	1.3%	4461	82	1.8%	8833	115	1.3%
Organotin compounds	295	2	0.7%	959	0	0.0%	536	0	0.0%	0	0	0.0%	985	1	0.1%	1640	1	0.1%	2804	3	0.1%
Chlorobenzenes	420	25	6.0%	1270	41	3.2%	680	37	5.4%	2589	116	4.5%	3707	132	3.6%	2078	86	4.1%	3541	51	1.4%
Organic solvents	504	0	0.0%	1488	4	0.3%	680	7	1.0%	0	0	0.0%	297	7	2.4%	2122	63	3.0%	4233	70	1.7%
Chlorophenols	188	5	2.7%	1406	9	0.6%	933	10	1.1%	0	0	0.0%	350	2	0.6%	2436	23	0.9%	4924	18	0.4%
Short Chain Chlorinated Paraffins	42	42	100.0%	129	39	30.2%	68	18	26.5%	259	6	2.3%	369	2	0.5%	206	6	2.9%	354	13	3.7%
Alkylphenols (Aps) and Alkylphenol ethoxylates (APEOs)	168	27	16.1%	520	78	15.0%	267	36	13.5%	1036	176	17.0%	1481	148	9.9%	830	58	7.0%	1414	82	5.8%
Perfluorinated Chemicals	66	0	0.0%	618	9	1.5%	2124	6	0.3%	0	0	0.0%	772	1	0.1%	3512	23	0.7%	10784	55	0.5%

The ZDHC wastewater guidelines and Inditex MRSLL, includes more chemical groups than the initial 11 groups, this has been included in the last testing campaign and University of La Coruña will include in the analysis once enough data is gathered.

1.2a Are you considering disclosing your suppliers’ wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes, Inditex is now disclosing the wastewater testing data on a public and a recognized platform, ZDHC Gateway, more than 477 are now in the process to being uploaded (wastewater test is ready to be disclosed and the wet process mills are filling all the information to create the account) and more will come during 2018. The ZDHC Gateway is working since the beginning of 2018 and it is still under construction to allow the fully transparent public disclosure, Inditex agrees that all published data should connect the supplier and the brand.

As an example of this connection between brand and the supplier, and as part our commitment to the right to know principle, Inditex has joined in 2017 the Green Supply Chain Map supported by IPE and NRDC. The green supply chain map is the first interactive platform dedicated to showcasing leading brands’ commitment to supply chain transparency and environmental management. The map also serves as a tool to supervise and promote suppliers environmental compliance. The map is the first tool to openly link leading brands’ disclosed supplier list to publicly-

available data concerning supplier environmental performance, including real-time data for air emissions and wastewater discharge.

Users of the map can filter by brand to view individual companies' supply chains or can also filter to see the types of data the facility discloses: 1) real-time emissions data, including compliance status; 2) feedback about environmental supervision records; and 3) annual emissions and resource usage data. Inditex is updating quarterly the wet supply chain list and sending to IPE for the disclosure. Full disclosure of the Chinese wet process mill location and its connection with Inditex can be checked in: <http://www.ipe.org.cn/MapBrand/Brand.aspx?q=6>

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Implementation and enforcement of our Zero Discharge Hazardous Chemicals Commitment throughout the entire supply chain is based on both: first, our self-imposed policies (RSL for product and MRSL for manufacturing) and, second, our procedures to guarantee the compliance of the aforementioned policies. To do so Inditex Group has set up a specific division with a stable team of experienced professionals in charge of:

Communication and transparency: In keeping with our commitment to transparency and credibility, Inditex discloses, first, its policies, programs and all relevant information to guarantee their proper enforcement and, second, their level of compliance and implementation.

Supply Chain Commitment: Inditex requests a formal commitment to comply with its Policies (RSL and MRSL) and to implement its Manufacturing Programs (Ready To Manufacture, Green To Wear)

Information and Training: Inditex actively disseminates all relevant information about the MRSL and RSL, the substances listed in it and the hazards posed by them throughout the entire supply chain. Inditex teams inform and train the management and workers of the processing units on how to interpret the MRSL / RSL and how to implement our manufacturing programs (Ready To Manufacture and Green To Wear). These training sessions take place locally on a regular basis, in all of Inditex manufacturing clusters. In 2017 experts in the field of chemical management of the Inditex Sustainability Team carried out training activities and technical assistance and advice in the main manufacturing clusters of the group: Portugal, Morocco, Turkey, China, Bangladesh, India and Pakistan.

Additionally, during the last year Inditex performed several in-person trainings with our suppliers in India, Bangladesh, China and Turkey. In the coming weeks Inditex expects to develop another training with our Portuguese and Spanish suppliers. This kind of training is focused on the next steps that are needed towards the zero discharge goal (better environmental performances, best practices, transparency

regarding the wastewater results, etc). The target audience was the environmental responsible managers of direct suppliers and their corresponding wet processing mills and the main outcome is to raise awareness of the importance of transparency with the industry but also with the communities around and explaining the right to know principle and the wastewater sample disclosure.

Control Program Implementation: Inditex verifies the compliance of its RSL and MRSL through building analytical and testing strength (Picking Program) In cooperation with SGS, TÜV SÜD, Bureau Veritas, UL, Intertek and other reputable international analytical service providers, Inditex has built up a network of more than 50 laboratories in 3 continents to check our articles, the substances used in their manufacturing, as well as the samples of the effluents taken from our supply chain.

Additionally, all non-compliances are studied and fully investigated through our Root Cause Analysis Program (RCA). This program provides the blueprint for the investigation of non-compliances with the RSL detected in the final articles. The investigation tools used to establish the root causes of the non-compliances include auditing all the processing units involved in the manufacture of the non-compliant articles, especially their chemical inventories

Chemical Management Programs Implementation: Inditex verifies the proper implementation of its manufacturing code through building technical audit strength. In cooperation with the company STS (Sustainable Textile Solutions), Inditex has set up audit teams in charge of the technical evaluation of the wet processing units used by our suppliers. These teams are charged with the responsibility of finding the specific root cause of any non-compliance detected with our RSL and MRSL In this sense, The List by Inditex has a relevant role as the main instrument in a reference chemical product procurement.

Every wet processes mill we work with at Inditex is evaluated through the indicators of the Green to Wear questionnaire and are, each assigned a grade. According to the result obtained in the questionnaire, companies are classified according to their environmental performance. Each Green to Wear classification is linked to a series of measures for continuous improvement that must be implemented by the mill, allowing the sector to advance towards a supply chain that is increasingly respectful of the environment:

[https://www.wateractionplan.com/en/green-to-wear- classification](https://www.wateractionplan.com/en/green-to-wear-classification)

Under the Green to Wear audit, Inditex performs unannounced sampling of the waste water discharge always before treatment, this creates a safety net to check on compliance with the MRSL and to monitor progress in phasing out uses of hazardous substances.

<https://www.wateractionplan.com/documents/177327/558146/Sustainable+and+responsible+manufacturing.+Inditex+perspective.pdf/ebe974da-clca-9416-ef00-aaade4a3fb03>

All information related to the aforementioned programs will be updated in our DETOX webpage in 2018

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Progress in advancing towards achieving the goals of the Detox program in Inditex supply chain has been good to date.

Inditex believes that a collective action approach should be found to convert both: The List by Inditex and Ready To Manufacture, into a reference recognized sectorial standard that will speed up the chemical and textile industry engagement. For this reason, key associations and retailers were already identified/contacted at the different Inditex production clusters in order to share with them the benefits of our programs and to discuss about its implementation

The declared supply chain which depends to a fair extent on Inditex business (Inditex orders are a relevant percentage of their total orders) is cooperating fully with all the instruments of the program. As a good deal of our suppliers are shared with other Detox-committed brands, the synergies between the messages received by the wet processing units from the different brands are creating a positive effect on their attitude towards compliance with Detox.

The remaining challenges are mostly related to dealing with suppliers in which orders are placed for the first time (and have not worked before with Detox committed brands and /or Inditex orders are meaningless), and for suppliers in countries in which the textile manufacturing sector is still in its early developing stages. For these cases additional bespoke information, formative and compliance-checking programs will have to be developed, as the awareness of these suppliers is underdeveloped with respect to the more experienced suppliers

Additionally, we still need to reach more chemical suppliers to increase the scope of commercial products classified by The List, by Inditex, thus reducing the risk of suppliers using non-classified products. So far, we have reached around 85 percentage of chemical products in our manufacturing cluster and continue to reach more each year.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

As it was stated in the PFCs progress report disclosed in May 2016, Inditex has phased out the C4, C6 & C8 at the end of 2014.

<https://www.wateractionplan.com/documents/177327/558146/PFCs+progress+report.pdf/9da1a51b-0cbf-3718-b48b-987d95580214>

Inditex has been implementing alternatives to the use of PFCs, mostly for water repellency, and some of the PFC-free alternative products for water-repellency are displayed in the current edition of The List by Inditex:

<https://www.inditex.com/documents/10279/301525/The+List+by+Inditex.+III+Edition.pdf>

As a company response to the common challenge at manufacturing level, a PFC Alternatives Manufacturing Guideline – a pioneering effort in this area – has been developed to assist and support our supply chain in PFC substitution. Its first edition will be published in 2018.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

In the pre-data that University of La Coruña is showing from the wastewater test report that was published on May 2018, APEOs global detection level is going down to 5.8% from the first reported figure of 16.1% in May 2012). Eliminating these substances from the supply chain is complex because even if APEO is banned in MRSL, APEOs can unintentionally be present in any chemical product used in a wet process mill, so this helps to show the progress of Inditex programs to reduce unintentionally contaminations.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Yes. Inditex has a procedure to define and report case study substitutions along its screening methodology of substances for their inclusion in the MRSL

Inditex firmly believes that the RSL (Restricted Substances List in the articles) and the MRSL (Restricted Substances List in the Manufacturing processes) are powerful instruments to bring about a positive change in the textile and footwear manufacturing chain. In this sense, these lists are a common and shared tool for Inditex and the different units of its supply chain to work together to improve sustainability in manufacturing. In this respect, it is important to point out that the MRSL itself is divided into three sections:

- Banned Substances:
- Innovation Substances.
- Transitional Exceptions Substances.

A detailed evaluation of the alternatives for the phasing out of the candidate substances from the textile and footwear manufacturing industry is a self-imposed stage in our “Screening Methodology of substances for their inclusion in the MRSL”. According to the hazard level of each substance and the existence, or lack thereof, of alternative substances or processes for their substitution, the candidate substances may be:

- o Included in the MRSL as “Banned Substances”. The use of these substances for the manufacturing of articles for Inditex will be subjected immediately to the bans/restrictions established in the MRSL. An innovative substitution is not needed for all of them and The List by Inditex will drive the substitution: Case Studies Formaldehyde based Decroline and Phthalates are a good example and Case Study Arylamines in Black 5 dyestuff is an innovative example
- o Included in the “Innovation List” section of the MRSL. This section contains the list of substances which fulfill the criteria for inclusion in the MRSL and for which there are no known safer alternatives for their use, but the development of alternatives for their use are likely to be successful in a reasonable timespan (less than 28 months). The use of the substances included in this section is allowed, within the restrictions specified in the MRSL. Inditex will impose a substitution of these substances within a period as short as possible (to incentivize investment in alternatives) in no more than 28 months since their inclusion in this section of the MRSL.
- o Included in a “Transitional Exception List” section of the MRSL. This section contains the list of substances which fulfill the criteria for inclusion in the MRSL and there are no known safer alternatives for its use, but the development of alternatives for their use for specific, narrowly defined applications, requires additional research and development incentives to set a phase-out timeline aiming for no longer than 28 months and adopted on a case by case basis, depending on annual revisions of possible alternatives and functional needs assessments. The inclusion of a substance in a “Transitional Exception List” is restricted for its use in certain specific, narrowly defined applications.

The use of the substances included in this section is allowed, within the restrictions specified in the MRSL. Inditex will impose a substitution of these substances within a period as short as possible (to incentivize investment in alternatives).

Substances in the transition list, Dimethylformamide and Formaldehyde, are a good examples of case studies. To be published in the second half of 2018.

Inditex is looking for alternatives to the polyurethane plastics and materials containing dimethylformamide (CAS number 68-12-2). DMF – free Technologies such as Water – based PU, have been tested in real products that are being commercialized at the moment. The quality, durability and finishing of these alternatives still do not reach Inditex requirements and we still need to find the correct solution for the elimination of dimethylformamide from our value chain.

Nevertheless, the use of dimethylformamide in wet processing units out of the PU production is forbidden.

For more details please check the Inditex Progress Report on the DETOX commitment for 2020. April 2018, reference to Phase out and substitution chapter: <https://www.wateractionplan.com/documents/177327/558146/Inditex+Progress+Report+on+the+DETOX+Commitment+for+2020.+June+2018.pdf/1efb0cd7-2c76-04bc-f123-78d6fdd67c65>

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Substitutions:

PFC Substitution – First Version Published in May 2016:

<https://www.wateractionplan.com/documents/177327/558146/Studies+toward+the+substitution+of+perfluorocarbons.pdf/000b7e82-e644-5b2a-135b-491df9147799>

Phthalates Substitution – Phthalates based printing pastes: First edition published in 2013 in subsport (<https://www.subsport.eu/case-stories/377-en>) and updated in our DETOX webpage in 2018:

<https://www.wateractionplan.com/documents/177327/558146/STUDIES+TOWARDS+THE+SUBSTITUTION+OF+ORTHO-PHTHALATES+IN+PLASTISOLS.pdf>

Arylamines Substitution – Dyestuffs containing banned arylamines as impurities are one of the main sources of these substances in the textile effluents. Reactive dyes of the vinylsulfone type, mainly used to dye cotton and wool fabrics, are particularly affected by this problem, as they are notoriously difficult to prepare completely free of p-chloroaniline. The dye Reactive Black 5 stands out among these dyes, as it is used to dye cotton items in black and navy colours. Its substitution case was updated in our DETOX webpage in 2018:

<https://www.wateractionplan.com/documents/177327/558146/STUDIES+TOWARDS+THE+ELIMINATION+OF+ARYLAMINES.pdf/39411814-e434-6232-6603-7c6d3fc1ca11>

In the same way, the corresponding substitution study about arylamines from diarylide based pigments was also uploaded in our DETOX webpage in 2018:

<https://www.wateractionplan.com/documents/177327/558146/STUDIES+TOWARDS+THE+ELIMINATION+OF+DIARYLIDE.pdf/716efc81-c74d-dce0-1a36-0640aa5e2a13>

Formaldehyde Substitution – Formaldehyde based Decroline Products: First edition published in 2013 in subsport platform (<https://www.subsport.eu/case-stories/376-en>) and updated in our DETOX webpage in 2018:

<https://www.wateractionplan.com/documents/177327/558146/STUDIES+TOWARDS+THE+SUBSTITUTION+OF+DECROLINE.pdf/a193a521-6189-13dc-6afc-602c2e474b90>

Dimethylformamide Substitution – Dimethylformamide based PU Products First edition to be published in the second half of 2018 in our DETOX webpage.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Inditex started to disclose the wet process suppliers in 2016 with a plan of a yearly update in July each year. The latest edition was in July 2017 and includes detailed names and locations. The programs explained above covered around 60% of the supply chain by volume and it is planned that this percentage increases 20% by year to reach 100% in 2020.

https://www.wateractionplan.com/documents/177327/558146/Wet+Processing+Units+List.pdf/2_26178af-2bed-4fef-4dcd-ff058770a932

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Yes, Inditex publishes its global direct and indirect suppliers list of wet processing (dyeing, washing, tanning and printing) declared by its suppliers including detailed names and locations:

The wet processing direct suppliers list names of those suppliers with whom we hold a direct sourcing relationship.

The wet processing indirect suppliers list includes mills that have been contracted by our direct suppliers. Indirect suppliers normally perform manufacturing operations that the main suppliers are not capable of doing in their own facilities: such as the wet processes like dyeing, tanning, printing and washing. The accuracy of our indirect suppliers list is heavily dependent on the disclosure provided to us by our direct suppliers, who have the direct business relationship with these wet processes mills. The direct and indirect wet processing suppliers list always describes the current status of our active business relationships and controlled with our standards at the date mentioned. This list of 524 mills will increase with time and, like any large database fed by several business entities, there will be a margin of error but every year the list gets closer to reflecting the full picture.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Through a detailed document made available at:

https://www.wateractionplan.com/documents/177327/558146/Wet+Processing+Units+List.pdf/2_26178af-2bed-4fef-4dcd-ff058770a932 Also available through www.inditex.com

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Not applicable

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Inditex has witnessed greater awareness in the textile sector since the DETOX campaign started, especially manufacturers that were not used to having health and safety standards in place are beginning to realize the importance of the correct management of chemicals. This must be a joint effort. International retailers like Inditex, since the DETOX campaign started in 2011, have been more focused in a manufacturing approach – preventive perspective – where Manufacturing Restricted Substances Lists and Manufacturing Codes drive the textile sector towards improving both manufacturing processes and products in terms of environmental impact.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

These are areas in which positive impacts of the Clean Factory Approach that Inditex is pursuing are being felt. Other environmental impacts such as water consumption, wastewater treatment, energy efficiency, waste management and raw material selection, plus the chemical management are considered key indicators of the performance of the suppliers. Also based on the knowledge acquired, Inditex has created the Join Life standard to promote the Best Available Technologies and Best Raw materials in the textile industry. For more information please check the standard in:

<https://www.wateractionplan.com/en/join-life>

<https://www.wateractionplan.com/en/green-to-wear-raw-materials>

<https://www.wateractionplan.com/en/green-to-wear-best-technologies>

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

To successfully address Zero Discharge of Hazardous Substance pledge for 2020 it is of paramount importance to recognize and accept that both: a systemic change and collective actions of the industry are needed. To do so an *ad hoc* internationally recognized non-profit structure with a profound scientific, technical and business knowledge of the textile manufacturing industry should undertake the leadership to engage all stakeholders (international retailers, its textile industry through its related manufacturer associations, its chemical industry through its related associations, all relevant scientific and technical institutions and, lastly, government from manufacturing countries) in the zero discharge of hazardous substances commitment.

Inditex firmly believes that the scientific and technical foundations to achieve the goal of the Detox campaign are already in place. First of all, we are adequately progressing in the compilation of a comprehensive, toxicity-annotated database of substances used in the manufacturing of textile and leather articles, which should allow us to place the process of selecting the substances to be included in the MRSL on a very firm, science-based footing. Secondly, and even more importantly, we have been able to identify the origins of most, if not all, of the detected non-compliances with our MRSL. Thirdly, we have devised programs in two areas (The List, by Inditex, with the chemical industry, and Ready to Manufacture, with the manufacturing units) which have already proven to be successful in diminishing the use of non-MRSL compliance substances in textile and leather wet processing units and their manufactured articles. This approach should be shaped, complemented, improved and/or bettered by the experiences and programs developed by other brands, but sharing experiences among different brands, developing cooperation projects or generating combined leverage of the brands towards the chemical industry and the manufacturing chain has proven to be extremely difficult to realize. This is, in our opinion, the critical piece that is still missing in achieving the Detox objectives.

During the DETOX implementation we have come to realize that the fragmentation of the apparel fashion market, in which the largest brand has less than a 4% market share, makes it very difficult for any brand alone to have enough leverage to effectively pressure both the chemical industry and the manufacturing industry to move faster towards the Detox objectives. So we have started talks with other

brands and industry players – manufacturer organization mainly - in order to share experiences and programs and to work towards creating a joint leverage with enough critical mass to create rapid change in the industry

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

An international regulatory framework on this issue would greatly help in policing and enforcing the commitments of all industry players to the Detox goals. It would also bring clarity and unification to the processes of creating and updating MRSLs.

With regards to rewarding the investment made by Detox-committed companies, this could be dealt through the normal public policy instruments used to promote research and development, whether they are focused on basic science (universities and research institutes), applied science and technology (technological centers and private companies) or sector-wide initiatives (trade associations, etc). Any further reward would be seen as a subsidy for complying with the law, which would have the wrong aim.

As a voluntary structure, IPE (Green Map tool and violation record section) is helping different brands to push the environmental performance's improvements in China. Also clearly the ZDHC Foundation is a structure that needs to be maintained to keep the momentum and secure the implementation of only the best practices within the industry.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Inditex usually does not take part in any specific environmental policy advocacy but it is necessary to clarify that in specific cases we have advocated for some positive changes in the remuneration policy in Countries as Cambodia and Bangladesh.

Levi's

Q0: Detox page

Please provide here the main link to access your Detox information.

<http://www.levistrauss.com/sustainability/planet/#chemicals>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

As of January 1, 2016, Levi Strauss & Co. stopped producing products with any perfluorinated compounds (PFCs) – chemicals that have unique properties to make materials waterproof and stain resistant. Previously, we had eliminated the use of long-chain PFCs (C8) in our products, but as of the end of 2015, we have in place a prohibition on the use of all PFCs in the manufacture of our products.

All PFCs, including FTOH and FTA CAS numbers, are listed on the Levi Strauss & Co. RSL. We are working with ZDHC to also include them on the next version of the ZDHC MRSL.

The list of CAS numbers is:

Ionic (including the salts)

Perfluorobutanesulfonic acid (PFBS) 375-73-5 or 29420-49-3

Perfluorohexanesulfonic acid (PFHxS) 355-46-4 or 3871-99-6

Perfluoro-1-heptanesulfonic acid (PFHpS) 375-92-8 or 60270-55-5

Perfluorodecanesulfonic acid (PFDS) 335-77-3 or 126105-34-8 Perfluorooctane Sulfonamide (PFOSA) 754-91-6 Perfluorobutyric Acid (PFBA) 375-22-4

Perfluoropentanoic Acid (PFPA) 2706-90-3 Perfluoro-n-hexanoic acid (PFHxA) 307-24-4 Perfluoro-n-heptanoic acid (PFHpA) 375-85-9

Perfluoro-n-nonanoic acid (PFNA) 375-95-1 Perfluoro-n-decanoic acid (PFDA) 335-76-2

Perfluoroundecanoic acid (PFUnA) 2058-94-8 or 4234-23-5 Perfluorododecanoic acid (PFDoA) 307-55-1 Perfluorotridecanoic acid (PFTrA) 72629-94-8 Perfluorotetradecanoic acid (PFTeA) 376-06-7

Perfluoro-3,7-dimethyldecanoic acid (PF-3,7-DMOA) 172155-07-6 7H-Perfluoroheptanoic acid (HPFHpA) 1546-95-8

2H,2H-Perfluorodecanoic acid (H2PFDA) 27854-31-5 or 882489-14-7 2H,2H,3H,3H-Perfluoroundecanoic acid (H4PFUnA) 34598-33-9 Perfluorooctanesulphonic acid (H4PFOS 6-2) 27619-97-2

Volatile

1H,1H,2H,2HPerfluorooctylacrylate (FTA 6-2) 17527-29-6

1H,1H,2H,2HPerfluorodecylacrylate (FTA 8-2) 27905-45-9

1H,1H,2H,2HPerfluorododecylacrylate (FTA 10-2) 17741-60-5

2-Perfluorobutylethanol (FTOH 4-2) 2043-47-2

2-Perfluorohexylethanol (FTOH 6-2) 647-42-7

2-Perfluorooctylethanol (FTOH 8-2) 678-39-7

2-Perfluorodecylethanol (FTOH 10-2) 865-86-1

2-(N-methylperfluoro-1-octanesulfonamido)-ethanol (N-MeFOSE) 24448-09-7

2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (N-EtFOSE) 1691-99-2

N-Methylperfluoro-1-octanesulfonamide (N-MeFOSA) 31506-32-8

N-Ethylperfluoro-1-octanesulfonamide (N-EtFOSA) 4151-50-2

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Levi Strauss & Co. restricts the chemicals in the ZDHC MRSL, which currently lists 16 groups of substances:

1. Alkylphenol (AP) and Alkylphenol Ethoxylates (APEOs): including all isomers
2. Chlorobenzenes and Chlorotoluenes
3. Chlorophenols
4. Dyes – Azo (Forming Restricted Amines)
5. Dyes – Navy Blue Colourant
6. Dyes – Carcinogenic or Equivalent Concern

7. Dyes – Disperse (Sensitizing)
8. Flame Retardants
9. Glycols
10. Halogenated Solvents
11. Organotin Compounds
12. Polycyclic Aromatic Hydrocarbons (PAHs)
13. Perfluorinated and Polyfluorinated Chemicals (PFCs)
14. Phthalates – including all other esters of ortho-phthalic acid
15. Total Heavy Metals
16. Volatile Organic Compounds (VOC)

1.2. Wastewater discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Below is the regularity of Levi Strauss & Co. wastewater data reporting:

Levi Strauss & Co. published supplier wastewater data on the IPE Detox Platform on November 2017.

In 2013, Levi Strauss & Co. published supplier wastewater reporting data on our corporate website (levistrauss.com). However, in 2014, we moved to reporting on the IPE Detox Platform and have reported there ever since. In 2018, we will report on both the ZDHC Gateway and the IPE Detox Platform.

Levi Strauss & Co.'s wastewater reporting represents 80 percent of the wet processing in our supply chain.

We work individually with each factory on remediation plans to address noncompliance issues identified in wastewater testing results.

Starting in 2018, Levi Strauss & Co. will follow the ZDHC Wastewater Guidelines and publish wastewater data reports bi-annually in April and October each year.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Starting in 2018, Levi Strauss & Co. will follow the ZDHC Wastewater Guidelines and publish wastewater data reports bi-annually in April and October each year on the ZDHC Gateway and IPE Detox Platform.

Levi Strauss & Co. agrees that published data should connect the supplier and the brand. In the immediate term, Levi Strauss & Co. is working with the IPE Green Supply Chain Map to disclose our suppliers data linked to the company.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

In 2014, we launched the [Restricted Substances Stewardship Program](#) (RSSP), which seeks to eliminate priority substances from suppliers' production processes, including production for other brands. The RSSP is a chemical management plan to restrict priority substance use and discharge, and help ensure a safe and healthful workplace.

With the RSSP, Levi Strauss & Co. requires supplier factories to accord high priority to responsible chemical management. Our suppliers are required to work closely with chemical suppliers and analytical laboratories, so that sound management migrates up the supply chain and that we are able to validate the results of implementation. Transparency is an important tool in keeping all stakeholders accountable.

Since 2015, we have focused on implementing the program with suppliers and aligning the RSSP with the ZDHC MRSL. We also have focused on utilizing other tools and trainings developed within the ZDHC Roadmap. We believe in industry collaboration to bring scale and scope to our commitment to zero discharge of hazardous chemicals.

Levi Strauss & Co. has made it a business requirement for each supplier factory to have a dedicated technical representative for the chemical management at the facility. The technical representative must be empowered and have sufficient budget to improve the chemical management systems of the factory. We require the technical representatives to participate in our online tool for chemical management systems and MRSL trainings.

Additionally, Levi Strauss & Co. invites our suppliers to participate in the ZDHC training programs. We provide on-site trainings conducted by our chemical management experts.

The goal is that through our supplier technical representatives, suppliers should have technical support available at our times to address problems and ensure compliance. Levi Strauss & Co. checks on RSSP performance and status of compliance quarterly, but we are planning to apply monthly check-ins in 2018.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Challenges:

When suppliers work with multiple buyers committed to zero discharge of hazardous chemicals, it is easier to engage and influence suppliers to have strong chemical management systems and achieve the Detox objectives. However, when buyers are not committed to ZDHC nor focused on improving the chemical management of their suppliers, it is harder to get traction and see lasting improvement by suppliers.

When buyers apply different standards or approaches, there can be confusion in the supply chain, which slows down progress.

Work still remains in building chemical industry support for the apparel industry's efforts. It is critical to increase adoption of tools that can assess formulations and provide transparency of the chemical companies' products and their manufacturing process.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

As of January 1, 2016, Levi Strauss & Co. stopped producing products with any perfluorinated compounds (PFCs) – chemicals that have unique properties to make materials waterproof and stain resistant. Our PFC-free policy is significant, especially considering that there are currently no equally effective alternatives to PFCs. Previously, we had eliminated the use of long-chain PFCs (C8) in our products, but as of the end of 2015, we have in place a prohibition on the use of all PFCs in the manufacture of our products.

In addition, Levi Strauss & Co. has mapped the mills supplying fabric that are completely free of PFC applications with those mills that still continue PFC production for other brands. We have a preference to allocate volumes to completely PFC-free mills wherever it is possible. Currently, 85 percent of mills supplying for Levi Strauss & Co. are completely PFC-free.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Levi Strauss & Co. began focusing on phasing out APEOs in 2008 — long before our most recent commitment to extending a usage ban throughout our supply chain. Our 2008 RSL listed APEOs as a substance identified for phase out, requiring manufacturing suppliers to assess the scope of their usage within their own supply chains.

The elimination of APEOs across our supply chain is a key success metric for Levi Strauss & Co.'s individual action plan toward zero discharge of hazardous chemicals. Levi Strauss & Co. is sourcing from about 540 facilities in 26 countries globally, so this is a significant commitment and a challenge to ensure compliance and understanding by suppliers when the regulatory environment in all these countries does not align with our prohibition on APEO use.

We understand that there are multiple supply chain pathways for potential APEO contamination (including process, maintenance, on-site laboratory, sanitation, pest control and chemical wastewater treatment). We are committed to enhancing both training and auditing of our supply chain to ensure our suppliers have the latest information on APEOs, highlighting where there is a risk that APEOs may enter into the undocumented contamination of chemical supplier formulations. In [this report](#), we are sharing the baseline findings from Levi Strauss & Co.'s phase out of APEOs in our supply chain.

In 2015, at our request, 83 finishing suppliers and 20 textile mills supplying Levi Strauss & Co. contacted all of their chemical suppliers to remind them of the APEO phase out. We also reinforced the APEO ban with all our licensees and provided training to 59 suppliers globally.

In 2017, we tested wastewater discharge from suppliers representing 80 percent of our production volume. We are encouraging testing labs to improve their facilities and make investments to ensure they are capable of testing for APEO everywhere we have suppliers.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Phthalates

Levi Strauss & Co. included a restriction on the use of phthalates in its Restricted Substances List (RSL) back in 2000 and has had a usage ban in place since 2010, which is further addressed throughout our Manufacturing Restricted Substances List (MRSL). Our attention to phthalates and commitment to elimination in our products globally preceded our joining the ZDHC Roadmap and Greenpeace

Detox Solutions Commitment. However, through our collaboration in the ZDHC Roadmap, we have a better opportunity to expand and ensure implementation.

In 2015, 100 percent of Levi Strauss & Co. print suppliers (59 total) were determined to be free of phthalates usage at their facilities. We continue to remind our suppliers of our phthalates usage ban and work with them on systems for responsible chemicals management.

Reducing chemicals in denim finishing and eliminating potassium permanganate

In February 2018, we announced Project F.L.X. (future-led execution), a new operating model that digitizes denim finish design and development, and enables a responsive and sustainable supply chain. By replacing manual techniques and automating the jeans finishing process, we are able to eliminate thousands of chemical formulations from jeans finishing.

Project F.L.X. is a major step forward in Levi Strauss & Co.'s commitment to achieving [zero discharge of hazardous chemicals by 2020](#). It accelerates the elimination of many chemical formulations that the company's [Screened Chemistry](#) program identified as "phase outs." Project F.L.X. eliminates up to 90 percent of chemical formulations used in jeans finishing – from thousands of chemical formulations to a few dozen chemicals in the denim finishing process.

Through Project F.L.X., Levi Strauss & Co. will phase out of the use of potassium permanganate, a chemical oxidizer that is used to accentuate worn, faded design elements on denim to achieve authentic-looking finishes. We are no longer developing products with potassium permanganate spray, and our plan is to fully eliminate potassium permanganate from our supply chain.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Published on SubSport in May 2016, Levi Strauss & Co. PFC Substitution Case Study is available on our corporate website at http://www.levistrauss.com/wp-content/uploads/2016/05/160311_Case-Story_Levi-Strauss_May252016final1.pdf.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

In 2005, we were among the first apparel companies to release the names and locations of all our active, approved owned-and-operated, contract and licensee factories that manufacture and finish Levi's®, Dockers® and Signature by Levi Strauss™ products. This public list represents 100 percent of our Tier 1 suppliers and is updated on a quarterly basis.

Since we published our first disclosure, we have subsequently added information, including parent company of the factory (for direct sourcing factories), type of product, number of employees, and whether the factory has participated in initiatives such as our Worker Well Being program.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Currently, Levi Strauss & Co. discloses all Tier 1 active, approved owned-and-operated, contract and licensee factories, which include cut-and-sew manufacturing, as well as laundries and garment finishing across all brands and products. Laundries are considered wet processing suppliers; thus, we disclose all Tier 1 wet processing suppliers.

We consider fabric mills as Tier 2 suppliers. On May 1, 2018, In order to enhance supply chain transparency, Levi Strauss & Co. added fabric mills to our public list of suppliers. This represents Tier 2 wet processing suppliers.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

The supplier list, which is updated on a quarterly basis, is uploaded as a searchable PDF and is organized by country. We publish our supplier list on our corporate website under the following URL:

<http://levistrauss.com/sustainability/production/#product-suppliers>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

As stated in response to Question 3.2, we currently disclose all Tier 1 and Tier 2 wet processing suppliers. We added fabric mills to our public list of suppliers, which represent Tier 2 wet processing suppliers. In this first phase of including fabric mills in our supplier disclosure, we cover approximately 80 percent of our fabric volume. We plan to expand this coverage in subsequent updates to the supplier list.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Levi Strauss & Co. supports the ZDHC Roadmap to Zero Programme as the best avenue to tackle the hazardous chemicals management in the global textile, leather, and footwear value chain.

The ZDHC Program is open to all relevant stakeholders within the apparel industry, including manufacturers, chemical companies, solution providers, and industry associations. The ZDHC Program is a collaboration of 24 signatory brands, 53 value chain affiliates, and 15 associates. It has integrated its audit protocol into the Sustainable Apparel Coalition (SAC) Higg Index to be able to scale uptake and utility of ZDHC tools and data.

ZDHC has accomplished important milestones, including the release of the ZDHC Wastewater Guidelines, organizational expansion in Asia, the establishment of the ZDHC global training academy that includes a robust accredited trainer program, and the development of common tools to improve the chemical management in the supply chain and track performance.

In 2017, the ZDHC Gateway was launched as an online data sharing portal for chemical companies to assess a product's compliance against the ZDHC Manufacturing Restricted Substances List (MRSL). It has two building blocks:

- 1) Chemical Module, a data exchange platform that enables chemical formulators to securely share chemical information in-line with the ZDHC standards and tools, and
- 2) Wastewater Module, a global online platform to register and share verified wastewater test data for the textile and apparel industry.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Industry collaboration through ZDHC Roadmap

Levi Strauss & Co. is an active member of the [ZDHC Roadmap](#), working in collaboration with other industry leaders and suppliers to achieve zero discharge of hazardous chemicals in the apparel supply chain. We firmly believe that by [combining efforts](#) with ZDHC, we will be able to create more sustainable change and eliminate hazardous chemical use and improve water quality across the industry. In an effort to raise wastewater standards across the industry, we also

worked with ZDHC to integrate Levi Strauss & Co.'s industry-leading [Global Effluent Requirements](#) into the [ZDHC Wastewater Guidelines](#).

Screened Chemistry

Over the last four years, Levi Strauss & Co. has been implementing a hazard assessment methodology, called [Screened Chemistry Program](#), which examines chemicals used to manufacture our products against specific health and environmental impacts, allowing us to identify better alternatives and areas for innovation. The goal of the program is that all Levi Strauss & Co suppliers will transition to using a preferred chemical list, using safer alternatives for manufacturing.

Ensuring the credibility and transparency of the program is a key objective, thus the program is based on the publicly available and transparent [U.S. EPA Safer Choice Program](#) and [GreenScreen® for Safer Chemicals](#).

We were honored to be named an [EPA Safer Choice Partner of the Year](#) in 2016 for our work to advance sustainable chemistry within our supply chain through our Screened Chemistry Program. In 2017, we were thrilled to be honored with the [Green Chemistry and Commerce](#)

[Council's Champions Award](#) for our work to push for safer chemicals in apparel production.

The Screened Chemistry Program has been launched in approximately 40 percent of our laundries, and a total of 460 chemicals have been screened to date. In addition, the program has been recognized as a ZDHC MRSL conformance tool, and we are collaborating with several brands to implement beyond our own supply chain.

Our goal is for Screened Chemistry to be recognized as an industry leading tool that identifies chemicals of concern (beyond RSL/MRSL listed chemicals) and helps to identify best in class chemicals and safer alternatives.

Cross industry education and partnership

In an effort to encourage others from across industries and sectors to collaborate to advance sustainable chemistry, we hosted a [forum](#) in partnership with UC Berkeley's Center for Responsible Business at the Berkeley-Haas School of Business. The event brought together more than seventy leaders from diverse industries and sectors to exchange best practices and brainstorm solutions for driving the adoption of green chemistry.

Project F.L.X.

As mentioned in Question 2.3 above, in February, [Levi Strauss & Co. announced](#) a transformative new operating model that will create a more responsible and responsive supply chain and a cleaner jean. Called Project F.L.X. (future-led

execution), this new model allows us to reduce the number of chemical formulations used in the denim finishing process from thousands to just a few dozen. This is made possible by replacing manual techniques and automating the jeans finishing process using innovative, digital tools such as lasers and advanced imaging.

This new operating model is a major step forward in Levi Strauss & Co.'s commitment to achieving [zero discharge of hazardous chemicals by 2020](#) and accelerates the elimination of many chemical formulations that the company's [Screened Chemistry](#) program identified as "phase outs." Among the chemicals that will be eliminated is potassium permanganate, an oxidizer that is used industrywide to replicate authentic vintage finishes. This benefits the environment and eliminates worker exposure to the chemical.

Water<Less

To minimize water use in production overall, our designers challenged themselves to create the same great styles our consumers love with far less water. The result was a series of innovative finishing techniques we call Water<Less™, which can save up to 96 percent of the water in the denim finishing process. Since launching the Water<Less™ processes in 2011, we have saved more than 1 billion liters of water in the manufacturing of Levi Strauss & Co. products.

Most recently, we have taken our commitment to reducing water use in the apparel industry a step further by making our water reduction standards and tools, including our [Water<Less™ innovations, publicly available](#) to others within and outside our industry, and encouraging other denim companies – large and small – to use them in their production. By utilizing our Water<Less™ innovations, we believe the apparel industry can save at least 50 billion liters of water by 2020. Our goal is to increase the percentage of our own products made with Water<Less™ techniques to 80 percent by 2020.

WellThread Collection

In Fall 2015, we launched [Levi's® Wellthread™ Collection](#), which is produced by applying a holistic, sustainable design approach. Products are made using far less water, crafted by empowered workers, built to last and designed with the end in mind, using 100 percent cotton product for easier recyclability. The Wellthread™ Collection features Water<Less™ fabric and finishing techniques and are made in factories that have implemented a Worker Well-being program. In addition, the collection's fabric, thread, pocketing, and labels are all designed for recyclability.

Durability is paramount to sustainability — the longer a product is worn without need for replacement, the better for the planet. Levi's® Wellthread™ garments feature some slight modifications that further improve durability of our classic pieces. Adjustments to the pocket flap on the Western shirt, for example, reduce strain and breakage where the pocket is joined to the shirt. Care instructions guide our consumers in responsible home-laundry habits, which are aided by design

modifications to help create an enduring look. For example, the overlapping panel at the shoulder of our t-shirts allows a consumer to hang dry without risk of the garment stretching out. And, as with all of our jeans, our [Care Tag for the Planet](#) provides the simple care instructions: wash less, wash cold, and line dry.

Worker Well-being

Building on our commitment to labor and human rights in the apparel supply chain, we have continued to advance implementation of our [Worker Well-being](#) program. This year, we were honored to be [recognized](#) on *Fortune* Magazine's [Change the World List](#) for our Worker Well-being program; the list recognized 50 companies that are turning their sustainability efforts into positive business results.

The Worker Well-being program seeks to move beyond a “do no harm” labor compliance model and collaborate with suppliers to improve the lives of apparel workers in locations where our products are made. We work with our suppliers and factory workers to design and deliver worker-focused programs in the areas of financial empowerment, health and family well-being, and equality and acceptance, often in partnership with local nonprofit service providers.

Since it began, the program has reached more than 100,000 workers in 12 countries, including countries such as [India](#), [Sri Lanka](#), and [Vietnam](#). Our goal is that by 2025, 80 percent of our product volume be product in vendor locations that have worker well-being programs in place, reaching 200,000 workers.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

As stated in Question 1.4, when suppliers work with multiple buyers committed to zero discharge of hazardous chemicals, it is easier to engage and influence suppliers to have strong chemical management systems and achieve the Detox objectives. However, when buyers are not committed to ZDHC nor focused on improving the chemical management of their suppliers, it is harder to get traction and see lasting improvement by suppliers. Additionally, when buyers are applying different standards or approaches, there can be confusion in the supply chain, which slows down progress.

Additionally, ensuring government leadership and commitment to chemical safety and environmental stewardship will help to advance the voluntary commitment of global apparel brands and retailers to zero discharge of hazardous chemicals. More needs to be done to educate policymakers on the progress and challenges of our voluntary, apparel industry- focused approach to ensure the adequate

policymaking and regulatory enforcement to bring scale and scope to the Detox objectives.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Voluntary initiatives such as U.S. EPA Safer Choice

Voluntary government initiatives, such as the U.S. Environmental Protection Agency's Safer Choice program, are an invaluable resource to industry by working with individual companies to help them develop and promote products that meet the rising demand for products with an excellent environmental, health and safety profile.

The U.S. EPA Safer Choice program and other government-led voluntary initiatives help consumers, businesses, and procurement officers/purchasers identify products that go beyond regular safety standards and use chemical ingredients that have more favorable attributes, including reduced environmental and health hazards, in their functional class, while maintaining a high level of performance.

Another advantage of these programs is that for many businesses a national program such as Safer Choice is preferable to a patchwork quilt of programs managed by retailers and nongovernmental organizations, or local governments.

Improved government enforcement of chemical regulations

As buyers work with suppliers to improve chemical management and achieve zero discharge of hazardous chemicals, greater sustained progress would be made if governments were enforcing their chemical regulations and educating and training the factory management on government regulations and requirements. Where enforcement and training are lax or none existent, it makes it harder for apparel brands and retailers to ensure compliance by their suppliers of their chemical management requirements.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Climate

Levi Strauss & Co. was a founding member of the advocacy coalition [BICEP \(Business for Innovative Climate and Energy Policy\)](#), a cross-industry organization focused on making the business case to policymakers for advancing clean energy

and addressing climate change. Since BICEP's 2008 inception, we have been able to speak out with a united voice to address climate concerns.

In 2015, Levi Strauss & Co. was among one of the first business voices to express support for the [Paris Climate Agreement](#). During those negotiations, our [CEO Chip Bergh joined](#) the heads of several global apparel companies in asking world leaders to sign a strong global climate deal.

When President Trump stated his intent to withdraw the United States from the Paris Climate Agreement last year, we stood with thousands of businesses, states, and mayors in joining the [We Are Still In](#) letter, reaffirming our continued support for climate action to meet the targets under the Paris Agreement.

We plan to continue advocating for U.S. federal and state policies and global action that support a transition to a low-carbon economy.

Chemicals

In collaboration with a multi-industry coalition of business, Levi Strauss & Co. has advocated for continued funding for the U.S. EPA Safer Choice Program, which has served as an integral source of data for our Screened Chemistry program focused on removing hazardous chemicals from the apparel supply chain upfront during the design phase.

Water

Levi Strauss & Co. has advocated, alongside our peers in the business community, to advance progressive and responsible water management and conservation policies, particularly in our home state of California. We are a member of Ceres's [Connect the Drops](#) business coalition that represents a range of industries that has advocated on issues such as water conservation and efficiency, water reuse, storm water capture and use and recharge, groundwater management, and funding for smart water projects.

Limited Brands

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.lb.com/responsibility/environment/water/manufacturing>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

We have adopted the Zero Discharge of Hazardous Chemicals Manufacturing Restricted Substances List and the Oeko-Tex® 100 Standard harmful substances value limits as our [Restricted Substances List \(RSL\)](#) to guide us and our suppliers in environmentally responsible product design, development and manufacturing. While the ZDHC MRSL only lists long-chain PFCs, since 2015 we have also directed all of our suppliers to not intentionally add PFCs (regardless of the chain length) to L Brands apparel products nor used in the manufacturing process of fabrics, trims or components intended for use in those final products per our company policy. The Oeko-Tex Standard 100, which is our RSL, provides a detailed list with CAS numbers of all PFCs that are prohibited from use.

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Our MRSL lists 14 chemicals groups, with Polycyclic Aromatic Hydrocarbons (PAHs), Volatile Organic Compounds (VOCs) and Glycols included in addition to the 11 priority chemical groups originally identified.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

We require our wet-processing mills to test their wastewater annually by a nominated third-party lab. If a chemical listed on our MRSL is found above our limits in treated or untreated water, we work with the supplier to identify and replace the offending chemical. We then require them to have their wastewater retested. Thus, suppliers for which a restricted chemical is found in violation of our policy are required to have their wastewater tested more than once per year.

Answers to specific questions:

We have published wastewater data annually since 2014 on our company [website](#). We also direct all of our Chinese suppliers upload their data to IPE.

Since 2016, we have been testing wastewater at wet-processing suppliers that collectively make up 95% of our apparel business by volume.

On our [website](#), we have posted all of the results and a [case study](#) that provides an example of actions we have taken when a restricted chemical was detected. We also provide a description of the many ways in which we engage suppliers (e.g. annual in- person trainings and facility audits)

We plan to continue to update data and reports to the [detox section](#) on our website annually.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

The ZDHC Gateway does not currently have functionality for brands to publicly disclose suppliers' wastewater results. We have been told that this functionality is expected to be in place this summer.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Training

We have hosted annual in-person trainings for our suppliers since 2013. We hold trainings in each of our primary sourcing countries to make participation convenient for our suppliers. These trainings focus on chemical management best practices, wastewater testing requirements and issue resolution and typically involve suppliers making up 95% of L brands apparel volume. We also encourage our suppliers to take advantage of other training opportunities, such as those offered by ZDHC.



Images from L Brands chemical management trainings held in Asia in March 2018.

In-person Audits

We began conducting in-person audits of our suppliers in 2016. During these audits we review our supplier's chemical storage and handling practices, environmental permits, personal protective equipment and safety policies. We also ensure that management is committed to achieving zero discharge of the priority chemicals and that at least one technical staff person with the required competencies is focused on operationalizing improved chemical management. Following the audit, corrective action plans are generated based on identified areas for improvement with clearly defined timelines for completion.

Chemical Inventory List Review

We require our suppliers to provide us with an updated chemical inventory every 6 months. This list must include the formulation name, the MSDS, the names of key chemical ingredients and their CAS numbers, certificate that the formulation is compliant with our MRSL (e.g. test report, declaration letter or positive list provided by chemical supplier) and the current volume of the chemical in their inventory. If the supplier is unable to provide any certification of MRSL compliance, we ask them to obtain evidence from the chemical supplier. If we identify a formulation that does not meet our requirements, we work with the supplier to find an alternative.

Technical Support

If a restricted chemical is detected in tested wastewater or in a product, we work closely with the supplier to identify the source of that chemical and to find a compliant alternative. Sometimes the chemical is generated during production. In these latter cases, we work with suppliers to identify adjustments to be made to the production process to prevent the generation of this chemical.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Fundamental changes to the textile supply chain are needed for sustainable achievement of the Detox goal. An example of a current gap hampering the achievement of this goal is the lack of standardized training in chemical management for textile mills. Chemical management is not a topic typically emphasized in the academic training of those ultimately working in textile manufacturing facilities and there is not a clear institution offering this training in our sourcing countries. L Brands has focused time and energy on training technical staff at our key mills on how to implement and maintain chemical management best practices.

However, we are challenged by high staff turn-over at mills, which requires us to frequently repeat our training for the same facilities. Our hope is that as the importance of chemical management at textile mills becomes more widely recognized, high-quality training on chemical management best practices will become more readily available.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we succeeded in eliminating the use of PFCs in all our final products in 2015. We achieved this goal by assessing alternative chemistries and replacing PFCs where needed. L Brands uses very little water/stain repellent fabrics/components in our products (less than 1% of our line).

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Eliminating APs/APEs has been more of a challenge due to their pervasive use throughout the supply chain. Whether they are discovered in janitorial cleaners, washroom hand soap, production detergents, knitting oils or animal-product cleaning detergents, it seems their possible uses are endless. Our restriction on APs/APEs has been well communicated to our tier 1, tier 2 and tier 3 suppliers who we have direct relationships with, and we have seen a dramatic decrease in the presence of APs/APEs in the past 5 years. When we do detect their presence, we immediately work with suppliers to replace the source. We believe their occurrence will be further minimized as more and more brands emphasize this goal and as more chemical companies provide lists of positive alternatives from which our suppliers can confidently source.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Removing all chemical formulations containing chemicals restricted in our MRSL from our suppliers' inventories is no small feat and has required constant effort. Since beginning this journey, we have focused on collecting updated and accurate chemical inventories from our suppliers and identifying formulations that require substitution. Identifying these formulations often requires coupling review of the chemical inventory with results from wastewater and sludge test reports. When a targeted chemical is identified in discharge reports, we review the inventory with the supplier to identify possible sources. We then have the supplier send the suspected formulations to a nominated lab for screening. Once the culprit formulation is identified by screening, we work with the supplier to find a replacement immediately. Over the past 2 to 3 years, we have worked to identify and replace more than 30 formulations using this process.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

We currently have a [case study](#) illustrating replacement of a formulation containing NPEO on our website. We plan to publish another substitution case study on our website before the end of the year.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

We are in the process of publishing our Tier 1 apparel factories on our corporate website, LB.com and expect that information to be public in the next 60 days. In addition, we continue to direct all of our China suppliers to upload their data on the IPE database.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

See 3.1

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

See 3.1

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking

this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

See 3.1

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Because of the complexity of the supply chain and the overlap of brands within factories which ultimately share water coming into and exiting factories, the apparel sector has collaborated in a variety of ways to make significant strides in eliminating the target chemicals. The sector is sharing policies, tools and best practices to deliver success.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

To deliver on our Detox commitments, we have collaborated with our suppliers on the goal of improving chemical management and environmental health and safety practices. We appreciate the effort of our suppliers who are striving to make the necessary changes to reach these goals.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The apparel supply chain is complex with many parts and players. The resources and abilities of smaller entities in the supply chain are limited, which impacts everyone involved.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Our focus on this journey to achieve our Detox objectives has been on building capacity within our supply chain, particularly with wet-processing textile mills. In some sourcing countries, local governments have reinforced our efforts by clearly communicating and strictly enforcing requirements for pollutant discharge into the

environment. We welcome similar environmental regulations from local governments in our other sourcing countries.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

In the past few years, we have had a laser focus on the goal of eliminating the discharge of priority chemical categories from our supply chain by 2020. With less than two years left, our intention is to maintain focus on this important goal.

Li Ning

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://ir.lining.com/en/csr/csr.php>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

The MRSL of LI NING is fully compliance with ZDHC MRSL v1.1., the link is as <http://ir.lining.com/en/csr/csr.php>. Otherwise, Li Ning is actively involved in the implementation program regarding to materials alternative with PFCs-free.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

The MRSL of LI NING is fully compliance with ZDHC MRSL., the link is as <http://ir.lining.com/en/csr/csr.php>, 5 more chemical groups were added compared with the intial 11 priority groups.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Since 2016, Li Ning has had 9 suppliers upload detox report on IPE platform and 3 suppliers upload detox report on ZDHC Gateway platform. A list of uploading dates are as below since 2016:

IPE upload dates	No of suppliers
Season 2, 2016	2
Season 3, 2016	3
Season 4, 2016	2
Season 1, 2017	2
Season 2, 2017	1
Season 3, 2017	3
Season 4, 2017	2
Season 1, 2018	1
Gateway upload dates	No of suppliers
Season 1, 2017	2
Season 2, 2017	2

The number of suppliers which published detox data takes up 90% of our key suppliers (the order amount is up to 90% of the whole supply chain). The planned publication in 2018 onwards is above 90% of our key suppliers.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Gateway Functionality available from August 2018 onwards-Please note that Data is owned by Supplier and even if this functionality is technically available it required the "legal handshake" between facility and brand.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Li Ning invites suppliers to participate the ZDHC Chemical Management training and seminar. Seasonal assessment covering chemical management is implemented to all the Tier 2 suppliers. Suppliers are also encouraged to apply ZDHC chemical gateway to search for chemicals complying with MRSL for purchasing. And Li Ning was also actively involved in implementing Detox with suppliers as follows:

Collaborate with ZDHC Asia team to conduct implementation pilot on DMF phase out in Synthetic Leather (including survey, discussion, reporting)

Support ZDHC to conduct 2017 ZDHC-CNTAC Implementation circuit workshops to scale-up ZDHC standards and tools implementation in China(9 workshops attracted about 1000 participants from chemical suppliers, wet-processing mills, ZDHC and non-ZDHC brands, government officers and etcs. 3 workshops specifically for chemical industry to conduct ZDHC Gateway chemical module registration. 3 progressive level workshops focus on capacity building and problem solving. 3 Foundational level workshops to pave for the ZDHC implementation to domestic supply chain.)

Continue working with our suppliers to make sure MRSL implementation and compliance in supply chain

Continue encouraging our suppliers to conduct wastewater testing and disclosing testing results on IPE website

Assisted the ZDHC Foundation and China National Textile and Apparel Council (CNTAC) to co-organize the 2017 Implementation Circuit of Chemical Stewardship 2020, in order to enhance the environmental management capability for chemical of Chinese textile enterprises and push forward the green transformation and upgrade of Chinese textile industry. Moreover, we proactively promoted the application of ZDHC Gateway in textile supply chain, thereby improving its management standard for chemical.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

We deeply notice that more extensive efforts were needed to achieve meaningful and long-term changes throughout the textile industry, based on our own capacity and commitment. At the same time, we and the ZDHC brands and its members is the integration of resources, various challenges -- process to deal with zero emissions of hazardous chemicals in the form so far in the industry the most practical value, can be expanded and solution oriented initiatives. We believe that this is the best and most sustainable way going forward. We know that in this complex system, we can not achieve a real transformation without the wide range participation of all stakeholders. We welcome all industry stakeholders, including suppliers, textile industry associations, environmental and social non-governmental organizations (NGO), and chemical industries, to support ZDHC goals.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Long-chain PFCs were totally removed from Li Ning's supplier chain.

Across all woven products, LI NING already achieved eliminating 95% of PFCs by no later than 31 December, 2017

Otherwise, Li Ning is actively involved in the implementation program regarding to materials alternative with PFCs-free.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Li Ning with ZDHC brands are committed to leading the apparel and footwear industry towards zero discharge of hazardous chemicals in our supply chains by 2020. Our Joint Roadmap toward Zero Discharge of Hazardous Chemicals Version 2 (June 2013) includes specific actions to address the discharge of alkylphenol ethoxylates (APE or APEO) from our industry.

According to ZDHC MRSL v1.1 and RSL (Q LNB 8001-2016), APE or APEO were strictly prohibited in any action use during our supply chain. At the same time, APE or APEO were never detected in manufacture process as well as in production or waste water of wet processing plants.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

LI NING was actively involved in the implementation of DMF free project with other ZDHC brands from 2017. Please refer to report on DMF Pilot-China on ZDHC website.

Otherwise, Water-based cement, water based printing techniques were implemented throughout the whole supply chain.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Tested DMF-free coated fabrics and faced technical and cost challenges in order to Phasing-out the use of DMF in the coated fabrics /"synthetic leather" industry.

Encourages the substitution of solvent-based polyurethane by eco-friendly polyurethane

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Not yet

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Not yet

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

N/A

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

N/A

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

ZDHC with almost 100 active contributors implementing its MRSL on a global level with significant uptake in the last 18 month and offices in China and India and strong collaboration partners like the German Partnership for Sustainable Textile, CNTAC and other strong partner to drive global AND local efforts ZDHC's MRSL does reflect compounds for which safer alternatives are available and the organization is working hard to address compounds in its update process. This process includes the provision of substitution scenarios preferably that just updating the list with substances.

As the only Chinese brand of the Zero Discharge of Hazardous Chemicals Program of Member Brands (ZDHC Program or ZDHC), Li Ning supports promoting application of ZDHC Chemical Gateway in supply chain in order to better

hazardous chemicals management. By using Chemical Gateway, suppliers can search for chemicals which comply with MRSL requirements and manage their chemical inventory list.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Li Ning implements environmental program, mainly including on-site audit (targeted suppliers with high risks) and seasonal self-assessment (targeted all Tier 2 suppliers) every year in supply chain. The program covers aspects of EMS, regulation compliance, water resources, wastewater discharge, energy consumption, air emission, chemical management, solid waste management, and sustainability.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

Education of Policy Makers for meaningful regulation is very important.

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

We deeply notice that more extensive efforts were needed to embedding the detox into public procurement efforts and enhancing the campaign to other industries with strong overlap in supply-chains to achieve meaningful and long-term changes throughout the textile industry, based on our own capacity and commitment. At the same time, we and the ZDHC brands and its members is the integration of resources, various challenges -- process to deal with zero emissions of hazardous chemicals in the form so far in the industry the most practical value, can be expanded and solution oriented initiatives. We believe that this is the best and most sustainable way going forward. We know that in this complex system, we cannot achieve a real transformation without the wide range participation of all stakeholders. We welcome all industry stakeholders, including suppliers, textile industry associations, environmental and social non-governmental organizations (NGO), and chemical industries, to support ZDHC goals.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Education of policymakers on meaningful regulation and a review of legislation in terms of eliminating old regulation e.g. Flame retardants for baby gear (out of times when houses were still fired by coal) Lowering boundaries for Chemical innovations e.g. Transforming ECHA to an Innovation Agency after completing the registration process.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Please refer to the ESG report of Li Ning 2017, which will be published in April 2018, the link is as below: <http://ir.lining.com/en/csr/csr.php>

Mango

Q0: Detox page

Please provide here the main link to access your Detox information.

Link:

<http://frontphp.ext.pre.mango.com/web/oi/servicios/company/rsc/medioambientale.php>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

A link to MANGO's MRSL can be found in the link mentioned above. MANGO's MRSL includes CAS numbers for each substance. MANGO's MRSL includes short chain PFC's with their corresponding CAS numbers as well. Below you will find a table with all PFC substances that can be found in MANGO's MRSL including short chain PFC's which have been highlighted in orange.

Table 1. List of PFC substances that can be found in MANGO's MRSL.

Group	Substance	CAS-nr
6. PFCs 6. P6FCs	PFOA	335-67-1
	PFNA	375-95-1
	PFBS	375-73-5 or 59933-66-3
	PFOS	1763-23-1
	4:2 FTOH	2043-47-2

	6:2 FTOH	647-42-7
	8:2 FTOH	678-39-7
	10:2 FTOH	865-86-1
	POSF	307-35-7
	PFHxS	355-46-4
	PFHxA	307-24-4
	FOSA	754-91-6
	N-Me-FOSA	31506-32-8
	N-Et-FOSA	4151-50-2
	N-Me-FOSE alcohol	24448-09-7
	N-Et-FOSE alcohol	1691-99-2
	PFBA	375-22-4
	PFPeA	2706-90-3
	PFHpA	375-85-9
	PFDA	335-76-2
	PFUnA	2058-94-8
	PFDoA	307-55-1

	PFTrA	72629-94-8
	PFteA	376-06-7
	PFHpS	375-92-8
	PFDS	335-77-3
	6:2 FTA	17527-29-6
	8:2 FTA	27905-45-9
	10:2 FTA	17741-60-5
	PF-3,7-DMOA	172155-07-6
	HPFHpA	1546-95-8
	4HPFUnA	34598-33-9
	1H, 1H, 2H, 2H-PFOS	27619-97-2

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

MANGO will continue to work jointly with expert labs to consider new chemical groups beyond the 11 priority chemicals substances in its MRSL taking into consideration their relevance and use in the textile industry. Suppliers will be made aware of any and all changes regarding the MANGO MRSL.

Up to date, the following substances have been added to MANGO's MRSL beyond the 11 priority chemicals.

NAME	CAS n°	Detection Limit (µg/l)	MRSL group	Relevance to Textile Industry
o-Phenylphenol	90-43-7	0.5	Chloro phenols	Used as biocide for textile preservation
(methylenebis(4,1-phenylenazo (1-(3-(dimethylamino)propyl)-1,2-dihydro-6-hydroxy-4-methyl-2-oxopyridine-5,3-diyl)))1,1'-dipyridinium dichloride dihydrochloride 118658-99-4	118658-99-4	0.1	Azo Dyes	Used as Azo dye
C.I. Acid Red 26 3761-53-3	3761-53-3			
Pigment Rot 53:1 (C.I. 15585:1); D&C Red No. 9	5160-02-1			
C.I. Solvent Yellow 14	842-07-9			
1,2-dihydro-6-hydroxy-4-methyl-1-[3-(1-methylethoxy)propyl]-2-oxo-5- [[4-(phenylazo)phenyl]azo]-3-pyridinecarbonitrile	85136-74-9			

C.I. Disperse Yellow 3	2832-40-8			
C.I. Solvent Yellow 2	60-11-7			
C.I. Direct Blue 218	28407-37-6			
Diaminobenzidine [biphenyl- 3,3',4,4'- tetrayltetraamine]	91-95-2			
diaminotoluene	25376-45-8			
N,N'-Diacetylbenzidine	613-35-4			
toluene-2,4-diammonium sulphate	65321-67-7			

Aniline	62-53-3			Precursor of Azo dyes
Benzyl chloride; α - chlorotoluene	100-44-7	Detection limit pending	Chloro benzenes	Can be found in dyeing carriers, dyestuffs, leveling agents, deodorizers, fumigants, degreasers, insecticides,
p- chlorobenzotrichloride	5216-25-1			
α,α,α -trichlorotoluene; benzotrichloride	98-07-7			

α,α -Dichlorotoluene (Benzal chloride)	98-87-3			herbicides and defoliants.
Beryllium & beryllium oxide	7440-41- 7/ 1304-56-9	Detection limit pending	Heavy Metals	Used as pigment
Vanadium pentoxide	1314-62-1			Used as pigment
Formaldehyde	50-00-0	0.1	Solvents	Used as anti- creasing, anti- shrinking agent also as fixation dyes and prints, can be found on fluorescent dyes and pigments and adhesives.
Formamide	75-12-7	Detecton limit pending		Solvent residues
Dimethyl formamide (DMF)	68-12-2	0.1		Solvent residues
N,N-dimethylacetamide	127-19-5			Solvent residues
N-methyl-2-pyrrolidone	872-50-4	Detection limit pending		Solvent residues

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

a list of the dates that you published data since 2016, the portal(s) of publication (e.g. IPE, own website, other)?

MANGO has contacted all China suppliers which participated in MANGO's latest DETOX analyses in order to ask their permission/encourage them to upload their waste water test results on the IPE platform.

By the end of May 2018, MANGO will provide a list of suppliers on its website detailing MANGO suppliers which have uploaded their DETOX test results on the IPE platform. We have realized that many suppliers wish to upload their DETOX results from their own IPE account.

In addition, MANGO has made DETOX result reports available on MANGO website. Reports reflect DETOX before treatment waste water tests carried out through the past years. Any reference to supplier name, factory address or contact which could facilitate the identification of the corresponding supplier has been eliminated.

the percentage of the supply chain (wet processes) this represents for each set of data

2017 RESULTS:

Throughout 2017 waste water testing has been carried out in India and China.

In India waste water samples were collected for testing from wet process factories of suppliers that represent 24% of MANGO's production in India during 2017. These analyses correspond to 2% of MANGO's global production during 2017.

In China waste water samples were collected for testing from wet process factories of suppliers that represent 22% of MANGO's production in China during 2017. These analyses correspond to 7% of MANGO's global production during 2017.

Therefore throughout 2017 MANGO has performed waste water analyses to an additional 9% of its supply chain.

PAST RESULTS

2015-2016 RESULTS = 24,39% of MANGO global production

- o Includes Bangladesh and Turkey wet process suppliers.

2014 RESULTS = 38,53% of MANGO global production.

- o Includes China, India, and Turkey wet process suppliers.

Links to status reports on the findings and actions taken as a result

All MANGO detox documents, status reports, roadmap, case studies, and other DETOX relevant documents can be found at the following link on MANGO's website:

LINK:

<http://frontphp.ext.pre.mango.com/web/oi/servicios/company/rsc/medioambient.e.php>

It is important to note that MANGO is developing a new corporate website that will be separate from the MANGO Shop website. As soon as the new website becomes active MANGO will provide updated links to all relevant DETOX documents.

- *Planned publication in 2018 onwards 2018 ROADMAP*

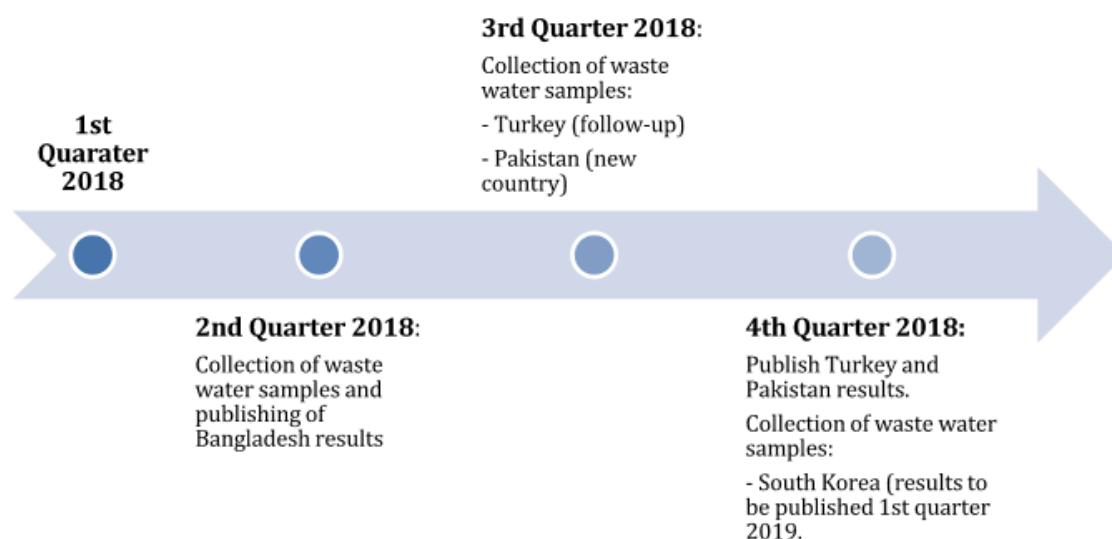
During 2018 MANGO has selected Bangladesh and Turkey for follow-up waste water sampling for the DETOX project. MANGO last tested waste water samples in these countries in 2016 and end of 2015 respectively.

MANGO considers Bangladesh a country with positive DETOX results as only 3 of the 11 priority substance groups were detected in our testing in 2015 and 2016 (heavy metals, chlorinated benzenes and phthalates). The upcoming 2018 waste water tests in Bangladesh will serve as a follow-up to determine if the detection of these substances has been reduced and hopefully to confirm that no other new substances are detected. New Bangladesh Detox results should be published by the end of the second trimester 2018.

Turkey is a contrary example. MANGO last collected waste water samples in Turkey in December 2015. Due to poor results and little improvement in comparison to previous 2013 waste water tests MANGO issued an official WARNING letter to urge suppliers to commit to the DETOX project. The scheduled waste water tests in Turkey for this year 2018 will serve as a follow-up to check if measures have been taken to reduce the detection of the 11 priority substance in Turkey. New Turkey Detox results should be published by the end of the fourth trimester 2018.

Mango has selected Pakistan and South Korea as new DETOX countries for analysis. Pakistan has a high production of denim and jeans and consequently has many wet processes throughout its textile industry. Pakistan represents about 6, 5 % of MANGO's production including raw materials. South Korea on the other hand represents about 5% of MANGO's total production including raw materials. Pakistan and South Korea waste water sampling is scheduled for the 3rd and 4th quarter of 2018 respectively. Corresponding results should be published by the following quarter after the collection of samples.

Suppliers will be selected according to the same criteria used in passed detox phases: volume of production, continuity along seasons, and history of cooperation. Sampling of waste water samples before treatment will be collected with the collaboration of Bureau Veritas (BV).



1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Connecting published data to suppliers and corresponding brands is not relevant to the DETOX objective. DETOX waste water analyses and results are part of an industry wide effort to eliminate the discharge of hazardous substances, therefore simply sharing results and possible alternatives to hazardous substances throughout the supply chain contributes equally to this goal whether supplier results are linked to brands or not.

As MANGO is not part of ZDHC no MANGO DETOX test results are uploaded on the ZDHC Gateway.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

MANGO has been carrying out CSR workshops for suppliers at origin with the objective to communicate directly with suppliers to reinforce MANGO's CSR priorities reviewing both social compliance and environmental/sustainability topics, including the DETOX project.



Picture 1. Workshop in Dhaka, Bangladesh, April 2018.

During these CSR workshops the DETOX topics covered were the following:

1. General MANGO DETOX Procedure
2. MANGO MRSL
3. Banned substances
4. Transparency
5. Most commonly detected substances per country
6. Recommendations for most commonly detected substances per country
7. Chemical/waste management

MANGO performed these CSR workshops in China and India during November 2017, and in Bangladesh in April 2018. MANGO plans to also carry out a CSR workshop in Turkey by the end of 2018. In each country MANGO tailors the DETOX presentation to cover the most relevant DETOX topics per country as well as the most commonly detected substances based on past DETOX test results.

In addition MANGO individually communicates suppliers their DETOX results along with substitution recommendations according to detected substances.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

The main challenge that the DETOX project must face is the search of affordable alternatives for the substitution of the 11 priority hazardous substances. Suppliers need assistance in order to identify which chemicals are most easily substitutable.

It would be interesting to involve chemical suppliers in the DETOX project. This way the DETOX project could work to identify chemical suppliers which have committed to chemical compliance and provide textile suppliers with substitution

options. Research for safe and affordable alternatives is key to assure an industry wide transformation regarding the substitution of harmful chemical substances.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since MANGO joined the DETOX project in 2012 no PFCs have been detected in MANGO final garment products. On the other hand PFC's have been detected in DETOX before treatment waste water testing in China and Turkey. PFC's were not detected in past MANGO DETOX testing in Bangladesh and India.

Therefore, MANGO cannot claim that we have succeeded to eliminate the use of PFC's but it is positive to note that these hazardous substances have not been detected in all MANGO DETOX countries.

The main problem slowing down the elimination of the use of PFC's is that many suppliers are unaware of the potential alternatives they may use. Furthermore, alternatives often do not offer the same results and properties achieved by conventional chemical products, this causes suppliers to be reluctant to the substitution of these hazardous substances.

Furthermore, it is important to note that Greenpeace's strong outdoor/PFC campaign has helped bring PFC's to supplier's attention and increased consciousness regarding the elimination of these hazardous substances.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

During the past year 2017, only one case of APEs was detected on a MANGO final garment. The corresponding style was blocked and was consequently not sold as it did not comply with MANGO's MRSL and PRSL.

APEs are still detected in MANGO DETOX results. Alkylphenols were detected in MANGO's latest DETOX results in India and China. Furthermore Alkylphenols were also detected in past DETOX phases in Turkey but not in Bangladesh.

Therefore, MANGO cannot say that it has succeeded in the elimination of the use of APEs.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

The following substances have not been detected in MANGO final garment test results (according to PRSL) since 2015:

- Antimony
- Arsenic
- Benzenes and Toluenes
- Polycyclic Aromatic Hydrocarbons
- Pesticides
- Disperse Dyes Allergens
- Short Chain Chlorinated Paraffins.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

MANGO CASE STUDY	Date Published/ expected to be published
Nonylphenol Ethoxilate alternatives case study	August 2013
PFC's procedure case study	April 2018
Phtatlates case study	October 2018
Alkylphenols case study	December 2018

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

See question 3.4.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

N/A

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

N/A

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

MANGO has always been committed towards working on transparency in many ways. Every year MANGO publishes its sustainability report reviewing relevant information regarding social compliance, product safety, environment and sustainability, as well as economic data among other.

In addition MANGO exercises transparency through its collaboration with Unions. MANGO has accompanied Union representatives to MANGO manufacturing factories in many of its top supplying countries. In addition MANGO discloses a complete list of its factories to unions.

Finally, MANGO has always maintained an open dialogue with all its stakeholders in order to ensure to establish long lasting relationships and collaboration.

MANGO's commitment to transparency continues to evolve and MANGO is aware that the publication of its list of suppliers is the next step that must be taken.

The first step that will be taken in this direction will be the publication of MANGO's manufacturing facilities including wet processes that are already in our system or wet processes that are part of in-house facilities of manufacturing suppliers. This first exercise of disclosure of factories will be completed by the end of 2018.

Therefore Tier 1 is expected to be disclosed within this year 2018 and tier 2 and tier 3 will progressively be disclosed according to the traceability and the availability of data. MANGO expects to be able to offer our progress regarding the disclosure of tier 2 and tier 3 information in 2019 for the next DETOX evaluation.

In addition, in order to obtain reliable tier 2 and tier 3 information and ensure this data is updated as regularly as possible MANGO will work on an internal procedure to achieve this goal.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

MANGO's goal is to assure that our products are free of any dangerous chemical substance for human health and environment as well as comply with the legislation in all countries we market our products. Consequently, for more than 16 years we have been developing strict internal control procedures to assure that 100%, with no exception, of our collections are tested including fitting and other small parts on the garments.

Therefore we can say MANGO is conscious about the impact of the chemicals on the final product but not that much on the production processes. This was one of the main positive impacts in the beginning of the campaign. Once we were aware, all brands within the sector started to work. It has also been another way of working through collaborations with crucial stakeholder for all textile brands: the supply chain.

This kind of alliances among brands, all brands moving in the same direction and gathered efforts makes it easier.

Also it has contributed towards a better knowledge of the supply chain and promoting the partnership with the suppliers who conform the supplier.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Suppliers do show signs of being more conscious regarding the use of water. Many have their own ETP and are very proud to show it. Also we have come across several suppliers who have installed closed loop water systems in order to filter and recycle approximately 20-30% of their water use.

Overall MANGO has had very positive experience with the DETOX project in all selected countries. Suppliers have been willing to collaborate and demonstrated interest for the project. No specific partnerships have arisen as a result of the DETOX project but it has reinforced communication and dialogue with suppliers regarding the use of chemical substances.

Since 2011, there has been a change regarding supplier knowledge and availability of sustainable fibers (i.e. organic and recycled fibers) and their corresponding certifications. Suppliers are eager to offer sustainable alternatives to conventional fibers and are starting to get involved in improving the sustainability of their factory processes to increase the efficient use of water and energy or improve the use of chemicals and reduce air emissions. Even though these changes have been

most noticeable during the past two years MANGO does not find a direct correlation with the DETOX project and the increased use of sustainable materials or processes.

Demand for sustainable fibers and certifications (GOTS, GRS, OCS etc.) is mostly being pushed by brands forcing suppliers to adapt and offer these sustainable alternatives. The growing existence of sustainable alternatives to substitute conventional fibers facilitates this transition and allows brands to set targets to reduce the environmental impact of the fibers of its garments. Similarly, if options for the substitution of the 11 priority substances were clearer to both suppliers and brands the transition to eliminate these substances would be facilitated.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

With no doubt, finding good alternative products to hazardous chemicals including similar properties and prices. If we ban the use of some products it would be advisable to give good alternatives. This way it would be easier for suppliers along the supply chain to adopt more friendly behaviors towards the environment.

Another challenge is the training. Suppliers still have lack of information and especially we observe that people that normally manage chemicals in the factories are not experts on the matter not even receiving training on chemicals, how to use them, to keep them properly, dangers, etc. This is another reason why we have done several workshops about Detox procedures in India, China and Bangladesh and by the end of the year planned for Turkey. If they are not aware and understand the danger it is less probable they take any actions to avoid these substances along the production processes.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Management and good practices should be absolutely voluntary since nor are suppliers throughout the supply chain or consumers ready to recognize the efforts done so far by companies in this sense. Maybe a policy of incentives for companies with good performance in this sense would be an efficient measure instead of any official regulation. Probably, motivation and recognition within the sector of the best practices of companies managing chemicals and financial support from governments are options that work best and motivate the rest of companies with less progress on the same.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively?

Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

We believe MANGO has no policy/advocacy plans that specifically adjust to the above description.

MANGO has its own internal environmental policy that serves as framework for carrying out all MANGO activities.

In relation to chemicals, in addition to MANGO's MRSL and PRSL MANGO has its Chemical Standard which serves as guidelines for chemical management regarding final products.

DIRECT LINKS TO NEW DETOX DOCUMENTS:

Results/Progress Report 2017:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/10.RESULTS_2016-2017.pdf

Road Map 2018:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/11.ROADMAP_2017-2018.pdf

PFC Case Study:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/12.Case_study_PFC.pdf

Examples of DETOX waste water test results:

o China:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/13.Supplier_Tests_Results-China_2016-2017.pdf

o India:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/13.Supplier_Tests_Results-India_2016.pdf

o Bangladesh:

https://st.mngbcn.com/web/oi/servicios/rsc/pdf/IN/detox/13.Supplier_Tests_Results-Bangladesh_2015-2016.pdf

M&S

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://corporate.marksandspencer.com/plan-a/clothing-and-home/product-standards/responsible-chemicals-management>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes, we have updated our MRSL with the PFC list and CAS numbers – please refer to <https://corporate.marksandspencer.com/plan-a/clothing-and-home/product-standards/responsible-chemicals-management>

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

M&S has adopted the ZDHC MRSL but has added a section on pesticides and insecticides, and increased the number of heavy metals listed, with a note on the use of metal-complex dyes, in accordance with ETAD guidelines.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

The primary focus of our chemical compliance program is on clean input chemistry and MRSL conformity. We believe that wastewater testing is an important element within our wider due diligence testing programme.

M&S invited all of our wet processors to conduct wastewater testing to the ZDHC Wastewater Guidelines biannually and to upload those results onto the ZDHC chemical gateway.

M&S has also conducted its own wastewater testing to the ZDHC Wastewater Guidelines at facilities in India and Bangladesh.

As from July 2017 it is now a mandatory requirement that all M&S wet processors upload their basic PRTR information onto the IPE website.

We will ensure that our wastewater testing results will continue to be uploaded onto the ZDHC Gateway.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

With the launch of Plan A 2025, we aim to add further Food and Clothing & Home supply chain details by April 2019 and details of raw materials suppliers by April 2022.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

M&S has banned the intentional use of all the 11 priority chemical groups.

We have just commenced screening of formulations using ChemIQ and we carry out regular due diligence chemical testing on finished product against our PRSL in region.

We have encouraged our suppliers to engage with the ZDHC Training Academy. We have also launched a REACH E-learning module for as a training tool for our own technical teams.

All wet processors must successfully undertake an Environmental and Chemical Compliance audit before doing business with M&S.

As from July 2017 it is now a mandatory requirement that all wet processors upload their basic PRTR information onto the IPE website.

All our Wet processors have been invited to register with the ZDHC Gateway. We have also commenced a CleanChain pilot with four of our facilities in Sri Lanka. During 2018/19, we plan to roll CleanChain out to a further 20 facilities with a live dashboard feed to monitor input chemical conformance against our MRSL. We will explore how we can make this public as part of our wider transparency programme.

We continue to engage in the IPE CITI initiative – we are currently ranked 4th in the textile industry.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Main challenges are

Achieving 100% visibility of MRSL compliance from all chemical and dyestuff suppliers

Extending the scope of chemical compliance to upstream suppliers such as fibre sources, fibre producers etc

We need more brands aligning with the leading ZDHC signatory brands and working

Poor and inconsistent chemical and environmental regulations (implementation and enforcement) in key countries of manufacture

Sludge handling and disposal – have just joined the ZDHC sludge task team

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes – we met our PFC phase out deadline of 1st July 2016 in clothing footwear and accessories.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we banned the use of APEOs in (check dates)

We acknowledge there is still a risk of contamination from upstream suppliers at low levels in countries where the use of such chemicals is still legally allowed.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

We are investigating alternatives to Potassium Permanganate spray used in the bleaching of denim trialing them with some of our facilities.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to

consider publishing all case-studies (past and present) on your Detox webpage.

<https://www.subsport.eu/case-stories/373-en> removal of phthalates from kidswear prints

We have also published a case study on PFCs substitution on our corporate website: <https://corporate.marksandspencer.com/plan-a/clothing-and-home/product-standards/responsible-chemicals-management>

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

In May 2016, we published for the first time an interactive map which features the locations of all our active first tier clothing manufacturing sites and is updated twice a year. [Find out more about our clothing supply chain](#)

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

We're very proud of our interactive map and have big plans around how this will evolve over the next few years. Through Plan A 2025, we've committed to disclose further details on our supply chains by April 2019 – you will then see a progressive ramping up of information being disclosed as we head towards 2025.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

See response to 3.1 and 3.2

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

See responses above

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Positive impact is that it has switched the emphasis of chemical compliance towards the input stage and not just at the “end of pipe” stage. This means a greater understanding of managing clean input chemistry, reducing risks of pollution and impacts on human health.

There are still lots of brands and retailers who have not yet made Detox commitments so we need greater collaboration to deliver greater and swifter impactful change.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

We are rolling out the HIGG FEM 3.0 tool to our top 100 wet processors (accounting for 80% of fabric/leather supplier turnover) which will enable us to continually assess their overall environmental sustainability performance

Plan A related commitments launched in 2025:

By 2025, the 50 key raw materials used for M&S products will come from sources verified as respecting the integrity of ecosystems, the welfare of animals and the wellbeing of people and communities. This will cover over 80% of M&S raw material usage by volume.

By 2019 we will develop a methodology for measuring water efficiency in our garment and textile factories and set targets for reduction by 2025

By 2025, for our M&S C&H products, we'll only use dyehouses, printers, laundries, tanneries and finishing facilities that meet credible independent standards of environmental and social sustainability

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Key challenges are:

We need more brands and retailers to commit to more responsible manufacturing.

We need more chemical suppliers to disclose the level of MRSL compliance of all of their formulations including proactive industry wide take up of the ZDHC Gateway

Greater government regulation – e.g. banning of APEO use in China

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

As above – tighter governmental regulations- e.g. banning the production, supply and use of APEOs for example

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Relevant information can be found on the following corporate webpages:

Plan A 2025 Commitments:

<https://corporate.marksandspencer.com/documents/plan-a/plan-a-2025-commitments.pdf>

Leading with Others to Accelerate Change:

<https://corporate.marksandspencer.com/plan-a/delivering-plan-a/leading-with-others-to-accelerate-change>

Responsible chemicals management:

<https://corporate.marksandspencer.com/plan-a/clothing-and-home/product-standards/responsible-chemicals-management>

Transparency: <https://corporate.marksandspencer.com/plan-a/delivering-plan-a/listening-and-taking-action/transparency>

Collaborations & Memberships: <https://corporate.marksandspencer.com/plan-a/clothing-and-home/collaborations-and-memberships>

Miroglio

Q0: Detox page

Please provide here the main link to access your Detox information.

Miroglio SPA is made of 2 divisions:

Miroglio Textile (MT) Fabrics Production & Commercialisation Miroglio Fashion (MF) Apparels

Given the nature of the survey, all replies refer to Miroglio Fashion, completed with peculiarities of Miroglio Textile.

Link: <http://www.mirogliogroup.com/our-approach/sustainability/>

Miroglio Textile (MT) <http://www.mirogliogroup.com/it/miroglio-textile-sust-doc/>

Miroglio Fashion (MF) <http://www.mirogliogroup.com/it/miroglio-fashion-sust-doc/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

We input all PFCs with CAS including also short chain ones with related CAS.

On the website you can find the same MRSL for both divisions updated to January 2018.

6. PFCs					
PFBA	378-22-4	GC-MSMS / LC-MSMS	GC-MSMS / LC-MSMS	0,01 (each)	0,01 (each)
PFBA	2706-90-3				
PFHxA	307-24-4				
PFHpA	378-28-9				
PFDA	335-67-1				
PFDA	378-98-1				
PFDA	335-76-2				
PFUnA	2050-94-0				
PFDA	307-55-1				
PFTrA	72629-94-0				
PFTrA	376-06-7				
PFBS	375-73-0 or 59933-06-3				
PFHxS	335-46-4				
PFHxS	378-92-0				
PFOS	1753-23-1				
PFOS	335-77-3				
4:2 PTOH	2043-47-2			0,1 (each)	0,1 (each)
6:2 PTOH	947-42-7				
8:2 PTOH	670-99-7				
10:2 PTOH	565-56-1				
6:2 FTA	17827-29-6				
8:2 FTA	27908-45-9				
Octabromo diphenyl ethers (OctaBDEs)	17741-60-5				
PFOSA	784-91-6				
PFOSF	307-38-7				
N-Me-FOXA	31506-32-0				
N-Et-FOXA	4151-60-2			0,01 (each)	0,01 (each)
N-Me-FOSE alcohol	24449-29-7				
N-Et-FOSE alcohol	1691-99-0				
PF-3-TDMA	172155-07-6				
MPFHA	1546-68-0				
4MPFHA	34590-53-9				
1H_1H_2H_2H-PFOS	27619-97-2				

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

We didn't add any group of hazardous substances. Miroglio SPA followed accurately what is stated in detox commitment.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- a list of the dates that you published data since 2016,
- the portal(s) of publication (e.g. IPE, own website, other)?
- the percentage of the supply chain (wet processes) this represents for each set of data
- links to status reports on the findings and actions taken as a result
- planned publication in 2018 onwards

Wastewater control is annual.

MF: publication of global data on the following link:

<http://www.mirogliogroup.com/it/miroglio-fashion-sust-doc/>

Publications until now :

2016 January, May

2017, January, April

2018 January, February March April

MT: publication of global data on the following link:
<http://www.mirogliogroup.com/it/miroglio-textile-sust-doc/>

Publications until now :

2016, January, April

2017, January, April

2018, January

Portal of publication is both IPE and our own website.

Corrective actions from monitored companies were not required, as wet process companies which did not agree with the commitment were excluded from Miroglio Supply Chain.

In 2018 we are going to plan and publish further analysis on wastewater in Turkey and in China.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We are not considering any publication on ZDHC Portal as it was not in the original commitment. Miroglio is not a member ZDHC program.

We agree that all data must be shared between brand and supplier.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Since our detox subscription we arranged 3 training sessions with all our italian suppliers. In detail:

2015 PRATO (UNIONE INDUSTRIALE)

2015 COMO

2016 PRATO

With regards to our supply chain from abroad we arranged personal meetings with most important suppliers in India, Bangladesh, China, Morocco.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Interference on the market from schemes or programs apparently similar but actually different from detox can generate unclear and confused situations in our supply chain. For example some brands which shared detox commitment and ZDHC program require to the supply chain MRSL ZDHC conformity which is different and less strict. Difficulties are all for the supplier which sometimes must respond to 2 detox companies which require different MRSL to be respected.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Miroglio is neither a sportswear nor an outdoor distributor. Therefore, there are very few items involved in water repellent treatments. As already specified in 2015 case study conclusion, Miroglio fashion can confirm that the items put into the market do not contain PFC. Moreover in 2017 we made a new sampling of items from the same suppliers in China in which we had found some PFC micro contaminations. The results published on the website remark the absence of Perfluorinated compounds in our water repellent items.

Yes of course in 2016. Miroglio Fashion, according to case study result, can state that all the items put on the market are PFC free, and guarantee to the consumers a high quality standard of chemical security. Anyways, Miroglio Fashion has committed with its suppliers, whose materials have had PFC micro-contaminations, to a "Chemical Management" plan, in order to identify the sources of those contaminations.

The only source of contamination we found in the past is China.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes we erased them in 2015 in all wet process. The only criticalities left are on raw fabrics or dyes.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

From our past studies we found out Apeos and Azo Dyes low contamination levels.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage

We published case studies throughout the years on Apeos and PFCs. Next publication with ongoing case study on Perchloroethylene.

Miroglio Textile is planning the publication of a case study about dyes by 2018.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, it is published on Miroglio Fashion website.

The percentage is 100% of Miroglio Fashion wet process suppliers.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Miroglio Fashion wet process list includes tier 2 and tier 3 suppliers.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

<http://www.mirogliogroup.com/wp-content/uploads/2018/04/2018.04-Wet-Process-Suppliers-List-2017.pdf>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Miroglio Fashion published the list on the website.

Miroglio Fashion is preparing a book with all the activities, previous case studies, progress done so far and the next steps we are going to take.

It will be published within the end of 2018.

Miroglio Textile : since it is sensitive data we are planning to publish the suppliers list within 2018.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Detox commitment had a relevant and very well monitorable impact on textile supply chain. In particular Detox companies commitment to erase hazardous substances created a great lowering/elimination of hazardous substances which were highly present when the campaign started. In particular we are referring to a remarkable lowering of Apeos and PFCs in processes and, consequently in products. Was also very important chemical management approach put in place by wet process involved in detox commitment in order to select and choose suppliers of dyes and textile materials. In that case the request of information about contamination level on dyes and materials with regards to hazardous substances included in the commitment brought us to a new approach with those suppliers with test reports to point out a contamination levels.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Miroglio Fashion regularly arranges training and audit on social, environmental and safety issues on the whole supply chain. About the main suppliers we also perform social audits with worldwide acknowledged certification criteria.

First of all we qualify the supplier then we check the product according to our testing manual.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

At the moment in 2018 it is very hard to think about a total elimination of heavy metals and Perchlorethylene in textile supply chain. For those substances we don't have adequate replacements as yet.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

About compulsory or voluntary structures, Greenpeace should promote and allow the use of Detox logo from commitment subscribers in order to give a bigger boost to our products on the market, given the efforts we made to follow the commitment and believe in the elimination of hazardous substances from our supply chain.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Miroglio company has always been very sensitive and believes in environmental policies extending the concept to production sites. Other than that we often take part in meetings and seminars about environment sustainability, like circular economy or use of recycled materials.

Miroglio Textile is ISO 9001:2015 certified.

Its products are OEKOTex certified, printing house is GOTS and GRS certified.

With regard to technologies, Miroglio Textile uses the best ones to save energy, also working on a water free printing method.

Nike

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: www.about.nike.com/pages/chemistry-homepage

Q1: Detox tools and wastewater testing

1.1 The 11-priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

No. While the MRSL states that DWR and other fluorinated polymer finishes based on long-chain technologies are banned from intentional use, CAS numbers are not provided. Instead of providing an avoidance list, we evaluate our PFC-free finish options through our chemistry evaluation process (detailed below and in our [2018 Chemistry Playbook](#)), allowing us to avoid regrettable substitutions with new technologies. We believe that to reach our better chemistry goals, we — and the entire industry — need to shift from simply stating what chemicals to avoid, to more clearly specifying what we want in our chemical footprint.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in s your next MRSL update)?

Though Nike has adopted and implemented the ZDHC MRSL, we have proactively managed our own MRSL for over a decade which includes chemicals not currently listed on the ZDHC MRSL. Recognizing that the scope of the ZDHC MRSL needs to be expanded to cover a broader range of material production (which is underway in 2018), Nike still maintains this list of additional chemical restrictions that are tightly managed within our finished goods factories. This includes:

CAS NO.	SUBSTANCE	SYNONYMS
71-43-2	Benzene	Benzol, Phenyl Hydride
Various	Class I and II Ozone-depleting Substances	----
127-19-5	N,N-Dimethylacetamide	DMAC
68-12-2	Dimethyl Formamide	DMF
67-68-5	Dimethyl Sulfoxide	DMSO
111-76-2	Ethylene Glycol Monobutyl Ether	EGBE/Butyl Cellusolve
50-00-0	Formaldehyde	Formic Aldehyde
75-09-2	Methylene Chloride	Dichloromethane, Methylene Dichloride
110-54-3	n-Hexane	Hexane
872-50-4	n-Methyl Pyrrolidone	NMP, 1-Methyl-2-pyrrolidinone
108-95-2	Phenol	Carbolic Acid, Phenyl Alcohol, Phenyl Hydroxide
127-18-4	Tetrachloroethylene	Perchloroethylene, PERC
71-55-6	1,1,1-Trichloroethane	1,1,1 – TCA, Methyl Chloroform
108-88-3	Toluene	Methylbenzene
79-01-6	Trichloroethylene	TCE, Trichlorethene
1330-20-7	Xylene – all isomers	Ethylbenzene, o-,m-,p-Xylene
67-66-3	Trichloromethane	Chloroform
79-00-5	1,1,2-Trichloroethane	Vinyl Trichloride
75-35-4	1,1-Dichloroethylene	1,1-Dichloroethene
1319-77-3	Cresol	Cresylic Acid
108-39-4	m-Cresol	
95-48-7	o-Cresol	
106-44-5	p-Cresol	
101-14-4	4,4'-Methylenebis (2-Chloraniline)	MOCA
584-84-9 91-08-7	2,4-Toluene Diisocyanate Toluene-2, 6-Diisocyanate	TDI

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Nike co-created and formally adopted the ZDHC Wastewater Guideline in FY17 and deployed it in early 2017. Nike requires suppliers to test wastewater twice per year, analyzing samples for MRSL chemicals and traditional wastewater parameters (i.e. COD, BOD, etc). We require this testing from raw material vendors that make up 80%+ of our production volume.

All facilities in the Nike Water Program must demonstrate annually that their wastewater discharge is compliant with their legal permit as well as comply with the Nike wastewater requirement based on BSR's water quality guideline. Facility sites representing at least 80% of Nike's materials production are required to meet the requirements of the ZDHC Wastewater Guideline Nike has communicated to its suppliers that they are required to upload the wastewater test results to the ZDHC Gateway Global Wastewater Reporting Platform.

UPDATE (per Nike's [FY16/17 Sustainable Business Report](#) released on 5/14/18):

By the end of FY17, 72.6% of suppliers met Nike's wastewater quality requirements – up from 57.8% in FY16. We are actively working with our remaining suppliers to understand the opportunities that exist to allow them to discharge wastewater at a quality better than legal compliance (see reference to ZDHC Wastewater Guideline in the first paragraph above). In many cases, the suppliers were challenged with conventional wastewater parameters such as chemical oxygen demand, biological oxygen demand, color, coliform, antimony and total nitrogen. To help our suppliers master these fundamentals of wastewater treatment, we're encouraging them to incorporate the NIKE Minimum Water Program into their operations and examine the wastewater treatment equipment they're using and how they are operating and requiring them to comply with the ZDHC Wastewater Guidelines.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes, we will be promoting the use of the ZDHC Gateway and we have communicated to our suppliers that they are required to upload the wastewater test results to the platform.

With regard to connecting published data with brand names, though we are in support of doing this, the connection should only be made if the brand has already made the decision to publicly disclose their relationship with the facility.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Following the release of our updated Code of Conduct (which now includes a foundational requirement for all contracted suppliers to ensure that "Chemicals Are Properly Managed"), we created the "Nike Chemistry Playbook" to clearly outline the expectations we place on our suppliers across our supply base. A copy of the Chemistry Playbook has been provided, and is available [here](#). This will be published on our website.

As outlined in the Chemistry Playbook, in order to support our suppliers and elevate their performance to a world-class standard, we focus our efforts across three core areas:

1) Input Management

This critical work is centered upon controlling the grade of chemical formulations entering a facility. This is achieved by defining the requirements that a chemical must meet and coupling this with effective tools that guide procurement of chemicals that then meet this standard.

Though we have managed our own MRSL for many years and used this to control the use of certain chemicals within the manufacturing environment, we also recognise the long-term value of developing and implementing a globally accepted industry guideline. In a shared supply base, this approach is more easily implemented at scale. In support of this approach, we have been a highly active member of the ZDHC organization and have fully adopted and implemented the ZDHC MRSL.

To summarize the approach outlined in the Chemistry Playbook, we focus our input management program across a number of key areas:

- a. Compliance to the ZDHC MRSL
- b. Compliance to the Nike MRSL
- c. Chemical Hazard Assessment of new chemicals
- d. Tools to support better procurement of MRSL compliant chemistry (i.e. ZDHC Gateway, and the bluesign bluefinder)

From the perspective of MRSL compliance, wastewater testing is our primary measure of performance against our goal of 100% MRSL compliance (outlined in section 3). However, to further strengthen our understanding of supply chain performance and support the continuous improvement of our supply chain, we have also been using ADECs CleanChain platform to better understand the compliance status of chemical inventories as a means to drive greater industry action and better target improved procurement practices. At the end of May 2018, we rolled out CleanChain to vendors producing over 80% of apparel materials and plan to expand this roll-out to strategic footwear material vendors later this year.

Importantly, the Nike Chemistry Playbook also includes our work that goes beyond compliance. Building on many years of performing chemical hazard assessments and broader risk assessments of key chemicals used within our business, we have taken the decision to more publicly disclose this program through the launch of our chemistry playbook. The Chemistry Playbook details how we have implemented a unified operational strategy across our business to drive the use of better chemistries.

In 2014, Nike began investigating the chemicals potentially used in our supply chain to gain an in-depth understanding of associated risks. We estimate more than 3,000 chemicals are used in the footwear and apparel industry, from raw materials to finished goods. Nike is identifying which of these chemicals are controversial. We define controversial chemicals as those rated Hazard Category 1 (or Green Screen® Benchmark 1), those with high skin-sensitization potential and those Nike has determined are a priority.

In many cases, however, the toxicology data required to inform a hazard-ranking approach are not available. We are working to overcome these data gaps and to identify and prioritize which chemicals to reduce or phase out – and then replacing them with innovative solutions that don't compromise product performance.

As of this year, we have evaluated the hazard profile of most chemical ingredients used in product formulations throughout the industry and determined where in the supply chain the chemical is most commonly used. This evaluation process enabled us to prioritize chemicals to phase out of manufacturing processes in a sequence that is relevant and scientifically appropriate. Currently we have communicated to our supply chain our intent to phase out of all PFCs by 2021 (discussed in more detail below); DMF in synthetic leather production; and formaldehyde on a timeline that is in the process of being developed over time with key stakeholders.

We understand that every chemistry-related decision can affect the efficiency of manufacturing processes, the possible risks to workers, impacts to the environment and product performance. We also know that every chemistry decision comes with the opportunity to innovate. To accelerate innovation and reduce potential risks, Nike continues to enhance our chemical assessment process.

The introduction of any new materials, new manufacturing processes or new chemistries requires a Nike chemical assessment. In the assessment, chemicals are ranked and compared to benchmark values. If a chemical is flagged during the assessment process, the Nike Chemistry Center of Excellence works with Nike innovation teams and chemical manufacturers to find a safer alternative whenever possible.

This assessment can also be applied to materials when the processing chemistry changes. For example, if a new material uses compliant yarns and existing knitting machines, but has a different construction, no chemical assessment is needed. However, if a supplier uses a new water repellent finish, the material must go through the chemical assessment process to protect against introducing controversial chemicals into the supply chain.

Performing chemical assessments early in the innovation cycle helps us identify controversial chemistries and work with our supply chain and internal partners to replace Hazard Category 1 or chemicals with high skin-sensitization potential with better chemistry alternatives.

2) Managing use within the facility

Once a chemical enters a facility, it must be properly managed to control risks to workers and the environment. It must also be managed in a way that enables compliance of the finished raw material and product. Given how important good chemicals management practices are for enabling the above outcomes, we have clearly communicated our minimum chemicals management expectations to our supply chain.

To elevate chemicals management performance across our finished goods factories and raw material vendors, we utilize two different approaches that are integrating chemicals management expectations into our business:

a. **Finished Goods Factories:** In accordance with our Code of Conduct, finished goods factories (our contracted factories), are audited against the requirements of our Code Leadership Standards (CLS). We have two important Code Leadership Standards that we use:

i. Hazardous Materials CLS: This audit framework has been in effect for many years, and was further strengthened in 2017. This CLS establishes how effectively a facility is handling, storing, using and disposing of chemicals. This also includes emergency response.

ii. Restricted Substance CLS: This standard outlines the behaviors and business processes that a facility is expected to follow in order to successfully manage MRSL and RSL compliance programs.

b. **Raw Material Vendors:** Though we do not define these as contracted suppliers, we expect our raw material vendors to follow the requirements of our Code of Conduct. In contrast to our finished goods factories, we will be using industry tools to assess performance against these requirements.

In support of our approach to industry collaboration and the adoption of shared standards, we co-created the chemicals management module of the Higg FEM 3.0. This is a valuable industry tool for measuring the chemicals management capability of a facility and providing a framework for continuous improvement.

Having adopted the Higg FEM, we have deployed this assessment tool across our raw material vendor base. It was rolled out to textile, leather, and synthetic leather vendors who make up 80% of our materials production. We expect results on these vendors in 2018. Additionally, we have offered training on the FEM to our vendors in order to help prepare them for successful completion of their self-assessments. Over time we expect to expand the scope of the FEM to cover our materials supply base and utilize its results in order to elevate supply chain capability and support Nike's vision for sustainability now and into the future. As we gain a verified understanding of performance, we will activate a program to support the elevation of our vendors, where needed.

3) Output Management

Controlling inputs and using chemicals safely are key to minimizing the impact of using chemicals. But, facilities that use chemicals must have an output of some sort that needs to be controlled, either as product, materials, wastewater or waste. To control the priority chemicals within these outputs, we manage several key programs and utilize several different tools:

i. Nike RSL Program: The Nike RSL program, well over a decade old, has been regarded as the industry benchmark for many years. This program, which is now centered upon the adoption of the AFIRM RSL (again developed through successful collaboration), outlines our requirements and expects suppliers to perform analytical testing as a means to provide assurance that materials and product meet our standard. As of the end of FY17, 98% of the materials we tested were compliant with the RSL. Nike's full RSL program is explained in detail within our Chemistry Playbook.

ii. Hazardous Waste CLS: This audit framework for our finished goods factories evaluates how effectively a facility is identifying and managing waste that would be classified as hazardous.

iii. Wastewater Compliance: Having co-created and adopted the ZDHC Wastewater Guideline, we require our core raw material vendors to comply with the requirements. This includes performing two wastewater samples per year, measured against the MRSL parameters of the Guideline, in addition to the traditional parameters. By the end of FY17, 72.6% of suppliers met NIKE's wastewater quality requirements - an increase from 57.8% in FY16. Further details are outlined in our Chemistry Playbook.

Across each of the areas above – input, use, output – there is a strong approach to elevating capability. One way of achieving this is through training, and to support our suppliers we have delivered chemicals management and RSL training to our finished goods factories and raw material vendors. Upon initial launch of this two-day training, we carried out in-person training in region, in-local language where possible, at multiple locations across the globe. We have now integrated the training curriculum onto an online platform, to ensure 24/7 global availability, as a means to remove potential barriers to training. To date we have trained 82% of our Tier 1 factories, and 72% of our strategic Tier 2 material suppliers. The total number of individuals trained is over 2,100 and continues to increase. In addition, we have also conducted global webinars to train our core raw material vendors on the requirements of the ZDHC Wastewater Guideline.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Strong progress has been made within the ZDHC and AFIRM groups to align upon guidelines that set strict limits for restricted substances, either within formulations or materials/products. We have also shared the how the Higg FEM (through SAC and ZDHC collaboration) is elevating the importance of good chemicals management. To further accelerate global change within this industry, we are looking forward to seeing these organizations grow, to gain more support from key stakeholders and to provide enhanced tools that support implementation of best practices. Achieving the objective cannot be done alone.

In many cases when a controversial chemical is present during the manufacturing process there is not currently an alternative available to the supply chain. Nike is working to address these innovation challenges by proving criteria for what better chemistry looks like and what chemicals to initially phase-out of. An important aspect of this is ensuring a regrettable substitution is not employed in its place.

Data gaps on toxicological endpoints to determine hazard profiles of chemicals continues to be a fundamental challenge and limits the availability of better chemistry choices. Filling in these data gaps as well as creating an international exchange of information on chemical hazards is a key driver for accelerating the sharing of chemical hazard information. Nike is working with a cross-industry to group to help address these challenges.

The lack of international harmonization of chemical regulations at all levels (use, disposal, in product, etc.) continues to be a challenge and leads to inconsistent application of efforts on the part of good actors in the industry. A harmonized, science-based international chemical regulatory system that prioritizes the biggest impacts to human health and the environment is needed.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining, and have you identified where these arise?

We phased out C8-based PFCs as of January 2015. Currently, more than 93% of our products are PFC-free. We have committed to a complete phase-out of all per- and poly- fluorinated chemistries used for water repellency, moisture management, and/or stain resistance by 2021. All PFC alternatives undergo our chemical assessment process to ensure that we don't introduce a regrettable substitution into the supply chain. Achieving desired performance while scaling better chemistries has required a detailed understanding of each solution, its interaction with different material categories, and its potential impact. We are committed to working with our supply chain through this process and to helping provide PFC-free options as they are reviewed and become available for testing.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Nike remains committed to the complete phase out of AP/APEs. Over the previous 5 years, we have reduced the allowable concentrations in our RSL from 1000mg/kg to 100mg/kg, which is ten times below the most stringent global regulation. Through the MRS� and RSL requirements, Nike is committed to continuing our efforts internally and collaboratively to eliminate AP/APEs from all stages of production, intentional or not.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11-priority hazardous chemical groups) you'd like to report on?

Significant accomplishments and progress throughout the year includes:

- Phased out of a UV inhibitor and substituted with a better chemistry
- Phased out of formaldehyde in shoe labels
- Activated a phase out of DMF in coated leather

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

As outlined in the Nike Chemistry Playbook, assessing the toxicological hazards of new innovations is an important part of our approach to scaling better chemistry. Though we have not published true case studies to show the extensive work that we have been doing, we have highlighted in our Chemistry Playbook a number of initiatives that are centered upon the substitution principle. This includes:

1. PFCs; to support our phase out by 2021, we screen all alternatives to avoid regrettable substitution.
2. 'Odor 3.0'; development of low hazard odor control technology that does not rely upon biocidal chemistry.
3. Waterless dying; this effort demonstrates the value of exploring different methods of manufacturing to eliminate the need for certain process chemistry, thereby reducing the different types of chemicals needed to produce a finished material.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

In 2005, Nike was the first company in our industry to voluntarily disclose the locations of all its contract factory suppliers. Today, Nike's [Manufacturing Map](#) is a tool to learn about the independent factories contracted to make Nike, Hurley and Converse products – including the names and location of each factory, the types of product made, the factories that supply our collegiate product, and demographic statistics about the workers at each factory.

UPDATE as of June 18, 2018:

Recently, Nike expanded its disclosures to include all material suppliers (Tier 2) representing approximately 80% of our production volume. This [interactive map](#) is updated on a quarterly basis to reflect changes in our source base.

(<https://about.nike.com/pages/resources-faq>)

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

For several years, Nike has been disclosing a number of strategic material suppliers (Tier 2) on our [Manufacturing Map](#) along with our Tier 1 finished goods factories. This map was recently expanded to disclose Tier 2 suppliers that represent approximately 80% of our production volume. The information disclosed on Tier 2 material suppliers within our supply chain, includes names and locations of each factory, and will be updated on a quarterly basis.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Nike created the [Manufacturing Map](#) for the public to access and learn more about Nike's contract manufacturing network and the countries where we do business. Virtually all NIKE, Inc. products are manufactured by independent contract factories. The factories featured on the Manufacturing Map are all those directly contracted by NIKE, Inc., licensees or agents to manufacture finished goods, and information is updated quarterly. The map can be accessed at <http://manufacturingmap.nikeinc.com/> and now includes the disclosure of our raw vendors representing 80% of our global production volume.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

n/a

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Given the shared supply chain in our industry, alignment and successful collaboration is key to achieving all of our sustainability goals, including those related to management of hazardous chemicals. In only a few years, the industry as a whole has made significant progress toward development and implementation of consistent requirements – including a shared AFIRM RSL and ZDHC MRSL, and deployment of tools to assist our manufacturing partners in understanding and helping to achieve our collective sustainability goals, including the effective management of chemicals (i.e., Higg Facility Environmental Module).

The past few years have also seen an expansion of our focus from RSL-focused chemical output management to the growth of tools to support increased attention on input management (i.e. Gateway). We also recognize that developing tools and partnerships is not enough and that to be successful we also need to focus on capability building of our manufacturing base. This is one reason we continue to require brand-specific training, provide and promote access to training via the ZDHC Academy, and share relevant guidance such as the AFIRM chemical information sheets and supplier toolkit. Nike continues to lead in these organizations (and others) and push for implementation of tools that will allow for better chemistry decisions throughout the supply chain.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

As Nike works to achieve our 12 the impact goals related to energy, water, and chemistry, we have realized that positive improvements to one area do not necessarily translate into end to end environmental improvements. While there are examples of efficiencies in one area benefitting other areas (i.e. waterless dying uses less chemistry and less water), this is not always the case and the unintended consequences are not always easy to recognize. While we do assess the full life cycle impact of any new technology we develop, phasing out of hazardous chemicals and replacing them with better alternatives does not necessarily equal a productivity improvement.

Use of the ZDHC MRSL has elevated the value of input management, which has likely led to an elevation of facilities focusing on general chemicals management practices. This has benefits for both the workers and the environment.

Specific to Nike, the integration of chemicals management into our Code of Conduct, developing a CLS for Restricted Substance Management, and deploying the Higg FEM to raw materials vendors has enabled us to use performance metrics which directly influence the sourcing decisions we make, and in doing so, the materials we select. In addition, failure to meet our RSL requirements results in the material being prohibited from use in our products.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

While collaboration within the industry has grown in the past decade, there are still a number of brands that have yet to adopt industry shared tools and requirements. Without greater participation, the efforts toward measurable improvements will be slower. In addition, expanding the collective work to other industries – in particular those that use similar chemistries but in a different supply base such as home textiles and automotive – could allow for innovative advancements in a shorter time frame.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Much of the work developing voluntary standards across the industry is performed through industry associations, such as the Apparel and Footwear International RSL Management (AFIRM) Group and the ZDHC program. We work collaboratively with other contributor brands of these organizations to scale the implementation of guidelines and tools across the supply chain. Collaborations such as these build on the work we've done in our own supply chain and support our future direction. We established the first in the industry RSL in 2001, which sets out chemical standards for our materials that meet or exceed regulatory or legislative requirements from around the world and includes substances that we have voluntarily restricted from products. Our work with AFIRM strengthens this program, and by collaborating with the ZDHC program, we are able to turn our attention to better managing chemicals before they enter facilities.

By engaging with ZDHC, we also managed to introduce the MRSL concept into the OECD guidance document for the textile industry -

<https://www.oecd.org/daf/inv/mne/Due-Diligence-Guidance-Responsible-Supply-Chains-Textiles-Footwear.pdf>

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives

and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Nike is actively engaged in regional, national and international sustainability-related policy initiatives around the globe. The key policy areas we focus on pertain to sustainable materials, products and supply chains; climate change and renewable energy; chemistry; and the circular economy. We recognize that public policy plays a key role in enabling our goals. Through coalitions and associations, we engage on proposed legislation and regulation at the regional, national and international levels to promote a harmonized regulatory framework that is drawn from the best-available science on the hazards of chemicals, and founded on credible, risk-based assessments of chemicals that protect the worker, consumer and the environment.

Primark

Q0: Detox page

Please provide here the main link to access your Detox information.

<https://www.primark.com/en-ie/our-ethics/setting-high-standards/our-performance>

https://www.primark.com/-/media/ourethics/detox/pdfs/detox-report/primark-detox-environmental-performance-report_2018.ashx

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes – please refer to our RSL (<https://m.primark.com/en/our-ethics/resources/environmental-sustainability-resources>) aligned to ZDHC MRSL standard. Whilst ZDHC MRSL includes PFOA and PFOS on the RSL –short chain (C6) and bi-products and related compounds are not on the MRSL, they are on the research list and this group is one that ZDHC expects to go through the update process to then be considered to be added to the ZDHC MRSL later this year.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Please refer to our RSL (<https://m.primark.com/en/our-ethics/resources/environmental-sustainability-resources>)

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

Please see page 31 of our Environmental Update Report 2018

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes – please see Page 31 of our Environmental Update Report 2018. We support an approach where data is owned by the supplier and brands have a legal say if the supplier wants to connect with a brand. This allows suppliers to publish wastewater reports on their own willingness and readiness. This is the approach taken by the ZDHC Gateway. This creates an important legal handshake between brand and supplier.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Please see information provided widely throughout our Environmental Update Report 2018.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Please see Page 22 of our Environmental Update Report 2018.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Please see Page 20 of our Environmental Update Report 2018.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Please see Page 20 of our Environmental Update Report 2018.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Please see information provided widely throughout our Environmental Update Report 2018.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Please see case studies on Page 20, 21, 31 and 32 of our Environmental Update Report 2018. We will continue to support ZDHC to construct a knowledge base to demonstrate efforts of the group.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Please see Page 12 of our Environmental Update Report 2018.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Please see Page 12 of our Environmental Update Report 2018.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Please see Page 12 of our Environmental Update Report 2018.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

We published our Global Sourcing Map in 2018. The Map includes information about the Tier 1 suppliers' factories which make Primark clothes and other product for sale. The Map will be updated on a twice-yearly basis by the Primark Ethical Trade and Environmental Sustainability Team. We will continue to look at how we might release further information about factories further down our supply chain, including wet processing sites, in future. We also continue to share information in relation to the initiatives we are a member of, and where disclosure is essential to the work being undertaken, for example, the Bangladesh Accord.

<https://www.primark.com/-/media/ourethics/suppliers/en-global-sourcing-map.ashx?la=en&hash=AE909091B0E412BF06C315C8B912AFE96D8554CE>

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Please see Page 22 of our Environmental Update Report 2018.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Please see information provided widely throughout our Environmental Update Report 2018.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Please see Page 22 of our Environmental Update Report 2018.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Please see Page 22 of our Environmental Update Report 2018

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Please see Pages 5-7 of our Environmental Update Report 2018.

Puma

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://about.puma.com/en/sustainability/environment/zero-discharge-of-hazardous-chemicals>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

PUMA uses the ZDHC MRSL with clear long chain PFCs details, including CAS numbers. In addition, PUMA has banned the usage of all PFCs by the end of 2017.

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

PUMA is aligned with ZDHC MRSL requirements, as we believe that only a common industry MRSL will carry enough weight to be implemented by our suppliers effectively.

In addition, PUMA has banned PVC since 2003 and PFCs since 2018 (long chain PFCs since 2015). Furthermore, PUMA is currently developing a strategy to minimize the use of DMFa in Polyurethane. (PUMA Annual Report 2017 Page 77 - 78)

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

PUMA has played an active role in the development and piloting of the ZDHC wastewater quality guideline. Therefore, all our suppliers with wet processing are required to follow the ZDHC wastewater quality guideline. We mandate all PUMA

core suppliers with wet processing to regularly test their wastewater quality in independent laboratories and upload the results of these tests on the IPE website and ZDHC Gateway. Our core suppliers cover approximately 80% of PUMA's business volume.

For 2018, we plan to expand our testing program beyond core suppliers. We expect the number of tested facilities to further grow, after 33 suppliers in 2016 and 42 in 2017 to well above 50 in 2018. At the same time, we will work with those suppliers, where we see a need for improvement from the 2017 testing round and have set clear targets to achieve higher compliance levels in 2018 than in 2017.

For further details, please refer also to the PUMA Annual Report 2017 (Page 79 – 81).

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

PUMA requires all wet processing core suppliers to upload the wastewater test data on the ZDHC Gateway. As a participant in the innovative IPE Green Supply Chain Map, we have already linked PUMA's brand name to the name of our supplier factories with wet processing in China. We are not against data (including PUMA data) being published by the ZDHC with the same level of transparency, but believe that individual brands and suppliers should be able to decide on the transparency level they wish to choose.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

As part of our annual PUMA Supplier Round Tables, we remind all our suppliers at least once per year on our Chemicals Management and Detox program, which is also detailed in the PUMA Sustainability Handbook on Chemical Management.

In addition, PUMA invites suppliers to attend training courses on ZDHC Academy including webinars and in-person courses whenever they are offered. Our core suppliers are required to invite their chemical suppliers registering on the ZDHC Gateway. Furthermore, as a Bluesign system partner, we invite our suppliers to use the Bluesign system and tools to ensure that only MRSL compliant chemicals are entering the production process. We have set aggressive overall material targets and were able to ensure a significant percentage (47%) of our polyester used in apparel and accessory products is Bluesign certified in 2017 (PUMA Annual Report 2017, Page 82).

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

PFC-free alternatives are still more expensive and less performing than short chain PFCs. This is particularly the case on oil repellency.

We find similar problems with the replacement of DMFa in polyurethane materials with higher prices and partially also replacement options being offered that contain other hazardous substances.

Finally, we need to cover all suppliers with our chemical management program, not only our core suppliers. To make this happen, the key players in our industry need to further align their standards and targets.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

PUMA reached the target to phase out PFC use at the end of 2017, except very few special function materials, where we are still looking for substitution. At the end of 2017, over 99% of PUMA products are PFC-free in production (PUMA Annual Report 2017 Page 78).

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

APs/APEs are clearly listed in the ZDHC MRSL requirements for PUMA suppliers. Among all 42 wet process suppliers who tested their waste water in 2017, only one of them detected Aps/APEs in the discharged water. Another six facilities found Aps/APEs in the sludge or raw wastewater, but not in the discharged wastewater. With the enforcement of MRSL requirement/chemical management training, we are confident that we will further improve the compliance rates in 2018.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

PUMA has banned PVC since 2003. We are now working on the feasibility of water-based PU to largely reduce or phase out DMF use for Polyurethane production in the future.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

PUMA's innovation, material and sustainability teams work continuously on identifying new and innovative materials, finishes and technologies. This includes materials which avoid or replace hazardous chemicals. In that effort, PUMA works with leading manufacturers of chemicals and materials. We have not published any case-studies on substitution cases in the recent past.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

PUMA discloses a list of core suppliers, including detailed names and locations. This list is updated annually and covers 80% of PUMA's business volume.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Our public supplier list includes core Tier 2 suppliers (fabric mills, tanneries and dyehouses), with detailed names and location, and is updated at least annually.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

PUMA publishes the data on our official website:

<http://about.puma.com/en/sustainability/supply-chain/public-factory-list>
<http://about.puma.com/en/sustainability/environment/zero-discharge-of-hazardous-chemicals> as well as the IPE Green Supply Chain Map:

<https://ipe.us11.list-manage.com/track/click?u=a773e75e6eb0116a78ee2219f&id=2417e1fe55&e=b411d946a>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

N/A

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

The launch of the Detox Campaign in 2011 was a clear wake-up call for the whole industry. Initiatives like the ZDHC with its tools and programs would probably not have been formed without the Detox campaign.

A further impact was an increased focus on the second Tier of the supply chain, such as the fabric mills and dyehouses.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

While the focus on Tier 2 was limited to chemical management and environmental compliance originally, in the meantime it also helped to expand social compliance and environmental performance efforts into the second Tier of the industry's supply chains.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

One positive enabling factor would be if all major stakeholders could fully agree on an industrywide accepted MRS, thus reducing duplication of efforts and confusion in the supply chain.

Furthermore, the ZDHC wastewater quality guideline should be supported by an air quality guideline and minimum standards on how to handle hazardous waste in order to fully align to the target of zero discharge from all pathways.

On the replacement of further priority chemicals, it would be helpful to agree and focus on the top priorities for the next two years.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

A further roll out of Detox related tools to the long tail of smaller brands and producers would be essential. This could happen through international initiatives like the Sustainable Apparel Coalition and the ZDHC, national initiatives like the German Partnership for Textiles, Industry Associations like CNTAC or BGMEA or through regional activation by the civil society sector.

It would help if Greenpeace could publicly support the efforts of the ZDHC in this regard.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

PUMA is a member of the AFIRM Group, the policy task force of the Sustainable Apparel Coalition as well as the World Federation of the Sporting Goods Industry and the European Federation of the Sporting Goods industry.

However, we do not have any particular plans on policy advocacy related to chemicals management.

As a member of the “Stiftung 2 Grad”, we do actively support policy advocacy on fighting climate change and as a member of the ILO Better Work Program and the Fair Labor Association we do support policy advocacy on transparency in supply chains and supporting Human Rights.

Valentino

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.valentino.com/experience/it/corporate-information/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes, kindly refer to question 1.1b PRSL/MRSL links

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

After the first release in 2013, updated lists (PRSL/MRSL) were released in 2015-2016 and 2017 with more than 150 substances added. The latest MRSL update includes disperse dyes, carcinogenic dyes, other dyes and pesticides depending on their application, relevance, chemical form and use in products, chemicals and production; others (e.g. VOC and PAH) will be added in the next 6 months.

PRSL: http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/valentino_product_rsl_2-pdf

MRSL: http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/valentino_manufacturing_rsl-pdf

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

1) As per our commitment, we published and asked our suppliers to publish the testing data yearly, starting from 2013; kindly find the updated water data at the following link http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/vspa_wastewater_test_results-pdf and in the yearly Detox commitment updates at <https://www.valentino.com/experience/it/corporate-information/>

2) Data were published on our website and we asked our suppliers to publish them, where feasible, on the IPE. All incoming water, untreated water, treated water and sludge data details coming from testing at wet-processes mills are available on our website at: http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/vspa_wastewater_test_results-pdf

3) Wet processes data include not only textile dyeing mills, but also tanneries, printings facilities and relevant galvanic processes. Results have been shared with suppliers and yearly elaborated, connected and integrated with testing data on products and chemicals, in order to schedule improvements, monitor progress and report on our website (http://valentino-4me.weebo.it/static/BKRATS_2017-DETOX_COMMITMENT_UPDATE_8W9XJM.pdf and <https://www.valentino.com/experience/it/corporate-information/>). Suppliers have been trained and made an important and active part of the process in order to prevent/avoid problems.

4) As per our commitment and taking into consideration seasonal variations in production/orders, water tests and audits are done, and data are published, representing more than 80% of the active global wet-suppliers volumes.

5) Water tests and audits findings, investigations, case studies/corrective actions and yearly updates are all available and clearly evidenced at our main link (<https://www.valentino.com/experience/it/corporate-information/>).

6) Kindly refer to our latest yearly commitment update report (http://valentino-4me.weebo.it/static/BKRATS_2017-DETOX_COMMITMENT_UPDATE_8W9XJM.pdf). Activities will consider possible new active wet-process global-south suppliers.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We are not a ZDHC member. We'll analyze and evaluate the Gateway.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

For Valentino, Detox is a 360° project and process. Our activities start from product concept, raw materials selection, then research, prototypes, sampling and production. Suppliers, partners, as well as Valentino employees, are active participants in the Detox process; goals, training, audit/test results and knowledge are shared with them in order to fully achieve the elimination target. To deepen, plan and implement these activities, Valentino has gradually enlarged its sustainability and product compliance team, boasting highly qualified team members, with a background from pure and industrial chemistry, to engineering and environmental science, and with masters/specialization degrees and PhDs in relevant fields along with a long-lasting experience in the apparel sector. Furthermore, Valentino partnered with worldwide recognized testing and certification entities, Associations/Organizations, Universities etc.

Enforcing Supplier Contracts and preventing issues. Our Detox requirements (such as RSLs etc.), together with the code of ethics and other key business documents, are integral parts of the supplier contracts. From the beginning, suppliers are made aware of our requirements and are requested to propose and produce compliant articles/treatments, adopt a clean factory approach, and allow audit/water testing, when needed.

Furthermore, we perform different kinds of activities, dealing with Environmental and Chemical Management Audits, Assessments, Wastewater Testing, Chemical formulations testing, Research, Products/articles testing, Corrective actions, Follow-up and Training.

Enhancing Product testing. Pre-tests on new articles/suppliers are performed regularly in order to prevent problems and find alternative solutions. Screening for hazardous substances in articles is conducted on a seasonal basis within the scope of Valentino's product compliance procedure and in order to verify previous steps efficiency. The screening process is based on the "Testing Packages" created for each type of substrate/treatment. Each package contains multiple groups of substances that have to be tested depending on the materials/treatments involved, applying the best available techniques for the tested substances. All results are discussed with the suppliers and problems and relative implementations are shared and made available to the various players. (See <https://www.valentino.com/experience/it/corporate-information/> , for detailed information in our yearly Detox commitment updates).

Enhance Environmental Controls through Auditing, water testing, chemicals testing.

To achieve its goals, Valentino reinforces its programme assigning Assessments and Environmental Audits at relevant wet-process suppliers to selected Service Providers. Audits consist on the following main activities:

Check List

Water Sampling and Testing

Chemicals Testing

For more details, please refer to our “2017 – Detox Commitment Update” and to the “Environmental Controls Guidelines” documents at

<https://www.valentino.com/experience/it/corporate-information/>



Check List is composed of three main sections:

- Section 1 - Production plant registry
- Section 2 - Focus Areas:
 - Environmental Management
 - Permits
 - Emissions
 - Resources Use
 - Chemical Management
- Section 3 - Audit Results, Corrective Actions and Score

Water sampling and testing. Water tests aim at sampling and testing production process *incoming* and *untreated discharge waters*, where appropriate. Each additional sampling point is assessed on a case-by-case basis (sludges, additional sources of untreated water, etc.). All water samples are tested to check the presence of the 11 priority chemical groups and additional substances. This kind of screening process helps identifying the use of these chemicals in the manufacturing processes.

(See <https://www.valentino.com/experience/it/corporate-information/>,

Wastewater Test Results and yearly Detox Commitment Updates for detailed information)

Chemicals testing. Chemical formulations to be tested are selected considering chemicals composition, materials to be treated (for instance fabric, leather, etc.), type of use in the production process (auxiliary/colorant/finishing agents, etc.), documentation availability, frequency and amount of use in the supply chain, as well as peculiarities and refinement of specific intended effects. Specific Chemicals are sampled during audits/follow-up or case studies as well. Depending on the kind of production, Service Providers are requested to sample suspect and/or the most used chemical products from the audited company chemical inventory. Starting from April 2016, a deeper Chemical formulations screening/testing has been seasonally scheduled and performed and the results are available at:

http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/vspa_chemical_formulations-pdf.

Providing Training and Technical Support.

Technical support from us and our testing and consultancy/auditing partners is given to our suppliers in order to solve problems, identify corrective actions and improve procedures and performances. See research case studies, investigations etc. at <https://www.valentino.com/experience/it/corporate-information/> plus refer to Q2 session.

Training. Introductory meetings are organized with new suppliers to explain our goals and all suppliers are met/contacted on a regular basis in order to monitor their compliance with our goals, provide training, share knowledge and lessons learned. Training sessions are carried out internally and through our partners for Valentino employees and suppliers. During 2016 and 2017 trainings to Valentino employees, more than 100 key figures were involved. Training session provided by us, our partners and/or organizations we are part of (<https://www.cameramoda.it/en/sustainability/>) to our suppliers and, as per our commitment, to other members of the apparel industry, involved more than 200 firms/suppliers.



Interactive Database. An interactive database related to articles, chemicals, water test and suppliers results was developed in order to elaborate data and rapidly query them to find solutions/compliant materials. The database is also used to elaborate and publish data and reports in an easy and transparent way.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Kindly refer to question 4.2a

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Valentino eliminated the use of PFCs. Since 2015, Valentino and its suppliers have identified their replacements and collaborated in developing case studies and in looking for the root-cause of possible findings in different articles, as per the studies/investigations/yearly commitment updates published on our website (<https://www.valentino.com/experience/it/corporate-information/>). However, the complete elimination of these compounds, which are characterized by an intrinsic persistence in nature and are used in different fields that go beyond the textile industry or mere water-repellent treatments, deserves deep thoughts and controls.

Trend data are published with absolute objectivity and transparency, and they are the result of the ongoing activities aiming at carefully controlling and monitoring the entire supply chain, making it aware of possible contaminations and informed of available alternatives.

The prohibition of their use is to be followed by monitoring and control actions, through a careful and meticulous testing of chemical products, raw materials, finished garments, discharge waters and through environmental audits. The testing

on articles must not be limited to mere water- repellent materials/treatments, but must consider all kinds of processes and materials, such as other fabrics, leathers and different kinds of trims. Once the analytes under test are detected in the different matrixes analyzed, all suppliers are promptly notified and supported in order to identify the source and fix the problem.

To reduce these instances, we committed to specific training activities aiming at raising awareness among the suppliers on possible contaminations and on a clean factory approach. Suppliers that use, handle and transform materials and/or garments coming from various suppliers that are not committed to clean processes must pay attention to contaminations as well.

Possible problems to consider usually come from:

- Their use in trims and articles that do not need water-repellent treatments
- Absence of worldwide updated, targeted and uniform legislations
- Possible cross-contaminations in traces, even volatile (e.g. FTOH), from chemicals, materials and environment
- Undeclared low concentrations in chemicals not necessarily linked to water/oil repellent treatments. (Please also see our website and: https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio_oleanti_filatura_ITA_Public.pdf)
- The use of recycled materials produced in the past with different requirements and that at the moment cannot meet Detox parameters
- Possible presence in incoming waters. Please see our case studies and website at <https://www.valentino.com/experience/it/corporate-information/> and <http://www.arpa.veneto.it/arpav/pagine-generiche/sostanze-perfluoro-alchiliche-pfas>.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Valentino eliminated the use of APs/APEs. Since 2013, Valentino and its suppliers have identified their replacements and collaborated in developing case studies and in looking for the root-cause of possible findings in different articles, as per the studies/investigations/yearly commitment updates published on our website (<https://www.valentino.com/experience/it/corporate-information/>). However, the complete elimination of these compounds, which are characterized by an intrinsic persistence in nature and are used in different fields that go beyond the textile industry, deserves deep thoughts and controls.

Trend data are published with absolute objectivity and transparency, and they are the result of the ongoing activities aiming at carefully controlling and monitoring the entire supply chain, making it aware of possible contaminations and informed of available alternatives. Possible problems are due to the fact that they can be found as contaminants in different kinds of formulations and materials and therefore in multiple processes. Due to a wide use of these substances in the past, they are still found in higher concentrations in recycled materials.

Therefore the prohibition of their use is to be followed by monitoring and control actions, through a careful and meticulous testing of chemical products, raw materials, finished garments, discharge waters and through environmental audits. The testing on articles must not be limited to specific treatments but must consider all kinds of processes and materials, such as other fabrics, leathers and different kinds of trims. Once the analytes under test are detected in the different matrixes analyzed, all suppliers are promptly notified and supported in order to identify the source and fix the problem.

To reduce these instances, we committed to specific training activities aiming at raising awareness among the suppliers on possible contaminations and on a clean factory approach. Suppliers that use, handle and transform materials and/or garments coming from various suppliers that are not committed to clean processes must pay attention to contaminations as well.

Possible problems to consider usually come from:

- Absence of worldwide updated, targeted and uniform legislations
- Possible cross-contaminations in traces from chemicals, materials and environment
- Their use in trims and articles that do not need them
- Undeclared low concentrations in chemicals (Please also see the chemicals tests and case studies on our website and:
https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio_coloranti_ITA_fase2_Public.pdf
;
https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio_oleanti_filatura_ITA_Public.pdf)
- The use of recycled materials produced in the past with different requirements and that at the moment cannot meet Detox parameters
- Possible presence in incoming waters. (please also see our website at <https://www.valentino.com/experience/it/corporate-information/>)

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Please refer to our case studies and yearly updates on our website (<https://www.valentino.com/experience/it/corporate-information/> and http://valentino-4me.weebo.it/static/BKRATS_2017-DETOX_COMMITMENT_UPDATE_8W9XJM.pdf) and answers to question 2.4.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

All case studies/researches are published on our website at <https://www.valentino.com/experience/it/corporate-information/>.

Kindly find the current links below (others to come):

APEOs investigation:

http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/2013_apeos_investigation_report-pdf

APEOs, PFCs and Phthalates investigation:

http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/2014_apeos_pfc_phthalates_investigation_report-pdf

PFCs substitution case study:

http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/2016_pfc_substitution_case_study-pdf

Cadmium substitution case study:

http://valentino-4me.weebo.it/static/OVRQZX_2017_-_Cd_Substitution_case_study_SMOTZX.pdf

APEOs, Phthalates, PFCs case study:

http://valentino-4me.weebo.it/static/PFTLJ5_2017_-_AP-APEOS_PHTHALATES_PFC_CASE_STUDY_NRRF9G.pdf

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Wet-suppliers locations, geographical distribution and wastewater data are published in a map at http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/vspa_wastewater_test_results-pdf and http://valentino-4me.weebo.it/static/BKRATS_2017-DETOX_COMMITMENT_UPDATE_8W9XJM.pdf,

taking into consideration seasonal variations, they represent more than 80% of the active global wet- suppliers volumes.

The map is intended to be yearly updated. Please see also question q1.2 for more details.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Within the published wet supply-chain map, and depending on the kind of articles produced, the information is almost equally divided between tier 1 and tier 2/3 suppliers.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Wet-suppliers locations, geographical distribution and wastewater data are published in a map at http://valentino-dev.4me.it/cloudlink/connectors/resources/download/get/valentino/CS-CSJQ4E/IT/vspa_wastewater_test_results-pdf and http://valentino-4me.weebo.it/static/BKRATS_2017-DETOX_COMMITMENT_UPDATE_8W9XJM.pdf on our website. The map is intended to be yearly updated.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Kindly refer to question q 3.1 and subsequent answers.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain? Response:

Thanks to Detox, the sector started considering the hazardous substances management from a comprehensive point of view, not simply focusing on material testing or certifications/self- declaration, but including them in a process enabling structured management, monitoring and prevention from the very beginning: from the garment conception, to the selection of materials, to the use and monitoring of chemical substances, to the training and the assessment and control of products/chemicals in production and in the wastewater.

It was an input for the definition of challenging goals, going beyond the single regulations, fostering the involvement of the whole supply chain, and more. Since the beginning of the Detox campaign, many relevant initiatives at various levels started and/or strengthened their actions and this triggered a positive momentum to the apparel sector as a whole. Various alternatives to priority banned substances have been developed in the meanwhile.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

As previously exposed in detail in question n° 1.3, our activities start from the product concept, raw materials selection, then research, prototypes, sampling and production. Suppliers, as well as Valentino employees, are active participants in the Detox process and goals, training, audit/test results and knowledge are shared with them in order to fully achieve the elimination goal. Our interactions with suppliers were developed and strengthened in a structured way. Working with them is key to meet our goals, and a comprehensive chemical management approach, with a deeper knowledge of the possibilities, pros and cons of available formulations, allows to better control pollution, hazard and, last but not least reduce the use of resources, costs and eventual problems in production.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2 a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Absence of worldwide updated, targeted and uniform legislations

Involve and help small-size and artisanal suppliers, that can have difficulties in facing the challenges related to the Detox project

Various alternatives to priority banned substances have been developed so far but there is the need of wider investments in research and technical feasibility from the whole industry to cover the full set of substances. (e.g. heavy metals are found in water as per their ubiquitary presence and because they are part of many colourants structure)

Resistance to change from some sector organizations

Possible cross contaminations, even volatile (e.g. FTOH), from chemicals, materials and environment

Undeclared low concentrations in chemicals (Please also see the chemicals tests and case studies on our website and:

https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio

[_coloranti_ITA_fase2_Public.pdf](https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio_oleanti_filatura_ITA_Public.pdf)

https://www.confindustriatoscananord.it/media/DETOX/Buzzi_CID_presentazione_studio_oleanti_filatura_ITA_Public.pdf)

The use of recycled materials produced in the past with different requirements and that at the moment cannot meet Detox parameters.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

The topic complexity shows that different variables and players are to be considered to meet the desired goals. Importantly, institutions and the whole fashion industry are to be involved, including for example chemical companies, the different Brands, the whole supply chain, governmental and non-governmental associations, testing laboratories, etc. Furthermore, awareness is to be raised among the whole supply chain by supporting and auditing the suppliers in the creation and control of chemical/environmental management systems, dealing with fundamental topics, such as: the principle of precaution and prevention, health and security, stocking and use of chemical products and materials, use and update of chemical inventories, research of alternative chemical products, correct discharge management, etc.

Interaction with regulators and institutions such as Ministries of health and Ministries of environment, involving the industry organizations at a country and global level is key. Involvement and training for all stakeholders, as well as monitoring, controlling and reporting of implementations, are fundamental. Structured and informed offices, institutions and organizations are needed to implement objectives and enlarge the scope to the wider sector. Education programs on this topic, involving also schools and universities, will help to create awareness for current and future generations and to pave the way for future implementations.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives

and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Beyond the initiatives published on our website:

(<https://www.valentino.com/experience/it/corporate-information/>), and in compliance with our Detox Commitment, we participate to other initiatives such as sustainability activities of Camera della Moda:

(<https://www.cameramoda.it/en/sustainability/> and <https://www.cameramoda.it/en/special-projects/>) that also interacts with regulators and institutions (e.g. the Ministry of environment, the Ministry of economic development etc.), sector organizations, chemical suppliers, testing laboratories etc. in order to push the entire supply chain to a systemic change (i.e. wider societal and policy) and to achieve the final goal. Furthermore, we have active collaborations with Universities specialized in related fields.

Retailers

Aldi South and Aldi North

Q0: Detox page

Please provide here the main link to access your Detox information.

Link:

- ALDI North: <https://www.aldi-nord.de/verantwortung/lieferkette-non-food/oekologische-produktionsstandards-bei-textilien-und-schuhen/das-aldi-detox-commitment.html>
- ALDI SOUTH Group: <https://aldi.in/detox>

(Brief information on Detox and a link to the above mentioned pages are available on all national ALDI websites, e.g. on the Australian or French websites)

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes, the ALDI M-RSL includes a comprehensive list of PFCs with CAS numbers. The list of PFCs covered within the ALDI M-RSL also includes short chain PFCs like FTOHs and FTAs.

ALDI North:

https://www.aldi-nord.de/content/dam/aldi/germany/corporate/lieferkette/oekologische-produktionsstandards-bei-textilien-und-schuhen/das-aldi-detox-commitment/chemikalienmanagement/20180301_ALDI_M-RSL_RSL_2018.pdf.res/1519638139167/20180301_ALDI_M-RSL_RSL_2018.pdf

ALDI SOUTH Group: https://cr.aldisouthgroup.com/fileadmin/fm-dam/Detox_Page/The-ALDI-Detox-Commitment-RSL-and-M-RSL_2018.pdf

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

In line with the ALDI Detox Commitment, we have focused on an elimination strategy for the 11 priority hazardous chemical groups. ALDI aims to tackle the elimination from various perspectives and consequently adapted the ALDI RSL (annually), introduced the ZDHC MRSL for input chemical formulations as a part of the ALDI Input Chemicals Requirements (2016) and rolled-out respective capacity building measures. Instead of adding further chemical substances to the M-RSL, ALDI decided to require suppliers to follow a clean factory approach and eliminate 7 of the 11 chemical groups ahead of schedule (see 2.3).

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *the percentage of the supply chain (wet processes) this represents for each set of data*
- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

All wet-processing facilities are required to commission a waste water test report on an annual basis. ALDI decided to follow a process with four nominated testing institutes. The approved institutes ensure that the reports are made accessible to ALDI.

The reports are published on the IPE platform in accordance with our Detox Commitment. In 2016, 81% of all wet-processing facilities (ALDI North and ALDI SOUTH) had a valid waste water and sludge report. In 2017, 89% of all wet-processing facilities (ALDI North and ALDI SOUTH) had a valid waste water and sludge report. We also publish these KPIs in our Detox progress reports. A status report on the detailed findings was first published on our websites in May 2018. Hence, internally we utilised the data to further develop the elimination strategy and to follow-up on the results with our importers, also on individual cases.

ALDI North: <https://www.aldi-nord.de/content/dam/aldi/germany/verantwortung/lieferkette-non-food/oekologische-produktionsstandards-bei-textilien-und-schuhen/das-aldi-detox-commitment/chemikalienmanagement/Daten-der-Abwasser-und-Schlammanalyse.pdf.res/1527150165958/Daten-der-Abwasser-und-Schlammanalyse.pdf>

ALDI SOUTH Group: <https://cr.aldisouthgroup.com/en/international-activities/detox-commitment/chemical-management/results-of-wastewater-and-sludge-reports/>

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

The ZDHC gateway solution currently remains only accessible for ZDHC brands. ALDI is in close contact with the ZDHC and we align our requirements and processes with those offered by the ZDHC, as long as these are suitable to our supply chain partners. Hence, the ALDI Detox Commitment explicitly requires ALDI to publish the data on the IPE

The ZDHC Gateway input management mechanisms are reflected in the ALDI Input Chemical Requirements to ensure our supply chain partners create the demand for common standards, even if not within the ZDHC Gateway.

The ZDHC Gateway's 'ClearStream' system for wastewater reporting is also an integral part of what remains only accessible to ZDHC brands. Additionally, as explained above, the MRSL related waste water standards and the testing limits vary from those of the ALDI M-RSL.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Activities at supplier level:

The ALDI suppliers, our direct business partners, are the main focus of the capacity building programme. Our suppliers serve as multipliers for the production facilities in their supply chains, which is why we offer regularly training, access to updated training material, and several points of contact for questions and feedback.

The ALDI suppliers are responsible for passing the information on through their respective supply chains and further engaging with supply chain participants.

In 2016, when rolling-out the ALDI Input Chemical Requirements, all importers were required to participate in webinar sessions introducing the general principles (ZDHC MRSL training) and specifying the ALDI requirements and processes. This summer (May/June 2018), the ALDI SOUTH Group will provide suppliers with access to a supplier e-learning platform and a mandatory refresher course will be required for all supplier staff responsible for chemical management.

In 2017, ALDI decided to join the amfori BEPI (business environmental performance initiative). Since then, the BEPI platform has been promoted as a main tool for providing ALDI suppliers and their supply chains access to capacity building measures focussing on general environmental management topics, ZDHC training modules, and more guidance on how to manage environmental data. In cooperation with the amfori BEPI, ALDI organised onboarding training sessions in several countries.

Additionally, ALDI offered in-depth e-learning on chemical management with the Indian laboratory and capacity building experts of NimkarTek in 2017/2018. The training focused on chemical management, wastewater and sludge management, MSDS training, and APEO and PFC elimination training. Based on an ALDI pre-test on the respective modules' content, all/100% of suppliers were required to undergo mandatory training.

Activities at production facility level:

Since 2017, all production facilities have had access to the amfori BEPI platform and amfori academy. The amfori academy runs a schedule on general environmental topics and collaborates with the ZDHC on chemical management topics. The main training tool used is the e-learning concept, whereas webinars and personal training (classroom and on-site) complement the programme.

A core element of working on the BEPI platform is that all production facilities need to fill out an online self-assessment questionnaire to evaluate their environmental performance. ALDI uses the amfori BEPI dashboard and other tools to regularly review the results.

Additionally, ALDI supports the 'Partnership Initiative' on environmental and chemical management (German Partnership for Sustainable Textiles). We are committed to the working groups, the promotion of the tools developed in cooperation with the ZDHC, and currently evaluate how to further support on-site training programmes for wet-production facilities.

Within our Detox programme, we intensively piloted various auditing options. As mentioned in our current progress report, the BVE³ pilot is still running. As reported in the previous progress report, chemical management audits (CMAs) have been piloted. In May 2018, ALDI has also rolled out risk-based CMA requirements, utilising the BEPI platform. This approach ensures a focus on the most important supply chain partners whose performance is lacking at the same time. The management of corrective actions and other root cause analyses will support facilities in improving.

As an additional step to ensure we meet the goals set by the commitment, we recently introduced another cornerstone of the ALDI clean factory approach. We aim to eliminate 7 of the 11 chemical groups ahead of schedule (see 2.3)

1.4. Challenges: What challenges still remain which might hamper the achievement of the Detox objectives in your supply chain by 2020?

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 31 December 2016, the PFC-ban has been integrated within all of our supplier contracts (per RSL and per contractual definition of the substitute used). For several product ranges and also some ALDI countries, PFC-based finishes have been substituted even earlier. Nonetheless, our data shows that PFC-based finishes are applied in the very same facilities that produce our products. 75% of our production facilities are PFC-free referring to the wastewater and sludge analysis of data in 2017. The PFC substitutes used for the ALDI products are contractually agreed upon, products undergo testing and in questionable cases in-depth verification analyses have been conducted. Remaining problems include: The quality of PFC alternatives is related to sacrifices in the water and oil repellent performance of the product. Only if all brands commit to zero PFCs can we ensure that customers understand and experience what realistic level of performance is necessary for everyday use.

Capacity building is necessary a) to convince industry associations and production facilities to commit to zero PFCs, and b) to improve their understanding of the scope of change. Merely substituting PFCs is insufficient. Also, further adjustments regarding the machinery parameters need to be implemented, e.g. velocity, temperature, etc., in order to achieve better application results

Incoming water can be contaminated with PFCs depending on the facilities that are located in the same area or district (e.g. electroplating facilities).

ALDI is committed to a zero PFC strategy and recently introduced another cornerstone of the ALDI clean factory approach. Among other chemical groups, we aim to eliminate PFCs ahead of schedule (see 2.3).

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 31 December 2016, the APEO ban has been integrated within all of our supplier contracts (per RSL). Nonetheless, our data shows that only 55% of our production facilities are APEO-free referring to the wastewater and sludge analysis conducted in 2017. Remaining problems include:

APEO is an omnipresent chemical group. It is used in various applications, in spinning mills, dyeing facilities, etc. Due to the variety of applications and the fact that there is often no specific 'APEO chemical' to be substituted by an alternative solution, the elimination remains challenging.

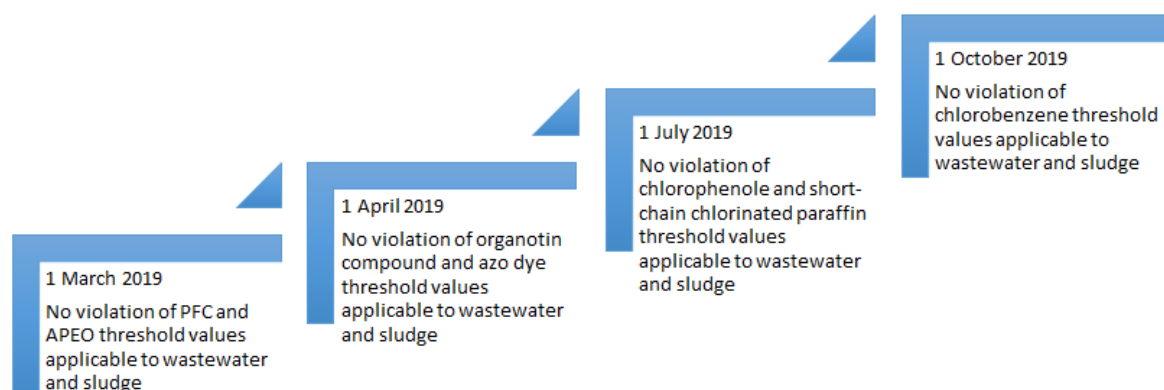
Incoming water can be contaminated with APEOs depending on the facilities that are located in the same area or district

ALDI commits to a zero-APEO strategy and recently introduced another cornerstone of the ALDI clean factory approach. Among other chemical groups, we aim to eliminate APEOs ahead of schedule (see 2.3).

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

As an additional step to ensure that ALDI meets the goals set by the commitment, another cornerstone of the ALDI clean factory approach was introduced. We aim to eliminate 7 of the 11 chemical groups ahead of schedule. We communicated the ALDI elimination strategy to our supply chain partners, which complements the elimination goals set by the M-RSL. By setting and communicating all phases, ALDI intends to offer supply chain partners the option to prioritise their own hotspots. It is our position that production facilities can tackle issues more effectively when given the prospective milestones until the '2020 deadline'.

The updated elimination strategy includes the following objectives:



For the remaining chemical groups, the goal set for 2020 will be maintained. Furthermore, the case studies are aimed at further investigating options for substitution, e.g. waterborne PU and PFC-substitutes.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

ZLD case study ([Link ALDI North](#) / [Link ALDI SOUTH](#))

APEO case study ([Link](#))

PFC case study ([Link](#))

Waterborne PU case study ([Link](#))

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

ALDI North Germany and ALDI SOUTH Germany published a list of all main production facilities in 2017. The list will be updated twice a year. It is planned to publish further information on these production facilities with the next update in 2018.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The list published for the German market (ALDI North Germany/ALDI SOUTH Germany) comprises main production facilities only. Conclusively, the list includes all vertically integrated wet-processing facilities.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

ALDI SOUTH Group:

<https://unternehmen.aldi-sued.de/de/verantwortung/lieferkette/transparenz-in-der-lieferkette/>

ALDI North:

https://www.aldi-nord.de/content/dam/aldi/germany/verantwortung/lieferkette-non-food/transparenz-in-der-lieferkette-von-textilien-und-schuhen/180302_Produktionsstaetten.pdf.res/1520432112687/180302_Produktionsstaetten.pdf

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

ALDI will discuss whether wet-processing facility data could be published in the future. In response to our customers' desire for information on the product origin, our products now display a tracking code. We also provide consumers with further online information on selected textile products, such as descriptive information ranging from the generation of the raw materials used to the manufacture of the product. In some regions in Germany, ALDI already offers a number of products containing certified cotton, the origin of which can be traced by means of a tracking code right back to the country of cotton cultivation. In further regions in Germany, ALDI will initially offer similar products in its stores in 2018. Successively

(by 2020 at the latest), we will extend the use of tracking codes throughout Germany to include all garment and household textiles containing certified cotton.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

4.2 Looking to the future, what is needed to maintain the Detox momentum with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

ALDI provided Greenpeace with honest and open feedback. However, this feedback is also confidential and ALDI therefore requests that it not be published.

COOP

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://www.coop.ch/content/act/de/grundsaeetze-und-themen/hauptthemen/textil/detox.html>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes. Please find list here:

http://www.coop.ch/content/dam/act/themen/hauptthemen/textil/Coop_Negative_List_for_Textile_and_Leather_v2.1.pdf

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Please find also in above list "P6" (violet colour):

- Various substances: glyoxal, bisphenol A, PCB and PCT
- Biocides: triclosan, octylisothiazolinone, chloromethylisothiazolinone, methylisothiazolinone, 1,2-benzisothiazolin-3-one, OPP
- Nitrosamines
- Pesticides
- Isocyanates
- Unreacted / free monomers

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- a list of the dates that you published data since 2016,
- the portal(s) of publication (e.g. IPE, own website, other)?
- the percentage of the supply chain (wet processes) this represents for each set of data

- *links to status reports on the findings and actions taken as a result*
- *planned publication in 2018 onwards*

As a small player in the textile sector, Coop focuses on three pillars to achieve the Detox objectives: 1. Training/Capacity Building, 2. Auditing, 3. Testing. We at Coop believe in cooperation with our suppliers and in training them in chemical management. Only with this knowledge are they able to perform well in auditing and to achieve good results in the Wastewater Tests. Therefore, Coop has concentrated its efforts in the past two years on three subject areas: 1. chemical management training at tier 2 / tier 3 level (wet processing units); 2. ensuring transparency in its supply chains, with focus on tier 2 / tier 3 suppliers; and 3. creating hands-on tools for implementing chemical management at factory level and building up an audit system.

After publishing wastewater data on the IPE database in previous years, Coop has placed the emphasis on sound training of 2nd and 3rd tier suppliers. Together with Systain Consulting, a professional and well-established consultant in the environment and textiles area, we trained our main wet processing suppliers in China and India in the field of chemical management. Systain Consulting based its training on Coop's own Detox Manual and ZDHC Guidelines. The aim was and is a) to enable factories to handle their chemicals according to Detox objectives and b) to achieve good results in wastewater testing.

Secondly, Coop prioritized to keep track of and maintain transparency with regard to 2nd and 3rd tier suppliers as well to build stable business relations. Coop already has fairly stable business relations with 1st tier suppliers. Moreover, we have already achieved transparent supply chains with our own brand Coop Naturaline through to cotton production at farm level. We should stress again that Coop, as a retailer and small player, does not have direct contracts with its 2nd and 3rd tier suppliers. That's why we need to establish trust and cooperation, so that these suppliers are willing undergo training and ultimately publish their wastewater data on the IPE database. We firmly believe that tests without training are no gain for the environment.

Thirdly, we focused on creating hands-on implementation tools for chemical management. We were in the lead of establishing amfori BEPI Chemical Management Audit, which is now launching and a viable tool to a) enable factories to meet Detox objectives and b) to measure the performance of suppliers on their chemical management.

All these actions were taken to be able to conduct wastewater testing on an annual basis. We plan to conduct wastewater testing at 6 suppliers in 2018, including BEPI CMA, and to upload the data on the ZDHC Gateway and IPE database. From 2019 onwards, we plan to do once-yearly wastewater testing following ZDHC Wastewater Guidelines.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

a) Yes, we will disclose our data on the ZDHC Gateway & IPE Database à We plan 6 suppliers in 2018.

b) Yes, we would agree to connect the supplier and the brand, though it is important to have the legal "handshake" with the suppliers to publish their data.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

For Coop, training is at the core of achieving the Detox objectives. That's why we set up a special chemical management training to achieve Detox objectives together with Systain Consulting. In 2017 we provided a 3-day workshop to our most important Chinese wet processing suppliers followed by a one-day on-site visit. The factory received tailor-made feedback on their chemical management performance including detailed corrective action plans on how to improve their performance. Now in 2018 we are doing a 2-day on-site follow-up visit at those Chinese suppliers to check their improvements after the first workshop. Secondly, we are launching a 2-day workshop with our most important Indian wet processing suppliers followed by a one-day on-site visit. We frequently talk to the trained suppliers and check on their improvements with regard to Corrective Action Plans and support, where needed. We place great emphasis on direct contact with our suppliers to train and support them on site. On a regular basis, we visit our suppliers and their wet processing units to show we are serious about the Detox agreement and our commitment for long-term business relations.

As mentioned above, Coop was the leading company in creating and establishing the Chemical Management Audit tool together with amfori BEPI. This BEPI CMA is based on the ZDHC protocol, and therefore meet the Detox objectives as well. Coop had an important and crucial role in making this tool available to all interested companies. The BEPI CMA has three advantages: 1. Factories have a hands-on chemical management tool; 2. companies have an overview of the factories' performance in terms of chemical management which meets Detox objectives; and 3, the audits are shared with all companies who are amfori BEPI participants. This will lower costs and reduce audit cycles. BEPI is in close contact with ZDHC to promote the BEPI CMA for ZDHC members.

We provide our suppliers regularly with updated positive lists ([Link](#)) and a user-friendly manual on how to achieve the Detox objectives ([Link](#)). We also plan a workshop with our tier 1 business partners in Switzerland on achieving the Detox objectives.

We conduct once-yearly chemical testing on products to check for any prohibited chemicals. Together with the supplier, we investigate any irregularities that may occur and help resolve the issue.

Coop is also open to finding innovative solutions together with suppliers to achieve Detox objectives. One of these successful collaborations is with our umbrella supplier, who was the first one to produce a PFC-free umbrella for the same price and quality as the previous model.

Coop will also publish the main 1st tier suppliers on the internet by July 2018 to ensure transparency in the supply chain.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

To establish transparency and stable business relation for 2nd and 3rd tier suppliers, who do not have a direct legal contract with Coop. Thus Coop carried out a project to map and analyse the supply chain so as to obtain a clear picture about what lies beyond the 1st tier. Coop has fairly stable business relation with its 1st tier, but needs to establish transparency and a certain stability for 2nd and 3rd tier suppliers so that it can implement and achieve Detox objectives.

ZDHC and also amfori BEPI are important providers of a supplier database where we can link our 2nd and 3rd tier and can share data on their chemical performance and wastewater testing. As a small player, Coop needs to have this collaboration and network with other retailers. We are too small to exert real pressure on suppliers or chemical companies to change to toxic free ingredients. In this regard, we also need Greenpeace to put more pressure on those chemical companies. The small ones in particular are difficult to get on track.

Although there is a lot of common ground among retailers to the textile supply chain, many brands still have their own guidelines. It is difficult for suppliers to comply with so many different standards. That's why we emphasize using the same tools and databases to achieve Detox objectives and spare the environment.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we achieved this by the end of 2015. We check in annual product testing if PFC has been fully eliminated. If any occurs we immediately take action with the supplier to resolve the issue.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we achieved this by the end of 2016. We check in annual product testing if APEO has been completely eliminated. If any occurs, we immediately take action with the supplier to resolve the issue. For example, there was one single case of a positive result on APEO in 2016 and we took immediate action with the supplier to resolve the issue. In this case, the APEO contamination was because the supplier used a cleaning detergent with APEO in it for its washing machines. The supplier then changed to an APEO-free cleaning detergent.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Most of the priority 1, 2 and 3 chemicals have been eliminated or are not measurable in our own-brand textile and leather items. In 2018 we are focusing on the elimination of SCCPs and in 2019 heavy metals and softener are also to be eliminated.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Our ground-breaking innovation was the substitution of PFC in umbrellas. Coop now only has own-brand umbrellas which are completely free of PFC and so contributes to chemical-free and environmental friendly production. Together with our supplier Strotz AG and Schoeller Textile we tested a lot of technologies and finally found the alternative in the existing technology "ecorepel", which meets Coop's quality and price standards. We are very proud to be the first company to use ecorepel for umbrellas and set a new standard in the sector. Please find further information here: <http://www.coop.ch/content/act/de/taten-statt-worte/tat-nr--324.html> and here: <http://www.coop.ch/de/ueber-uns/medien/medienmitteilungen/2016/pioniergeist-und-umweltschutz-unter-einem-schirm.html>

Another achievement is that we no longer use optical brighteners for the recycled polyester in our Naturaline Washcare label.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

We disclose the names of 80% (in terms of turnover) of our main wet processing units on the internet (No. 4: Veröffentlichung auf der IPE-Datenbank):

<http://www.coop.ch/content/act/de/grundsaeetze-und-themen/hauptthemen/textil/detox.html>

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

We are a pioneer in having a transparent supply chain with our own brand Coop Naturaline (organic and fair!). Please refer to following [link](#) for Naturaline. Every Coop Naturaline item can be traced along the whole supply chain. This is especially unique and groundbreaking as Coop Naturaline is not a niche product: it comprises about 35-40% of Coop's own-branded textile assortment or even 80% for socks. Please find the traceability tool here: <http://www.biore.ch/>.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Please refer to this websites:

<http://www.coop.ch/content/act/de/grundsaeetze-und-themen/hauptthemen/textil/detox.html>

<http://www.coop.ch/de/labels/naturaline-bio-fair/philosophie.html>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step asap by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

We have 80% of our main wet processing units publicly available on our website (see above).

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

There is a lot of positive movement in the sector. As a member of ZDHC with almost 100 active contributors implementing its MRSL on a global level – and with significant uptake in the last 18 months – Coop is part of a network which is driving forward the process to zero hazardous chemicals.

Again we would like to mention our active and also pioneering role in developing the amfori BEPI Chemical Management Audit together with other companies. This is a concrete instrument to implement and give leverage to Detox objectives. On the amfori BEPI database we also share our audit reports and thus combine our forces.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Coop has a unique collaboration with its supplier Remei AG to push forward environmental and social standards with Naturaline Textile. This pioneering project, which was launched over 20 years ago, has a significant impact on people and the planet.

Since then, Coop has supported many different social and environmental projects in collaboration with the bioRe Foundation, obtaining fair and organic produced cotton from bioRe India and Tanzania (on average 850 tons of lint cotton every year). Until 2020 we are supporting an education program in 4 schools in rural India in the bioRe farm villages, farmer training for strengthening farmers' skills, a Mobile Health Unit (basic healthcare and first aid for farmer communities in rural India, drinking water supply in Tanzania and assurance of GMO-free seeds for the bioRe farmers in India.

Coop is driving forward environmental compliance at factory level together with amfori BEPI (Business Environmental Performance Initiative – the overarching architecture). This Initiative is focusing on different environmental aspects at the factory level. The BEPI CMA, which was developed as an idea from Coop, is a special tool to implement and measure Chemical Management Performance. BEPI CMA uses the ZDHC audit protocol, effluent guidelines and the ZDHC MRL for the textile and footwear industry. The BEPI Chemical Management Audit is the first audit that suppliers can conduct to measure their performance and receive a good overview of their achievement level. The BEPI CMA is now being launched, and sharing data with other participants is key here as well. Please find further information at: <http://www.amfori.org/content/bepi-supply-chain-chemical-management-module-sccm>

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The challenge for the sector is to embed the Detox objectives into public procurement efforts and extend the campaign to other industries with strong overlaps in supply chains. It is important that Greenpeace is also educating policymakers to ensure meaningful regulation.

Another main challenge is to get more support from Greenpeace to build up pressure on wet processing units and the chemical industry to support Detox objectives.

4.2b What regulatory or voluntary structures – either global, regional (e.g. EU) or local – are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

It is important that our efforts are rewarded. It is necessary for Greenpeace to have discussions with policymakers to lower boundaries for chemical innovations or even push them.

We are in discussion with the public sector in Switzerland regarding environmental issues and we are putting forward the need to integrate Detox objectives into procurement.

Coop has established a regular (at least once yearly) round table with Greenpeace Switzerland. We have an open and constructive discussion on how to implement the Detox objectives in our supply chains. This engagement with an NGO is fairly unique.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

We are actively involved in two ZDHC Task Teams. Furthermore we actively promoted and built the amfori BEPI Chemical Management Audit. Coop has its Guideline on Textiles and Leather, which are mandatory for all suppliers.

We have all sustainability guidelines publicly available. Regarding textiles, please find the following:

- Naturaline:
http://www.coop.ch/content/dam/act/themen/standards%20und%20richtlinien/r_cnl_d.pdf
- Textile and Leather
http://www.coop.ch/content/dam/act/themen/standards%20und%20richtlinien/r_textil%20und%20leder_d.pdf

We have held speeches and workshops (about Naturaline) at the following events:

- Swiss Fair Trade: Förderung nachhaltiger Mode [promoting sustainable fashion] (27.02.2018)
- Fashion Revolution Week (28.04.2018): Workshop on GMO-free seeds in collaboration with the bioRe Foundation

Kaufland

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://unternehmen.kaufland.de/mensch-und-umwelt/umwelt-und-klimaschutz.html#textilien>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

YES, various PFCs and their precursor (FTOHs and FTAs) are listed with CAS numbers on Kaufland's MRSL. They have been banned from intentional use in production of Kaufland's private label products since 01.01.2017.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Beyond the initial 11 priority chemical groups the following groups are listed in the Kaufland MRSL:

- Antioxidants
- Brominated solvents
- additional Azo dyes that release carcinogenic amines through reduction cleavage
- Dyes and dye intermediates
- Dinitrotoluene
- epoxy intermediate
- fibrous mineral
- Glycols
- Monomers
- N-nitroso compounds

- PAH
- Petroleum distillates & related chemicals
- respirable particles
- Solvent
- Others

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
 - *the portal(s) of publication (e.g. IPE, own website, other)?*
 - *the percentage of the supply chain (wet processes) this represents for each set of data*
 - *links to status reports on the findings and actions taken as a result*
 - *planned publication in 2018 onwards*
- a list of the dates that you published data since 2016,

We started to upload the wastewater data on IPE in June 2016 due to the fact, that the IPE Database was not functioning before. Uploading wastewater results on the IPE Database is a continuous process in our Detox Project. We test wastewater at our wet process facilities and all of these test reports are uploaded to the IPE Database.

- the portal(s) of publication (e.g. IPE, own website, other)?

IPE Website for wastewater and Kaufland Website for Reports, Supplier List and Case Studies

- The percentage of the supply chain (wet processes) this represents for each set of data

71 WPF; 53 water test; 52 uploading of the Institute of Public and Environmental Affairs (IPE)

- Links to status reports on the findings and actions taken as a result

<https://unternehmen.kaufland.de/mensch-und-umwelt/umwelt-und-klimaschutz.html>

status report 2017 will be published in June 2018

- Planned publication in 2018 onwards

yearly report

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We don't have any plans of disclosing the wastewater testing data on ZDHC Gateway.

Yes, we agree that all published wastewater data should have a connection to the supplier and brand. All of our wastewater data that we uploaded on the IPE Website have the connection to Kaufland. Kaufland as client name is stated on the report.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

All suppliers and wet process facilities are asked to commit themselves to detox and disclose their complete supply chain.

A wastewater test is conducted at the WPF. This is done once a year.

After that we train all suppliers and their wet process facilities on detox. In china we even go for one to one training. That means we visit the wet process and train them on their premises. During that training, we go for a walk through: checking the chemical rooms, the chemical management system on site, PPE's of workers etc. and we fill together with the WPF a chemical inventory. This is usually done once a year.

After training a detox audit and consultation is conducted on the premises of the WPF.

During the audit the chemical management system of the WPF is being checked (e.g. handling and storage of chemicals, PPE's etc.) and the discussion of wastewater results as well as root cause analysis where the problems come from and consult the WPF e.g. on substitutions etc.

After the audit we follow up on the WPF to track the implementation of the necessary improvements. If the WPF is done implementing the necessary improvements a re-audit is conducted.

Internally we started classifying our suppliers on detox criterias to look for the best performers and suggesting them to other suppliers.

We also send out a chemical positive list to our suppliers

We are doing spot checks on our products.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Challenges are:

- to find suitable alternatives for all hazardous substances.
- to establish a good Chemical Management system along the whole supply chain, especially in factory beyond tier 2.
- contaminations in incoming water. Water in some area in Asia is already contaminated before entering the factories, water treatment process could not solve the problems
- supply chain transparency: knowing who is involved in the supply chain
- traceability systems: a tracing/tracking system within the supply chain is on enormous task and until today we didn't encounter such a system which makes it possible to trace a product in the textile industry
- getting the supply chain realize the importance of Detox and getting their commitment to comply to Detox remains a big challenge, especially in countries where government regulations are not very strong and the mills for example still feel that water is free and there is no need for any water treatment required as it is seen as a cost instead of responsibility/investment
- Heavy metals as a challenge: the design of the ETP's in the countries where most of our suppliers come from are not sufficient enough to handle and treat heavy metals
- Eliminating PFC: we still encounter mills in our supply chain which also work with American retailers and brands. The elimination of PFC is not included in their MRSL/RSL

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

YES in view of strategy. PFCs were banned from intentional use in production of Kaufland's private label products since 1.1.2017. Kaufland has narrowly missed the "zero discharge" aim, 10% of water-test results showed PFCs exceeding the limit. According to our analysis, they were not intentionally used, but came from contamination of chemicals and dyes, and in some area also from incoming water.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Kaufland is making good progress to reach its aim of zero discharge by 2020. APs/APEOs were set to be phased out.

87% of water-test results showed that they are free from AP/APEO. There are various sources for AP/APEO, in many cases, they were from up-stream materials.

The AP's from the unorganized glue sector still pose a challenge and we are continuously working on this challenge and hope we can achieve the results by 2018. We started collecting APEO free glues from known manufactures like Wactur, Ayer, CHT etc. and we are passing it to our supply chain

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Response: NO

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Links:

Case Study Kaufland on detection of chlorophenols in wastewater

<https://www.subsport.eu/case-stories/435-en>

Case Study Kaufland on chlorinated solvents

<https://www.subsport.eu/case-stories/436-en>

<https://unternehmen.kaufland.de/mensch-und-umwelt/umwelt-und-klimaschutz.html#textilien>

Case study – Substitution von PFC

https://media.kaufland.com/images/PPIM/AP_MarketingDocument/deu/59/94/Asset_995994.pdf

Case study– Substitution von AP/APEO

https://media.kaufland.com/images/PPIM/AP_MarketingDocument/deu/48/20/Asset_994820.pdf

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Kaufland discloses its list of suppliers for Kaufland private label products on a regular basis, including detailed names and locations. Currently, the percentage of supply chain disclosed amounts to 100%. Please refer to our Detox webpage

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

As part of providing more transparency on our supplier structure, Kaufland is currently determining its approach with respect to requested information about wet processing suppliers. Kaufland discloses its list of wet processing suppliers for private label products on a regular basis, including detailed names and locations

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Link: <https://unternehmen.kaufland.de/mensch-und-umwelt/umwelt-und-klimaschutz.html#textilien>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

As referred to under 3.2 Kaufland is currently coordinating a meeting with Greenpeace in order to discuss our approach on best practice concerning the publication of wet processing suppliers.

For the first time, Kaufland published a list of wet process suppliers for private label products in June 2018.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

More transparency

More discussion of the topic of chemistry,

Circular economy

More sustainable products

Greater attention / public attention

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Suppliers:

In order to reach a common spirit with our suppliers about fulfilment of the Detox-commitment a higher level of confidence with the suppliers is needed. The result for us is a more systematic concentration on strategic suppliers.

Sustainable Fibres/Raw Materials

We still aim to use as many materials as possible which are produced based on natural fibres. In practise this means

- we want to continuously increase the share of GOTS-certified fibres
- when using Modal and viscose fibres we want to continuously increase the share of branded fibres from Lenzing

Currently approx. 32% of our textile products are made from synthetic fibres. Polyester fibre, partially in mixtures or in the shape of 100% polyester, is our main focus. We are intensively looking for options to at least replace polyester fibre in parts with recycled fibres.

A further aim is to offer articles that comply with other sustainable approaches, for example cradle-to-cradle.

Packaging

Due to our sales concept we are forced to sell our textile products to customers in packaging. Unfortunately, we cannot fundamentally forgo packaging. We have been using polybags with inserts to protect the article and make the content of the package clearly visible. Our aim is certainly to avoid or completely forgo the use of plastic.

We have intensively explored options for alternative packaging and developed folding boxes with windows (to see and feel the product) as well as waterfall packaging and banderoles. A majority of our products has already or will switch packaging during 2018 and by the end of 2019 we aim to be fully (apart from some exceptions based on the product) plastic-free across our entire range of textile article packaging.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

To find suitable alternatives for hazardous substances

To establish a good Chemical Management system along the whole value chain, especially in factory beyond tier 2.

Contaminations in incoming water. Water in some area in Asia is already contaminated before entering our factory, water treatment process could not solve the problems

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

It would be much more easier, if the initiative for saving the environment and the prevention of using toxic substances would be supported by the countries where the factories are located.

Also an international approach of Greenpeace Detox-campaign would be helpful to reach a higher attention and engagement on supplier side.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

The corporate website of Kaufland constitutes the key communication platform with respect to environmental initiatives. The fields of intervention and objectives are reflected amongst others in the following directives: Tierwohl (animal welfare), Richtlinie Fisch (Sustainable Fishing), Selbstverpflichtung Mikroplastik (self-commitment on microplastics), Code of Conduct for supplier behavior and internal guidelines for procurement. Furthermore we are engaged in several initiatives such as multi-stakeholder dialogues and retail-platforms from BVLH, HDE and Eurocommerce and support the Retailers' Environmental Action Plan REAP from the European Commission. The communication of respective initiatives is coordinated centrally by those associations / organizations.

Link:

<https://unternehmen.kaufland.de/mensch-und-umwelt/nachhaltige-sortimentsgestaltung.html>

Richtlinie Tierwohl:

https://media.kaufland.com/images/PPIM/AP_MarketingDocument/deu/09/59/Asset_1690959.pdf

Richtlinie Fisch:

https://media.kaufland.com/images/PPIM/AP_MarketingDocument/deu/85/27/Asset_1018527.pdf

Selbstverpflichtung Mikroplastik:

https://media.kaufland.com/images/PPIM/AP_MarketingDocument/deu/99/55/Asset_1689955.pdf

REAP Commitment:

http://ec.europa.eu/environment/archives/industry/retail/reap_2014/show-commitment2992_en.html

Lidl

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.lidl.de/de/detox-commitment/s7376403>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

CAS numbers are given on PFOA and PFOS. With regards to FTOHs and FTOs we have used the term various instead of listing all CAS#. This means all short chain PFCs are restricted. The use of PFC containing chemicals banned, in cases where it is technical unavoidable, supplier must always get an approval from LIDL before using any PFC containing system, which was never the case.

Manual for suppliers: Chemical Restrictions apparel, hometextiles and footwear

CAS No.	substance	chemical formula- tion and finished product require- ment	Chemical formula- tion limit
Perfluorinated and Polyfluorinated Chemicals (PFCs) ¹			
335-67-1	Perfluorooctanoic acid (PFOA) and related substances	no intentional use	2 ppm
1763-23-1	Perfluorooctane sulfonate (PFOS) and related substances		Sum = 2 ppm
various	Fluortelomer alcohols (FTOHs)		Sum = 50 ppm
various	Fluortelomer olefins (FTOs)		Sum = 50 ppm

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Glycols have been added as a group to the scope of the MRSL

DMFu have been added to the scope of waste water testing

Biocides and Nitrosamines have been added as a group to the scope of waste water testing.

Cyanide, DMFa and Formaldehyde have been added as substances to the scope of waste water testing.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Waste water testing is conducted on a yearly basis

Reports on the waste water testing are published on: <http://wwwen.ipe.org.cn/>

80 %

Report on waste water status 2017 attached

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

The ZDHC Gateway will be evaluated.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

In order to transfer knowledge a training on production-integrated environmental protection is provided for textile manufacturers with wet-processing units. It is mandatory for our direct business partners (importers) to participate in the training. The training-programm is called PURE ("Projekt für Umwelt und Ressourceneffizienz") and is based on the three pillars Input-stream-, Production-process- and Output-stream-Management. The trainings are organised and given by the "Gesellschaft für internationale Zusammenarbeit" (GiZ) for the factories. The training lasts for nine months for one factory with consecutive on-site visits from local experts and workshops (for more information see attached document).

Positive lists based on the current version of the Lidl-MRSL have been elaborated with the chemical industry and been provided to our business partners

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Knowledge of textile manufacturers is a major success factor for achieving lasting solutions. Though Manufacturers in Asia have caught up there still remains a gap. Thus the PURE training for wet processing units has been launched. In order to transfer knowledge a training on production-integrated environmental protection is provided for textile manufacturers with wet-processing units. It is mandatory for our direct business partners (importers) to participate in the training. The training-programme is called PURE ("Projekt für Umwelt und Ressourceneffizienz") and is based on the three pillars Input-stream-, Production-process- and Output-stream-Management. The trainings are organised and given by the "**Gesellschaft für internationale Zusammenarbeit**" (GiZ) for the factories. The training lasts for nine months for one factory with consecutive on-site visits from local experts and workshops (for more information see attached document).

An Industry-wide push and more efforts by other big players in the sector are needed

Standardization and round robin tests of waste water testing is important to assure comparability and quality test results. At the moment the results between laboratories are not comparable

Information on chemical products produced in China is poor: e.g. names and data sheets given only in chinese, important information on hazard communication is missing, safety data sheets are based on different formats (partly this comes down to missing knowledge) – testing of chemical products is not a solution.

Technology and Know-How on textile recycling is lacking and needs more research which is time-consuming.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Lidl uses of the Ecofriendly alternative BionicFinish ECO in all of our products, instead of PFC containing finishes for dirt and water repellency. In very few of our products zippers are being used which still contain PFCs. Currently we work on a PFC-free zipper with the industry.

In few factories, PFCs are still found in the waste water. Residues on products of our private labels have not been detected. So PFCs seem still to be used for some customers of these factories. The topic has been raised with our business partners.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

The ban on the usage of APs/APEs is part of the contract with our business partners.

In few factories, APEOs are still found in the waste water. Residues on products of our private labels have been detected. The topic has been raised with our business partners and we work on solutions. Since the huge amounts of possible applications of APs/APEs, one of the major challenges is the availability of reliable information on the content of chemicals as well as knowledge in the factories.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

A substitution study on N,N-Dimethylformamide has been published.

Project on textiles for the circular economy: together with the **Beneficial Design Institute** and **EPEA Gemeinnützige GmbH** as partners a print paste formulation for **textiles** was optimised for circularity in the biosphere with regards to its chemical composition – no data was published yet.

Project on textiles for the circular economy: together with the **Beneficial Design Institute** and **EPEA Gemeinnützige GmbH** the print paste formulation for the **cardboard packaging** was optimised for circularity in the biosphere with regards to its chemical composition – no data was published yet.

A training concept for wet processing units was established to transfer knowledge: it is focused on input-stream management, optimisation of production processes, output-stream-management and the **substitution** of chemicals.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

A substitution study on N,N-Dimethylformamide has been published.

A substitution study on Phthalates was conducted but was rejected by Subsport published, because of change in **EU regulation** of the compilation of safety data sheets. (See not published substitution story attached).

A substitution study on PFCs has been published

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Lidl started to disclose the list of 650 main manufacturers of our private textile and shoe labels on our web-site in January 2017. The list is updated biannually and names, addresses and countries are given. The list encompasses independent companies awarded with orders from Lidl to produce its private labels.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The list includes Factories on a Tier 1 level and includes ready-made garment manufacturers as well as vertically integrated factories with wet processing units.

Information about the deeper supply chain is not published.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Response: <https://www.lidl.de/de/transparenz-in-der-lieferkette/s7376023>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

N/A

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

The challenges are the same for the whole industry: knowledge and reliable information, both of which are important for establishing a sound chemical management in the factories and tackling the issues of hazardous chemicals in the supply chain.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Project on textiles for the circular economy: together with the **Beneficial Design Institute** and **EPEA Gemeinnützige GmbH** as partner print paste formulation was optimised for circularity in the biosphere with regards to its chemical composition – no data was published yet. An information campaign is in preparation.

In order to transfer knowledge a training on production-integrated environmental protection is provided for textile manufacturers with wet-processing units. It is mandatory for our direct business partners (importers) to participate in the training. The training-programme is called PURE (“Projekt für Umwelt und Ressourceneffizienz”) and is based on the three pillars Input-stream-, Production-process- and Output-stream-Management. The trainings are organised and given by the “**Gesellschaft für internationale Zusammenarbeit**” (GiZ) for the factories. The training lasts for nine months for one factory with consecutive on-site visits from local experts and workshops (for more information see attached document).

In the Supplier Qualification Programme Factories are being trained on social compliance and about workers participation. Furthermore the factories are granted a training on clean production methods. The training is being conducted with the internationally renowned “Gesellschaft für internationale Zusammenarbeit” GiZ.

Packaging guideline was reworked. Use of polybags in packing textile and shoe private labels is to be banned by 2020. Instead cardboard packing shall be used with recycled fibres as first choice. Second choice is FSC certified virgin fibres. Wherever possible packaging is to be avoided at and for all packaging overall weight is to be reduced.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The detox-campaign established a broad awareness in the textile and shoe industry about the impacts of production on the environment. As we are only one player in the sector, we believe it needs more engagement from other players in the sector to achieve a market change. Lidl will pursue the goals of the detox-campaign after 2020 and work hard on improving the sectors performance.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

More regulatory efforts and legal enforcement in textile producing countries in Asia would be helpful.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively?

Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

A guideline for our business partner on environmental/chemical management for wet processing units in the textile sector was created. Its purpose is to assist our business partners in implementing and understanding our perception of a sound environmental / chemical management system.

Rewe/Penny

Q0: Detox page

Please provide here the main link to access your Detox information.

Link to Detox Websites (with progress reports):

<https://www.rewe-group.com/en/nachhaltigkeit/gruene-produkte/unser-detox-programm/>

<https://www.rewe-group.com/en/nachhaltigkeit/gruene-produkte/informationmaterial-f-r-lieferanten-und-fabriken.html>

Link to Sustainability Report:

<http://rewe-group-nachhaltigkeitsbericht.de/2017>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Chemicals that may not be used in our supply chains are listed in our Manufacturing Restricted Substances List (MRSL 3.0). In addition to eleven priority chemical groups, the MRSL also contains four more groups of chemicals that the REWE Group classified as hazardous within the scope of an extensive screening process. For all the identified chemicals the MRSL defines test methods and limit values that apply to the use of (input) chemicals and the presence of chemicals in wastewater and sewage sludge. The MRSL also contains CAS numbers for all listed chemicals including short chain PFCs (FTOHs and FTAs).

The MRSL also includes a Restricted Substances List (RSL). This defines limit values for our products that are also included in our product requirements profiles for every textile order.

Within the scope of our phase-out strategy, timelines for elimination of the chemicals are also defined in the MRSL. The MRSL is updated each year based on a method developed by the REWE Group. The MRSL update method may be reviewed on the REWE Group website.

1.1 b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

In addition to the eleven priority chemical groups, the MRSL 3.0 contains four more groups of chemicals that the REWE Group classified as hazardous:

Glycols

Biocides

Nitrosamines

Poly aromatic hydrocarbons

These chemical groups contain 38 additional substances.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

The REWE Group requires its suppliers to provide a valid water test report of an accredited laboratory for the relevant wet processing factories for every order which is controlled by the REWE Group. Thus, there is a functional mechanism to control the waste water of 100% of wet process factories producing for the REWE Group. You can find more information about the process in the Progress Report 2016: 13.

The REWE Group also requires all suppliers to upload the test reports on the IPE platform and we intensified our follow up to assure the obligation.

Besides the publication on the IPE platform, we report on the waste water testing data including a discussion of results and necessary actions publicly on our website. We use the data for our phase out strategy and as an indicator for which chemicals our suppliers need further support. Since 2016 we have published a discharge data report on an annual basis.

Discharge Data report 2015 Discharge Data report 2016

Since this year these data form part of our annual progress reports. (The discharge data for the year 2017 can be found in Progress Report 2017: 15.)

1.2 a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

The REWE Group is not a ZDHC member and does currently not disclose waste water testing data on the ZDHC Gateway but uses the IPE platform for disclosure according to its Detox Commitment. In general, we could imagine using another platform if costs are feasible and the upload replaces the IPE upload. Regarding the data connecting suppliers and brands we already share such data within sustainability initiatives like e.g. BEPI.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

The REWE Group launched its Detox Program in 2014 with the aim to remove hazardous chemicals – meaning those that have an adverse effect on humans and the environment – from textile production. The aim of our Detox Program is to eliminate harmful chemicals from the production and supply chain for our own brands of apparel, home textiles and shoes by 2020 at the latest. By doing this, we not only aim to reduce water pollution and adverse health effects of chemicals on employees, but also want to ensure transparency in the textiles supply chain.

Our Detox strategy comprises four elements:

Chemicals management

Cooperation and dialogue

Closed Loop

Supplier development

Chemicals management

We update our Manufacturing Restricted Substances List (MRSL), which contains our chemicals-related requirements for suppliers, in an extensive screening process on an annual basis. In this context we also work continuously on our phase-out strategy, which envisages the progressive elimination of hazardous chemicals, defines the corresponding timelines, and involves its communication to our suppliers. The chemicals management also includes the monitoring of discharge data and pilot projects on substitution. (Further information on our progress with regard to the chemicals management can be found in the Progress Report 2017: 11.)

Cooperation and dialogue

To achieve long-term changes, we are in close contact with our stakeholders. Together and in collaboration with competitors, NGOs, testing institutes, service

providers and universities, we are working towards understanding the complex demands placed on sustainable chemicals management and developing effective solutions and tools. Within the scope of the Chemicals and Environmental Management working group in the Partnership for Sustainable Textiles, we are working towards standardising the requirements and, in the Partnership's initiative of the same name, are committed to their implementation in the production countries. We also have bilateral discussions with various companies and initiatives to expedite the development of standards in this area including ZDHC and BEPI. (Further information on our progress with regard to cooperation and dialogue can be found in the Progress Report 2017: 22.)

Closed loop

Closed loop describes a production process in which used goods are collected, processed and resold as new products. The REWE Group set up a collection system for old clothes, offers products made of recycled fibers in its product range, and is in exchange with stakeholders like universities and collection companies how to close the loop. (Further information on our progress with regard to closed loop can be found in the Progress Report 2017: 24.)

Supplier development

The REWE Group builds on its long-lasting and strong business relationships for the Detox implementation. The implementation includes the main steps information, monitoring and training.

Information:

The REWE Group held a big supplier event on Detox in Asia in 2015 to which all textile suppliers and their factories were invited and which was the kick-off of our Detox Program (see Detox Progress Report 2015: 14).

In the further on-boarding all suppliers received and still receive the [Detox brochure](#) in their respective language and the link to the REWE Group Detox websites: <https://www.rewe-group.com/en/nachhaltigkeit/gruene-produkte/unser-detox-programm> <https://www.rewe-group.com/en/nachhaltigkeit/gruene-produkte/informationmaterial-f-r-lieferanten-und-fabriken.html>.

Our Detox requirements including the MRS L form part of our contracts. In addition, suppliers and factories need to commit to our Detox target and sign a respective commitment.

Our Detox Supplier Toolkit is also provided and explains our Detox process and requirements to our suppliers. This is also available in different languages. It includes a FAQ which provides answers explaining which chemical manufacturers offer Detox compliant products and which databases inform about compliant alternatives.

In order to assist the substitution we provide our suppliers with [chemical factsheets](#).

Monitoring:

In order to identify the wet process facilities the supplier needs to fill out a supply chain questionnaire containing information of sub-suppliers and wet processes for every order.

For the producing wet process facilities involved in production a valid waste water test report of an accredited laboratory needs to be provided. The report is checked for compliance with our MRSL before the order is allowed to be shipped.

Additionally, product tests are conducted in which certain Detox parameters are controlled for chemicals which are banned according to the REWE Group MRSL.

Wet process factories which are involved in our training program undergo an on-site check to identify areas for improvement. The guiding questionnaire is based on the chemical module of the latest Higg FEM questionnaire. However, the questionnaire is not an audit tool but used during the factory tour and document check to document the status quo. It does not have a pass or fail result but is used to identify areas for improvement. The focus is to explain to the factory what they can improve.

Supportive and Corrective Actions:

The elimination of hazardous chemicals poses challenges to our suppliers and their wet process facilities. In order to get an overview of the used chemicals all factories are required to establish a chemical inventory.

If water test reports contain findings for not allowed chemicals, suppliers are requested to establish a corrective action plan which includes steps how they want to address the non-compliances. Respective questions can be directed to our Detox e-mail address.

In order to gather information on how best to implement the steps required for substitution, the REWE Group has carried out five pilot projects since 2014. The projects were conducted in collaboration with service providers with selected strategic suppliers in different production countries. The aims were to improve chemicals management in the factories and to identify and substitute hazardous chemicals. (An overview of the pilot projects can be found in the [Progress Report 2017](#): 13.) We have published information about the procedures and the results of the individual projects as [case studies](#) on the REWE Group website. We now make use of the gained insights in our training program.

We conducted 2 one-day classroom trainings in China. For other locations we offered webinars. In the trainings we introduced our Detox process, informed about the chemicals which are hazardous according to our MRSL and ways how to

approach substitution. Those chemicals which had to be phased out till the end of the year were the focus of the webinars for every year.

A capacity building program was developed for factories with wet processes which will enable them to fundamentally change their chemicals management system in line with the Detox requirements. The REWE Group works together with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German development agency) within the scope of the develoPPP.de program of the German Federal Ministry for Economic Cooperation and Development (BMZ) and Tchibo. It is a three-year program and involves an investment volume of 2.3 million Euro. On the whole 110 factories with wet processes will be trained in China and Bangladesh. The program is based on a train the trainer approach: master trainers of the organisations Made-By and Sustainable Textile Solutions train experts in local organisations to be trainers. These trainers then consult the relevant employees in the production facilities. By this approach a local trainer and consultant network shall be established which can be used by further companies in the regions. In addition, local stakeholders like universities, authorities and associations are involved in order to facilitate local expertise and positively influence framework conditions. In 2017, the training concept was finalised and training material was compiled and agreed with important stakeholders like the ZDHC and Textile Partnership for Sustainable Textiles. Furthermore, 16 trainers in Bangladesh and 21 trainers in China were trained. The selected trainers consult 20 factories with wet processes till Q3 2018 and deepen their knowledge and skills in practice. Within more than 30 weeks the involved factories participate in kick-off workshops, five workshop days and three on-site factory visits. After optimizing the training concept if necessary at least 30 additional factories will be trained by the end of 2018. In the future, the developed training concept, established consultant structures and the generated knowledge will be shared with other companies and stakeholders to increase the program's effectiveness and impact. For example, it has been made available within the Partnership for Sustainable Textiles which is currently working on setting up 'Advanced Trainings' to improve chemicals management in the textile sector. (See Progress Report 2017: 19)

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Collaboration throughout the supply chain is important for the success of the Detox Program. This applies especially since hazardous chemicals are generally not used by the direct business partners of the REWE Group but by their upstream suppliers. The aim of supplier management is therefore to maintain close relationships with our suppliers and garner their support as partners in the Detox Program to convince the wet process facilities to refrain from using hazardous chemicals and encourage long-term collaboration between our suppliers and wet process facilities. In our Detox training program we experience that not all wet process facilities want to support the Detox aim. Additional efforts at persuasion are sometimes necessary. However, also wet process facilities which are committed to substitute hazardous chemicals often have not implemented a

comprehensive chemicals management system which would allow them to track chemicals from purchase till treatment of the effluent. With our Detox training program we are working to implement such chemical management systems and thereby build the basis for an effective and successful substitution as the following step.

In spite of noticeable improvements in wastewater quality, the results from the 2017 tests show that action and support is still needed for the substitution of certain chemicals. Since apart from the REWE Group, other companies have their textiles produced in wet process facilities and often do not make the same demands regarding chemicals management, removal of the chemicals from the entire factory is a challenging task. The elimination of flame retardants (especially boron and antimony) and heavy metals is particularly difficult for wet process facilities. In 2017, both chemical groups were found in many of the wet process facilities. Elimination of heavy metals is particularly complicated, because in many cases the input water used for production is already polluted. With the flame retardants that have been banned since the start of 2018, antimony pollution often comes from upstream polyester production. The REWE Group will continue to carry out some educational work in this area and help the wet process facilities develop a comprehensive chemicals management system.

Although the ban on using certain chemical groups in production takes effect from a specific time, the products manufactured in accordance with the new standards will not be on our markets until the following year. This delay is due to our complex purchasing process, which covers procurement, production and shipping through to marketing and takes almost a year. This is necessary to allow sufficient time to coordinate with the suppliers and give them enough time for capacity planning and production. Remarketing of the products is also possible.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

The REWE Group succeeded in banning the use of PFCs by 31 December 2016. We worked with a factory with wet processes in a pilot project to gain experience with the elimination of PFCs. A respective [case study](#) was published to share these insights. All suppliers were informed about the ban of PFCs early 2016 to give them enough time for the phase-out. We supported our suppliers during the elimination, e.g. by trainings and a chemical factsheet on PFCs.

By the end of 2017 83% of the water test reports comply with the PFC limit values of our MRSAL (see Progress Report 2017: p. 17). We regularly have a couple of water test reports that contain PFCs, mainly PFOAs. The water tests only reflect the water quality at a specific point in time and the results depend on the production

running in the factory at this point in time. We experience that factories which had a compliant water test report in the past have findings for PFCs in the following report. There are also cases in which suppliers have entered a business relationship with a new wet process factory which has not produced for us in the past and which has findings for PFCs. In these cases the supplier is requested to find the source of the PFCs and to provide a corrective action plan for elimination. In some cases we also find out that the inlet water is the source for the PFC contamination. In our training program we raise awareness for the ban of PFCs and help the factories to develop a comprehensive chemicals management system which enables the elimination of PFCs.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

The REWE Group succeeded in banning the use of APs/APEOs by 31 December 2016. All suppliers were informed about the ban early 2016 and were supported during the elimination, e.g. by trainings and a chemical factsheet on APs/APEOs. We also worked with different factories on pilot projects with regard to APEO elimination.

By the end of 2017 87% of the water test reports comply with our AP/APEO limit values of our MRSL (see [Progress Report 2017](#): p. 17). We regularly have a couple of water test reports that contain APs/APEOs, mainly NPEOs and Nonylphenols. The water tests only reflect the water quality at a specific point in time and the results depend on the production running in the factory at this point in time. We experience that factories which had a compliant water test report in the past have findings for APs/APEOs in the following report. There are also cases in which suppliers have entered a business relationship with a new wet process factory which has not produced for us in the past and which has findings for AP/APEOs. In these cases the supplier is requested to find the source of the AP/APEOs and to provide a corrective action plan for elimination. During our pilot projects and in our Detox training program we experienced that it is difficult for factories to identify the source of APEOs because there are many different potential sources. In our training program we raise awareness for the ban of AP/APEOs and help the factories to develop a comprehensive chemicals management system which enables the elimination of AP/APEOs.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Since 2017, PFCs and AP/APEOs, which, according to our Detox Commitment were classified as high-priority hazardous chemicals, have been banned. In 2017, the REWE Group expedited the elimination of more priority chemical groups. Accordingly, from 2018 use of certain brominated and chlorinated flame retardants and other flame retardants is banned. Chlorophenols and chromium (VI) are also

now banned in the production of apparel, home textiles and shoes, and short-chain chlorinated paraffins are prohibited in the production of apparel. These chemicals may not be used for production from 2018.

Phthalates and organotin compounds, which belong to the eleven priority chemical groups, are also banned from 2019 according to our MRSL 3.0. Also banned from that time onwards are nitrosamines and dimethylformamide (DMF), which the REWE Group classifies as hazardous in addition to the eleven priority hazardous chemical groups. Like every year, the timelines for the new phase-outs of chemicals were communicated to our suppliers in January 2018 so that they have sufficient time to prepare for the ban. (See Progress Report 2017: 12)

The REWE Group has worked with wet process factories on the substitution of hazardous chemicals in different pilot projects (see question 2.4). The insights acquired in the pilot projects are now used in our training program with which we support the factories with wet processes on working towards Detox compliance. We plan to publish further reports from our work in the training program.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

The elimination of hazardous chemicals poses many challenges for our suppliers and their wet process facilities. To gather information on how to support substitution, the REWE Group has carried out five pilot projects since 2014. The projects were conducted together with service providers at selected strategic suppliers in different production countries. The aims were to improve chemicals management in the factories and to identify and substitute hazardous chemicals. The project teams worked with individual solutions and in one case on the basis of a standard (STeP by OEKO-TEX). We have published information about the procedures and the results of the projects as [case studies](#) on the REWE Group website and subspport.org.

You can find an overview on our published case studies in our Progress Report 2017: 13 and the links to the case studies on our website and subspport.org below:

Pilot Project	Focus
Pilot project with an apparel manufacturer, Bangladesh	Elimination of azo dyes, disperse dyes and chlorophenols by changing and training sub-supplier in collaboration with consultant

Pilot project for PFC substitution, Bangladesh	PFC substitution by chemical inventory check and training in collaboration with consultant
Pilot project for STeP certification by OEKO-TEX, China	Azo dye substitution by OEKO-TEX certification (subsport.org)
Pilot project to optimize bleaching process, Bangladesh	XY substitution by optimization of bleaching process in collaboration with chemical manufacturer (subsport.org)
Pilot project for chemicals management, China	APEO elimination by chemical audit and corrective action plan in collaboration with testing institute

Q3: Disclosing list of suppliers with wet processors

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

The REWE Group will disclose a list containing names and locations of production facilities by summer 2018. The list will contain all main production facilities for apparel, home textiles and shoes that have produced REWE Group orders in 2017. The list will be updated on an annual basis. In addition waste water testing data containing names and locations of wet processing suppliers are uploaded to the IPE platform.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The list of production facilities will include all wet process suppliers that are vertically integrated, meaning that wet processes are undertaken by the same facility that finishes the product. It will include the names and locations of these facilities. Further information about the wet process facilities including names and locations can be found on the IPE platform.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

The production facility list including wet processing suppliers will be available on the REWE Group website.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

The REWE Group will disclose a list of production facilities including vertically integrated wet processing suppliers by summer 2018. The list will include name and locations of the facilities and will be updated on an annual basis.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

The Detox campaign has succeeded to create awareness regarding the use of hazardous chemicals in textile supply chains. This holds true for European companies, and suppliers and factories in European and Asian markets. Fashion companies and retailers have joined the campaign and set up programs to eliminate hazardous chemicals. The REWE Group signed the Detox Commitment in December 2014 and has since then worked on creating awareness among its suppliers (see question 1.3).

Today suppliers and factories are often well aware about the customers' requirements with regard to hazardous chemicals. Some of them have started to review the MRSL's of their customers and to control the chemicals they are buying. Many factories are also sensitized for the importance of MSDS and chemical inventories. Waste water test results have improved as a consequence of the requirements.

Also big chemical manufacturers have started to work on their chemical formulations and to develop new chemicals free of hazardous chemicals as a response to the demand of chemicals which are free of toxic substances.

Sustainability initiatives like the ZDHC, amfori BEPI or the Partnership for Sustainable Textiles have emerged and work towards a standardization and collaborative approach to eliminate hazardous chemicals in textile supply chains.

Authorities in European and Asian markets are aware about the use of hazardous chemicals in textile production.

The Detox campaign was also able to create some awareness in the media and civil society. The REWE Group supported the efforts with communication activities aiming to explain the Detox topic to customers e.g. by means of explanations in advertising leaflets and a [video clip](#) on our website (see Progress Report 2017: 23).

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

The REWE Group has also tested an approach to save water and energy within its Detox program. In this [pilot project](#) we collaborated with a chemical manufacturer with the aim to not only substitute hazardous chemicals but also to optimize the wet process with regard to consumption of water, chemicals, energy and emissions. The optimized process allowed savings of 40% in water, 30% in power and 34% in CO₂ emissions.

Also in our Detox training program we encourage factories to establish a comprehensive environmental management.

Our Detox program helped us to achieve more transparency in our supply chain. Since we have established our program we know all factories doing wet processes for us and not only those which are vertically-integrated. With the pilot projects we started to actively engage with the wet process factories. In our Detox training program these relationships are now strengthened. We aim to build a pool of wet process factories which are producing for us and which are able to fulfill our requirements.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2 a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

REWE Group has been the second retailer in Germany which has committed to the Detox objective in 2014. Since then additional textile companies and retailers have joined the campaign. However, there are many more big fashion companies in Germany, Europe, the United States and Asia which have not started to work on the elimination of hazardous chemicals. It is important to win more companies to work on the elimination in order to achieve the implementation in the producing markets. Factories are sometimes reluctant to change certain chemicals if this is requested by one or two customers only.

In our Detox training program we experience that some factories still lack the knowledge and processes to manage the chemicals in their facilities from purchase to discharge – although they can provide acceptable water test results. This shows that the necessary understanding and skills to achieve and maintain Detox compliance have not been acquired by all factories yet and that additional training and support is necessary. We will roll-out our training program to additional

factories and share the established consultant structures and generated knowledge with further companies to maintain the Detox momentum. Collaboration among brands as well as with other stakeholders is necessary for Detox implementation.

The diversity of requirements by brands poses a huge challenge for factories. Factories are overstrained with the differences among MRSLs. They are often unable to manage and differentiate the requirements when substances in chemical groups or respective limit values vary from customer to customer. A standardization would ease the implementation for factories. This demand was brought forward by many of our factories during the pilot projects and kick-offs of our training program and was reinforced by local trainers. Although initiatives have evolved during the last years – like the ZDHC, BEPI or the Partnership for Sustainable Textiles – which aim to standardize the requirements, many companies have not joined.

Factories also experience difficulties if they request information from chemical manufacturers about the chemicals they buy. Information provided by the manufacturers is often insufficient especially for local producers. Dialogue has started with the multinational chemical manufacturers but local manufacturers are not involved.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Voluntary structures which seek a standardization of Detox requirements and provide a platform for exchange are welcomed by the REWE Group. Initiatives like the Textile Partnership, BEPI or the ZDHC are essential to achieve a standardization of requirements and to ease the implementation for all parties. Standardizing requirements allows to share efforts and to increase influence by speaking with one voice. Standardization will be key to achieve an industry-wide commitment to the sustainability objectives. The initiatives also provide a platform for exchange and thereby promote the sharing of best practices. Standardization and exchange are essential to achieve the elimination of hazardous chemicals until and beyond 2020.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

As a member of the Partnership for Sustainable Textiles and an active participant in the partnership initiative on environmental and chemical management we support and drive the Detox objective.

In our Detox training program we support the exchange with stakeholders in local markets. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (German development agency) which is a partner in our training program promotes the exchange.

Tchibo

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: [Tchibo Detox Website](#)

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes, in total 38 PFCs including short chain PFCs (including FTOHs and FTAs) are listed on the Tchibo MRSL including CAS numbers and respective test methods.

Link: [Tchibo MRSL V3.0](#)

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

All substances listed on the MRSL of the German 'Partnership for Sustainable Textiles' adopting the values of the ZDHC MRSL are listed on the Tchibo MRSL. In addition, the Tchibo MRSL has an extended substances range in 15 of the groups, such as, but not limited to Azo (forming restricted amines) and further impurities, PFCs, PAHs and Phthalates. Further ten more chemical substances groups have been listed on the MRSL, due to their hazardous intrinsic characteristics. Some of the groups substances are used in wet processing or garment production, such as biocidal active substances for certain finishing effects, which have been banned for Tchibo products. Other substance groups are not expected to be used intentionally in wet processing, but are expected to be used in upstream processes, such as the synthesis of chemicals or synthetic textile fibres used in apparel and footwear.

Therefore, Tchibo will engage in stakeholder initiatives to gain knowledge about the appearance of traces of the substances in textile processing and work with chemical suppliers and textile producers towards the reduction/ phase out of the substances.

Tchibo reviews and updates the requirements for chemicals in its products and production at least once a year and then actively notifies its suppliers of any changes. In 2017 Tchibo has included 30 new substances and has changed the

status to “banned” for 207 substances. Tchibo MRSL is constantly aligned with the EU REACH candidate list for „substances of very high concern” as well as with Tchibo product requirements.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

In 2017, 166 wet-processing suppliers were identified that were involved in the production of 91% of all textiles sold in 2017. Wet-processing units that are involved in the production of Tchibo products need to provide a valid waste water test. In total, 163 samples were taken in 2017 (54% waste water before treatment, 22% waste water after treatment, 11% incoming water and 13% sludge). The test results show that:

Ten of the eleven priority substance groups could be detected

On average, three out of eleven substance groups per wet-processing were found

Already fresh water is contaminated (e.g., heavy metals, halogenated solvents and PFCs)

Compared to the results of the last reporting period 2016, the detection rate of most substance groups has been strongly reduced

Details on the findings are summarized in the latest progress report.

Link: [Tchibo Progress Report 2017](#)

Also, in accordance with the ‘right to know’ principle, Tchibo expects its business partners to ensure that the results of the waste water and sludge tests are entered in the Institute of Public and Environmental Affairs (IPE) database. As of 31 Dec 2016, the wastewater and sludge tests of 24 wet processes were on the IPE database. The number of supplier disclosing their effluent data could be increased in 2017: by today the waste water and sludge tests of 62 wet-processing units were on the IPE database. More information is available at <http://www.ipe.org.cn>

1.2a Are you considering disclosing your suppliers’ wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes, disclosing suppliers' wastewater testing data on the ZDHC Gateway platform is considered but not yet implemented. Tchibo is already in close collaboration with the ZDHC, e.g. in terms of sharing good practices and knowledge and is currently assessing options for an official membership.

Tchibo believes that industry collaboration is the key for improvement. The industry-wide implementation of the detox requirements requires a comprehensive engagement of all actors in the value chain - from the chemical industry to producers and traders to the customers. Tchibo is already engaged in many multi-stakeholder partnerships to develop sector-specific solutions and standards, e.g. in the "German Partnership for Sustainable Textiles" and others cross-industry initiatives and cooperations.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Tchibo has developed several tools to support suppliers and factories to improve their chemical management. Below please find a few examples – further programs are summarized in the latest progress report. Link: [Tchibo Progress Report 2017](#)

Chemical Management Handbook

Tchibo supports its suppliers and their wet-processing units to implement a holistic chemical management system according to the Green Factory approach. A supplier handbook has been developed that provides concrete guidance and operational support for implementing the Tchibo requirements.

Link: [Tchibo Chemical Management Handbook](#)

CPI₂ – Carbon Performance Improvement Initiative

In 2011, Tchibo teamed up with eight other companies to establish the Carbon Performance Improvement Initiative (CPI₂). It uses an online tool to give manufacturers specific recommendations on how to reduce energy consumption and hence greenhouse gas emissions in production. Modules for water and chemicals management have been integrated since 2015. Around 1,600 factories in 34 countries have already used the tool. In 2017, to complement our Detox qualification programmes, 23 additional factories that produce for Tchibo registered to use the online tool. Link: <http://www.cpi2.org/home/>

Strategic Alliance on Sustainable Chemical Management in the Textile Production

To promote on-site advisory services, in 2016 Tchibo teamed up with the REWE Group and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) under the develoPPP program by the Federal Ministry for Economic Cooperation and Development to devise and adopt a qualification programme for chemicals-

and water-intensive production areas. As part of this project, local experts are trained in Bangladesh and China, who then support production plants in the establishment of a chemicals management system. The structures and training concepts developed for this purpose are to be made available to other interested companies and thus contribute to an improvement in the industry. The project will run for three years and has a volume of 2.3 million Euro.

Partnership for Sustainable Textiles

Tchibo is member of the German “Partnership for Sustainable Textiles”, a multi-stakeholder initiative with about 150 members. The initiative is striving to improve the conditions in the global textile production – from the production of raw goods for textile production to the disposal of textiles. By participation in numerous working groups Tchibo has contributed to the development of a supplier guideline that allows all members of the partnership a harmonized communication on chemicals management. Further Tchibo has developed several factsheets for critical substances and substance groups as well as a chemical inventory template.

Link: [Guideline - Preventing the use of hazardous chemicals in textile supply chains](#)

Link: [Factsheet Antimony](#)

Link: [Factsheet Di\(ethylhexyl\)phthalate \(DEHP\)](#)

Link: [Factsheet EDTA und DPTA](#)

Link: [Factsheet Formaldehyde](#)

Link: [Factsheet Per- and polyfluorinated chemicals](#) Link: [Factsheet Potassium permanganate \(KMnO₄\)](#) Link: [Factsheet Quinoline](#)

Link: [Chemical Inventory Template](#) Download excel file on website

Factory Visits / Onsite Technical Support

Several Tchibo suppliers have been visited for onsite consulting and implementation support (incl. baseline assessment, corrective action planning and follow up). Tchibo supports suppliers in using innovative and sustainable production technologies:

Example Rubber Boots: To support phase-out of VOCs and PAHs - pollutants that often occur in rubber boot production - Tchibo supports its suppliers by conducting chemical input testing including technical substitution consulting by a third-party service provider.

Example Denim: Since 2012 not only sandblasting but also chemical blasting, meaning the use of chemical bleaches (including KMnO₄ or sodium hypochlorite (NaHClO₂)) to create a used effect, are excluded for Tchibo products. Tchibo

supports its suppliers in using more environmentally friendly alternatives such as ozone washing, laser technique, etc.

Example Leather: Tchibo only accepts leather, which have been tanned without chromium salts. In 2016, two tanneries in China has been visited. Experts have evaluated the status of chemical management and the wastewater treatment plant. Improvement potential was identified and trainings were carried out in the factories.

Best Practice Case Study – Sun Hing Industries: An example of a factory that is already pioneering today in the field of chemical management is Sun Hing Industries Holding Limited, a fabric supplier for lingerie located in Shenzhen, China. Sun Hing is a long time strategic partner of Tchibo. In 2017 Tchibo bought over 4.4 million products with components by Sun Hing. The factory has established an advanced chemical management system as well as innovative production processes, such as "dope dying". By using this dyeing technique, yarns are dyed in the spinning process - much earlier than in the conventional dyeing process. This results in a reduction of water and electricity consumption as well as carbon emissions by 80 to 85% - with a positive effect on operating costs. Further Sun Hing uses renewable energy and generates a total of 42 million kWh of electricity with 7,200 solar modules. In addition, a waste heat from over 200 dyeing machines and 17 stenter frames are recovered and reused, which significantly reduces carbon emissions. With these technologies, Sun Hing is a role model for other factories in the textile industry.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Complex supply chains: The various stages of textile production and apparel manufacturing take place in many different countries around the globe and production-lines are usually neither organized vertically nor consistent. Third and fourth tier suppliers add complexity to the supply chain and traceability of chemicals. Due to the complexity, it is challenging to maintain transparency of the use of chemicals and their release within the entire supply chain.

High number of chemicals: Hundreds of chemical formulations might be present in a single factory in the form of dyes, auxiliaries, detergents, lubricants, etc. Each of these formulations may contain many different ingredients, with only a portion of those ingredients being divulged by the manufacturer. This is due to trade secrets and limited reporting requirements. According to the latest „Textile-Auxiliaries-Catalogue,, there are currently 5,800 different textile chemicals (=branded products) available on the German market based on 800 different components/substances. In Asian production mostly, local products are used. So, the amount is even higher. Not only there is a numerous number of different substances in use today, these substances are also applied in varying and complex mixtures according to the individual product and its individual requirements. The full range of applied chemicals is challenging to identify and scientific research is missing.

Missing knowledge and awareness at suppliers: Especially in developing countries and emerging economies, knowledge and experience in handling chemicals properly is often insufficient. Employees who handle chemicals in the production processes are not trained properly and have no understanding of the consequences of wrong chemical handling. Often handed down knowledge and hands-on experience guide their work and understanding. Suppliers need to be trained and supported.

Additionally, chemical products which could be used as substitutes for hazardous chemicals, are not yet developed or not yet available in many markets. Therefore, Tchibo is supporting in the framework of the German Partnership for Sustainable Textiles a respective dialogue with the chemical industry in order to foster the respective product range in production countries.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 2012, PFCs (including but not limited to C4, C6, C8 and PTFE) are banned from intentional use in processing Tchibo raw materials and textiles. Because of their hazardous properties, Tchibo had already started eliminating these chemicals from outdoor textiles and replacing them with PFC-free alternatives, such as ecorepel® from Schoeller, prior to signing the Detox Commitment. Since then, the PFC-free product portfolio is constantly extended. In 2017, PFC-free tablecloth has been developed that is finished with Ecoperl Active® from CHT. Tchibo uses its own screening processes for the nomination of substitutes and consults relevant databases to ensure that these substitutes do not exhibit other hazardous intrinsic properties (CMR, PBT, vPvB and ED).

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

APs/APEs are banned for production of Tchibo products. Tchibo supports its suppliers with substitution. A case study was published in 2016 sharing experiences from the substitution of NPEOs in wool materials with materials washed with APEO-free detergents.

Link Case Study APEOs/APs: <http://www.subsport.eu/case-stories/418-en>

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Tchibo has initiated several pilot projects to assess options for further substitution of hazardous chemicals in the production of its products. Projects are still ongoing and learnings as well as potential roll-out to full product assortment will be evaluated in 2018.

Example DMFa: The substitution of the solvent dimethylformamide (DMFa) is currently piloted. This solvent is often used in the production of artificial leather and is classified as toxic for reproduction as well as toxic and harmful to skin contact. Tchibo has developed a synthetic leather sneaker that uses only aqueous polyurethane dispersions that do not require the use of DMFa or other solvents. The sneaker with the water-based PU coating was sold in week 4 2018.

Link: <https://www.tchibo.de/sneaker-p400114463.html>

Besides substitution, Tchibo also constantly extends its portfolio of nominated finishings to better control the use of chemicals in production. For active wear Tchibo has nominated miDori® bioWick finish from 'Beyond Surface Technologies AG'. This moisture transporting finish is mainly made from vegetable oil and free of hazardous chemicals (GreenScreen and GOTS certified). The final products are labelled with the green hangtag "DryActive Plus by MiDori". Until today, about 350 tonnes of miDori® bioWick have been used to produce Tchibo products.

Link: <http://blog.tchibo.com/aktuell/sportlich-zum-detox-ziel/>

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Tchibo and its suppliers have succeeded in initiating a successful substitution of hazardous chemicals in several cases. The results of the substitution of hazardous chemicals were submitted to the website subsport.org, in the form of case studies. These case studies can be used by other companies and producers to help them select suitable chemicals for substitution. Until today Tchibo has published four case studies:

Link Case Study PFCs: <http://www.subsport.eu/case-stories/420-en>

Link Case Study APEOs/APs: <http://www.subsport.eu/case-stories/418-en>

Link Case Study Chlorinated Solvents: <https://www.subsport.eu/case-stories/433-en>

Link Case Study Phthalates: <https://www.subsport.eu/case-stories/425-en>

For easy access, all case-studies are also published on the Tchibo Detox webpage:
Link: [Tchibo Detox Website](#)

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, Tchibo has disclosed its suppliers. The list, which is updated every six months, includes the names, addresses and countries of all the main factories that produce for Tchibo. In total 206 manufactures are published. Link: [Tchibo Textile Suppliers](#)

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The Detox commitment includes transparency on the use and discharge of all hazardous chemicals within textile production. The chemical-intensive process steps usually take place in the deeper supply chain at wet-processing level. That is why full transparency of all suppliers and production processes is the basis to take action and improve chemical management. Therefore, transparency of the supply chain is constantly enhanced. In 2017, 166 wet-processing suppliers were identified that were involved in the production of 91% of all textiles sold in 2017. The list is published on the Tchibo website and updated every six months.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Supplier lists are published online on the Tchibo website: Link: [Tchibo Textile Suppliers](#)

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Suppliers and wet-processing units are already published. Lists are updated every six months.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain? Response:

The Detox Campaign has put chemical management on top of the agenda and has led to the foundation of various industry initiatives like the 'Partnership for Sustainable Textiles' or the 'Zero Discharge of Hazardous Chemicals Group –

ZDHC'. A lot of tools, standards and sector-specific solutions have been developed so far.

The campaign has also had political impacts, triggering policy changes such as China's enforcement of stricter wastewater standards or the EU ban on the import of textiles containing the hazardous chemicals nonylphenol ethoxylates (NPEs) that should enter into force in 2020.

Inspired by Detox there has also been significant progress in the field of R&D. For example, PFC: A few years ago, there have been hardly any non-fluorinated durable water repellents (DWR) available on the market. The chemical industry has worked on new environmental friendly durable water repellent solutions – today several options are available.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Initiated by the Detox Campaign, Tchibo interaction with its suppliers has significantly increased. Since signing the Detox Commitment, Tchibo has systematically created transparency about the relevant wet-processing units in its textile value chain and since then engaged with them in several projects and improvement activities.

Advanced chemical management does not only improve the environmental impact but can also lower production costs, improve product quality as well as health & safety conditions for workers. Further the strong engagement in industry initiatives also facilitates collective action on other issues, such as water and energy saving.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Fashion brands, in particular, play an important role in transforming the sector because of the influence they have on suppliers and trends. However, small and medium-sized enterprises ("SME") often lack this influence due to smaller order volume and less capacities to ensure full transparency and develop suppliers. Collective approaches e.g. like the 'Partnership for Sustainable Textiles' are needed to develop sector as well as cross-sector solutions rather than individual brand solutions.

Also the challenges mentioned in 1.4. are still an issue after 2020.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Platforms and initiatives are the driver for sector wide solutions and the promotion of best practices through collective action. A collaborative industry approach is required to transform the economy, customers, politics and NGOs towards more sustainable chemical use. To contribute to systemic change Tchibo participated in the “SuSport”-project by sofia (Sonderforschungsgruppe Institutionenanalyse) from the university of applied sciences in Darmstadt. Goal of this research project is to explore development paths towards a sustainable chemistry in the textile industry. In a series of four workshops different possible future scenarios were developed involving different kind of stakeholders. Using scientific methods (Delta-Analysis) trends and their interdependencies were carved out to deduce recommendations for action. More information can be found here:

[http://www.sofia-darmstadt.de/marktchancen.0.html?&no_cache=1&sword_list\[\]=susport](http://www.sofia-darmstadt.de/marktchancen.0.html?&no_cache=1&sword_list[]=susport)

Further national regulations in production countries need to be strengthened. Current legislation regarding environmental standards is often insufficient and compliance with national laws is not checked properly.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Tchibo is engaged via the German trade association and other federations in different policy advocacy processes, which are in many cases confidential. Nonetheless, several times a year we are organizing or contributing to public stakeholder dialogue or campaigns. Some examples:

- November 8th 2016: Public Stakeholder dialogue regarding Use and necessity of legal sustainability obligations for companies:
http://blog.tchibo.com/aktuell/unternehmen/mit_kraft_aus_der_nische/
- May 2017: Contribution to the Ministerial Declaration of the G20 Labour and Employment Ministers Meeting 2017: Presentation of ACT on living wages -
http://www.bmas.de/SharedDocs/Downloads/DE/PDF-Pressemitteilungen/2017/g20-ministerial-declaration.pdf?__blob=publicationFile&v=3
- November 7th 2017: Signing a joint climate protection declaration initiated by Germanwatch, 2° Foundation and BAUM e.V. -
<https://germanwatch.org/de/14633>
- January 11th 2018: Stakeholder dialogue “Tchibo Share” promoting sustainable consumption with Greenpeace, Joschka Fischer et. Al:
<http://blog.tchibo.com/aktuell/unternehmen/minimode-einfach-mieten-podiumsdiskussion-mit-greenpeace-und-joschka-fischer/>

Tesco

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.tescopl.com/little-helps-plan/products-sourcing/ff-clothing-fashion-corporate-responsibility/eliminating-harmful-chemicals/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes we have included it in our Restricted Substances list as below. The full document can be accessed here:
<https://www.tescopl.com/media/474541/60391-restricted-substances-in-textiles-leather-and-footwear.pdf>

Perfluorooctane sulfonates (PFOS)	1763-23-1
Perfluorooctanoic acid (PFOA)	335-67-1
Ammoniumpentadecafluorootanoate (APFO)	3825-26-1
Heptacosafuorotetradecanoic acid (PFTeDA)	376-06-7
Henicosafuoroundecanoic acid (PFUdA)	2058-94-8
Pentacosafuorotridecanoic acid (PFTrDA)	72629-94-8
Tricosafuorododecanoic acid (PFDoA)	307-55-1
Perfluorononane Acid (PFNA)	375-95-1
Perfluoroheptane Acid (PFHpA)	375-85-9
Perfluorodecane Acid (PFDA)	335-76-2
Perfluorobutane Sulfonate (PFBS)	375-73-5
Perfluorohexane Sulfonate (PFHxS)	355-46-4
Perfluoroheptane Sulfonate (PFHpS)	375-92-8
Perfluorodecane Sulfonate (PFDS)	126105-34-8
Perfluorooctane Sulfonamide (PFOSA)	754-91-6
Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2)	27619-97-2
Perfluorobutane Acid (PFBA)	375-22-4
Perfluoropentane Acid (PFPA)	2706-90-3
Perfluorohexane Acid (PFHxA)	307-24-4
Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA)	172155-07-6
7H-Dodecanefluoroheptane Acid (HPFHpA)	1546-95-8

2H,2H-Perfluorodecane Acid (H2PFDA)	882489-14-7
2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA)	34598-33-9
2-(N-methylperfluoro-1-octanesulfonamido) - ethanol (MeFOSE)	24448-09-7
2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSE)	1691-99-2
N-methylperfluoro-1-octanesulfonamide (MeFOSA)	31506-32-8
N-ethylperfluoro-1-octanesulfonamide (EtFOSA)	4151-50-2
Perfluorooctane sulfonfluoride (PFOSF)	307-35-7
1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA)	17527-29-6
1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA)	27905-45-9
1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA)	17741-60-5
1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH)	2043-47-2
1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH)	647-42-7
1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH)	678-39-7
1H,1H,2H,2H-Perfluoro -1-dodecanol (10:2 FTOH)	865-86-1

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

We have followed the ZDHC MRSL and have added the following additional chemical groups to our list:

Glycols

Poly Aromatic Hydrocarbons (PAHs)

Volatile Organic Compound (VOCs)

Dyes – Carcinogenic or Equivalent Concern

Dyes – Disperse (Sensitizing)

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Since 2015 we have been requesting that our strategic wet-processing units in our clothing and footwear supply chain conduct wastewater testing and disclosure these results to IPE.

For units that are shared with other companies of the ZDHC group, we are encouraging them to use the ZDHC wastewater guidelines and to conduct bi-

annual testing so that they can be shared. We ask that these reports are uploaded to both IPE and the ZDHC gateway, which was officially launched in Q4 2017 and will be accessible to the public by 2018.

For non-shared units, we are conducting annual wastewater testing with an extended list, as referenced in our published RSiT. If there are positive results, we may require the units to conduct additional testing to confirm that their corrective action plan is effective (usually within six months).

We already cover more than 70% of our total production and are aiming to reach about 80% by end of 2018. We will report it on this in our progress report, which we plan to publish in June 2018. This should be available from the same webpage as our DETOX commitment.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Yes, we expect to publish the data on the ZDHC Gateway, provided that the supplier is willing to be named as a supplier to Tesco. As far as we are aware it is not currently possible to connect the brand to a supplier's wastewater testing data, however, ZDHC is working on this, and the target completion date is August 2018. We welcome this greater transparency.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

We have provided a capacity building framework for our supply chain. This has included face-to-face workshops in all eight of our offices (e.g. UK, Hong Kong, Shanghai, Bangladesh etc), webinars, e-learning, business case studies (e.g. on our Supplier Network Platform), and other communication to suppliers, such as blogs. Since we started working on ZDHC and DETOX, we have so far hosted 38 training workshops with over 1,000 participants, plus nine webinars on our online Supplier Network. We plan to host more over the coming year, especially for our home textiles supply chain. We also strongly encourage many of our suppliers to take part in the training provided by ZDHC, for example, workshops and conferences in China, Pakistan, India and Bangladesh, as well as webinars.

We have a Tesco-certified fabric technologist training program in our supply base. So far over 110 people are certified and working together with our in-house team to visit wet processing units and to provide technical support. We have also worked with training experts to develop a non-textiles module training for our footwear, accessories and trims suppliers.

In terms of innovation, we have taken part in the ZDHC DMF-free pilot project and we ask our suppliers to support technical workshops in collaboration with other brands to explore alternatives to hazardous chemicals.

We have developed positive lists against our restricted substance list with 21 chemical suppliers as a supplementary tool for input chemicals screening.

We are currently working with IFC to incorporate a Chemical Management Module into the Bangladesh Partnership for Cleaner Textiles (PaCT) programme, which we plan to pilot in some of our sites this year. This could be rolled out in other regions as PaCT itself expands.

We are also working with a solution provider to introduce a new chemical management tool. This will help us monitor input chemicals for the strategic wet processing units in our supply chain, which represent nearly 75-80% of our business in 2018. Our team and vendors have already been trained and it will be rolled out to the wet processing units from Q1 2018.

Since 2016 we have developed a good working relationship with IPE and we now use their tools to screen all of our China-based wet processing units monthly. Our policy is that existing units have to close out their environmental violations within six months, and potential new suppliers are not allowed to be on board if they have a record of violations with IPE. We have also invited IPE to take part in our supplier workshops and support our supplier training sessions.

1.4. Challenges: What challenges remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

We believe that there are still challenges in fibre production and some other supply chain tiers which are not yet in the scope of ZDHC but which still require further studies and technical expertise. Our focus has been on the sector where we can make the most impact, i.e. our main fabric wet-processors.

In a fast-paced sector which is highly price-sensitive, another challenge has been retaining a stable supply chain so that we can see through progress with suppliers after initial engagement.

Another challenge is the fact that there are still various approaches used in the industry to drive this agenda. To avoid confusion, it is important that the supply base recognises an aligned and consistent approach to this topic.

The Home Textile supply chain (e.g. towels, bed linen) has been engaged on the Detox agenda even less than clothing and footwear, meaning that there is a particular need to provide training and support. In some cases, suppliers are cautious about disclosing information as they do not understand how the data will be used.

In general, the agenda requires a considerable amount of expertise and knowledge about chemical management, which English-speaking factory contacts do not always possess.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, we have developed an alternative with our preferred chemical suppliers, which is one of the world's leading chemical suppliers. We have replaced our spring / summer 2018 'back to school' programme using this sustainable chemistry without compromising on performance requirements. All our products that require water repellent performance are now all using PFC-free finishes.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We have eliminated the use of APs / APEOs in our products as we educate our suppliers with our updated restricted chemical list. We have monitored this by carrying out product and due diligence testing. There is no intentional use at site level but our wastewater testing shows some contamination. We have hired a consultant to build business case studies to share with our supply chain to be released with our progress report. We also share the results with our supply chain so that we can continue to promote best practices.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

We are following ZDHC including the additional chemical groups in our wastewater testing. The results will be reported with beyond 11 priority chemical groups. As mentioned above, we are actively looking into DMF-free materials.

We are working with our strategic viscose producers on having a shared objective to reduce the use of hazardous chemicals and work towards closed-loop manufacturing system by 2023 (we supported Changing Market Roadmap).

We also worked with chemical suppliers and machine manufacturers to develop our new "Advanced Denim" range, which uses more sustainable chemistry with reduced environmental footprint using less water and energy. We plan to move more of our denim range to similar processes.

We also committed to using 100% sustainable cotton by 2025. We have already reached 60% in 2017. By using more sustainable cotton such as BCI, we expect fewer pesticides to be used in our supply chain.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

We intend to upload the business case studies on our website and publish together with our Detox report in June 2018.

Two of them are APEOs and the rest are Phthalates, Chlorinated Compound and Naphthylamine.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, on our plc website we disclose and update each year a list, including names and addresses, of all our tier 1 clothing and footwear supplier sites, a third of which are also tier 2 wet processing units.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Around one third of the tier 2 sites are included in the list. We are now carrying out assessments of our strategic processing sites in our supply chain (covering about 70-80% of our supply) from an integrated environmental, chemical, ethical and technical perspective. Once these are complete (approximately end August 2018) we plan to disclose the names and addresses of these sites in line with our DETOX commitment.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

It is publically available at <https://www.tescopl.com/media/392259/ff-factories.pdf>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

See 3.2.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

We have found that, on the whole, the Detox campaign has been received positively and that industry awareness over the last three years has increased dramatically, especially where several brands are working toward the same requirements in their supply chain. The challenge is greater for those supply chains which are more isolated and which are only working on Detox for one global brand. In these cases, it is more effective to drive change through local industry collaboration and government regulation.

Some regions are more challenging than others, which is partly a result of local business culture and understanding in regards to the importance of transparency.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

We are signatories to Sustainable Clothing Action Plan (SCAP) which aims to reduce carbon dioxide emissions, water and waste to landfill by 15% and waste to whole product life-cycle by 3.5%.

We are in partnership with IFC in PaCT which aims to reduce resource used (energy, water and chemicals) and water pollution.

We have committed to the CanopyStyle initiative in not sourcing from the ancient and endangered forest.

We have committed to using 100% sustainable cotton by 2025 and nearly 60% of our cotton now sourced from Better Cotton Initiative (BCI).

We support the Changing Market Foundation Roadmap towards responsible viscose fibre manufacturing.

We have recently committed to working with other UK food and drink companies on sustainably sourcing products which face water challenges:

<http://www.wrap.org.uk/content/businesses-commit-courtald-commitment-2025-water-ambition-cut-environmental-cost-food-drink>

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

There is still a significant number of retailers that are not working toward the DETOX objectives or on the ZDHC agenda in general, including some of our competitors in the UK. This makes it harder for us to drive progress in sites where we do not have the leverage to bring about change on our own. The greater the pull from end customers and retailers, the more incentive for other companies in the supply chain to work on this agenda.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

We need local governments to integrate best practice as the industry standard and to provide incentives to transform the sector at scale. Otherwise, we risk having a positive impact in limited number of sites only.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

As part of our Environment Strategy, we recognise that policy advocacy can play an important role in helping us to meet some of our environmental commitments. For example, in the past, we have publicly said that the government needs to take more action on climate change. We support advocacy as part of regional water stewardship projects, for example with the World Wildlife Fund. Specifically on chemicals: we have a Chemical Compliance Policy for our clothing supply chain and also a wider Tesco Chemical Safety Policy, as well as working within ECHA.

Outdoor brands

Paramo

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://www.paramo-clothing.com/blog/en-gb/paramo-detox-commitment-outline/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

Yes, All forms of PFC's are explicitly and inclusively prohibited in our MRSL and fabric acceptance testing.

The MRSL list is linked from the above web page, and the same link I provided to suppliers as an annex to their contracts.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

All of the 11 groups are currently excluded, we are not actively looking to exclude more however we will keep an eye on the SIN list to see if there are others which we should be aware of.

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

We have tried to use the IPE system, as some of our suppliers are already set up on this.

However, our major supplier is not and getting data in a position to publish has been a challenge.

We are dependent upon suppliers who can publish to do so, so they operate on their own schedules.

The first discharge testing was completed in March 2017 for Lafayette (our main Colombian supplier) and we will be due to run another discharge test in May of 2018.

We have had limited luck in dealing with the IPE system as there seems to be a lack of interest in supporting non-Asian supply chains which causes us more difficulties than we have time to manage.

We would like a simple location to manage the data upload as we can't provide the resource to manage it internally.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Not currently, although this is not to say it is ruled out completely.

We would agree that the data should be linked to the supplier, and in the broadest sense the brand, however there should be scope for not linking to specifics in order to avoid compromising intellectual properties associated with specific suppliers.

That is to say that the supplier should be linked to the brand at the broadest level rather than the specific.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Contracts cover the exclusions from the MRSL, new suppliers only being added if they are already compliant with Detox data publication. All fabrics are tested for PFC treatment before acceptance on a risk basis (no failures and long relationships mean less testing)

We have taken the time to visit all of our critical suppliers in an attempt to get them to buy into the Detox testing. This is a challenge as they are not necessarily all vertical, however it has uncovered at least one instance where a suppliers external dyer was already publishing data.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Publication overhead involved in making testing public. IPE is not an international friendly setup and attempts to get support have been ineffective, we don't have the resource in house to manage the publication well, so we need to find an open and useable solution for a small-scale business.

We still have problems with getting other smaller, but significant suppliers on board even if they are in Asia as there are not enough other brands asking for this yet.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes, 1st April 2016 from all manufacturing.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We believe so, all tested samples have been APEO free, and these are explicitly listed in the Páramo MRSL.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Our main production became Fair Trade verified by the WFTO in 2017, meaning that we also have to audit more distant suppliers for Fair Trade compliance.

We have an internal target of 50% of all of our polyester intake being from recycled sources by the end of 2020.

We are participating in the EOG supported micro-fibre discharge research project with Leeds University.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

In June 2016 our PFC-DWR substitution was submitted to sub-sport. Though it is unclear if this was acknowledged.

This is the only substitute study relevant to us, and is something that can and will be reiterated on the company web pages.

In March 2018 we presented the PFC-DWR substitution and design for circularity as a part of our presence at the Chemical Watch business summit in Amsterdam.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

yes, over 90% disclosed, update on annual basis.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Limited most are direct tier 1 suppliers or those we have a direct relationship with even if they are technically tier 2.

The specific addresses are the contact addresses for the suppliers, we should also list the processing address where this is different from the contact address, but we haven't don't that yet, something that this questionnaire has helped identify.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Linked though from the main Páramo detox commitment page.

<http://www.paramo-clothing.com/blog/en-gb/paramo-suppliers-april2016/>

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

We will review the locations of the suppliers and the processing location where these differ from the main contact location by the end of June 2018.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

It is helpful to us that there are larger brands some of whose have an impact on our suppliers also pushing for this. We have an increasingly close relationship with suppliers and this is good thing for business and product development even beyond the wet process safety.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Our principles for raw material selection are to go with single polymers wherever possible. Specifically polyester, which can be recycled chemically. We intend to make as much of this recycled input as possible (50% target by end 2020)

Ultimately we aim to have a 100% recyclable or mulch/compostable product range.

All of our electricity in the UK comes from renewable sources.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

The difficulty of getting suppliers tested where they share a single discharge point with other facilities.

The sheer workload required to manage these processes is far higher than anticipated, after allowing for getting buy in from the suppliers.

Getting suppliers who haven't already agreed to testing to do so without any further assistance.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Some kind of positive restitution for companies taking this extra action, for example tax breaks or support grants.

A clear global harmonisation of rules or voluntary networks to institute compatible reporting, beyond the obvious Chinese areas, and testing by suppliers.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Beyond the chemistry side we have worked with charitable manufacture in the Miquelina foundation in Colombia for over 25 years. Providing work and training for at risk woman in Colombia.

We have contributed to the planting of thousands of trees in Scotland through Trees for life and these donations are linked to specific garments so consumers see that by buying it they will donate to the re-forestation project.

We have a developed and functioning take back and recycling project to get garments from garments linked to our recycled input goal.

Commercial director Gareth Mottram presented on all of the above initiatives as well as Detox at ISPO 2018 as well as at Chemical Watch business summit 2018.

Detox and recycling programs have been presented in posters at outdoor and ISPO since January 2016.

Rotauf

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: https://rotauf.ch/chf_de/philopage-eco.html

Please note: we designed a totally new homepage. Unfortunately, not the whole content is online now. There will be a general part again with the whole information about Greenpeace DETOX.

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

ROTAUF is since 2013 completely PFC-free. Our MRSL is online, see link above.

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

Brominated solvents, chlorotulenes, azo-dyes, antioxidantes, usw see MRSL at: https://rotauf.ch/pub/media/pdf/MRSL_List%20of%20all%20Chemicals_Detox-Commitment.pdf

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

As of yet we haven't done any waste water testing. Most of our production partners are in Switzerland, there is still trouble to see the sense in testings for them since the Swiss law itself is very strict and requires regular reporting.

We haven't found a reliable supplier in Asia to provide wastewater testing.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

We are working with Sympatex, a main driver behind ZDHC. All our data will be published on ZDHC gateway.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

We search new suppliers, mainly in Switzerland, which can fulfill our detox guidelines. We deliver technical support and perform fabric testings at buzzi lab.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Biggest challenge are waterproof zippers. We haven't found a good solution there. Also ROTAUF wants to work closer together with VAUDE and PARAMO to solve this problems.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 2013 ROTAUF is PFC free.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Our fabric testings were all negative on AP/APES

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Still some postcontamination of chlorinated solvents from our Asian supplier. Change of supplier at the moment.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

As already explained at the beginning. Our Homepage is in reconstruction. Therefore unfortunately aren't all case-studies online. We will correct this issue until summer this year.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, 100% of our supply chain is publicly available for each product. Check: go to a product and under the part "social sustainability" you will find the whole supply chain of each product.

This was our greatest change in this winter: we implemented for every product a 100% transparency concerning our supply chain, as well as the financial structures of every product and the detox information for each product. Still there are missing some crucial information but we are working on it until summer 2018 should everything be completed.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

Location as well as name and a short description of every wet process supplier is available online for every product, see: "history of your jacket".

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

See above.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

All suppliers are already online.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

PFC is for sure a greater topic in outdoor industry. But for a small brand like ROTAUF it is still very complicated to find a good partner since our MOQ is quite small (less than 700 lfm). No supplier is developing a new fabric with detox properties for such small quantities.

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

We are changing at the moment our whole statement towards synthetic fibres and are searching for new possibilities to use natural fibres or biodegradable raw material in order to close the loop and tackle the micro plastics problem. Of course also energy and water saving are important topics. We are developing new membranes with ETH Zürich and new DWR's with our wet process supplier in Switzerland in order to use less energy and water during production process. Furthermore ROTAUF is since autumn last year the first completely CO2 neutral outdoor brand (production of fabrics, accessories, garments etc.), transport and main office.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Use more recycled material or nature made material. Also a challenge is the intransparency of new OEKOTEX standard "detox to zero". This standard would allow our production partner to get guidance by OEKOTEX in order to reach our detox standards, but the testings done by OEKOTEX are not available for publishing by the brands.

Furthermore the different MRL of the different brands is a big problem when you want to work with the same suppliers.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

The campaign should still be active on social media. Post from time to time new achievements by the different detox brand. So the brand gets reward for what they are doing and the Greenpeace customers see that there is something going.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

No ROTAUF doesn't have such things.

Vaude

Q0: Detox page

Please provide here the main link to access your Detox information.

<http://csr-report.vaude.com/gri-en/csr-standards/Detox-Commitment.php>

Please also view “related stories” on this page.

This website will be updated with a “Detox Index” in new CSR report (published on August 1st, 2018).

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

yes, please see VAUDE MRSL under:

<http://csr-report.vaude.com/gri-en/environmental/suppliers.php>

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

please see VAUDE MRSL: <http://csr-report.vaude.com/gri-en/environmental/suppliers.php>

1.2. Waste water discharges reporting

What’s the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

No publishing so far, we will start with GRI Report 2017 on our own website (will be online as of August 1st 2018).

We are in discussion with our supply chain to publish on IPE but so far not all of them agree. Alternative might be ZDHC Gateway platform.

So far we achieve 95% (by material consumption).

All tests fulfill at least ZDHC Foundational Limit. Overview of all results will be online in CSR report from August 1st, 2018.

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

So far we are not a member of ZDHC but in discussion to get access to ZDHC gateway in 2018. Yes - data should be connected in the final stage.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

a) Material suppliers (tier 2):

Since 2001 VAUDE is bluesign system partner. Since then we have a VAUDE RSL. We work mainly with suppliers which are bluesign system partners. Please see here: <http://csr-report.vaude.com/gri-en/product/bluesign.php> (update online from August 1st, 2018)..

After signing the Greenpeace Detox Comittment we established a VAUDE MRSL which has been sent to all tier 1 and 2 suppliers (see above).

2015 VAUDE started an develoPPP.de project called "Environmental Stewardship in the Textile Supply Chain". We offer training free of charge for all participating wet processing (tier 2) suppliers in chemicals management, waste management, waste water treatment, social aspects (incl. OHS), resources productivity. These trainings are combined with onsite visits and consultancy on a very operation level.

We started with our main material suppliers (80% material consumption) and will roll out this system to further 10 suppliers this year. Additionally, we plan to do a similar project together with other brands to rescale.

Please see here: <http://csr-report.vaude.com/gri-en/environmental/suppliers.php> (update online from August 1st, 2018).

We started to do waste water tests and will follow the ZDHC waste water guidelines.

We also do spot checks on finished materials and finished final products.

Results and Findings are forwarded to all suppliers. We build up CAP Lists for affected suppliers.

In summer 2018 we will have a VAUDE Vendor Meeting to point out our strategy and all relevant tools for our future vendor management which is based on four pillars: quality, environment, social and economics.

b) Manufacturing (Sewing lines, tier 1)

After signing the Greenpeace Detox Commitment we established a VAUDE MRSL which has been sent to all tier 1 and 2 suppliers.

Since 2013 we minimize local supply materials in our BOMs, but we still use some so we offer MRSL trainings and risk analysis for the different local supply chains of our manufacturers. For each manufacturer we have a CAP List. For all local supply materials, we ask for third party certificates.

Beginning 2018 we want to link our manufacturers to specific training programs like Chemicals management or resources productivity by rolling out our Environmental Stewardship Program (onsite consultancy for chemicals / energy / water / wastewater management).

VAUDE built up a spot check system of finished products based on a risk analysis (manufacturer, local supply chain, complexity).

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Missing of real alternative chemicals or weak performances of chemical alternatives >> much higher overall costs and risks for brands and supplier (especially regarding DMF, Phthalates).

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Yes. Please see VAUDE CSR Report: <http://csr-report.vaude.com/gri-en/product/water-repellent-materials.php> (update online from August 1st, 2018).

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We did a lot of progress but due to the fact that APEs are not banned in a lot of Asian countries we still have to work on this topic.

APE detergents are very effective and cheap. Due to the substitution of PFCs and the upcoming problems during this process a lot of suppliers are afraid to have a second "source" for quality problems and weak physical properties.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

We have been focussing on the 11 priority groups.

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

PFC already published (see above)

11 priority groups with every CSR report (update, actual status)

DMF planned for 2018 (update, actual status)

Please also see answers to Q1.2.

Q3: Disclosing list of suppliers with wet processes:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Yes, we update at least every year. So far we disclose 95% of our supply chain.

Please follow this link to view currently published list:

<http://csr-report.vaude.com/gri-en/environmental/suppliers.php>

New lists to be published on August 1st 2018.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

So far we include tier2/tier 3 for 80% of our material consumption.

The VAUDE supplier list contains all tier 2 suppliers except for converters (max. ca. 5% of all material supply) with their respective processes.

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Please see link in Q3.1.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Please see link in Q3.1.

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

The Detox campaign has definitely helped to catch the outdoor industry's attention for changes in chemicals management needed. This has been broadened upstream to supply chain and chemical industry, as well as downstream to customers.

After bluesign, ZDHC is a big step towards DETOX. ZDHC MRSL, Audit protocol and Waste water guidelines and ZDHC Academy have become something like "mandatory" tools. The big brands in ZDHC have a big influence on the textile supply chain and now a lot of suppliers started to follow those rules and requirements

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

As above, Greenpeace led to many players in outdoor industry starting to work intensively with all eco topics. A few examples:

We all have to do business more sustainably because we run out of natural resources, and because of risk & reputation management.

To cover the costs for all R&D, testing, process modification etc. the suppliers need to save money, and since energy, water and waste cost a lot of money they discover these as a source for economic efficiency – a win-win situation!

All these challenges cannot be solved by the suppliers alone, so nowadays we have much deeper interactions with our suppliers but as well with our competitors (other brands) because only together we can move forwards.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Unclear political conditions in Asia, US and Europe, so please keep up the pressure on global policy makers!

Retail and end consumers are for the most part still asking for very high performance of our products. Greenpeace can play a huge role in education consumers on consequences of usage of hazardous performance chemicals. It is very hard as a Detox committed brand not to damage your reputation on performance by focussing your PR mainly on eco issues.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

See Q4.2a.

What is really needed is strict, global, binding regulation for hazardous chemicals, so brands have equal market conditions instead of being punished (by higher cost and the risk of lower performing materials) because they act especially responsibly!

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

VAUDE staff, especially CEO Dr. Antje von Dewitz, have a long tradition of presenting best practice examples of CSR integration into business. We hold nearly hundreds of presentations each year in house and externally with different target groups from students to CEOs of other industry sectors to politicians.

We publish our political stances in our annual CSR report: <http://csr-report.vaude.com/gri-en/vaude/political-work.php> and <http://csr-report.vaude.com/gri-en/vaude/our-political-stance.php>.

Suppliers

Utenos

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <http://www.ut.lt/detox>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

yes, it is provided

Link to our MRSL:

<http://www.ut.lt/documents/5878b2851b7e94b0094aflac>

1.1b. Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

DMF

Organic Solvents

Chlorotoluenes

Other dyes/CI no

Disperse (sensitizing) dyes

Other metals

Formaldehyde

Link to our MRSL:

<http://www.ut.lt/documents/5878b2851b7e94b0094aflac>

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Testing of waste water – once a year.

The portal of publication IPE. IPE link is shown below:

<http://wwwen.ipe.org.cn/User/DataInfo.aspx?type=2&yearId=5153>

Wet processes: washing, bleaching, dyeing, printing, finishing are carried out at Utenos.

Planned publications in 2018:

- Testing of waste water for 11 priority groups
- Testing of the waste water beyond 11 priority groups
- Antimony elimination
- Detox to Zero audit report

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Not discussed yet

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

We have informed our suppliers of chemicals about our determination to support Detox initiative, as they are important part of achieving Detox goals.

We give an information for our customers/educate them about Detox project as well and importance of this project.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

Larger suppliers know or have heard about this initiative, but for smaller supplier or customers this is new. It is needed more involvement.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 2015, when we have started to test our waste water by 11 priority groups, there was not detected PFC. We do not see the risk of PFC.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

Since 2015, when we have started to test our waste water by 11 priority groups, there was not detected APs/APEs. The risk of APEO can be, therefore, should be constantly monitored.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

Not

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

This year we will arrange Detox to Zero by Oeko-tex audit. So, the report is planned to publish in our Detox webpage. Timeline 4th quarter the latest.

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

n/a

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

n/a

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

n/a

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

n/a

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on:

4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

Chemical suppliers, certification authorities are taking into account the Detox initiative by tightening requirements of textile standards & limits

4.1b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Environmental & social issues are the part of our company strategy. It is really important. We are buying energy from renewable energy sources. We offer to our customers organic products. Our we are proud of our organic customers and partners. At present about 40% of our production is organic made from organic materials according Global Organic Textile Standard requirements.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

Regarding hazardous chemicals, I think that the challenge is still the group of heavy metals.

And the most important - waste of textile. There are no suitable and affordable solutions for further use or recycling of textile waste and closing the loop.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

-

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

-

Consorzio di Implementazione Detox (CID)

Q0: Detox page

Please provide here the main link to access your Detox information.

Link: <https://www.confindustriatoscananord.it/sostenibilita/detox>

<http://www.consorziodetox.it/>

Q1: Detox tools and wastewater testing

1.1 The 11 priority groups & beyond

1.1a. Within the scope of PFCs on your MRSL, do you provide a detailed list with CAS numbers and include short chain PFCs (FTOHs and FTAs) with CAS numbers?

PFBA	375-22-4
PFPeA	2706-90-3
PFHxA	307-24-4
PFHpA	375-85-9
PFOA	335-67-1
PFNA	375-95-1
PFDA	335-76-2
PFUnA	2058-94-8
PFDoA	307-55-1
PFTTrA	72629-94-8
PFteA	376-06-7

PFBS	375-73-5 or 59933-66-3
PFHxS	355-46-4
PFHpS	375-92-8
PFOS	1763-23-1
PFDS	335-77-3
4:2 FTOH	2043-47-2
6:2 FTOH	647-42-7
8:2 FTOH	678-39-7

10:2 FTOH	865-86-1
6:2 FTA	17527-29-6
8:2 FTA	27905-45-9
10:2 FTA	17741-60-5
PFOSA	754-91-6
POSF	307-35-7
N-Me-FOSA	31506-32-8
N-Et-FOSA	4151-50-2
N-Me-FOSE alcohol	24448-09-7
N-Et-FOSE alcohol	1691-99-2
PF-3,7-DMOA	172155-07-6

HPFHpA	1546-95-8
4HPFUnA	34598-33-9
1H, 1H, 2H, 2H-PFOS	27619-97-2

1.1b Which chemical groups (or individual hazardous chemicals) beyond the initial 11 priority chemicals have you added to your MRSL (or considered for inclusion in your next MRSL update)?

	Beyond Priority 11 group examples		
	<u>α-chlorotoluenes</u>		
178	α -chlorotoluene	Benzyl chloride; α -chlorotoluene	100-44-7
179	α -chlorotoluene	p-chlorobenzotrichloride	5216-25-1
180	α -chlorotoluene	α,α,α -trichlorotoluene; benzotrichloride	98-07-7
181	α -chlorotoluene	α,α -Dichlorotoluene (Benzal chloride)	98-87-3
	<u>Azo dyes that release carcinogenic amines through reductive cleavage (in addition to the priority 11 examples linked to amines listed in EU & Chinese regulations)</u>		
183	azo dye (CMR)	C.I. Acid Red 26	3761-53-3
185	azo dye (CMR)	C.I. Solvent Yellow 14	842-07-9

186	azo dye (CMR)	1,2-dihydro-6-hydroxy-4-methyl-1- [3-(1-methylethoxy)propyl]-2-oxo-5-[[4-(phenylazo)phenyl]azo]-3-pyridinecarbonitrile	85136-74-9
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187	azo dye (CMR)	C.I. Disperse Yellow 3	2832-40-8
188	azo dye (CMR)	C.I. Solvent Yellow 2	60-11-7
189	azo dye (CMR)	C.I. Direct Blue 218	28407-37-6
	<u>Dyes</u>		
194	dye (CMR)	C.I. Acid Violet 49	1694-09-3
195	dye (CMR)	Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylenene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride	548-62-9
196	dye (CMR)	C.I. Basic Red 9 monohydrochloride	569-61-9
197	dye (CMR)	C.I. 77332, C.I. Pigment Black 25, cobalt nickel gray periclase	68186-89-0
198	dye (CMR)	C.I. 77900, C.I. Pigment Yellow 157, nickel barium titanium primrose priderite	68610-24-2

202	dye	C.I. Basic Green 4 leuco base	129-73-7
203	dye	C.I. Disperse Blue 1	2475-45-8
207	dye	Disperse Orange 11	82-28-0
	<u>Solvents</u>		
311	solvent	Benzene	71-43-2
313	solvent	Dimethyl formamide (DMF)	68-12-2
318	solvent	Methyl isobutyl ketone	108-10-1
319	solvent	N,N-dimethylacetamide	127-19-5
321	solvent	N-methyl-2-pyrrolidone	872-50-4
323	solvent	Toluene	108-88-3
324	solvent	Ethylbenzene	100-41-4
	<u>Others</u>		
365	-	Aniline	62-53-3
378	-	Michler's base (N,N,N',N'-tetramethyl-4,4'-methylenedianiline)	101-61-1

386	-	o-Phenylphenol	90-43-7
404	Biocide / antiseptic (inc. Leather)	Dichlorophene [2,2'-Methylenbis(4-chlorophenol)]	97-23-4
429	Styrene	Styrene	100-42-5
	<u>Allergenic dyes</u>		

		DISPERSE BLUE 1	2475-45-8
		DISPERSE BLUE 3	2475-46-9
		DISPERSE BLUE 7	3179-90-6
		DISPERSE BLUE 26	3860-63-7
		DISPERSE BLUE 35	12222-75-2 / 56524-77-7
		DISPERSE BLUE 102	12222-97-8
		DISPERSE BLUE 106	12223-01-7
		DISPERSE BLUE 124	61951-51-7
		DISPERSE BROWN 1	23355-64-8
		DISPERSE ORANGE 1	2581-69-3
		DISPERSE ORANGE 3	730-40-5

		DISPERSE ORANGE 76/37	12223-33-5 / 13301-61-6
		DISPERSE ORANGE 149	85136-74-9 / 51126-94-2
		DISPERSE YELLOW 1	119-15-3
		DISPERSE YELLOW 3	2832-40-8
		DISPERSE YELLOW 9	6373-73-5
		DISPERSE YELLOW 23	6250-23-3
		DISPERSE YELLOW 39	12236-29-2
		DISPERSE YELLOW 49	54824-37-2
		DISPERSE RED 1	2872-52-8
		DISPERSE RED 11	2872-48-2
		DISPERSE RED 17	3179-89-3
		PIGMENT RED 104 (**)	12656-85-8
		PIGMENT BLACK 25 (**)	68186-89-0
		PIGMENT YELLOW 157 (**)	68610-24-2
	<u>Carcinogenic dyes</u>		
		ACID RED 26	3761-53-3

		BASIC RED 9	569-61-9
		DIRECT BLACK 38	1937-37-7
		DIRECT BLUE 6	2602-46-2
		DIRECT RED 28	573-58-0
		DISPERSE BLUE 1	2475-45-8
		BASIC VIOLET 14	632-99-5
		DISPERSE ORANGE 11	82-28-0
		BASIC BLUE 26	2580-56-5
		BASIC GREEN 4 (as chloride)	569-64-2
		BASIC GREEN 4 (as oxalate)	2437-29-8
		BASIC GREEN 4	10309-95-2

		DIMETHYL YELLOW	60-11-7
		SOLVENT YELLOW 3	97-56-3
		SOLVENT YELLOW 14	842-07-9
		BASIC VIOLET 1	8004-87-3
		DIRECT BLUE 15	2429-74-5
		ACID RED 114	6459-94-5

		ACID VIOLET 49	1694-09-3
		SOLVENT YELLOW 1	60-09-3
		DIRECT BLUE 218	28407-37-6
		DIRECT BROWN 95	16071-86-6
		DIRECT BLACK 3	622-04-9
		DIRECT YELLOW 1	6472-91-9
		PIGMENT YELLOW 34 (*)	1344-37-2
		BASIC VIOLET 3	548-62-9 / 603-48-5 / 14426-25-6

1.2. Waste water discharges reporting

What's the regularity of waste water testing data reporting? Provide:

- *a list of the dates that you published data since 2016,*
- *the portal(s) of publication (e.g. IPE, own website, other)?*
- *The percentage of the supply chain (wet processes) this represents for each set of data*
- *Links to status reports on the findings and actions taken as a result*
- *Planned publication in 2018 onwards*

Publication of complete data of the group: in aggregate form were published on the website at least once a year through the following link:

<https://www.confindustriatoscananord.it/sostenibilita/detox/english-version>

As of now, dates of publishing were:

February 2016

March 2016

October 2017

April 2018

Each company publishes the testing result on the company website once a year.

Companies publish their first data once they have subscribed DETOX commitment (February 2016: group of 20 companies- March 2017 group of 7 companies- October 2017 group of 4 companies).

In April/July 2017 and each company published the results of its annual testings on the website.

In April/July 2018 data from new inspections are going to be published

Companies which are members of CID are also part of the supply chain. In CID companies group there are: 11 wet process companies, 20 companies which make fabrics and yarns and 2 companies which produce chemical substances. The percentage of the supply chain (wet processes) is around 80%.

- Links to status reports on the findings and actions taken as a result:
https://www.confindustriatoscananord.it/media/DETOX/Prato_Disclosure_DATA_2017_07_18_public.pdf

- Planned publication in 2018 onwards: global results from 2018 inspections and case study on the use of the perchloroethylene in washing fabric in width

1.2a Are you considering disclosing your suppliers' wastewater testing data on the ZDHC Gateway? Would you agree that all published data should connect the supplier and the brand?

Publication on ZDHC portal was not considered at the beginning as wasn't included in the original commitment. CID, so far, has not signed ZDHC program.

1.3. Suppliers implementation: Please provide further information on how you are implementing Detox with your suppliers, such as training (the type of training and its frequency), spot checks, technical support, positive lists or any other initiatives.

Further to DETOX commitment, Confindustria Toscana Nord arranged many public meetings to spread on the territory the information about DETOX campaign.

- 23rd March 2016: Prato in DETOX: training about DETOX commitment and presentation of a study and research program.
- 15th June 2016: presentation of a study about wastewater quality
- 20th september- 8th november- 15th november2016 introducing prato in detox: 3 days training path to introduce DETOX program

Were arranged meetings with employees, customers and suppliers within the company.

In July 2016, all the companies who subscribed DETOX formed CID, which has got, as its main goal, the implementation of DETOX principles and arranged many initiatives to support the companies. The most important initiatives for CID disclosure and training are:

- 26th October 2016 DETOX objective: situation of textile dyes.
- 18th July 2017 Italian consortium DETOX implementation: new tools for DETOX supply chain
- December 2017 presentation of case study recycled textile materials.

Consortium arranged many meetings and gives technical support to its members: an Operating Manual was made, with all the procedures of monitoring and control of manufacturing companies which subscribed DETOX. The manual also contains the tools to manage buying activity, criteria to evaluate buying of raw materials, control plans for raw materials and chemical products.

Since April 2018 we have a regular system of annual inspections in all the companies which are CID members.

1.4. Challenges: What challenges still remain that might hamper the achievement of the Detox objectives in your supply chain by 2020?

the superimposition of schemes and programs which are apparently similar but less ambitious than DETOX are and will create confusing messages and situations within the supply chain.

Q2: Substitution of hazardous chemicals

2.1 Did you succeed in eliminating the use of PFCs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

We achieved good results with alternative products. Replaced during water-repellent treatment. Replacement is also possible for oil repellents but the level of performance is lower.

Companies from the group which use water/oil repellent treatments dismissed the use of products containing PFC.

In July 2016, CID published a case study which is available on the below link:

https://www.confindustriatoscananord.it/media/DETOX/CTN_CaseStudyPFC_07_2016_ENG.pdf

Individual case studies has been published on the company's website.

Among CID companies, Daykem, which produces chemicals, replaced their products with PFC free ones. Here you can find all details:

<http://www.daykem.it/wp-content/uploads/2012/11/Sostituzione-pfc-case-study-daykem1.pdf>

The cases study on textile dyes and textile auxiliaries have detected PFC contamination also in dyestuffs and in some auxiliaries. This situation indicates that to get the total elimination of PFCs in the supply chain we have to work not only on the non-use of perfluorinated products, but also on the continuous monitoring of the dyestuffs and the auxiliaries.

2.2 Did you succeed in eliminating the use of APs/APEs? What was the date this was achieved? Are there any residual problems remaining and have you identified where these arise?

DETOX commitment brought great achievements in order to eliminate APEOS contamination in textile raw materials. . After two years of commitment, many textile raw materials seller are already able to sell APEO's free textile material.

In July 2016, CID published a case study which is available on the below link:

https://www.confindustriatoscananord.it/media/DETOX/CTN_APEOS_CaseStudy_2016_DEF_ENG.pdf

Individual case studies has been published on the company's website.

- A.CHI.MO. SRL - chemicals - www.achimo.it
- CROMOS SRL - yarn finishing - www.tintoriacromos.it
- DAYKEM SRL - chemicals - www.daykem.it
- F.LLI CIAMPOLINI & C. SPA - fabric finishing - www.ciampolini.com
- FILATI BE.MI.VA. SPA - yarn producers - www.bemiva.it
- FILATI BIAGIOLI MODESTO SPA - yarn producers - www.filatibiagioli.it
- FILATURA PAPI FABIO SPA - yarn producers - www.papifabio.com
- FURPILE IDEA SPA - fabric producers - www.furpileidea.it
- ILARIA MANIFATTURA LANE SRL - yarn producers - www.ilaria.it
- INDUSTRIA ITALIANA FILATI SPA - yarn producers - www.yarn.it
- JERSEY MODE SPA - fabric finishing - www.jersey-mode.it
- LANIFICIO BELLUCCI SPA - fabric producers - www.lanificiobellucci.com
- LANIFICIO DELL'OLIVO SPA - yarn producers - www.lanificiodellolivo.it

- MARINI INDUSTRIE SPA - fabric producers - www.marini-industrie.it
- PECCI FILATI SPA - yarn producers - www.pecci1884.it
- PROGETTO LANA SRL - basic textile materials - www.progettolana.com
- TINTORIA BIAGIOLI MODESTO SRL - yarn dyeing - www.filatibiagioli.it/it/tintoria.asp
- TINTORIA ALESSANDRINI SRL - yarn finishing - www.tintoria-alessandrini.com
- TINTORIA COMETA SRL - yarn finishing - www.tintoriacometa.it
- TINTORIA FIORDILUCE SRL - yarn finishing - www.fiordiluce.it
- ALBERTO BARDAZZI SPA - fabric producers - www.bardazzi.it
- FINISSAGGIO T.R.T. SRL - fabric finishing - www.finissaggiotrt.it
- LANIFICIO EUROPA SAS - fabric producers - www.laneuropa.it
- MANIFATTURA EMMETEX SPA - fabric producers - www.emmetex.com
- TEXMODA TESSUTI SRL - fabric producers - www.texmodatessuti.com
- BERTO INDUSTRIA TESSILE joined our commitment - www.berto.it
- A ZETA FILATI SRL - yarn producers - www.azetafilati.it/it/info/detox
- COTONIFICIO ROBERTO FERRARI DI HSG SRL - yarn producers - www.ferraricotonificio.it/ita/certificazioni.php#progetti
- FILTE SPA - fabric finishing - www.filte.com/detox.html?lang=ita
- ILCAT SPA - basic textile materials - www.ilcat.it/detox

Study made in July 2016 by CID pointed out some APEO contamination in dyeing powders. That substance is also used as anti-dust.

Below you can find all details:

https://www.confindustriatoscananord.it/media/DETOX/Case%20study%20coloranti_ENG.pdf Dyeing houses which are CID members require from their suppliers the absence of those substances and regular updates about APEOS in chemical products.

Many suppliers, especially bigger ones, are not able to give any further information, as their products follow the ZDHC MRSL according to which there is a 250 ppm limit (our MRSL have 1ppm). Many brand committed in Detox campaign asked to their supply chain to respect ZDHC MRSL so Prato MRSL seems senseless to chemical suppliers.

In this scenario, all our companies have to take big efforts to make specific test on the most critical parameters like APEOS in order to choose the best product available.

2.3 Are there any other examples (past achievements, or current substitution objectives beyond the 11 priority hazardous chemical groups) you'd like to report on?

We are reporting our study on the level of contamination of dyeing powders on APEOS

Here you can find it:

<https://www.confindustriatoscananord.it/sostenibilita/detox/english-version>

2.4 Please list below all substitution case-studies your company has published (or intends to publish, with a timeline). For easy access, we invite you to consider publishing all case-studies (past and present) on your Detox webpage.

Case study: chemical substitution of PFC -July 2016

Case study: APEO's investigation report - July 2016

Case study Dyestuffs for Fashion Industry: actual chemical contamination levels- October 2016

The results of the recycled water monitoring carried out by GIDA - December 2016

Case study: spinning auxiliaries - July 2017

Second case study on textile dyes - July 2017

Restricted Substances List (PRSL) for Regenerated Textile Product for Detoxed Companies- December 2017

Presentation of case study on regenerated textile products- December 2017

Q3: Disclosing list of suppliers with wet processors:

3.1 Do you disclose your suppliers list (including detailed names and locations, updated on a regular basis)? (please provide the relevant % of your supply chain disclosed)

Our companies are members of the supply chain (fabric producers, yarn producers, wet process, chemicals) and publish on the website the results of their inspections.

3.2 To what extent does it include tier 2/tier 3 wet processing suppliers and details of the relevant processing operations for each supplier (including detailed names and locations, updated on a regular basis)?

The list of CID companies and their location is available here:

<http://www.consorziodetox.it/index.php/who-we-are/?lang=en>

Our companies do not have tier 2/tier 3 wet processing suppliers

3.3 How do you make this information available for public scrutiny? Please provide relevant link(s).

Our companies are members of the supply chain and publish on their website the results of the inspections. The consortium has arranged a control plan for all the companies (<https://www.confindustriatoscananord.it/sostenibilita/detox/english-version>))

Upload data of waste water test on IPE platform is impossible. Too much technical error and few support and information.

3.4 If your company has not yet aligned on this best practice (the publication of wet processing suppliers, including details), we invite you to consider taking this important step ASAP, by providing us with details of a timeline by which you intend to publish an updated list of wet process suppliers by May 1st.

Not applicable

Q 4. Impact of Detox and future landscape

4.1 Since its launch in 2011, what are the positive impacts of the Detox campaign on: 4.1a How the sector as a whole is managing hazardous chemicals in the supply chain?

DETOX campaign was really effective in focusing the sector's attention and efforts towards the elimination of hazardous chemicals from products and supply chain.. Before 2011 we focused on residual substances in the product but not on the industrial process. The campaign gave to the brands the input to be more transparent.

Chemical management approach was also very important, as the suppliers followed up products and chemical mixtures with reports which pointed out contamination levels.

4.1 b Other environmental and social issues, such as water saving, energy saving, changes in raw material selection, your interaction and partnership with suppliers?

Each company puts in place specific actions to achieve those goals. In Prato district, wet process companies use recycled water from industrial aqueduct and many companies have made investments for energy saving and emissions

reduction. All DETOX companies have qualified both their textile and chemical suppliers to respond to DETOX commitment.

Control and selection of textile material is the major work we have to do to qualify recycled textile product.

The use of recycled material in textile production has in general a positive environmental impact that are predominant with the exclusion of the no-conformity to contamination levels compared to virgin materials

This work is complemented by the design of operational tools (control plan and certification scheme) for the qualification and traceability of the recycled textile material production line, also through collaborations with international certification authority.

4.2 Looking to the future, what is needed to maintain the Detox momentum, with regard to:

4.2a Challenges that still remain that might hamper the achievement of the Detox objectives in the sector by 2020 (and beyond)?

As of now, in 2018, it is hard to figure out how to eliminate heavy metals and Perchloroethylene from the supply chain. At the moment, there are no adequate replacements for those products.

CID is working on testing campaign for the case study on the use of the perchloroethylene in washing fabric in width.

4.2b What regulatory or voluntary structures (either global, regional (e.g. EU) or local) are still required to maintain the momentum of the progress being made to Detox and to reward the investment made by Detox companies by spreading the implementation of best practice across the wider sector.

Greenpeace should allow and promote the use of DETOX logo, in order to give a major commercial input on the market, given the efforts which have been made to follow the commitment and believe in the elimination of hazardous chemicals from the supply chain.

4.2c Does your company have any record or plan of environmental policy advocacy, in particular on chemicals or transparency, but not exclusively? Please give a brief description of the fields of intervention and the objectives and provide links to any documents, such as submissions to policy consultations, policy positions, keynote speeches, etc.

Within the consortium, each company has specific further policies. Many companies have subscribed and shared the policies proposed by their customers, from which, most of the times, it is required to respect ZDHC parameters.

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GREENPEACE

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