

# H&M “Towards Zero Discharge of Hazardous Chemicals” report 2016/2017

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## Our approach

H&M’s chemical management vision is to ensure safe products made in a healthy workplace while protecting the environment. We apply a precautionary approach in our chemical management and our goal is to guide and support our suppliers’ facilities and whole industry to phase out hazardous substances to achieve “clean factory”, which means hazardous substances should be phased out from the whole production sites. This report included our actions towards zero discharge in 2016-2017 and is divided into 4 parts; Disclosure & Transparency, Phase Out/Manufacturing Restricted Substance List (MRSL), Systemic change and Circularity.

## Disclosure & Transparency

### Public list of Suppliers

Public [supplier factory list](#) includes our first tier supplier factories that account for 95% of the total order volume for all H&M brands and fabric and yarn mills involved in about 50% of our production volume.

### Standardized wastewater guideline

In November 2016, ZDHC wastewater guideline is released. This is the standardized set of wastewater parameters, limit values and test methods for the garment and footwear industry to follow. In beginning of 2017, ZDHC group launched a pilot program to review the execution of guideline in supply chain and the H&M group was one of the supporting brands to streamline the implementation.

### Discharge report 2016

In line with the right-to-know principle in ZDHC commitment, we have been working with suppliers to disclose environmental data since 2012. The 11 priority chemical groups are tested in incoming water and discharged waste water every year and reported on IPE platform. (Alkylphenols (APs) & Alkylphenol Ethoxylates (APEOs), Azo Dyes, Brominated and Chlorinated Flame Retardants, Chlorinated solvents, Chlorinated Aromatic Hydrocarbons (Chlorobenzenes & Chlorotoluenes), Chlorophenols, Organotin, Phthalates, Short Chain Chlorinated Paraffins (SCCPs) Total heavy metal, Perfluorinated Chemicals (PFCs)).

By end of 2016, 67 factories with wet processes disclosed their discharge data through IPE. The annual discharge data summary report is regularly published; you can find the latest summary report [here](#).

The key findings from discharge testing 2016 is:

- Phthalates, Chlorobenzenes and Heavy Metals were commonly detected in both incoming and waste water samples. These were also the three major chemical groups found in discharged waste water samples.
- Azo dyes, Chlorophenols and PFCs were found in waste water samples only. This implies its actual usage in manufacturing process.
- Flame retardant, Organotin and Chlorotoluenes were not detected in the incoming and waste water samples.

### **Environmental Emission Evaluator (Ecube)**

To increase the transparency of the use of hazardous chemicals in manufacturing processes, H&M worked together with Bureau Veritas to develop Environmental Emission Evaluator (E cube). Ecube is a tool to measure the chemical management performance in a factory. The aim with Ecube is to transform textile industry from reactive to proactive approach in chemical input management and it is designed to help identify area of improvement in chemical usage and discharge.

For more information regarding Ecube, please see:

<http://www.bureauveritas.com/services+sheet/bve3++environmental+emission+evaluator>

In 2016, we performed a pilot project at 29 suppliers in China, Bangladesh, Indonesia, India, Pakistan and Turkey to test the online version of this tool.

### **Phase Out/Manufacturing Restricted Substance List (MRSL)**

The goal of the H&M MRSL is to reach “clean factories”. This means that the substances listed in our MRSL should be phased out from the whole production site by the latest 2020. This is an approach that requires cooperation within our industry. Accordingly, we continue our work actively with ZDHC group as one of the co-lead for alignment in a one industry standard. Today, we are reviewing our MRSL screening methodology and update MRSL document regularly [Link to MRSL Methodology Document](#).

### **PFC- phase out**

Fluorocarbons can be used in the textile industry as functional finish to receive a water repellent function. Many fluorocarbons are known to be persistent meaning that they do not break down and therefore they are accumulated in our environment. H&M started phasing

PFCs out in 2009 and enforced a ban in 2013 in our own production line. Our aim is to reach clean factory. The work phasing out PFCs is described in the Case Study Phase out of Perfluorinated Compounds (PFCs), published on [Subsport](#).

Since our ban on PFCs for all products within the H&M Group, we have confirmed the compliance with this requirement through product testing and also the consumer organisation "[Forbrugerrådet Tænk Kemi](#)" confirmed the absence of PFCs at a test of children's gloves from 11 different brands in a test conducted during 2015.

## **H&M Positive lists**

Since 2012, H&M engaged and worked together with the chemical industry to seek for possible solutions. We conducted chemical trials together with chemical suppliers to verify the presence of hazardous chemicals in wastewater discharge when using specific brands of chemicals at a factory. Today there are 15 chemical suppliers who can commit that they fulfill the requirements of ZDHC and H&M's Chemical Restrictions. These suppliers are listed here: Longshan, [Transfar](#), BASF, [CHT](#), DyStar, Huntsman, [Bozzetto](#), [Jintex](#), [Matex](#), Ohyoung, [Resil](#), [Tanatex](#), [Everlight](#), [Croda](#), [Pidilite](#), [Jay Chemical](#), [Atul](#), [Silkflex](#), [Centro Chino](#), [Seydel](#).

## **Supply chain engagement**

Currently, we are investigating a scientific methodology to evaluate the hazard assessment of better alternative and a more user friendly tool for supply chain to access.

Together with some ZDHC leading brands, we are piloting a Green Screen Hazard Assessment of the available alternatives at a common supplier.

## **Product testing**

During 2016 H&M conducted nearly 44,500 chemical tests at third party labs to ensure compliance with our Restricted Substances List (RSL) and even more tests were conducted on our supplier's initiative at third party labs. The H&M quality management requires suppliers to take the responsibility to assure good chemical management. Therefore, suppliers themselves send samples to third party testing and the test reports are submitted to H&M for review and final approval. H&M is currently reviewing the best approach to include all test statistics from different stakeholders in one system.

## **Systemic Change to Create Awareness and Drive More Responsible Practice within the Industry**

In 2011, together with the Adidas Group, C&A, Li Ning, NIKE, Inc. and Puma, H&M formed the [Zero Discharge of Hazardous Chemicals \(ZDHC\) Program](#) with a mission of catalyzing the awareness level and driving more responsible practices within industry. Since then, more brands, different value chain affiliates and associates also joined this program.

Together with other ZDHC brands, H&M has continuously provided our support to CNTAC ZDHC conferences in China, since 2013. In November 2016, H&M also joined the CNTAC ZDHC conferences in China, to strengthen our synergy with supply chain in China.

To drive common practice within industry, H&M is working closely with the group in development of industry standards, systems and tools (e.g. ZDHC Gateway, wastewater guideline and alignment of HIGG index tool with ZDHC audit protocol).

The H&M group became part of the ChemSec<sup>1</sup> business group - a collaboration between companies to inspire progress on the reduction of toxic chemical use. The collaboration develops effective corporate practice and, by sharing case studies and success stories from its members, raises awareness across the industry and pushes for better legislation from governments.

Strong chemical legislation helps strengthen our message to our supply chain and stakeholders. During 2016 H&M actively engaged on the EU public consultation on the restriction of certain hazardous substances in textiles and clothing. We endorsed the restriction of the use of CMR (carcinogenic, mutagenic, or toxic for reproduction) substances in consumer products.

We continued our work on securing our suppliers' capability on chemical management. Hazardous Substance Control (HSC) training is developed as partner with SGS (the world's leading inspection, verification, testing and certification company). In the training, chemical flow management concept with supporting toolkits are illustrated.

In 2016, 124 factory professionals participated in HSC training on wet processing module in China, Bangladesh, Indonesia, India and Turkey. We will continuously expand the module of HSC training (e.g. denim) to apply it to other factories.

Best Chemical Management Practice (BCMP) guideline was published in our supplier portal to provide guidance for our suppliers to develop and implement correct management practice in their units, and hence minimize the use of hazardous chemicals.

## **Towards becoming 100% circular**

H&M has set out the vision to become 100% circular. H&M promotes a circular (1) approach in how products are made and used, and works towards a clean, closed and effective circular life cycle for textiles, maximizing the utility and the value of the products. As part of this we have set a long-term goal to only use recycled or other sustainably sourced materials (1).

H&M will implement a voluntary Extended Producer Responsibility (EPR) system (2). This includes:

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<sup>1</sup> <http://chemsec.org/the-hm-group-joins-chemsecs-business-group/>

- i. Conduct further analyses of economic value of additional models/offers aiming to maximize the utility and value of products, following a circular approach.
- ii. Offering take-back and consumer textile waste collection systems (3) in all markets where we operate (4).
  - o Reaching more than 95% of H&M (brand) customers globally through the H&M global clothing and home textile collection scheme for clothes and home textile for re-use (re-wear) and clean recycling (5), independently of brand and condition. The collection will maximize the utility and the value of the textiles following the [European Waste Hierarchy](#) promoting re-use before recycling. We ensure that none of the collected textiles end in landfills. We aim to continuously ensure that at least 50% of the textiles collected in H&M stores are reused or recycled (and not downcycled) and work to further minimize downcycling.
- iii. Taking a holistic circular approach in how products are made and used.
  - o This includes addressing circular design, longevity, chemical input, quality and durability requirements, raw material choices and sourcing, sustainable production processes and to expand the lifespan of our products, i.e. through durability requirements and by promoting and/or facilitating repair, re-use and recycling.

#### Footnotes

(1) Circular is defined as maximizing the utility and the value of the products and components. Having a circular approach to how products are made and used including circular design, durability and longevity, chemical input, only recycled or other sustainable sourced materials, sustainable production processes and different ways of expanding the fashion life span for example through repair, re-use recycling and collecting schemes. Sustainably sourced materials are evaluated and qualified as sustainably sourced preferably with third party certification when available. Examples of sustainably sourced materials include the [H&M Conscious materials](#) and Better Cotton. We follow a science based approach and we constantly review what qualifies as sustainably sourced together with our stakeholders.

(2) Extended Producer Responsibility is individual and global company responsibility to ensure the whole lifecycle of a product having a circular approach to how products are made and used through circular design, raw material choice, longevity and durability, sustainable production processes and different ways to expand the life span of the products through repair, reuse and recycling.

- Sustainable sourcing that protects the well-being of the natural environment stays within planetary boundary limits and supports the socio-economic well-being of workers and local communities;
- ensures the system for end-of-life collection achieves the highest utility and value of the product and the material quality through effective collection, disassembly and re-use or recycling.

- Promote circular design ensuring the highest utility and value of the product and enable an extended lifespan including different ways of extending the lifespan through repair, reuse and recycling.

(3) Take-back program shall enable the highest utility and value of the products and the materials and the program will follow the waste hierarchy promoting re-use and remake before recycling and making sure that nothing ends up in landfill.

(4) Covering all H&M brand stores in all self-operated markets (for new stores after six months after opening at the latest). In franchise markets (as per FY 2015 representing approx. 2% of total sales), at least one store per market (Morocco and Egypt excluded).

(5) H&Ms approach to hazardous chemicals in recycled materials, see [separate document](#).

### **Enforcing stricter requirement on virgin material to enable circularity**

In January 2017 H&M lowered our limits in final products for APEO and phthalates as a step towards zero discharge and 100% circularity.

#### **Additional links:**

Our commitment: <http://sustainability.hm.com/en/sustainability/commitments/use-natural-resources-responsibly/towards-zero-discharge/hm-commitment-to-zero-discharge-of-hazardous-chemicals.html>