

H&M group “Towards Zero Discharge of Hazardous Chemicals” report 2017/2018

Our approach

Leading the Change towards Safe Products and a Toxic Free Fashion Future is the new vision for Chemical Management within the H&M group. Along with the vision a roadmap has been created. The roadmap includes our goal of zero discharge however it also sets direction and goals beyond 2020.

A key goal is 100% traceability of input chemicals by 2030. This is also crucial in our overall company ambition to become 100% circular. In the circular economy the material and chemical input must be known and safe. Therefore, we are working towards positive listed chemicals with screened chemistry, a hazard based approach that enables brands to choose the best available chemicals for each product as well as traceability and transparency.

This report includes our actions towards zero discharge in 2017-2018 and is divided into below parts (according to our commitment to Zero Discharge); Disclosure & Transparency, Phase Out, 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 group brands and fabric and yarn mills involved in about 50% of our production volume.

Discharge report 2017

In line with the right-to-know principle in ZDHC commitment, H&M group is working with suppliers to disclose environmental data. The 11 priority chemical groups are tested in incoming water and discharged waste water 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 2017, 140 facilities with wet processes disclosed their discharge data through IPE. Full report is to be found [here](#). Analyses were performed on incoming water, raw wastewater and treated waste water.

The key findings and conclusions from discharge testing 2017 are:

- SCCPs, AP&APEO and chlorinated solvents were the substance groups most often detected in incoming as well as treated waste water samples.
- AP and APEOs was detected in treated discharge water in China, Bangladesh, India and Indonesia with the highest levels detected in China in levels varying from 0,0080-0,070 ppm. AP and APEOs are banned from usage where H&M group produce, therefore these traces could be due to impurities or lack of transparency in the chemical information from the chemical manufacturer.
- Only cadmium and mercury were compliant with the ZDHC standards for Heavy Metals. Antimony was the most detected heavy metal. Since antimony is included in the making of polyester it is difficult to avoid contamination of antimony.
- ZDHC Wastewater Guideline was not fully implemented in 2017, which may have caused some inconsistency in sampling points.

Environmental Emission Evaluator (Ecube)

Ecube is a tool developed by Bureau Veritas to measure chemical utilizations within our supply chain. 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. In 2017, 49 business partners, used Ecube for chemical usage and discharge performance.

For more information regarding Ecube, please see:

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

Phase Out

H&M group MRLS

To reach our goal of zero discharge we cooperate within our industry. Therefore, H&M group is active in the ZDHC Input Focus Area. The goal in this work is that H&M group and other brands can align on a harmonized standard. During 2017 a robust update process for the ZDHC MRSL has been set which is a crucial step towards industry alignment.

H&M group Positive List

H&M group's Positive List contains all chemical products which conform to the latest H&M group Chemical Restrictions (MRSL and RSL). This Positive List is a part of our efforts in securing Zero Discharge of Hazardous Chemicals by 2020 and to foster sustainable production in our industry. We highly encourage the use of this Positive List within our supply chain to foster clean production using safer chemicals. The Positive List, will be updated monthly. Since our knowledge changes with the progress of scientific research, the Positive List will also change to reflect the most current state.

In building this updated Positive List, a methodology that encourages transparency for chemical industry was adopted. H&M group Positive List methodology is as follows:

a) Screened Chemistry for non-dyestuff (auxiliary chemicals and polymers)

Chemical products (non-dyestuff) that have undergone Screened Chemistry hazard assessment using GreenScreen methods by ZDHC approved accessors or by Rapid Screen from SciveraLens. Screened Chemistry should be performed to include full-product scoring, instead of per CAS numbers.

b) Chemical testing for dye-stuff

Dyestuff products shall be developed by chemical testing against the most updated ZDHC MRSL. Only dyestuff products listed on ZDHC Gateway Level 1 by product testing will be included in the Positive List.

Product testing

During 2017 H&M group conducted 60 000 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. We have identified a need for better alignment between RSL and MRSL and will work towards that both when it comes to monitoring and tools, this is included in our H&M group roadmap.

Systemic Change

ECHA webinar

H&M group presented our chemical management at an ECHA webinar to share our ambitions as well as to highlight industry challenges. For more information, <https://echa.europa.eu/-/replacing-harmful-chemicals-in-the-textiles-sector>

ZDHC Board and Focus Area Co-Leads

During 2017 H&M group took the collaboration within ZDHC to a higher level and was appointed as one of the new Board Directors of the ZDHC Foundation. The Board is the most strategic and future focused governing body of ZDHC. Board Directors are nominated and elected individuals that fulfil and demonstrate ZDHC established values and qualities. During 2017, H&M group became member of the co-lead teams in all focus areas (input, process and output).

REACH REFIT Evaluation

Strong chemical legislation helps strengthen our message to our supply chain and stakeholders. 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. In the evaluation, the importance of addressing group of substances for the identification of SVHCs to the candidate list, rather than individual substances was highlighted. We also shared our view from a circular economy perspective where we believe that recycled materials must fulfil the requirements of REACH. To be able to trace back materials from its origin, to make sure no hazardous chemicals have been used, REACH needs to evolve to include mandatory requirements of chemical traceability for all products produced and imported to EU.

Supplier Training

We continued our work on securing our suppliers' capability on chemical management. Hazardous Substance Control (HSC) training is developed as partner with. In the training, chemical flow management concept with supporting toolkits is 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. In 2017, the HSC training was extended to 82 chemical intensive suppliers.

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. In 2017, the BCMP training was rolled out to all suppliers.

Chemical Gathering

In June 2018 H&M group hosted an event together with Levi's and C&A and ZDHC in Hong Kong. Chemical companies were invited to take part in the brands' long term chemical vision as well as to discuss benefits and challenges of Screened Chemistry approach. The event was a success on very lively participation and discussion, also introducing the fashion companies vision in a constructive way to work towards preferred chemical development.

Towards becoming 100% circular

H&M group has set the vision to become 100% circular ([see separate document](#)). H&M group promotes a circular 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.

2017/2018 updates towards 100% circular

Goal set to use 100% recycled or other sustainably sourced materials by 2030. In 2017, 35% of our material use is either recycled or sustainably sourced. The H&M group is one of the largest users of sustainable cotton including organic, recycled and better cotton as well as lyocell and recycled polyester.

Goal set to collect 25,000 tons annually in the global garment collecting initiative by 2030. In 2017 the collection amount was 17 771 tons.

Launch of Take Care pilot aiming to inspire, educate and enable customers to take better care of their products through care and repair. The Take Care concept consists of guidance and inspiration, services and products.

Sustainable collections and design: In 2017/2018, the H&M group launched several collections and products made in recycled or sustainably sourced materials and “REMAKE” collections prolonging the lifespan of used garments and home textile.

Acceleration of innovation towards circular, recycled and sustainably sourced materials, processes and business models. During 2017/2018, the H&M group invested in innovation companies re:newcell and Tree to Textile. And through the H&M foundation the annual Global Change Award supported 5 early stage innovations on circular materials, processes and business models. The H&M group also engaged in research projects such as Demeto and Effective.

Chemicals in recycled materials

In May 2016, H&M published our approach to chemicals in recycled materials. For detailed document please see [separate document](#). In short, the H&M approach for using recycled materials is based on precaution and aims to avoid recirculation of hazardous chemicals. The H&M objectives regarding hazardous chemicals in recycled materials are that consumer products should comply with the same chemical requirements regardless of their recycled content. Any exceptions to this should be justified and transparently communicated.

During 2017, exceptions in H&M group RSL concerning chemicals in recycled materials have been removed. However, we are still facing some challenges with recycled wool on APEO and Cr. Therefore H&M group is collecting test results to build more knowledge of chemicals in recycled materials. In addition to internal monitoring H&M group also cooperated within Re-TEX to test postconsumer denim for risky chemicals. The test result indicates that black postconsumer cotton can contain elevated levels of total chromium. This will be further studied and evaluated.