

H&M Group “Towards Zero Discharge of Hazardous Chemicals” summary report 2011-2018

Background

H&M Group together with Adidas Group, C&A, Li Ning, NIKE, Inc. and Puma formed the [Zero Discharge of Hazardous Chemicals \(ZDHC\) Program](#) in 2011 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.

As part of our shared commitment to help lead the apparel industry towards eliminating hazardous chemicals and to achieve zero discharges of such by 2020, H&M Group developed together with the Adidas Group, C&A, Li Ning, NIKE, Inc. and Puma a joint roadmap in 2011.

Our approach

Since the early 1990s, we have applied the Precautionary Principle in our chemical management towards safe products, a safe working environment for workers in our supply chain and limiting environmental impacts.

This report summarizes our actions towards Zero Discharge from 2011 to 2017 and is divided into 4 parts covering: “Disclosure & Transparency”, “Phase Out/Manufacturing restricted list (MRSL)”, “Systemic Change” and “100% Circular”.

Disclosure & Transparency

Below are the main actions H&M Group and our suppliers have done related to disclosure & transparency, listed by year.

2012

Together with C&A and G-Star, we conducted a pilot benchmark study to verify the use and discharge of the 11 priority chemicals. The pilot study verified that five out of 11 chemicals were still present in the wastewater after discharge.

2013

Scaled up the benchmark study including strategic suppliers with wet processes. In total, chemical audits and verification tests were completed at 37 factories across Bangladesh, Cambodia, China, Indonesia and India. The 11 chemicals data were disclosed on IPE platform.

- H&M published its [supplier factory list](#).

2014

Continued to increase the number of wet process unit in discharge data disclosure on IPE platform. In total, 50 factories across Bangladesh, Cambodia, China, Indonesia and India were involved.

2015

- 59 factories with wet processes disclosed data through IPE.
- Through extensive research we found that the Pollution Release Transfer Register (PRTR) is an effective method to prevent intentional use of hazardous chemicals in the manufacturing process. Inspired by the PRTR methodology, we developed a mathematical modelling together with Bureau Veritas, one of the global leaders in Testing, Inspection and Certification (TIC), to determine the chemical discharge performance in factories in a more comprehensive way.
- We launched the first pilot project for using this method in 8 factories located in China and Bangladesh. All factories were trained and required to submit all the relevant information for evaluation. This modeling method allows acquisition of comprehensive discharge information of factories.

2016

- 2016 ZDHC wastewater guideline is released and the H&M group was one of the supporting brands to streamline the implementation in a ZDHC pilot program.
- 67 factories with wet processes disclosed their discharge data through IPE.
- H&M group worked together with Bureau Veritas to develop Environmental Emission Evaluator (Ecube) to measure chemical management performance in a factory based on the PRTR work in 2015. A pilot project was performed at 29 suppliers.

2017

- 2017, 140 facilities with wet processes disclosed their discharge data through IPE.
- In 2017, 49 business partners, used Ecube for chemical usage and discharge performance.

2018

- In 2018, 204 business partners used Ecube, we also allowed the use of CleanChain for units that are shared with fellow ZDHC brands.
- By end of 2018, 227 suppliers participated in waste water testing according to the ZDHC waste water guideline and the results were published on ZDHC Gateway and IPE platform.

Phase Out/Manufacturing Restricted Substance List (MRSL)

In 1995, we have published our first Chemical Restriction list. Since then, we regularly update our public available [Chemical restriction list](#) taking the intrinsic hazards approach into account based on precautionary principle.

2011

H&M made a detailed APEO investigation to assess the presence and source of APEO in the supply chain.

2012

An alternative list of water repellent finishes was published in 2012 for supplier to use.

2013

- We banned the usage of perfluorinated compounds (PFC) for all orders placed from 1st January 2013.
- We included the idea to base on stepwise approach in eliminating the hazardous chemicals from production line level and whole factory level. Clause 1: Substances are not allowed to be found in H&M production sites and used in H&M production and Clause 2: Substances are not allowed to be used in H&M production.

2014-2015

Expanded the MRSL scope to include chemicals beyond the 11 Priority Chemical groups.

2016

- The goal of the H&M Group MRSL is to reach “clean factories”. 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.
- PFC- phase out is published on [Subsport](#).
- H&M Group Positive List now contains 15 chemical suppliers who can commit that they fulfill the requirements of ZDHC and H&M's Chemical Restrictions.
- Investigated a scientific methodology, Green Screen, to evaluate the hazard assessment of better alternative and a user-friendly tool for supply chain to access. Piloting a Green Screen Hazard Assessment of the available alternatives at a common supplier with some of the leading brands within ZDHC.
- During 2016 H&M group 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.

2017

- Adopted screened chemistry as a method for hazard assessment
- During 2017 H&M group conducted 48,700 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.

2018

- H&M Group's [Positive List](#) is re-launched, containing all chemical products which conform to the latest H&M Group Chemical Restrictions (MRSL and RSL) and ZDHC MRSL. In building the Positive List, Screened Chemistry is used.
- Screened Chemistry is currently limited to non-colorants product and we are supporting the on-going method development for colorants products by Scivera and Toxservices.
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Systemic Change to Create Awareness and Drive More Responsible Practice within the Industry

2011

H&M together with Adidas Group, C&A, Li Ning, NIKE, Inc. and Puma formed the [Zero Discharge of Hazardous Chemicals \(ZDHC\) Program](#) with a mission of catalyzing the awareness level and driving more responsible practices within industry.

2012

H&M together with Adidas Group, C&A, G-Star, Li Ning, NIKE, Inc. and Puma released their first update on the progress in implementing the joint roadmap towards zero discharge of hazardous chemicals (ZDHC) in the supply chain by 2020 on April 24th 2012.

2013

- H&M joined 17 other brands in organizing two CNTAC ZDHC conferences to facilitate industry dialogue, promote industry collaboration, support from industry associations and engage with textile supply chains in China.
- The ZDHC Group continued to strengthen engagement and discussion around disclosure with IPE. Through direct, face-to-face meetings and discussions at key events including the October 2014 CNTAC meeting.

- Sustainability Apparel Coalition (SAC) and the ZDHC group further align a chemical management module and ZDHC audit protocol.

2014

- H&M and the ZDHC brands strengthened engagement with Institute of Public and Environmental Affairs (IPE) to discuss pollution disclosure
- ZDHC MRSL was released
- ZDHC is creating standard testing (collection, sampling, analysis) and reporting methods to provide consistent direction to the supply chain, where tremendous crossover between brands exists.
- H&M organized a stakeholder engagement event in Bangladesh 2014 to drive green chemicals import.
- H&M advocated towards the EU commission to strengthen regulatory requirements for hormone disrupting chemicals
- H&M launched the BMI (Better Mill Initiative) project in China

2015

- Partnered with SGS (one of the world's leading inspection, verification, testing and certification company) to develop Hazardous Substance Control (HSC) training. This training is designed for factory professionals to secure the foundational knowledge and know-how on chemical management.
- The ZDHC MRSL is continuously reviewed with the latest version including leather products.
- H&M continues to assist the Swedish Government to push for tougher EU regulations on chemicals in textiles.

2016

- H&M group 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 ChemSec¹ business group - a collaboration between companies to inspire progress on the reduction of toxic chemical use.
- H&M group 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

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

CMR (carcinogenic, mutagenic, or toxic for reproduction) substances in consumer products.

- Hazardous Substance Control (HSC) training is developed as partner with SGS and 124 factory professionals participated in HSC training on wet processing module. Best Chemical Management Practice (BCMP) guideline was published in our supplier portal.

2017- May 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. H&M group were actively engaged in the EU public consultation in relation to the REACH REFIT Evaluation. The importance of addressing group of substances for the identification of SVHCs to the candidate list was highlighted.
- We continued our work on securing our suppliers' capability on chemical management by extending HSC training with SGS to cover all suppliers with significant chemical use.
- Best Chemical Management Practice (BCMP) guideline was rolled out to all suppliers to provide guidance for our suppliers to develop and implement correct management practice in their units, and hence minimize the use of hazardous chemicals.

2018- May 2019

- In beginning of 2019, ZDHC Safer Chemistry Task Team was established. The brands in the task team Safer / Screened Chemistry also agreed on a seven-month grace period with immediate effect, to allow the alignment of methodology
- H&M group and other brands have also initiated dialogue with service providers (SciVera and ToxServices and NSF) and chemical industry the development to develop a screening method to be developed for colorants. In a similar way there is also an ongoing project on how to include commodities in Screened Chemistry together with Nimkartek.
- We invested in train-the-trainer program based on Best Chemical Management Practice, (BCMP), to implement clean production. We also cooperated within ZDHC task team to create a common chemical management system. In February 2019, we also collaborated with Sustainable Textile Solutions for advanced capacity building

with our chemical team in Production Sustainability to secure implementation across our regions.

Towards becoming 100% circular

2016

- H&M group set out the vision to become 100% circular and promotes a circular approach in how products are made and used. H&M 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. We also implement a voluntary Extended Producer Responsibility (EPR) system that includes for example take-back and consumer textile waste collection systems.
- H&M group publishes approach to hazardous chemicals in recycled materials.
- H&M group lowered our limits in final products for APEO and phthalates as a step towards zero discharge and 100% circularity.

2017 – May 2018

- 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.
- 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. 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.

2018- May 2019

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- Goal set to collect 25 000 tons annually in the global garment collecting initiative by 2030.
- Take Care was launched in several markets.
- H&M Group launched several collections and products made in upcycled, recycled or sustainably sourced materials.
- H&M Group were involved in research projects such as DEMETO and H&M Foundation's Hong Kong Research Institute of Textiles and Apparel (HKRITA).
- H&M Group's the Laboratory joined IDEO's Circular Economy CoLab, a collaborative innovation lab exploring circular business models.
- H&M Group started to explore the field of re-commerce. &OtherStories commenced a pilot collaboration with Sellpy, which is a Swedish web-based retailer of pre-used items.
- Through the H&M Foundation, the annual Global Change Award supported early stage innovations on circular materials, processes and business models.
- H&M Group invested in Colorifix and we participated in the EU project EFFECTIVE for developing bio-based nylon. H&M Group also invested in Ambercycle and Infinited Fiber Company. H&M Group investment TreeToTextile got another partner in Stora Enso and is moving into the next phase to build a demonstration plant.
- H&M Group collaborated with the Ellen MacArthur Foundation to develop and launch a circular packaging strategy.

Chemicals in recycled materials

2016

- In 2016, H&M published our approach to chemicals in recycled materials. For detailed 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.

2017-May 2018

- 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.
- H&M group 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.

2018 - May 2019

- During 2018, we continued to collect and analyses chemicals in recycled material. Samples used in this analysis were pre- and post-consumer cotton in various colors. Findings from the testing include that 62,5% of the pre-consumer samples had no detection of any of the tested substances. Comparing to only 6,4% of the post-consumer samples that didn't contain any of the tested substances.
- H&M Group also initiated a cooperation regarding data gathering and information sharing of chemicals in recycled materials within [AFIRM, Apparel and Footwear International RSL Management Group](#).