

Honoring our 2020 Commitment to Zero Discharge of Hazardous Chemicals

Consistent with our long-held commitments to sustainability and responsible chemicals management, Levi Strauss & Co. (LS&Co.) published a [Greenpeace Detox Solution Commitment](#) (Detox Commitment) in 2012, formalizing our commitment and intended actions toward zero discharge of hazardous chemicals by 2020. LS&Co. also joined the [Joint Roadmap Toward Zero Discharge of Hazardous Chemicals](#) (ZDHC Roadmap) in 2012, an apparel industry collaboration to drive systemic change with a goal of zero discharge of hazardous chemicals by 2020.

Now we are proud to announce that LS&Co. has fulfilled these 2020 commitments to Greenpeace and the ZDHC Roadmap. We have made tremendous progress since we introduced wastewater effluent standards to the industry in the early 1990s and we remain committed as ever to work to advance and scale more sustainable chemicals management. Above and beyond our 2020 commitments, we continue to advance strategies, programs and collaborative efforts with key partners to develop and scale robust and comprehensive chemicals management practices across the apparel sector and beyond.

The following details key milestones towards our fulfilment of our 2020 commitments, additional key developments and opportunities to continue to advance our sustainable chemical management program.

Implementing and Scaling Hazard Assessment and Screening

Consistent with the prevention-based approach and precautionary principle embraced in our Detox Commitment, we developed the [Screened Chemistry](#) program in 2014 to prevent hazardous chemistries from being introduced to the supply chain. We published a [case study](#) on Screened Chemistry and its development in 2016 and open-sourced the program so that any of our peers could adopt it.

Screened Chemistry goes beyond priority or (manufacturing) restricted substance list chemicals to apply a hazard-based assessment methodology to examine chemicals used to manufacture our products against specific health and environmental impacts. This enables us to identify better and best-in-class alternatives and areas for innovation. One of our goals for the program is for all key LS&Co. garment and fabric suppliers to use only preferred, safer options for manufacturing from a list of screened chemicals. As of January 2020, the Screened Chemistry program reaches 120 key garment and fabric suppliers in our supply chain and 200 chemical suppliers. Nearly 1,000 screened chemicals from more than 100 chemical suppliers have been included on our preferred, safer chemicals list.

Ensuring the credibility and transparency of Screened Chemistry is a key objective. As such, 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 the Screened Chemistry program. Then, in 2017, we were recognized with the [Green Chemistry and Commerce Council's Champions Award](#) for driving safer chemicals in apparel production. And in 2018, Screened Chemistry garnered LS&Co. a spot on *Fortune* magazine's "[Change the World](#)" list.

Over the past year we have cleared several significant milestones through collaborations with key partners to scale the reach and impact of Screened Chemistry. In January 2019, we converged with several industry peers and the ZDHC Foundation (ZDHC) on a [single standard for chemical screening](#) and guidance for third-party assessors who conduct chemical hazard assessments, enabling the integration

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of Screened Chemistry into the ZDHC conformance pyramid. Working with these same peers, we developed new screening methodologies for dye and pigments as well. In November, LS&Co. announced a [collaboration with the Hohenstein Institute](#) to utilize the ECO PASSPORT by OEKO-TEX® certification system. Through enhanced testing, verification and transparency to chemical suppliers, this partnership will enable LS&Co. to advance and better implement its existing chemicals management program and create a template that others in and beyond the apparel industry can follow. Furthermore, we have recently partnered with Scivera, an international analytical chemistry lab, and NimkarTek Technical Services Pvt Ltd to develop and implement an industry-first [screening process for commodities](#), or bulk chemicals, increasing the range of screenable chemistries dramatically.

Addressing Priority Chemicals

In 2000, LS&Co. became one of the first apparel companies to establish a [Restricted Substances List](#) (RSL), which outlines chemicals that are restricted or prohibited for use. As part of our Detox Commitment, we pledged to continuing to publish and update our RSL on our company [website](#).

Also core to the Detox Commitment was the disclosure and elimination of 11 priority chemical classes¹. ZDHC went further to ban an additional seven similarly hazardous chemical classes in their Manufacturing Restricted Substances list ([ZDHC MRSL](#)), which LS&Co. adopted and implemented. Between the adoption and execution of our RSL and the ZDHC MRSL, we have banned the use of all 11 priority chemical classes, along with a host of similarly hazardous chemistries in our products and across our supply chain.

In our Commitment to Greenpeace, we outlined specific elimination policies for alkylphenol ethoxylates (APEOs), perfluorinated compounds (PFCs) and phthalates.

Alkylphenol ethoxylates (APEOs)

LS&Co. began working to phase out APEOs in 2008, years prior to our Detox Commitment, and in 2013 we extended a use ban on APEOs to all our garment and fabric suppliers. The elimination of APEOs across our supply chain is a key metric of success for LS&Co.'s individual action plan toward zero discharge of hazardous chemicals. We remain committed to ensuring compliance by our more than 500 supplier manufacturing facilities in 42 countries around the world.

Understanding that there are multiple pathways for potential APEO contamination beyond our direct control, or even that of our suppliers, we reviewed and developed a [case study](#) on our phase out of APEOs in 2013. Through our Restricted Substances Stewardship Program, we are ensuring that our suppliers have the latest training and information on APEOs. By screening chemical formulations through the [Screened Chemistry](#) program, we can prevent APEOs from entering the supply chain. By testing and treating wastewater in accordance with the [ZDHC Wastewater Guidelines](#), we can detect and address any potential contaminations.

Perfluorinated compounds (PFCs)

As of January 1, 2016, LS&Co. stopped making products with any perfluorinated compounds (PFCs), chemicals that have unique properties to make materials waterproof and stain resistant. This marked the successful completion of a two-step phaseout, outlined in our Detox Commitment. We eliminated the use of long-chain PFCs by January 1, 2014. By January 1, 2016, we eliminated the use of short-chain PFCs as well. We went a step further by banning the use of all related and per- and polyfluoroalkyl substances (PFAS) in our products effective January 1, 2018. Our PFC and PFAS use ban is significant

considering there are currently no equally effective water and stain repelling alternatives. While several apparel companies have banned the use of PFCs, LS&Co. is among the few to ban the use of all related PFAS as well. A 2016 [case study](#) on the phase out of short-chain PFC C6 can be found on our website.

In addition, LS&Co. has mapped the use of PFCs and PFAS across our fabric mills suppliers to identify the mills that are completely free of PFCs and PFAS and those mills that apply these chemicals to other companies' products. Currently about 85 percent of LS&Co.'s fabric mill suppliers are not producing fabrics containing PFCs or PFAS for any brands. It is our preference to source from mills that are not engaged in PFC or PFAS application for other companies' products whenever possible.

Phthalates

LS&Co. included phthalates in our original 2000 RSL. We have banned their use in our products since 2010 and this is reinforced in the ZDHC MRSL. Our attention to phthalates and commitment to their elimination from our products globally preceded our Detox Commitment and joining the ZDHC Roadmap. However, through our participation in the ZDHC Roadmap and collaboration with ZDHC and fellow member companies, we have enhanced our ability to execute the ban with suppliers and scale it across the industry.

In 2015, 100 percent of LS&Co. print suppliers were determined to be free of phthalates usage at their facilities. We continue to enforce our phthalates usage ban as we engage our suppliers to support their responsible chemicals management.

Restricted Substances Stewardship Program (RSSP)

We launched the [RSSP](#) to ensure conformance with the ZDHC Roadmap and the successful elimination of priority chemicals, identified by Greenpeace and ZDHC. The RSSP provides guidance and a plan to eliminate priority chemical use and discharge, while supporting safe and responsible chemicals management. LS&Co. checks on RSSP performance and compliance status monthly.

Through the RSSP, LS&Co. requires manufacturing suppliers to prioritize responsible chemicals management. Our suppliers are required to work closely with chemical suppliers and analytical laboratories to ensure that responsible management extends throughout the supply chain. This provides us with transparency into program implementation and promotes accountability.

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.

LS&Co. requires all its fabric and garment manufacturing suppliers to employ a dedicated technical chemical management expert at each facility. These representatives are on hand to provide constant access to technical support, address issues and ensure conformance. The technical experts must be empowered and provided sufficient budget to improve the chemical management systems of the factory. We also require technical representatives to utilize our online tool for chemical management systems and MRSL trainings. Additionally, LS&Co. invites our suppliers to participate in the ZDHC training programs and provides on-site trainings conducted by our chemical management experts.

Research and Disclosure

Pursuant to our commitment to zero discharge of hazardous chemicals, LS&Co. performed a benchmark study of chemical use and discharge in 2013. The study assessed 11 priority chemical classes at 41 supplier facilities across Mexico, China, India, Bangladesh, Cambodia, Sri Lanka, Pakistan, Vietnam, Egypt, Nicaragua and Lesotho. These results helped LS&Co. establish a baseline understanding of chemical use and discharge, allowing us to focus on supplier capacity building, process change and policy change toward the goal of zero discharge of hazardous chemicals in the apparel industry. It also helped us understand how to improve supplier transparency. The original 25 supplier facility reports on chemical use and discharge from December 2013 can be found [here](#).

Since 2014, LS&Co. suppliers have consistently reported wastewater discharge testing results on the IPE Detox Platform, and as of 2018, LS&Co. has applied the ZDHC Wastewater Guidelines at all key fabric and garment suppliers, representing over 85 percent of our production volume. LS&Co. also publishes wastewater data reports twice each year, in April and October, to the ZDHC Gateway and the Institute of Public and Environmental Affairs (IPE) Detox Platform. We are engaged with ZDHC, working with them and our industry peers to encourage greater adoption of the Wastewater Guidelines and disclosure of testing results.

We are proud that our efforts to improve sustainability, chemicals management, and disclosure with Chinese suppliers has been recognized by the IPE in its [Corporate Information Transparency Index \(CITI\)](#), which measures the performance of about 250 companies across over a dozen industries on their management of supply chain environmental performance in China. Each of the past three years, from 2017 to 2019, LS&Co. has ranked first in the textile sector and third overall in the CITI. We have been rated among the top three textile and apparel companies surveyed every year since 2015.

LS&Co. has consistently promoted transparency and disclosure as a means to improve our understanding of issues and to identify opportunities to drive progress on sustainability. By signing the Apparel and Footwear Supply Chain [Transparency Pledge](#) in 2017, we reinforced our commitment to publish our garment factory supplier list. The garment factory list can be found on our [website](#) along with our list of fabric mills. We are advancing programs that are as transparent as possible so we can effectively partner with suppliers, industry peers and other key stakeholders to drive the necessary impacts and solutions.

Also in 2017, we advanced our chemicals research through an extensive study to map chemical use across our manufacturing suppliers. The study detailed not only the chemicals used on LS&Co. products, but all 650 million kilograms of chemicals used by our suppliers to manufacture fabric and garments for the broader textile and apparel industry. This represented the apparel industry's first comprehensive chemical impact footprint survey.

Industry collaboration through the ZDHC Roadmap

LS&Co. is an active member of the ZDHC Roadmap, working in collaboration with industry peers, suppliers and ZDHC to achieve zero discharge of hazardous chemicals in the apparel supply chain. We firmly believe that we will be able to create more sustainable change at scale, eliminate hazardous chemical use and improve water quality across the industry by partnering with ZDHC and fellow member companies. As such, we have worked with ZDHC to integrate LS&Co.'s industry-leading Global Effluent Requirements into the ZDHC Wastewater Guidelines and collaborated on Screened Chemistry to ensure harmonization with the ZDHC roadmap and to maximize the scale and impact of the program.

ⁱ The 11 priority hazardous chemical groups identified by Greenpeace are: 1. alkylphenols, 2. phthalates, 3. brominated and chlorinated flame retardants, 4. azo dyes, 5. organotin compounds, 6. perfluorinated chemicals, 7. chlorobenzenes, 8. chlorinated solvents, 9. chlorophenols, 10. short chain chlorinated paraffins, 11. heavy metals such as cadmium, lead, mercury and chromium (VI).