



Commitment to Zero Discharge of Hazardous Chemicals

INTRODUCTION:

This individual company commitment will refer to specific actions which C&A will take, in order to move us towards zero discharge of hazardous chemicals from all of our products by 2020. Our actions will further contribute to, and be guided by the "Joint Roadmap: Toward Zero Discharge of Hazardous Chemicals", published on the websites of the Adidas Group, C&A, H&M, Li Ning, Nike Inc. and Puma in November 2011.

C&A recognises that broad collaboration across all involved sectors of the industry, as well as with NGOs and other interested stakeholders will be essential in driving the necessary business transformation required to enable the reaching of this extremely ambitious goal.

SOME SELECTED STEPS TAKEN EARLIER BY C&A IN ENVIRONMENTAL MATTERS:

- A member of the Expert Task Force within the Global Social Compliance Programme (GSCP) which also established a comprehensive Environmental Module currently being tested in the C&A supply chain in China. (<http://www.gscpnet.com>)
- A member of the AFIRM group since 2004 on restricted substances (<http://www.afirm-group.com>)
- The first C&A Restricted Substance List (RSL) was established in 2004, and was published in the public domain in November 2011. (<http://www.c-and-a.com/uk/en/corporate/company/our-responsibility/protecting-the-environment/restricted-substance-list-nov-2011/>)
- The use of PVC was phased out of C&A product by 01.01.05
- C&A started to conduct screening of Substances of Very High Concern (SVHC) linked to the REACH legislation as from 03.02.09.
- A member of the BLC Leather Working Group since 2010 (<http://www.leatherworkinggroup.com>)
- A Founding Circle member of the Sustainable Apparel Coalition (SAC) with the goal of developing a universally accepted index to measure the environmental and social impact of clothing and footwear based on an LCA approach. The first group of products are currently being tested using V 1.0 of this index. (www.apparelcoalition.org)
- Our commitment to the selling of 100% certified organic cotton products in 2011 avoided the use of around 12,500 MT of chemical fertiliser and 68,500 litres of chemical pesticides
- An iconic study of the grey water footprint in cooperation with the University of Enschede in 2010/11 points to a significantly better local water quality in those areas where organic cotton farming takes place in relation to conventional farming
- Founding shareholder in the establishment of Cotton Connect which aims to transform the worlds cotton supply chain for good, with an inclusive focus which includes a reduction in the current use of water in cotton production



THE C&A ROADMAP APPROACH IN CONTEXT:

- C&A is committed to the goal of zero discharge of hazardous chemicals by 2020. This is stated publicly on our website (<http://www.c-and-a.com/uk/en/corporate/company/media-library/picture-and-audio-service/>) and further enhanced via our full commitment to the Joint Roadmap referred to above and launched in November 2011.

This commitment represents in itself a significant challenge, but offers the opportunity to effect positive change. To maximise our individual (as well as our joint) impact, and ahead of listing specific C&A commitments, it is necessary to understand what are the main challenges we face:

- We own none of the factories or suppliers which manufacture our product
 - The clothing industry is very fragmented, with very little verticalisation
 - This means for C&A, 800 contractual manufacturing partners, with close to 1,600 production units, and thousands more suppliers of the inputs which are used along this fragmented supply chain
 - Hundreds of individual chemicals are used at different stages of the supply chain, with limited current visibility regarding the formulas (mixtures of chemicals) used in additional preparations
 - Resulting incomplete information on various hazardous ingredients on Material Safety Data Sheets
 - Directly controlling chemical formulations far back in clothing supply chains has never been attempted by brands / retailers to date
 - Large volumes of water are used in dyeing, finishing and other processes.
- The starting point therefore involves an inherent lack of transparency in the industry, and this is probably the major hurdle that has to be overcome in order to reach our defined long-term goal.

ROADMAP ACTION PLANS:

- We will conduct a benchmark study on whether the first 9 identified priority chemicals which are listed at the end of this message are in discharge to water or sludge, via on-site visits and audits, inventories, and other analytics. C&A has selected a number of manufacturing pilot projects in China, India and Bangladesh where this benchmark study will be performed. In addition, and in cooperation with the wider group of brands under the Joint Roadmap, we have identified selected dyehouses/ finishers (China & Bangladesh), Tanneries (Indonesia & China), Printers (Thailand, China & Bangladesh), where such an analysis will also be carried out, using consultants for sampling and reporting back to the group.

A detailed project brief is under construction - the study involving pilot projects is to be completed by latest 31.12.12

- We will develop an action plan to phase out any of these 9 groups of chemicals which might be found as a result of this benchmark study.
- We have communicated to our contractual manufacturing partners the need to source APEO / NPE-free preparations, and together with other members of the group of brands will initiate a project to identify a "positive list" of APEO/NPE-free detergents.



The C&A-specific communication pointed out that APEOs / NPEs may still be widely used in both textile and leather manufacturing processes, and that consequently the potential for discharge is higher than for the first group of 9 chemicals referred to above. We have informed our partners additionally that scouring / degreasing and detergents are believed to be the main sources of such discharges, and all manufacturers have been asked to already look into the use of any alternatives. In addition, and as part of the actions of the Joint Roadmap brands, a further letter will be sent to all contractual manufacturing partners by end January 2012, asking them to further communicate throughout their own supply chains the need to source APEO / NPE-free preparations, and chemical suppliers will also receive a copy of that same letter. Beyond this, the "positives" list referred to above will be developed and circulated within the first half of 2012.

- We will conduct a follow-up study at facilities which will convert to the use of APEO / NPE-free detergents in order to identify any remaining sources of such discharges. This task will be undertaken within 2012.
- We are committed in the longer term to set up public disclosure of hazardous chemicals in our supply chain, although we recognise the difficulties (technically and regulatory, for example) which such disclosure will permit initially. Given our focus in 2012 on the first 9 identified priority chemicals, and on APEOs / NPOs also, we will encourage those suppliers who are part of our pilot projects in 2012 to provide information on any discharge of these 10 groups of chemicals by 31.12.12, although we do not see it as being possible to reference specific facilities, unless voluntarily offered by those pilot project partners.
- As part of the Group Roadmap, we are committed to convene a cross sector group to explore the best ways to encourage a broader long-term sector wide supplier chemical disclosure, and to deliver a study based on data collection from a selected group of pilot facilities. The first stakeholder dialogue meetings with reference to such disclosure are already underway, and further opportunities are already identified for the second quarter of 2012. Additionally in 2012, we will, as a group, explore platform options as to how suppliers could disclose their chemical inventory under the assumption that such disclosure will have a positive impact.
- We will continue with the expansion of C&As Restricted Substance List, and ensure public disclosure regarding such updates. This is an on-going task.
- As part of the Group Roadmap activities, we will set timelines for the elimination of the use of PFOAs / PFOSs by replacing C8 fluorinated water repellent chemistry with alternative technologies. This task will be undertaken in 2012, and will require specialist input.
- As part of the Group Roadmap, we will collaborate on joint training efforts and knowledge transfer, and deliver a joint training programme in one or more countries by the end of 2012.
- As part of the Group Roadmap, we will develop a comprehensive, generic inventory of chemicals used in textile manufacturing. This will start by including the majority of chemicals known to be used in the industry, then extracting those which are most commonly used and relevant to the products sourced by this group of brands. This process will start during the first quarter of 2012, and will require specialist support and cooperation from within the chemical industry.
- As part of the Group Roadmap, we will identify and agree on a cross-industry screening tool for chemical hazards. This will require specialist consultant support, and a detailed briefing will take place in the first half of 2012 once a suitable partner for this work has been identified.

The C&A Action Plan



- As part of the Group Roadmap, we will establish a plan to evaluate the chemical inventory by intrinsic hazard and to establish a sector-wide list of hazardous chemicals. Such work can only begin once the generic inventory applicable to this group of brands has been identified, and a cross industry screening tool for chemical hazards has been agreed on. The likely starting date for this latest phase will therefore begin in early 2013.
- As part of the Group Roadmap, we will expand existing efforts of prescribing alternative (greener) chemistries to be used in our products. This will require the mapping of existing industry approaches, and then the setting up of new recommendations. This is seen as being an on-going effort as part of an emerging Group Roadmap.
- As part of the Group Roadmap, we will develop a joint generic audit approach for environmental performance, which will include chemicals management. The deliverables will include health and safety issues, energy use as well as the chemicals focus, with the intention of developing a common audit approach, whilst avoiding duplication of effort.
- As part of the Group Roadmap, and beyond this generic audit approach within the manufacturing sector, we will develop a shared dye-house and printer audit protocol with a competent third party. The aim is to complete this task by the end of 2013. Within legal confines, to then develop a programme which would incentivise suppliers to fulfill this dye house and printer audit protocol. This could be considered via a link to the SAC Eco Index, or by a link to individual sourcing practices by each brand. Such an incentive scheme would have to follow from the previous step (the shared dye house and printer audit protocol) and therefore, in the current scenario, would follow in 2014.

9 identified priority chemicals are in discharge to water or sludge

1. Phtalates
2. Brominated and Chlorinated flame retardants
3. Azo dyes (those that may release carcinogenic amines as defined in REACH)
4. Organotin Compounds (e.g. TBT)
5. Chlorobenzenes
6. Chlorinated solvents
7. Chlorophenols
8. Short-chained Chlorinated Paraffins (SCCPs)
9. Heavy metals (cadmium, lead, mercury, chromium VI)