MARKS & SPENCER

ENVIRONMENT AND CHEMICAL POLICY (ECP)

EXPECTATION FOR M&S SUPPLIERS



Version 4.0

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LAST UPDATED FEBRUARY 2024

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Dear Supplier,

The Marks & Spencer (M&S) Environment and Chemical Policy (ECP) is an integral part of our commitment to source responsibly and to protect consumers, workers, and the environment.

The policy is in place to ensure that all products manufactured for M&S meet the strictest legal requirements and to restrict or eliminate specific chemicals of concern. This fully revised and updated version incorporates the latest information regarding chemical safety, environmental management, and new legislative requirements. It also provides guidance on best practices for improving quality and efficiency at your facility and to overall help reduce our impact on the environment.

Every facility that supplies materials and product for M&S must comply with the requirements of the ECP and commit to conducting the assessments, audits and testing applicable to their facility type. The policy aligns with industry guidelines and best practices to provide a consistent approach and expectations for all M&S suppliers.

It is important to remind you that M&S reserves the right to return or recall products which do not meet our stated ECP standards. Noncompliance to ECP requirements may result in a financial penalty being applied to your business.

Compliance with the ECP should be seen by our suppliers as a licence to do business with M&S, without which orders cannot be placed. The guidance should also be considered a tool that will help facilities to improve the quality of their production, reduce waste and emissions, improve efficiency and be more productive.

The ECP is integrated into our Plan A strategy, and by working with our value chain partners we will achieve our climate goals together.

Thank you for your continued support,

Yours Sincerely,

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FOREWORD BY THE DIRECTOR OF SOURCING, PLAN A & TECHNOLOGY

1. INTRODUCTION

1.1 SCOPE

Every facility that supplies materials and product for M&S must comply with the requirements of the ECP. The main, but not exclusive, area of risk is wet processing which employs a high intensity of water, energy, and chemicals in manufacturing. This includes facilities such as dyehouses, printers, laundries, finishers, coating factories, tanneries, componentry, and packaging. These are referred to as 'wet processors' throughout this policy.

By adopting an environment and chemical management programme, facilities can reduce their negative impact on the environment, help encourage responsible sourcing, and protect consumers and workers from hazardous chemicals.

This document covers:

- Environmental & Chemical minimum standards for suppliers;
- Best Practice guidance
- M&S approach to monitoring facility compliance

The ECP helps to ensure the safety of our customers, facility workers, and the environment, as suppliers must declare they meet the requirements of the ECP before M&S will source from them.

Failure to comply with the M&S ECP may result in a fine or the rejection of the supplier's product. M&S reserve the right to Return to Manufacturer (RTM) the product at the supplier's cost.

This document should be read alongside the Global Sourcing Principles⁽¹⁾ and the Restricted Chemical Policy ⁽²⁾.

1.2 RATIONALE & OBJECTIVES

M&S are committed to sourcing responsibly manufactured products through their supply chain and protecting consumers, workers, and the environment. The M&S ECP helps to ensure this by:

- Implementing the strictest legal chemical requirements and eliminating specific chemicals of concern.
- · Promoting advanced chemical management practices in facilities.
- · Providing guidance on minimum requirements for environmental management.
- Requiring facilities to measure, track, and reduce, their environmental impacts.

It is the responsibility of M&S's suppliers to share the ECP with the rest of their supply chain and to ensure that all chemicals and materials used in the manufacturing of M&S's products are compliant with the M&S ECP, the Global Sourcing Principles, and the Restricted Chemical Policy.

1.3 BACKGROUND

M&S launched their first chemical compliance policy in 1998, outlining the chemicals that are restricted or banned from use in the manufacture of M&S products. It has continued to evolve and improve with the industry since then.

To meet advances in legislation, regulation and best practice, the Environment and Chemical Policy (ECP) now includes minimum standards for both environmental and chemical compliance at facility level.

Many types of chemicals are used throughout the production of M&S Clothing & Home (C&H) products. For example, chemicals are used to dye or print fabrics and yarns, in specialist finishes, to tan leather and in effluent treatment. There are many other processes within the C&H supply chain that require chemicals, and there is a wide range of legislation and safety standards that governs their use to protect customers, workers, and the environment.

Manufacturing facilities have the potential to negatively impact their surrounding environment and communities. Risks include effluent discharge, air emissions, environmental contamination, and hazardous waste disposal.

Facilities are now required to consider their climate impacts due to high Greenhouse Gas (GHG) emissions within the sector. Inclusion of energy and air emission monitoring and tracking within this policy demonstrates M&S's commitment to work with suppliers to reduce emissions in line with our Science Based Target (SBT) and our Net Zero commitment.

M&S will only source from suppliers that monitor their environmental impacts from chemicals and processing, and have improvement plans in place as part of their business strategy.

This new update aligns with the latest approach to advanced chemical management and incorporates all elements of a robust environmental management system.



1. INTRODUCTION

1.4 INDUSTRY COLLABORATION

We strongly believe that the elimination of hazardous chemicals and the management of environmental impacts require collaboration and partnership with our industry colleagues. Therefore, we have partnered with multi-stakeholder organisations who provide relevant guidance and tools that align the industry.

1.4.1 ZERO DISCHARGE OF HAZARDOUS CHEMICALS (ZDHC)

M&S is a signatory brand member of the Zero Discharge of Hazardous Chemicals (ZDHC). The ZDHC is a collaborative, multistakeholder organisation comprising over 320 signatories from across the apparel and footwear industry including Brands, Suppliers, Solution Providers and Chemical Suppliers.

The ZDHC Roadmap to Zero Programme⁽³⁾ works with stakeholders in the fashion industry to phase out hazardous chemicals from the global value chain by building the foundation for more sustainable manufacturing with a goal to protect workers, consumers, and our planet's ecosystems.

The programme promotes a standardised approached to how the footwear and apparel industry manage their chemical inputs, processes, and outputs.

M&S has committed to implementing the ZDHC tools and guidelines across the supply chain with an aim to prevent the use of hazardous substances in production and to ensure that hazardous chemicals are not discharged into the environment. The ZDHC tools and guidelines can be found on the Roadmap to Zero⁽⁷⁾, and include:

- 1. The ZDHC Manufacturing Restricted Substance List (MRSL).
- 2. The ZDHC Chemical Management System (CMS) Framework.
- 3. The ZDHC CMS Technical Industry Guide (TIG).
- 4. The ZDHC Wastewater Guidelines.

1.4.2 SUSTAINABLE APPAREL COALITION (SAC)

M&S is a member of the Sustainable Apparel Coalition (SAC), an international non-profit collaboration consisting of 300 industry members including brands, retailers, manufacturers, sourcing agents, service providers, trade associations, NGOs, and academic institutions.

The SAC has developed 'The Higg Index' suite of tools⁽⁴⁾, including the Higg Facility Environmental Module (FEM), which consists of a self-audit questionnaire that standardises how Brands and Manufacturers measure Environmental Management Systems (EMS) and other key metrics within their supply chain. The Higg Index suite of tools is hosted on the Worldly platform.

As a member of the SAC, M&S has committed to implementing the Higg FEM across our supply base. The FEM is an annual environmental assessment that gives facilities a score out of 100 based on the following metrics⁽⁵⁾:

- 1. Environmental Management Systems.
- 2. Energy Use and Greenhouse Gas Emissions.
- 3. Water Use.
- 4. Wastewater.
- 5. Air Emissions.
- 6. Waste Management.
- 7. Chemical Management.

All M&S wet processors must complete the Higg FEM annually and have environmental improvement plans in place as part of their business strategy

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

M&S is dedicated to reducing its environmental impact and has created a plan to become a Net Zero business. In alignment with Higg FEM⁽⁶⁾ and ZDHC guidelines⁽⁷⁾ the ECP assists suppliers in implementing a strong sustainability action plan to address significant environmental challenges and drive necessary actions.

2.1 GUIDANCE FOR FACILITIES

This policy aims to align our suppliers with M&S expectations regarding environmental and chemical management in manufacturing. All facilities should be familiar with the policy content and ensure that their procedures and operations meet the requirements as well as continuously working towards improvement to upgrade environmental performance.

The policy is presented in an easy-to-read format, to deliver all the necessary information a facility will need to know to be a compliant and efficient part of the Marks & Spencer supply chain. It includes:

- Legal: This section serves as a reminder for manufacturers to remain in compliance with all relevant environmental laws and regulations.
- Minimum requirements: Facilities supplying M&S must meet these mandatory expectations. To ensure adherence to these practices, facilities must maintain the necessary resources, monitoring mechanisms, and planning.
- **Best practices:** Facilities are expected to progressively work towards implementing best practices across their operations. As these sections refer to industry best practices, facilities can use these expectations as guidance to develop a long-term sustainability roadmap and meet M&S supplier KPIs.

Throughout the document we provide links to different websites and publications so that you can find further information on different topics. If there are any queries regarding the content of this document, these should be referred to your contact within the Marks & Spencer Regional Office or the Departmental Technologists.

We recognize that we have many exceptional facilities in our supply base and accept that many will already be following the advice in this document, but we urge you to read the updated content, follow the links and continually seek ways of improving your business.

2.2 LAWS AND REGULATIONS

All suppliers for M&S are expected to comply with the local and national laws and regulations for their country.

Table 1: Minimum Requirements: Laws and Regulations

MINIMUM REQUIREMENTS: LAWS AND REGULATIONS

All facilities supplying to M&S are expected to comply with applicable environmental laws and regulations. These may include but are not limited to:

- Valid business operating licenses.
- Valid operating permits required by law.
- Compliance with local & national environmental laws e.g. Environmental testing & reporting.
- Environmental Assessment Reports (where applicable).
- Any violation related to environmental regulations must be addressed according to applicable laws.

2.3 ENVIRONMENTAL MANAGEMENT SYSTEMS (EMS)

Implementing an Environmental Management System (EMS) helps facilities to systematically identify, prioritise, and manage environmental risks and opportunities. By adhering to an EMS, wet processors can improve their environmental performance, comply with legal and regulatory requirements, reduce costs through resource efficiency and enhance their reputation.

Table 2: Minimum Requirements: Environmental Management Systems (EMS)

MINIMUM REQUIREMENTS: ENVIRONMENTAL MANAGEMENT SYSTEMS

- Responsible Staff: Qualified and dedicated staff members are nominated for the implementation and coordination of environmental
 management activities.
- Environmental Impact Assessment: An assessment is conducted to identify and evaluate the environmental impacts of the facility's current operations.
- **Environmental Strategy:** A documented environmental strategy is developed considering the facility's significant impacts. This should be approved by senior management team, with goals and actions set for three or more years.
- Environmental Policy: The company's environmental policy is established and implemented within the facility and is approved by senior management. The policy should align with their long-term strategy by committing to reducing their environmental impacts.
- Legal Compliance: The facility has established procedures and defined responsibilities to regularly monitor, review and renew environmental permits as required to ensure compliance.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

MINIMUM REQUIREMENTS: ENVIRONMENTAL MANAGEMENT SYSTEMS (cont.)

- Awareness Training: Training on environmental strategy, policy and performance is provided so that all levels of employees are aware of the facility's environmental programmes and strategy.
- Environmental Incidents Reporting: The facility has a documented procedure that enables workers to report environmental incidents or issues. All employees must be trained on the reporting procedure.
- **Contamination Prevention:** The facility demonstrates that its operations do not contaminate soil or groundwater, and it takes appropriate remediation measures if contamination occurs.
- **Equipment Maintenance:** A maintenance schedule is established and implemented for all equipment and machinery, aiming to minimise equipment failure, reduce environmental impact, and decrease waste and resource consumption.

 Table 3: Best Practices: Environmental Management Systems (EMS)

BEST PRACTICES: ENVIRONMENTAL MANAGEMENT SYSTEMS

- Internal Audits: Routine internal audits are conducted to ensure effective implementation of environmental requirements.
- Management Review: Annual environmental management review is conducted with the facility's management team to review performance and create action plans to drive improvement.
- **Competency Development:** The competencies and qualifications of environmental management staff should be evaluated annually, and opportunities for professional development are provided in the facility.
- Supplier Engagement: Subcontractors and suppliers are engaged to improve environmental performance.
- **Community Contribution:** The facility contributes to environmental management improvements in the local community through staff participation and financial support.
- ISO 14001: Facilities are encouraged to obtain ISO 14001 certification⁽⁹⁾ to set-up a robust EMS.

2.4 CHEMICAL MANAGEMENT

It is the responsibility of M&S's suppliers to ensure that all chemicals and materials used in the manufacturing of M&S's products are compliant with our Restricted Chemical Policy⁽²⁾. M&S expect all suppliers to establish and implement robust chemical management procedures at their facilities.

Table 4: Minimum Requirements: Chemical Management

MINIMUM REQUIREMENTS: CHEMICAL MANAGEMENT

- Chemical Management Policy: There is an established chemical management policy that follows the ZDHC Chemical Management System (CMS) Framework⁽¹⁰⁾ and outlines the facility's continuous improvement goals.
- Chemical Purchasing Policy: There is a chemical purchasing policy established and implemented for chemical procurement to reduce risk and comply with the M&S Restricted Chemical Policy.
- **Responsible Staff:** The responsibility for implementing and maintaining the CMS should be assigned to a specific staff member or team. Training should be provided to ensure knowledge of RSL and MRSL compliance.
- Chemical Inventory: A comprehensive inventory of all chemicals used or stored on-site is well maintained, including quantities, locations, and hazards. Please refer to the ZDHC Chemical Inventory List (CIL)⁽¹¹⁾.
- Chemical Health & Safety: A documented programme is available and implemented for environmental and occupational health and safety, covering chemical risks including procedures for storage, handling, usage, disposal, and environmental controls.
- Safety Data Sheets: Safety Data Sheets (SDS) are available for all chemicals and are compliant with the UN Globally Harmonised System (GHS) of Classification and Labelling of Chemicals⁽¹²⁾.
- PPE, Safety Equipment, and Chemical Hazard Signage: Proper personal protective equipment (PPE), safety equipment, and chemical hazard signage are available for employees in areas where chemicals are used and stored.
- Chemical Management Training: Training on chemical hazards, proper handling, emergency procedures, and the use of PPE are provided to employees who handle chemicals.
- Chemical Spill and Emergency Response Plan: A documented chemical spill and emergency response plan is practiced at least twice per year for all relevant employees.
- Chemical Storage and Handling: Chemical storage and handling areas are well marked, designated, ventilated, and fire and weather protected. Storage containers are closed, clearly labelled, and have appropriate secondary containment. Chemicals are stored following the SDS guidelines.
- Process Control and Improvement: There is a documented process for identifying the root cause of RSL failures and how to implement the corrective action plan.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

Table 5: Best Practices: Chemical Management

BEST PRACTICES: CHEMICAL MANAGEMENT

- Chemical Strategy: Develop and implement a chemical management strategy with clear goals, timelines, resources, and milestones.
- Transparency Policy: Establish a transparency policy to communicate information about chemical products, waste, and wastewater
 with stakeholders.
- Capacity Development: Employees who are responsible for chemical management develop necessary technical knowledge and capabilities through training from qualified training providers, e.g. ZDHC CMS TIG Training⁽¹³⁾.
- Chemical Traceability: Implement traceability procedures to track chemicals and raw materials from inventory to the final product.
- Adoption of ZDHC tools: Adopt tools and programmes developed by the ZDHC including the Supplier to Zero⁽¹⁴⁾ and Verified InCheck⁽¹⁵⁾.
- Efficiency Upgrading: Upgrade manufacturing processes and chemical selection to improve efficiency and reduce environmental impacts, e.g. process optimisations and automation systems.

2.5 HEALTH AND SAFETY

All suppliers must maintain exceptional Health and Safety (H&S) standards at their facilities, providing workers with a safe and hygienic working environment. Wet processing facilities have specific hazards related to machinery operation and chemical use, so adequate steps should be taken to minimise the causes of hazards inherent in the working environment.

Table 6: Minimum Requirements: Health and Safety

MINIMUM REQUIREMENTS: HEALTH AND SAFETY

- **Policy:** H&S policies and procedures must be in place at the site, appropriate to the size and operations. Regular and appropriate risk assessments should be carried out and the significant hazards and control measures must be communicated to all workers.
- Training: New and existing workers shall receive regular and recorded H&S training to include all on site H&S procedures and precautions.
- Responsible Staff: H&S responsibility is assigned to a competent senior management representative.
- Housekeeping: Workstations and work areas must be clean and tidy and maintained to a standard that ensures worker safety.
- Building and site maintenance: Sufficient action is taken to maintain good working conditions including air quality, dust level, noise, and temperature. Assessment of these parameters is carried out regularly and improved where necessary.
- Machinery maintenance: A schedule must be in place for the on-going control, inspection, and maintenance of machinery.
- Machine Safety: All machine hazards must be clearly signed. Machines must be electrically and mechanically safe, with moving parts guarded, functioning alarms and safety stops where required.
- **Signage:** High-risk areas should have signs instructing workers on the correct usage of PPE e.g. importance of ear plugs for high noise or specific PPE for chemical use or handling.
- Personal Protective Equipment (PPE): Must be provided and worn according to machine and chemical hazard guidance. PPE must be properly cleaned, maintained, and stored.
- Fire plan: An emergency response plan should be in place, to include evacuation plan or designated emergency exit route, fire drill trainings, adequate fire exits, fire alarms, firefighting equipment, fire assembly points, emergency lighting, testing, and monitoring of fire alarms regularly.
- Worker facilities: Workers should be provided with changing room, storage, and sufficient rest or break area. Eating and drinking are prohibited in the production areas of the facility and a separate eating area provided.
- Smoking: Must be forbidden in working areas of the factory and a separate smoking area provided.
- First aiders: A designated First Aider should be available on site and a fully stocked first aid box maintained. Eye wash station is required in chemical areas.
- Records: All injuries and accidents must be recorded, and action taken to prevent it happening again.
- Chemical management: Please refer to Section 2.4.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

2.6 ENERGY USE & GREENHOUSE GAS (GHG) EMISSIONS

Energy intensity in manufacturing and wet processing is very high. Most energy needs are traditionally met by burning fossil fuels, which contributes to air pollution and climate change. There are many opportunities for improving efficiency. Reduction in energy consumption will help to reduce Greenhouse Gas emissions while enabling cost reduction.

M&S is committed to becoming a net zero business across our entire value chain by 2040, so adoption of industry-leading strategies to reduce energy use and GHG emissions are crucial e.g., replacing the use of coal and other fossil fuels with cleaner/renewable energy sources.

Figure 1: M&S's Approach to Reducing Greenhouse Gas Emissions

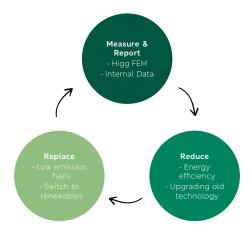


Table 8: Minimum Requirements: Energy Use and Greenhouse Cas Emissions

MINIMUM REQUIREMENTS: ENERGY USE AND GREENHOUSE GAS EMISSIONS

- Energy Sources: The sources of energy used in the facility, as well as the processes and emissions associated with them, should be understood.
- Energy Measurements: All energy used in facility operations and production, including for company-owned vehicles, is tracked, and recorded
- Responsible Staff: Employees responsible for managing energy and CHC emissions are competent and possess necessary skills and expertise.
- Maintain Documents: All relevant documents, such as invoices, meter reading records, and Energy Attribute Certificates (EACs), are maintained for energy monitoring.
- Data Accuracy: Data accuracy is ensured through measures such as equipment calibration and reviewing energy calculation methodologies.

Table 9: Best Practices: Energy Use and Greenhouse Gas Emissions

BEST PRACTICES: ENERGY USE AND GREENHOUSE GAS EMISSIONS

- Coal Phaseout: Create a plan to gradually reduce the use of onsite coal and transition to cleaner fuels.
- CHG Reduction Strategy & Implementation Plan: Develop and monitor a long-term plan to reduce CHG emissions with specific actions and timelines across the entire facility. Share this plan with stakeholders.
- Energy Audit: Conduct a thorough energy audit every 5 years in compliance with ISO 50001⁽¹⁶⁾ and ISO 50002⁽¹⁷⁾. This should be done by a qualified provider to identify opportunities for reducing GHG emissions.
- CHG Inventory: Carry out a GHG inventory to identify and calculate emissions from all activities within the facility.
- GHG Baseline: Establish an accurate GHG baseline for the facility, considering the energy sources being used.
- Energy Hotspot Identification: Establish procedures to identify and prioritise the most energy-consuming operations to reduce consumption, either by addressing those areas or transitioning to renewable energy sources.
- Target Setting: Set formal targets for energy sources based on a thorough evaluation of improvement opportunities and determine the amount of energy that can be saved.
- **Continuous Improvement:** Continuously review and improve the action plan for reducing GHG emissions in the supply chain. Calculate year-on-year energy consumption by comparing historical data and considering the improvements made.
- Renewable Energy: Use renewable energy to minimise the impact of fossil fuel usage.

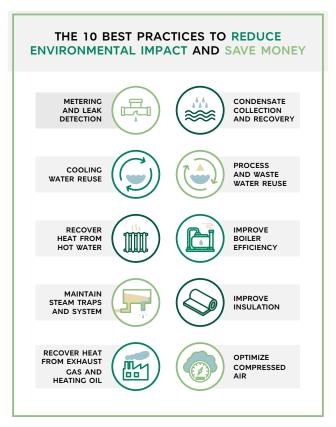
2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

BEST PRACTICES: ENERGY USE AND GREENHOUSE GAS EMISSIONS (cont.)

- **Energy Management System:** Implement the energy management certification system ISO 50001⁽¹⁶⁾ to identify energy-related risks and opportunities and demonstrate commitment to continual improvement in energy management.
- Science-Based Target: Set a Science-Based Target (SBT)⁽¹⁹⁾ to reduce CHG emissions (Scope 1 & 2) in line with the guidelines provided by the Science Based Targets initiative.

Other examples of best practice to reduce energy use at your facility include Clean by Design's⁽²⁰⁾ top 10 practices to reduce environmental impact and save money.

Figure 2: Clean by Design's top 10 practices to reduce environmental impact and save money



2.7 WATER USE

The Earth has a limited supply of fresh water, and the surge in worldwide water consumption poses a threat not only to industry but to local communities and the planet at large. Water use has far-reaching implications on operational, ecological, and financial fronts, making it a fundamental concern for facility management. Wet processors are very high-water users, so it is important to establish and implement effective water usage operations at their facilities.

Table 10: Minimum Requirements: Water

MINIMUM REQUIREMENTS: WATER

- Identify Sources: Understand the type of water sources and the associated water risk with current operations and location.
- Measure Water Use: Track water consumption separately for domestic and production use with appropriate water measurement equipment.
- **Responsible Staff:** Staff members responsible for water management possess the necessary skills to communicate and improve water efficiency.
- Maintain Documents: Maintain records of water monitoring, such as invoices and meter reading records.
- Data Accuracy: Ensure data accuracy through equipment calibration and reviewing unit conversion methodologies.
- Legal Compliance: Comply with local limits and regulations for water withdrawals.
- Inspection: Establish a process to identify and prevent leaks in the water supply network.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

Table 11: Best Practices: Water

BEST PRACTICES: WATER

- . Water Audit: A qualified service provider conducts a water audit in the facility every five years to identify ways to reduce water usage.
- Water Strategy: A water strategy is developed to track water intake and usage over the past five years to quantify areas of significant water use or potential loss, also known as calculating the "water balance".
- Water Baseline: A baseline year is established for water sources, selecting a year with sufficient and robust data to measure future reduction efforts against.
- Water Targets: Identify and prioritise areas with the highest water consumption to target for reduction. Formal targets are set for improving water use in significant areas based on evaluation and calculating potential improvements.
- Implementation Plan: A long-term implementation plan with action plans, timeline, and resource allocation for water use reduction is developed.
- Continuous Improvement: Demonstrate year-on-year improvement in water consumption and compare data with historical usage.
- Water Efficiency: Low-cost water efficiency practices are adopted, such as proper processing, rainwater harvesting, worker training,
 use of valves on pipes, dye batch scheduling to reduce equipment cleaning/rinsing, and dye fixation ratio optimisation for fewer rinse
 cycles.
- Advanced Practices: Advanced water efficiency practices applicable to the facility's operation are explored, such as water recycling and use of modern machinery with lower liquor ratios.
- **Reporting:** Water risk and consumption data are reported by using external reporting standards such as the Global Reporting Initiative (GRI)⁽²¹⁾ or the Carbon Disclosure Project (CDP)⁽²²⁾.

2.8 WASTEWATER

If wastewater is not properly managed, treated, and disposed of, it can have a detrimental impact on surrounding natural systems and communities, leading to pollution and contamination. The impacts of wastewater on facility operations, both in terms of operations, environment, and finances, are significant. As a ZDHC signatory brand, M&S has adopted the ZDHC Wastewater Cuidelines⁽²³⁾ for all wet processors to reduce the impact on the environment and local community.

Facilities are accountable for ensuring that any wastewater produced during their operations is treated appropriately before release. Untreated effluent must never be discharged directly to the environment.

Table 12: Minimum Requirements: Wastewater

MINIMUM REQUIREMENTS: WASTEWATER

- Legal Compliance: Comply with local and national laws and standards for effluent treatment and wastewater discharge.
- Source and Track: Identify and track all wastewater sources. Maintain and calibrate measuring instruments regularly.
- Responsible Staff: Staff possess necessary skills, qualifications, and expertise to operate the facility's Effluent Treatment Plant (ETP) for effective wastewater management.
- Effluent Treatment Plant Handling: All wastewater is treated in a functioning ETP before discharging and is not bypassed into the environment. Untreated effluent must never be discharged. An Emergency Response Plan (ERP) is established and implemented for any ETP failures to prevent untreated effluent from being discharged.
- Effluent Treatment Plant Monitoring: The capacity of the on-site ETP is sufficient to process the total facility effluent output. The facility has a mechanism to monitor whether the wastewater treatment plant is functioning, e.g. Flow Rate, to ensure the effective treatment of wastewater.
- Regular in-line testing: Facilities must regularly measure the required parameters for general wastewater quality and keep testing records not limited to COD/BOD, pH, Temperature, Offensive colour, Suspended solids, Total Dissolved Solids, Specific metals, and toxins.
- **Sludge Management:** Undertake proper tracking and disposal of sludge and retain relevant documents as outlined in the ZDHC Sludge Reference Document ⁽²⁴⁾.
- Stormwater Management: A mechanism is developed and implemented to prevent stormwater from being contaminated before it is discharged into the environment by ensuring that appropriate infrastructure (e.g., collection, storage, and drainage systems) and protections (drain covers, berms etc.) are in place.
- Offsite Effluent Treatment Plants: For offsite treatment of wastewater, the facility shall have a valid copy of the permit, agreement, and invoices that demonstrate compliance with requirements for wastewater discharge.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

MINIMUM REQUIREMENTS: WASTEWATER (cont.)

ADDITIONAL MANDATORY REQUIREMENTS FOR FACILITIES PRODUCING MORE THAN 15m3 WASTEWATER PER DAY:

- **ZDHC Wastewater Testing:** Facilities that generate on average more than 15m³ of wastewater per day must follow the ZDHC Wastewater Guidelines (23) which includes regular sampling, testing, and reporting on the ZDHC Gateway. As a minimum, the ZDHC Wastewater Guidelines require testing to be undertaken twice a year. M&S reviews wastewater monitoring data as part of the annual FCP review.
- Root Cause Analysis (RCA) and Corrective Action Plan (CAP): Wastewater nonconformities (alerts) require an immediate RCA and CAP to be undertaken following the ZDHC RCA and CAP Template⁽⁷⁾.

The ZDHC wastewater sampling and testing requirements for suppliers that produce more than 15m³ of wastewater per day is summarised in **Table 13**.

Table 13: ZDHC Wastewater Guidelines Sampling and Testing Requirements

Facility		Incoming water		Raw/	untreated waste	water	Dischar	ge wastewater/	effluent	Sludge
types by sampling location and parameter group	Conventional and anions	Heavy metals	MRSL	Conventional and anions	Heavy metals	MRSL	Conventional and anions	Heavy metals	MRSL	Sludge parameters
Direct	×	×	×	×	X	✓	√	√	×	√
Indirect with pre- treatment	×	×	×	×	×	√	×	√	×	√
Indirect without pre- treatment	×	×	×	×	×	√	×	√	×	×
Zero liquid discharge	×	×	×	×	X	√	×	×	×	√

Table 14: Best Practices: Wastewater

BEST PRACTICES: WASTEWATER

- Water Recycling: Adopting a comprehensive approach to effluent management, such as Zero Liquid Discharge (ZLD) or water recycling, can have significant cost-saving benefits for wastewater management, water extraction, and environmental protection.
- Advance ClearStream: It is essential for facilities to have a plan in place to achieve aspirational levels in MRSL, heavy metals, conventional parameters, and anions as reported in the ZDHC ClearStream Report (25).
- Best Practices: Compliance with the European Union's Best Available Techniques (BAT) (26) for wastewater treatment ensures that facilities are using the most effective and efficient methods.
- Capacity Development: To ensure the effective operation and management of wastewater treatment, relevant staff should be provided with ZDHC Wastewater Treatment System Operator (27) Academy training.

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

2.9 AIR EMISSIONS

The control of air emissions is important for both environmental and human health reasons such as fumes, dust, and smoke that can create serious pollution and health issues. Facilities must establish and implement effective procedures and mitigation to reduce the impact of air emissions from their operations.

Table 15: Minimum Requirements: Air Emissions

MINIMUM REQUIREMENTS: AIR EMISSIONS

- Legal Requirements: Comply with all air emission-related legal requirements and retain records of independent test results for at least 12 months.
- Air Emission Inventory: Maintain an inventory of all sources of air emissions, including point sources, mobile sources, and fugitive sources (passively released into the outdoor environment and are not actively directed through a single exhaust point) following the Higg FEM Air Emissions guide⁽²⁸⁾. This inventory (please see Summerra Air Emissions Inventory⁽²⁹⁾) must include information such as the pollutants emitted, the process or equipment it is linked to, and any testing or reporting requirements.
- Tracking Refrigerants: Track the quantity of refrigerants used in equipment and implement preventative maintenance procedures to prevent leakage.

Table 16: Best Practices: Air Emissions

BEST PRACTICES: AIR EMISSIONS

- Tracking: Track the total annual emissions quantities of key pollutants from all emissions from production and operations to identify any opportunities for reduction.
- Implementation Plan: Develop an implementation plan with defined actions to reduce emissions.
- Industry Guidelines: Monitor, report & conform to industry guidelines or tools for air emissions in addition to legal requirement such as the ZDHC Air Emission Position Paper (30).
- Refrigerant Replacement Plan: Have a plan to replace refrigerants with lower environmental impact alternatives such as those outlined in the Climate-friendly alternatives to HFCs⁽³¹⁾ guidelines.
- **Continuous Improvement:** Have documented business policies or procedures in place to evaluate and plan for the implementation of BAT⁽²⁶⁾ to reduce air emissions from the facility operation & production processes.

2.10 WASTE MANAGEMENT

The waste generated from industrial processes and manufacturing operations can have negative effects on the environment, human health, and local ecosystems. As a result, there is a growing focus on reducing waste and implementing stricter regulations and requirements through governments and industry stakeholders.

Additionally, new materials and technologies are being developed to minimise waste and move towards a circular economy. It is crucial for our suppliers to adopt a mindset that views waste as a valuable resource and incorporates this principle into daily operations. We encourage our suppliers to explore opportunities to ensure that all materials and waste could be given a second life through reuse and recycling.

By actively managing and minimising waste at your facility, you can help reduce environmental impacts and avoid regulatory risks. All wet processors must establish and implement effective waste management at their facilities.

Table 17: Minimum Requirements: Waste management

MINIMUM REQUIREMENTS: WASTE MANAGEMENT

- Waste Inventory: Understand the type of waste (domestic, hazardous, and non-hazardous) produced, and track the quantity and disposal methods of each waste type by developing a waste inventory.
- Waste Segregation: Segregate non-hazardous & hazardous waste streams.
- Waste Storage: Have well marked, designated hazardous and non-hazardous waste storage areas to ensure that waste is stored safely.
- Waste Disposal: Have policies and procedures in place to forbid all irresponsible waste disposal practices including open burning, open dumping, burying waste and intentional release into soil and/or water.
- **Training:** Provide awareness training to all employees on waste segregation to ensure proper waste management across the facility. Conduct regular training on proper handling, storage and disposal of waste, waste minimisation, and the use of personal protective equipment (PPE).

2. M&S ENVIRONMENT & CHEMICAL POLICY (ECP)

Table 18: Best Practices: Waste Management

BEST PRACTICES: WASTE MANAGEMENT

- Waste Baseline: Establish a baseline measurement for each waste stream generated at the facility.
- Waste Targets: Set formal targets for significant waste sources to reduce waste generation and to improve waste disposal methods.
- Waste Strategy: Conduct a formal evaluation of waste reduction opportunities and calculate how much waste can be reduced to support the target and compared with the baseline.
- Implementation Plan: Have a waste disposal implementation plan and work on defined actions to switch to a preferred waste disposal method.
- **Circular Economy:** Work on circular systems that capture and reintroduce waste material into the facility's own operations and production or into and external party's operations or production. This will require collaboration with waste contractors, industry partners, local governments, and communities. Refer to best practice guidance from organisations such as the Ellen MacArthur Foundation⁽³²⁾ and the Zero Waste International Alliance⁽³³⁾.

2.11 THE INSTITUTE OF PUBLIC AND ENVIRONMENTAL AFFAIRS (IPE)

The Institute of Public & Environmental Affairs (IPE)⁽³⁴⁾ is a non-profit environmental research organisation registered and based in Beijing, China. Since its establishment in June 2006, IPE has dedicated itself to collecting and analysing government and corporate environmental information to build a database of environmental information. IPE uses cooperation between companies, government, NCOs, research organisations and other stakeholders and leverages the power of a wide range of enterprises to achieve environmental transformation, promote environmental information disclosure and improve environmental governance mechanisms.

M&S expects all wet processors in China to upload their last calendar year environmental data onto the platform no later than each March. M&S uses IPE data as a useful screening tool to ensure environmental compliance at China facilities. For any pollution violations, facilities shall publish their public explanations regarding the reason for the violation, corrective actions undertaken or in progress, and current compliance status within 10 working days from receipt of the notice letter from IPE. If GCA audit is required, facilities need to verify the effectiveness of the corrective actions or continuously disclose information on corrective actions. If the facilities PRTR⁽³⁵⁾ data and carbon data are not published on IPE platform on time, M&S will not approve the annual ECP self-assessment on Origin. The ECP assessors shall review the facilities' performance on IPE by end of each March to confirm facilities meeting the minimum requirements.

Table 19: Minimum Standards: The Institute of Public and Environmental Affairs

MINIMUM STANDARDS: THE INSTITUTE OF PUBLIC AND ENVIRONMENTAL AFFAIRS

- Connection: Register and upgrade to be enterprise account on IPE platform and connect with M&S.
- PRTR and Carbon data Publishment: Publish last calendar year PRTR and carbon data (including carbon reduction target setting) on IPE platform no later than March.
- Public Communication: The information disclosure or Green Choice Audit (GCA) for violations are completed before March. Any new violations are addressed within 10 working days.
- Consistent Collaboration: M&S are selected as the "promoter" by the facilities for each of the above actions on IPE platform.

Table 20: Best Practices: The Institute of Public and Environmental Affairs

BEST PRACTICES: THE INSTITUTE OF PUBLIC AND ENVIRONMENTAL AFFAIRS

- **Connection:** Tier 1 suppliers and wet processors promote upstream and downstream suppliers (e.g. materials and chemicals suppliers, weaving suppliers, knitting suppliers, spinning suppliers, effluent treatment plants, logistics, and waste treatment suppliers etc.) to register and upgrade to be enterprise account on IPE platform and connect with themselves and M&S.
- PRTR and Carbon Data Publishment: Tier 1 suppliers and wet processors promote upstream and downstream supplier to publish their last calendar year PRTR and carbon data (including carbon reduction target setting) on IPE platform no later than each March.
- Public Communication: Tier 1 suppliers and wet processors promote their upstream and downstream suppliers to disclosure the information (public explanations) or conduct GCA audit for the violations before each March. Any new violations shall be responded within 10 working days.
- Consistent Collaboration: Tier 1 suppliers and wet processors promote upstream and downstream suppliers to select M&S as "promoter" for each of the above actions on IPE platform.

3. ECP COMPLIANCE MONITORING REQUIREMENTS

Suppliers are responsible for the compliance of their facility and operations and are expected to be proactive in implementing best practices. As the industry moves from voluntary frameworks to more regulation, it is critical for M&S to have a robust process for the assessment of the facilities who produce in our supply chain.

The ongoing assessment of wet processors in our supply chain includes several elements outlined in the following sections. The M&S Sourcing Office Raw Material team is the regional point of contact for queries about facility profiles on the Origin platform and about the annual ECP Self-Audit.

3.1 ECP SELF-AUDIT

This online assessment is completed annually by the facility, confirming their compliance with the Environment and Chemical Policy minimum standards. The assessment and supporting documents are reviewed by a regional M&S technologist (assessor) before approval. Orders cannot be placed with a facility that does not have a valid ECP registration.

3.2 ORIGIN PROFILE

All facilities must have an account on Origin, the M&S Tier 2 Supplier management platform. They must fully complete their facility profile including location data, production capabilities, raw material certifications, ZDHC ID and Higg ID before accessing the ECP Self Audit. Origin also acts as a useful resource for supplier training documents, policies, and performance standards.

3.3 WET PROCESSOR VISIT

A technical visit will be conducted at all wet processors by an M&S assessor. The purpose of this in-person visit is to check compliance with the ECP Minimum Standards, quality assurance, onsite processes and standards and provide recommendations for continuous improvement.

In order to benchmark facilities, a compliance score will be assigned to the facility based on their adoption of minimum standards and best practices.

3.4 HIGG FEM

All wet processors are required to complete the Higg Facility Environmental Module (FEM)⁽⁶⁾ annually and share with M&S on the Worldly platform. Self-assessment is a minimum requirement. Verification improves data accuracy and drives continuous improvement. Only verified data can be used for business insights and higher level KPIs.

3.5 ZDHC

All facilities must register for a ZDHC Gateway account and accept a connection with M&S. According to our wastewater policy, all facilities producing over 15m³ per day must provide ClearStream reports to M&S by conducting wastewater testing in accordance with the ZDHC Wastewater Guidelines⁽²³⁾ and follow up any nonconformance with an RCA and CAP. Facilities are encouraged to complete InCheck and aim for high levels of MRSL compliance.

As part of ZDHC implementation, M&S recommends that facilities complete the Supplier to Zero⁽¹⁴⁾. The Supplier to Zero toolbox guides the facility through the ZDHC approach to sustainable chemical management from the entry to the expert level, to identify areas of improvement and reduce risks and costs associated with outdated practices.

3.6 LEATHER WORKING GROUP (LWG)

All leather for M&S products must be sourced from Leather Working Group (LWG)⁽³⁶⁾ rated tanneries. An LWG rated tannery is defined as an audit ranking of Bronze, Silver, or Gold. The LWG Leather Manufacturer Audit Protocol is used to assess the environmental performance and practical capabilities of leather manufacturing facilities.

3.7 RESTRICTED CHEMICAL POLICY

The M&S Restricted Chemical policy⁽²⁾ focusses on implementing the strictest legal chemical requirements and eliminating specific chemicals of concern. The document lays out our minimum standards for chemical compliance and contains the following guidance:

- ZDHC Manufacturing Restricted Substances List (MRSL) restricts the input of hazardous chemicals to the manufacturing process. The chemicals listed are banned from deliberate use in formulations. This list has been developed by the Zero Discharge of Hazardous Chemicals (ZDHC), of which M&S is a signatory.
- M&S Restricted Substances List (RSL) defines the limits for residues of hazardous chemicals allowed on the finished product.
- Risk assessment table guidance regarding the restricted substances associated with different types of fibres and materials and for use in selecting due diligence tests.

3. ECP COMPLIANCE MONITORING REQUIREMENTS

The RSL ensures compliance with chemical legislation in the UK, EU and M&S global markets and reflects M&S's policy in proactively phasing out certain chemicals as outlined in the MRSL.

The RSL table details the chemical's risk, acceptable levels of presence in the finished product, and the preferred test method for identification and quantity present.

3.7.1 DUE DILIGENCE RSL TESTING

It is a criminal offence under EU and UK Product Safety Legislation⁽³⁷⁾ to offer for sale merchandise, which is unsafe, misleading or makes commercial claims which are not substantiated.

M&S and its Suppliers must be able to demonstrate independently that they both have systems of controls and checks to ensure merchandise is safe and both must be able to provide evidence that these systems are being followed.

M&S has a Due Diligence testing programme in place to test randomly selected products for RSL compliance. We expect that suppliers will carry out appropriate, risk based Due Diligence Testing to ensure compliance with the Restricted Chemical Policy⁽²⁾, and to request evidence that their upstream suppliers also carry out Due Diligence Testing and checks as appropriate.

3.8 SUMMARY OF ECP COMPLIANCE MONITORING REQUIREMENTS

The following table summarises the above ECP minimum requirements and recommended practices for wet processors supplying to M&S. Facilities with a long-term working relationship with M&S will also be expected to verify their Higg FEM and work towards ZDHC InCheck reporting.

Table 21: Summary of ECP Compliance Monitoring Requirements	Mandatory	Recommended			
ECP Self Audit	✓				
Origin Profile	✓				
Wet Processor Visit	✓				
Self-assessed Higg FEM	✓				
Verified Higg FEM		✓			
ZDHC InCheck Report		✓			
M&S RSL compliance	✓				
ZDHC MRSL compliance	✓				
For wet processors that produce more than 15m ³ of wastewater per day					
Connect on ZDHC Gateway	✓				
ZDHC ClearStream Report	✓				
RCA and CAP for ClearStream non-conformance	✓				
For leather wet processors					
LWG Rated	✓				
IPE requirements for China only					
Connection on IPE	✓				
PRTR and Carbon data publishment	✓				
Public communication	✓				
Consistent collaboration	✓				

4. GLOSSARY

DAT	Post Available Techniques
BAT	Best Available Techniques
BOD	Biological Oxygen Demand
C&H	Clothing & Home
CAP	Corrective Action Plan
CDP	Carbon Disclosure Project
CIL	Chemical Inventory List
CLP	Carbon Leadership Project
CMS	Chemical Management System
COD	Chemical Oxygen Demand
EAC	Energy Attribute Certificate
ECP	Environmental & Chemical Policy
EMS	Environmental Management System
ERP	Emergency Response Plan
ETP	Effluent Treatment Plant
GCA	Green Choice Audit
GHG	Creenhouse Gas
GRI	Global Reporting Initiative
H&S	Health & Safety
HFCs	Hydrofluorocarbons
Higg FEM	Higg Index Facility Environmental Module
IPE	The Institute of Public and Environmental Affairs
ISO	International Organisation for Standardisation
LWG	Leather Working Group
M&S	Marks & Spencer
MRSL	Manufacturing Restricted Substance List
NRDC	Natural Resources Defence Council
PIR	Passive Infrared
PPE	Personal Protective Equipment
PRTR	Pollutant Release and Transfer Register
RCA	Root Cause Analysis
REACH	The Registration, Evaluation, Authorisation, and restriction of Chemicals
RFT	Right First Time
RSL	Restricted Substance List
RTM	Return to Manufacturer
SAC	Sustainable Apparel Coalition
SBT	Science Based Target
SDS	Safety Data Sheet
SOP	Standard Operating Procedure
StZ	Supplier to Zero
TIG	Technical Industry Guide
ZDHC	Zero Discharge of Hazardous Chemicals
ZLD	Zero Liquid Discharge
	. •

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