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This document is subject to change. Small adjustments including, but not limited to typos and glossary updates will not be labeled as a new version. Instead, only the date will be updated when these changes are made.

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Introduction

The ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) is a list of chemical substances banned from intentional use in suppliers that process textile materials and trim parts in textile, apparel, leather, and footwear. The ZDHC MRSL is a living document, and is updated as needed to expand the materials and processes covered and to add substances that should be phased out of the value chain. This Principles and Procedures (PnP) document contains and explains the process used to update the ZDHC MRSL.

The Principles and Procedures ensure that the update process remains transparent, inclusive, and efficient whilst keeping in mind that the updates should reduce hazard and impact based on the best available information.

Revision History

In the spirit of continuous improvement, the ZDHC MRSL Update Principles and Procedures (PnP) will be reviewed on a regular basis and revised as needed to incorporate learnings and opportunities identified during the practical application and implementation of these proceedings. This update does not change the update process. Instead, the changes in this version are limited to clarifications of procedures and Roles and Responsibilities. A historical record of the updates to these guidelines is noted below.

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Changes</th>
<th>Time of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 2.0</td>
<td>Clarification of process flow chart, responsibilities, review process</td>
<td>May 2021</td>
</tr>
<tr>
<td>Version 1.0</td>
<td>Release of Version 1.0</td>
<td>January 2019</td>
</tr>
</tbody>
</table>
1. ZDHC MRSL Update Process at a Glance

1.1 Five Step Review Process

This visual provides a brief summary of the entire ZDHC MRSL update process. This five step review process outlined in Figure 1 takes place on a rolling basis (as needed), and may include adding new substances, updating limits, changing test methods, and/or scope of the ZDHC MRSL. The submission of a proposal must take place on the ZDHC MRSL Submission Platform. All other review steps must take place on the ZDHC MRSL Submission Review Platform.
Figure 1: ZDHC MRSL Update Process

- ZDHC to provide comments and additional relevant information to the submissions
- ZDHC to provide a recommendation to MC to which category the proposal will go (see Figure 2)
- ZDHC to provide recommendation via ZDHC MRSL Submission Review Platform

Step 1: Proposing Entity submits Proposal to ZDHC
- Through ZDHC MRSL Submission Platform
- Based on submission criteria including required information & supporting documents

Step 2: ZDHC Screens Submitted Proposals
- Rolling basis
  - Identify proposals that are irrelevant or out of scope
  - Identify and merge duplicate submissions
  - Identify incomplete submissions
    - ZDHC asks Proposing Entity for additional information / to complete proposal

Step 3A: ZDHC Programme Team (ZDHC) to Independency Review Submissions & Provide Recommendations to MRSL Council (MC)
- TT to provide comments and additional relevant information to the submissions
- TT to provide a recommendation to MC to which category the proposal will go (see Figure 2)
- TT to provide a recommendation via ZDHC MRSL Submission Review Platform

Step 3B: Technical Review Task Team (TT) to Independency Review Submissions and Provide Recommendation to MRSL Council (MC)
- MC to review submission docs, including all comments & recommendations from both ZDHC (3A) and the Technical Review TT (3B)
- MC to review Candidate List for potential inclusion in MRSL
- MC to provide ZDHC with the final decision as to which decision option (see Figure 2) the submission will go into.
- ZDHC will make changes based on the final decision from MC. See Figure 2 for a list of options.
- ZDHC to notify Proposing Entity of final decision regarding their submission.

Step 4: MC to Review Submissions & Provide Final Decision to ZDHC

Step 5: ZDHC to Make Necessary Updates & Inform Proposing Entity on Final Decision

a. Any questions for the Proposing Entity go through ZDHC.
b. Substances reviewed from Candidate List will be verified by ZDHC and Technical Review Task Team.
1.2 Decision Matrix

When a submission makes it to Steps 3A and 3B, ZDHC and Technical Review Task Team must provide the MRSL Council with a recommendation for the substance. During Step 4, the MRSL Council must make a final decision. The recommendations and final decision are outlined below in Figure 2: Decision Options for ZDHC MRSL Submissions.

**Figure 2: Decision Options for ZDHC MRSL Submissions**

<table>
<thead>
<tr>
<th>A) ZDHC MRSL</th>
<th>B) ZDHC Candidate List</th>
<th>C) Substances under review - pending further information</th>
<th>D) Archive List</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Add new substance, OR 2. Add new engineering control OR 3. New manufacturing limit concentrations for substances previously listed on this list. Inclusion will take place in the next revision of ZDHC MRSL.</td>
<td>• Applicable to chemical substances lacking viable, safer, or widely/readily available alternative chemicals or processes. • For each chemical substance included in this list, a specific time-scale for inclusion to the ZDHC MRSL may be indicated. E.g. &quot;X will be added in 2025&quot;</td>
<td>• A substance without required data and information cannot be reviewed for addition to the ZDHC MRSL. • ZDHC may ask the wider ZDHC Community for data on the missing points. • Once the information is available the proposal may be re-entered in the review process for inclusion in the ZDHC MRSL or ZDHC Candidate List.</td>
<td>• Chemical substances that are no longer in use within the textile, apparel, leather and footwear industry and are therefore no longer necessary for listing within the ZDHC MRSL. • These substances are recognised to be hazardous; however, they no longer need to be routinely tested because they have been phased out of use in the industry.</td>
</tr>
</tbody>
</table>
1.3 Roles and Responsibilities

To better understand the clear roles and responsibilities of different key stakeholders during the ZDHC MRSL update review process, please see the following table: Roles & Responsibilities. See Appendix A for more information of different key stakeholders.

Figure 3: Roles and Responsibilities of Key Stakeholders

<table>
<thead>
<tr>
<th>Step</th>
<th>Roles and Responsibilities</th>
<th>ZDHC</th>
<th>Technical Review TT</th>
<th>MRSL Council (MC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-review</td>
<td>Define submission criteria.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pre-review</td>
<td>Annual review of existing ZDHC MRSL chemicals / limits and scope.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Throughout</td>
<td>Provide advice on correct procedures and governance in accordance with ZDHC Guidelines and processes</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>Remove duplicates and proposals out of scope. Identify incomplete submissions.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 2 - 5</td>
<td>Communication with Proposing Entity.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3A, 3B</td>
<td>Evaluate submissions from Proposing Entity. Provide comments and additional information &amp; recommend Decision Option.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Step 3A, 3B, 4</td>
<td>Detailed review of submissions.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Step 3A, 3B, 4</td>
<td>Additional research on submitted substance.</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Step 3B, 4</td>
<td>Manage questions to the Proposing Entity on behalf of the Technical Review Task Team and MRSL Council.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 4</td>
<td>Review of submissions, comments, additional information and recommended Decision Options from ZDHC &amp; Technical Review Task Team.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Step 4</td>
<td>Endorsement / non-endorsement of recommendations from ZDHC and Technical Review Task Team.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Step 4</td>
<td>Sign-off on final decision.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Step 4</td>
<td>Determine or verify formulation limits that prevent intentional use.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Step 4</td>
<td>Add and or verify test methods in consultation with Laboratory Advisory Group.</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Step 5</td>
<td>Implement final decision.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. Submission Process and Criteria

To further the information provided in Section 1 of this document, this “Submission Process and Criteria” section describes the criteria, required data, and information to be submitted by the proposing entities for updating the ZDHC MRSL. The Proposing Entity must submit their proposal via the ZDHC MRSL Submission Platform. Proposals must be submitted and accompanied by required data and information outlined in this chapter.

The ZDHC MRSL Update process is a science-based evaluation. To ensure this, all submitted proposals should include feasibility and timing of restrictions as well as critical information to efficiently support the decision-making process. This may include a sunset date for inclusion or review. For example, “substance X should be added in the ZDHC MRSL in 2025”.

2.1 Identification of Proposing Entity

Proposing Entities should provide basic information including their name and email address when submitting a proposal. This is necessary to complete Step 5, where the ZDHC Programme Team (Programme Team) informs the Proposing Entity of the final decision of their proposal. The Programme Team may also use this information during Steps 3A, 3B, and 4 when they communicate with the Proposing Entity to gain additional information or clarification on the submission on behalf of the Technical Review Task Team or MRSL Council.

The identity of the Proposing Entity is only visible to the Programme Team. This information is not made available to the Technical Review Task Team or the MRSL Council.

2.2 Identification of Proposed Substance

The Proposing Entity must submit at least one of the below data points in order to identify the substance:

- IUPAC name(s) of the proposed chemical substance
- Chemical Abstract Service number (CAS)
- European Inventory of Existing Chemical Substances (EINECS) number
- Colour Index (CI) Number

2.3 Hazard

Proposing Entities should indicate the Globally Harmonized System (GHS) or equivalent classification of the substance. This classification may be supported by hazard ranking according to its Benchmark in the GreenScreen® List Translator, GreenScreen®, or similar type toxicology evaluation (e.g. SciVera Lens, ToxServices ToxFMD Screened Chemistry), and/or legal restrictions.

2.4 Volume

The volume in use in the Textile, Apparel, Leather and Footwear Industry (the Industry) is an indicator of its pervasiveness and the potential for exposure. These are critical to determine the relevancy in the Industry and prioritisation. Proposing Entities should obtain data on the estimated annual tonnage of the proposed substance in the Industry, and provide supporting documentation. Proposing Entities should select which of the following ranges the proposed substance falls under:

- < 1 TON
- 1 – 10 TONS
- >10 – 100 TONS
- > 100 TONS

Volume data for hazardous chemicals in commercial use are generally available in the marketplace. Various kinds of volume data for chemical substances, including specific industry use, can be purchased from market research and investment firms. Note that the EU REACH Regulation makes volume a standard information requirement for the Registration part of REACH. This may include or relate to The Industry but is not necessarily limited to the Industry. For the purpose of prioritisation by the MRSL Council, estimated volume in tonnage is adequate.
2.5 Use Pattern

Use Pattern – like volume – is recognised as an indicator of a chemical's exposure potential. If a substance is used at multiple stages of the value chain, it may be more pervasive and possibly a higher priority than substances confined to a single stage.

A checklist of Use Pattern cases is provided on the submission page. The Proposing Entity should provide as much information as they can when completing this section. This includes the raw materials and/or processes where this product is used, and how widespread the chemical substance is in that material or process, and supports these claims with as much supporting documentation as possible. This can include declarations by chemical formulators and test data (e.g. chemical substance ZDHC MRSL testing/screening, product, wastewater).

2.6 Formulation Limit Value of Proposed Substance (Optional)

A Proposing Entity may submit a proposed formulation limit value for the proposed substances. Substances will be evaluated for inclusion on the ZDHC MRSL even if no limit is proposed.

2.7 Testing Methodology (Optional)

When possible, the Proposing Entity is encouraged to cite internationally-recognised test method(s) for analysis of the substances, and provide the literature reference for any non-standard method, or state if such a method does not exist.

Substances will be evaluated for addition to the ZDHC MRSL even if no testing method is proposed.

2.8 Safer Alternative(s) to Proposed Substance (Optional)

In order to restrict a substance currently in use in the Industry, ZDHC encourages safer alternative(s) to be identified. These may be a different kind of chemical substance or process, not just a single chemical substitution; however, they must be functional for the relevant use cases and commercially available. Safer alternatives should also have a lower hazard rating to prevent so-called “regrettable substitutions”.

If a substance is not classified as high priority, it may end up on the ZDHC Candidate List until a safer alternative is identified, or may not be listed at all.
3. Evaluation of Submitted Proposals and Decision-Making Process

If a proposal is incomplete or questionable, the MRSL Council may use their own expertise and connections to complete or verify the proposal. They may also request that the Programme Team ask the Proposing Entity or other qualified parties for clarification or additional information.

3.1 Evaluating Submitted Proposal based on the Submission Criteria

For Hazard, Volume, and Use Pattern, the MRSL Council verifies and amends the information included in the submission including: GHS Classification, estimated tonnage, and applicability.

For the remainder of the submission criteria, the MRSL Council evaluates the proposed formulation limit based on credibility, impact to the Industry, test methods, and viability of safer alternatives.

In case any information is absent, the MRSL Council may provide supporting information to support decision making. See Appendix C for more information on the decision making guidelines for MRSL Council.

3.2 MRSL Council Final Decision to ZDHC

The MRSL Council uses this combined information to support their final decision. In the case of ambiguous data, the MRSL Council reserves the right to form a decision based on their experience and knowledge. They may choose any of the 4 decision options listed in Figure 2.

When the decision is made to add a substance to the ZDHC MRSL, a precautionary approach is followed and applied to both the substance and any substitutions. This avoids potential “regrettable substitutions” that may be worse than the substance targeted for replacement.

3.3 Conclusions and Report

The MRSL Council should develop and submit a formal written decision for each proposal submitted via the ZDHC MRSL Review Platform that was not filtered out by ZDHC Programme Management Team during Step 2.

The written decision should include a summary of reasons for their decision. If the MRSL Council is not able to agree on a decision, the reasons should be summarised with both the majority and minority’s opinions. The majority decision will become the official position of the MRSL Council unless the disagreement is significant enough to keep the substance listed under “Substances Under Review Pending Additional Information” or the “ZDHC Candidate List”.

3.4 Reviewing and Acting on MRSL Council Decision

After the MRSL Council reports its final conclusions and decisions in writing, the ZDHC Programme reviews the final decision, notifies the Proposing Entity, and makes any necessary changes to the ZDHC MRSL, Candidate List, Archive List, or Substances Under Review list. The Programme Team may request the MRSL Council to respond to any questions or concerns relating to their conclusions and decisions. As appropriate, the MRSL Council may update their report in response to the ZDHC Programme enquiries.
4. Update of the Principles and Procedures Document

Substances proposed on the ZDHC MRSL Submission Platform will be reviewed annually on a rolling basis. All revisions to the ZDHC MRSL, Candidate List, Substances Under Review, and Archive List will follow the steps highlighted in this document. The Programme Team is responsible for setting the cadence for review and updates while taking into consideration the status of current events, the Industry, and stakeholder groups.

APPENDIX A
Key Stakeholders in the Update Process

MRSL Council (MC)

The MRSL Council is an independent group who uses an objective, science-based approach to review proposed substances.

The MRSL Council is composed of technical experts from diverse segments of the textile, apparel, leather, and footwear industry, and other significant stakeholders with relevant industry knowledge and experience. The group has a chairperson to manage and organise the group activities. This chairperson ensures the group reports its final decision for submissions on the ZDHC MRSL Submission Review Platform.

The MRSL Council is bound by the operating principles laid down in the ZDHC Council Playbook, which is only made available to ZDHC Councilmembers.

ZDHC Technical Review Task Team

ZDHC Contributors may decide to join the ZDHC MRSL Technical Review Task Team. Once the review process starts, new members will not be accepted until the start of the next round.

The Technical Review Task Team does not have a formal vote in decision-making by the MRSL Council.

ZDHC Programme Team

The Programme Team manages the day to day activities along the process of the ZDHC MRSL update process including communications between the Proposing Entity and the Technical Review Task Team or MRSL Council.

The Programme Team does not have a formal vote in decision-making by the MRSL Council.
**APPENDIX B**

**ZDHC MRSL Scope: Materials and Process**

More information on the ZDHC MRSL Scope: Materials and Processes [here](#).

**APPENDIX C**

**Decision Making Guidelines for MRSL Council (MC)**

**Decision Making**

- In common with decision making in the ZDHC Programme and in the spirit of collaboration, MC will strive for alignment on all decisions they are requested and/or need to make. This principle requires MC to ‘discuss then decide’ rather than waiting for agreement on every detail.
- If alignment cannot be reached, decisions can be adopted following voting as the group itself determines is appropriate – see Section on ‘Voting’ below.
- It is recommended for MC to consider the recommended meeting quorum and voting processes described below for guidance on best practices with regard to quorum and voting.

**Quorum**

- A majority of MC Members present in person (over two-thirds), by teleconference or other communication equipment by which all members participating can hear each other will constitute a quorum.
- The affirmative vote of a two-thirds (66.6%) majority of the MC Members present (assuming quorum) shall be necessary for the adoption of any MC decision.

**Voting**

In the event that a voting process is needed to make a decision the following applies

- Each MC Stakeholder Group is entitled to one (1) vote. Identified Stakeholder Groups are; Governmental Organisations, Non-Governmental Organisations, Service Providers, Chemical Industry and Manufacturers. We may identify additional groups during the process.
- Voting by the MC shall occur in a properly noticed meeting of the group and communication by which all persons participating in the meeting are able to hear one another, and such participation shall constitute presence in person at the meeting.
- Votes during an official meeting may be registered by voice, hand or ballot delivered in person or electronically.