

# ZDHC Supplier to Zero Version 2 Manual

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## About Supplier to Zero

Supplier to Zero is the implementation and assessment framework of the [ZDHC Suppliers Roadmap to Zero](#). It enables suppliers to evaluate, demonstrate and benchmark the extent to which sustainable chemical management practices have been implemented across their operations and supply chains, based on their specific supplier profile.

Supplier to Zero evaluates performance across three focus areas aligned with the ZDHC Suppliers Roadmap to Zero:

| Focus Area | Content                                                                                                                                                                                           |
|------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Input      | Chemical and input material purchasing<br>Chemical and input material traceability                                                                                                                |
| Process    | Chemical management strategy<br>Upstream supplier engagement<br>Safe chemical storage<br>Chemical handling and worker safety<br>Document and process control<br>Chemical-related waste management |
| Output     | Wastewater and sludge management<br>Air emissions management<br>Chemical-related waste disposal                                                                                                   |

Supplier to Zero recognises achievement across three progressive performance levels, from entry level (Level 1) to best practice (Level 3). Through this framework, facilities can measure their progress, identify opportunities for improvement and demonstrate their commitment to sustainable chemical management.

By engaging facilities worldwide in a harmonised assessment approach, ZDHC aims to strengthen chemical management practices at the facility level and throughout the supply chain. The Supplier to Zero framework helps drive continuous improvement towards improved sustainable chemical management.

Together, the [Suppliers Roadmap to Zero](#) and Supplier to Zero provide both the guidance on what good chemical management looks like and the framework for measuring and recognising progress. They complement and strengthen the ZDHC Roadmap to Zero Programme and support the ZDHC community in achieving its aim of 100% ZDHC MRSL conformance.

## Scope

Supplier to Zero applies to organisations that manufacture, process, assemble, finish or manage the production of materials and products for the fashion industry. This includes facilities and organisations that are responsible for implementing sustainable chemical management practices within their own operations and, where applicable, throughout their supply chains.

### In Scope

Examples of organisations within scope include:

- Textile manufacturers and processors
- Leather manufacturers and tanneries
- Apparel manufacturers, including Cut, Make, and Trim (CMT) facilities
- Footwear manufacturers and assemblers
- Accessories and trim manufacturers
- Home textile and furnishing manufacturers
- Printing, dyeing, washing, finishing, coating, and laundry facilities
- Raw wool scouring and raw silk degumming facilities
- Vertically integrated manufacturing facilities
- Traders, agents, sourcing companies, and similar organisations that subcontract manufacturing activities or manage supplier networks and are responsible for establishing and implementing chemical management requirements across their supply chains

### Out of Scope

The following are outside the scope of Supplier to Zero:

- Raw material production and extraction activities, including agriculture, livestock farming, forestry, and petrochemical feedstock production
- Chemical manufacturers and formulators producing substances or formulations
- Fibre manufacturing facilities covered under the ZDHC Fibre Programme, including:
  - Dissolving pulp manufacturers
  - Man-made cellulosic fibre (MMCF) manufacturers
  - Recycled fibre manufacturers

## Assessment and Outcomes

Before beginning a Supplier to Zero assessment, suppliers should familiarise themselves with the applicable requirements, performance criteria, and supporting guidance. Facilities are expected to complete the assessment honestly, accurately and transparently.

The facility undertaking the assessment is responsible for demonstrating conformance with the applicable Supplier to Zero requirements and performance criteria. This includes ensuring that all relevant activities, personnel, contractors, and service providers operating under the facility's management or control conform with applicable requirements where relevant.

The time required to complete the assessment will vary depending on the complexity of the organisation, the availability of the required information and supporting documentation, the level of internal coordination required, and whether a third-party assessment is planned. Suppliers are strongly encouraged to review all applicable information before starting an assessment and to ensure that relevant personnel are available to support completion of the assessment.

A Supplier to Zero result consists of two separate components:

- **Assessment Type:** The degree of independent verification applied to the assessment.
- **Performance Level:** The maturity of chemical management practices implemented by the supplier.

## Supplier to Zero Assessment Steps

To achieve a successful assessment outcome, suppliers should follow the steps below:

1. **Understand the requirements:** Review this document and become familiar with the applicable requirements and performance criteria.
2. **Prepare the facility's assessment:** Complete your supplier profile and self-assessment to understand your facility's current level of implementation.
3. **Improve the facility's performance:** Conduct a gap analysis, implement improvements and prepare the required supporting evidence.
4. **Arrange the facility's assessment:** Select a ZDHC Approved Assessment Provider, schedule the assessment and submit the required documentation.
5. **Complete the assessment:** Participate in the independent third-party assessment - either desktop or on-site and provide any additional information requested by the assessor.

6. Review the outcome: Review the assessment findings, address improvement opportunities, and, where applicable, obtain a Supplier to Zero Certificate.
7. Continue improving: Repeat the assessment annually to maintain certification and demonstrate continued implementation and improvement over time.

## Applicability

Not all Supplier to Zero requirements and performance criteria apply equally to all organisations within scope. The applicability of specific requirements is determined by factors captured in the Supplier Profile, such as facility type, manufacturing activities, chemical use, wastewater generation, discharge type and other operational characteristics. Suppliers are required to meet only the requirements and performance criteria that are applicable to their operations.

## Assessment Period

Unless otherwise specified in a particular requirement or performance criteria, the assessment period is the 12-month period immediately preceding the assessment date.

Information, records, data, and evidence provided during the assessment should therefore relate to activities, performance and practices implemented during this 12-month period. Where a requirement specifies a different timeframe, the timeframe stated within the requirement shall apply.

## Assessment Types

Supplier to Zero offers multiple assessment types that provide increasing levels of confidence in the assessment outcome. Facilities may select the assessment type that best meets their needs and objectives.

### Self-Assessment

The self-assessment is completed by the facility and is based on self-declaration of performance against the applicable Supplier to Zero requirements. Supporting evidence is not required to be submitted as part of the assessment process. However, facilities should verify that they have the required evidence and retain it to substantiate their responses.

### Third-Party Assessment

For a third-party assessment, facilities are required to provide documented evidence, valid for the assessment period, for all criteria marked as "meets".

## Third-party Desktop Assessment

The third-party desktop assessment is conducted remotely by a ZDHC Approved Supplier to Zero Assessor through a review of the facility's assessment responses and supporting documentation. The assessment outcome reflects the assessor's evaluation of the information and evidence provided by the facility at the time of assessment.

## Third-party On-site Assessment

The third-party on-site assessment includes the same document review activities as a desktop assessment, supplemented by an on-site evaluation to verify the implementation of practices directly at the facility. This assessment type provides the highest level of confidence in the assessment outcome.

## Second-Party On-site Assessment

Second-party on-site assessment, or an assessment carried out by a customer or client, is not yet available, but it is planned for future development.

## Performance Levels and Evaluation Methodology

Supplier to Zero is designed to evaluate the implementation of sustainable chemical management practices across the three focus areas and identify opportunities for continuous improvement. Each focus area contains a set of topics, and each topic includes multiple requirements that vary in terms of applicability based on the Supplier Profile. Each requirement has performance criteria assigned at either Level 1, 2, or 3.

Supplier to Zero recognises achievement across three performance levels:

- Level 1: Baseline implementation
- Level 2: Advanced implementation
- Level 3: Best practice implementation

## Evaluation of Conformance

Performance criteria are assigned to each requirement at either Level 1, 2, or 3. Performance is evaluated against the defined performance criteria as either "meets" or "does not meet". For selected performance criteria, partial conformance may be recognised where substantial implementation has been achieved, but minor gaps remain. Where partial conformance is permitted, the specific conditions are described within the performance criteria guidance on the platform.



Partially met performance criteria contribute to the achievement thresholds for the applicable performance level in the same manner as a met criteria. However, significant gaps will result in the criteria being assessed as not met.

Apart from the selected performance criteria identified in the guidance as permitting partial conformance, performance criteria must be fully implemented to be evaluated as "meets". Where uncertainty exists, suppliers should refer to the guidance provided in this manual and on the ZDHC Supplier Platform when determining the appropriate response.

## Mandatory Performance Criteria

Mandatory performance criteria are those considered fundamental to achieving a performance level. These criteria represent key sustainable chemical management practices that must be met before a facility can achieve the corresponding performance level, regardless of its overall percentage of conformance.

Mandatory performance criteria are identified throughout this manual alongside the relevant performance criteria. As a rule, all applicable Level 1 performance criteria are mandatory to be met.

## Level Assignment Methodology

The Supplier to Zero assessment evaluates facility performance across three progressive performance levels. To achieve a performance level, facilities must meet the performance criteria defined for that level, including any applicable requirements from the preceding levels.

### Level 1

To achieve Level 1, all applicable performance criteria must be met.

If any applicable Level 1 question is answered as "Does not meet", the facility will not achieve Level 1. In this case, the assessment report can serve as a gap analysis to identify areas for improvement before the facility undertakes another assessment.

### Level 2

To achieve Level 2, a facility must:

- Meet all applicable Level 1 performance criteria.
- Meet all mandatory Level 2 performance criteria.
- Meet at least 80% of the remaining applicable Level 2 performance criteria in the Input focus area, 80% in the Process focus area, and 80% in the Output focus area.

## Level 3

To achieve Level 3, a facility must:

- Meet all applicable Level 1 performance criteria.
- Meet all mandatory Level 2 and 3 performance criteria.
- Meet at least 80% of the remaining applicable Level 2 and Level 3 performance criteria in the Input focus area, 80% in the Process focus area, and 80% in the Output focus area.

## Final Result

Supplier to Zero recognises performance independently across the three focus areas. The final Supplier to Zero level achieved is based on the lowest level achieved across Input, Process, and Output.

*Example:*

| <i>Focus Area</i> | <i>Result</i>  |
|-------------------|----------------|
| <i>Input</i>      | <i>Level 3</i> |
| <i>Process</i>    | <i>Level 2</i> |
| <i>Output</i>     | <i>Level 3</i> |

*Overall Supplier to Zero Performance Level = Level 2*

## Certificates and Validity

Upon completion of a Supplier to Zero assessment, facilities will receive either an acknowledgement document or a certificate, depending on the assessment type completed. All assessment types are valid for one year from the assessment completion date.

## Self-Assessment

A facility that completes a self-assessment will receive a document via the supplier platform acknowledging its completion. This acknowledgement confirms that the facility has completed the Supplier to Zero self-assessment. The acknowledgement is not a confirmation of independent verification or certification of performance and does not indicate the level achieved.

## Third-party Assessment

### Third-Party Desktop Assessment

Facilities completing a third-party desktop assessment receive a Supplier to Zero Certificate indicating the achieved performance level and assessment type.

### Third-Party On-Site Assessment

Facilities completing a third-party on-site assessment will receive a Supplier to Zero Certificate indicating the achieved performance level and assessment type.

While the Supplier to Zero Certificate for the on-site assessment is valid for one year, it is possible to extend the validity period if certain criteria are met. For facilities that achieve Level 2, the validity can be extended once by completing a desktop assessment before the certificate expiry date, for up to a maximum of 2 years in total until an on-site assessment is required again. Similarly, for facilities that achieve Level 3, the validity can be extended twice by completing a desktop assessment before the certificate expiry date, for up to a maximum of 3 years in total until an on-site assessment is required again.

## Supplier Profile

The supplier profile is the first step in the Supplier to Zero Assessment. It consists of core facility details and questions that are critical to determining the applicability of ZDHC RtZ tools (e.g. InCheck), assessment frameworks (e.g. Supplier to Zero), and, importantly in this context, the applicability of specific Supplier to Zero requirements to the unique operations of the facility.

### Supplier Details

The first section of the Supplier Profile is **Supplier Details**. This section requires suppliers to provide detailed information related to the facility's main contact information, location, size, authorisations and permits. The information provided in this section will be used to categorise the facility and determine its compliance status with applicable legal and regulatory permit requirements.

Meeting basic legal compliance requirements is not part of the Supplier to Zero assessment and evaluation. However, suppliers will not be permitted to proceed with a Supplier to Zero assessment in the following situations:

- The facility does not have a valid operating license.
- The facility does not possess the required relevant permits.

### Operations

The **Operations** section contains questions related to the facility's industry sector, supplier type, facility processes, product and material categories and the use of subcontractors.

#### Industry Sector

Industry sectors should reflect the primary end-use markets served by the facility. Facilities that produce intermediate materials or components supplied to multiple industries should select all applicable sectors based on their customer base. The following are the industry sector options available for selection:

| Industry Sector    | Additional Guidance                                                                                                                                                                                                                                                                  |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Apparel            | Apparel includes clothing and wearable products intended for personal use, including fashion, casualwear, workwear, uniforms and protective garments.                                                                                                                                |
| Footwear           | Footwear includes all types of shoes, boots, sandals, slippers and other products designed to be worn on the feet.                                                                                                                                                                   |
| Accessories        | Accessories include fashion and lifestyle products such as bags, wallets, belts, small leather goods, gloves and similar accessories made from leather or other materials.                                                                                                           |
| Home Textiles      | Home textiles include bed linens, blankets, tablecloths, towels, cloth napkins, curtains and similar textile products used in the home.                                                                                                                                              |
| Technical Products | Technical products include textile- or leather-based products used for technical or functional applications, such as military, medical, protective clothing, industrial, filtration, construction and transportation products.                                                       |
| Home Furnishings   | Home furnishings include textile- or leather-based products used to furnish or decorate interior spaces, such as cushions, upholstered furniture, mattresses, rugs and similar household products.                                                                                   |
| Sporting Goods     | Sporting goods include products used for sports, outdoor, recreation and travel applications that contain a textile or leather component, such as tents, backpacks, luggage, harnesses, slings and similar products.                                                                 |
| Packaging          | Packaging includes textile-based packaging products used for the containment, protection, transport, storage or presentation of goods, such as textile bags, sacks, pouches, protective covers and reusable packaging solutions.                                                     |
| Automotive         | Automotive includes textile- or leather-based products used in motor vehicles, other transportation types, such as trains and aeroplanes, and related transportation applications, such as upholstery, seat covers, carpets, headliners, airbags and other interior trim components. |

## Supplier Type

Supplier types should be determined based on the activities physically carried out at the facility. Whether single processes or end-to-end production is carried out, the type that best describes the process or processes carried out within the facility should be selected. Multiple supplier types may be selected where applicable. These are the supplier type options available for selection:

| Supplier Type                    | Description                                                                                     |
|----------------------------------|-------------------------------------------------------------------------------------------------|
| Finished Product Processing      | Assembly, manufacturing or processing of final products ready for sale or use.                  |
| Textile Processing               | Production, treatment, processing, or finishing of fibres, yarns, fabrics or textile materials. |
| Leather Processing               | Production, treatment, processing or finishing of leather and leather-based materials.          |
| Primary Processing               | Production and primary processing of raw materials and fibres.                                  |
| Trader / Non-processing Facility | Distribution, storage, trading, or handling of products without physical transformation.        |

## Process Categories

Process categories classify the operational activities carried out at the facility. The categories available depend on the supplier type(s) selected. They are used to classify the general types of manufacturing, processing, treatment, finishing, assembly, or support activities carried out on site. Facilities should select all process categories that apply to their operations. Only activities physically conducted within the facility boundary should be selected.

## Processes

Processes are the specific manufacturing, treatment, finishing, assembly or processing activities performed at the facility. Facilities should select all applicable processes carried out within the facility boundary. Only activities physically performed by the facility should be included. Activities performed exclusively by suppliers, subcontractors, customers, or external service providers should not be selected.

The selected process categories determine which specific processes are available in the Processes section. For example, a facility that selects “textile processing” as a supplier type and “dyeing” as the process category will subsequently be able to select specific processes, such as “exhaust dyeing or pad-batch dyeing”.

## Material Categories

Material categories are high-level groupings of the primary materials processed, manufactured, assembled or supplied by the facility. They are used to classify the general types of materials handled within the facility and determine which specific material options are available for selection.

Facilities should select all material categories that apply to their operations. Multiple material categories may be selected where applicable.

The available material categories are:

| Material Category | Description                                                                                                            |
|-------------------|------------------------------------------------------------------------------------------------------------------------|
| Animal            | Materials of animal origin, including natural animal fibres, leather, hides, skins and other animal-derived materials. |
| Plant-based       | Materials derived from plants, including natural vegetable fibres and plant-based raw materials.                       |
| Synthetic         | Man-made polymeric materials, produced through chemical synthesis.                                                     |
| Cellulosic        | Regenerated cellulose fibres, manufactured from natural cellulose sources.                                             |
| Inorganic         | Non-organic materials, including metals, glass and mineral-based materials.                                            |
| Miscellaneous     | Materials that do not fall within the other categories, including composites, mixed fibres, wood and textile waste.    |

## Materials

Materials are the specific raw materials, fibres, polymers, leather types, metals or other material types processed, manufactured, assembled or supplied by the facility.

After selecting one or more **Material Categories**, the system will display the corresponding list of available materials. Facilities should select all materials that are applicable to their operations. Multiple materials may be selected where applicable.

Only materials that are physically processed, manufactured, assembled or supplied by the facility should be selected.

For example:

- If **Animal** is selected as the Material Category, the supplier may subsequently select one or more applicable materials such as **Wool**, **Cashmere**, **Silk**, **Leather (Bovine)**, or **Down**.
- If **Synthetic** is selected, the supplier may select materials such as **Polyester**, **Polyamide (Nylon)**, **Polyurethane**, or **Polypropylene**.
- If **Plant-based** is selected, the supplier may select materials such as **Cotton**, **Flax (Linen)**, **Hemp**, or **Bamboo**.

The selected materials are used to further define the supplier profile by providing more detailed information on the specific materials handled within the facility.

## Processed or Part-processed Input Materials or Components

Processed or partially processed input materials or components are non-chemical materials, products, or components purchased or received by a facility for further processing, manufacturing, finishing, assembly, or incorporation into another product, or for further transformation. This includes processed raw materials, intermediate materials, finished materials, and manufactured components supplied by upstream facilities within the supply chain.

Examples include: Staple fibre, raw hide, greige or dyed yarn, greige, dyed or finished fabric, tanned hides and leather (e.g. wet-blue, wet-white, crust, dyed or finished leather), printed fabric, etc.

Facilities should answer "Yes" if they purchase any processed or part-processed materials or components from external suppliers for use in their operations.

Facilities operating as fibre manufacturers (tier 4) and facilities acting exclusively as 100% subcontractors would generally not be expected to purchase processed or part-processed input materials as part of their operations.

## Use of Subcontracting

Subcontracting is the practice of assigning one or more production, processing, finishing, assembly, testing, packaging, warehousing or service activities to an external organisation or facility. Facilities should answer "Yes" if any part of their operations is performed by an external organisation on their behalf.

Examples include:

- Outsourcing a production process to another facility.
- Sending materials to a subcontractor for dyeing, printing, coating, finishing, or assembly.
- Using an external facility to perform testing, packaging, or specialised processing activities.

All subcontractors engaged by the facility during the assessment period should be listed. Where multiple subcontractors are used, all applicable subcontractors should be included. The subcontractor list should reflect subcontracting arrangements that were active during the assessment period and should be consistent with supporting operational, purchasing or production records.



## Chemical Usage

The Chemical Usage section collects information on the types and quantities of chemicals used within the facility. This information is used to establish the facility's chemical profile and determine the applicability of specific Performance Criteria within the Supplier to Zero assessment.

## Chemical Categories

Chemical categories classify the different types of chemicals used within the facility. Facilities should indicate whether each chemical category is used within their operations by selecting "Yes" or "No".

The available chemical categories are:

- Chemical Formulations
- Commodity Chemicals
- Solvents

## Quantity of Chemicals

If "Yes" is selected for Chemical Formulations, Commodity Chemicals, or Solvents, the supplier must also provide both:

- The average number of chemicals used per month (by count)
- The average quantity of chemicals used per month (kg)

The values must be selected from the applicable ranges available in the Supplier Profile and should reflect the facility's typical monthly chemical usage during the assessment period.

## Wastewater and Sludge

The Wastewater and Sludge section collects information on the facility's generation of industrial wastewater and sludge, the wastewater discharge pathway, the wastewater treatment processes operated on site, and the sludge disposal pathway. The information provided in this section forms part of the Supplier Profile and is used to determine the applicability of specific requirements within the Supplier to Zero Assessment.

## Industrial Wastewater Generation

Industrial wastewater is the effluent generated by manufacturing processes. Facilities should indicate whether industrial wastewater is generated within the facility by selecting one of the available response options.

Facilities generating less than 15 m<sup>3</sup>/day of industrial wastewater should select "Yes, below 15 m<sup>3</sup>/day", while facilities generating 15 m<sup>3</sup>/day or more should select "Yes, equal to or more than 15 m<sup>3</sup>/day".

If industrial wastewater is not generated, the remaining wastewater-related questions are not applicable.

## Wastewater Discharge

Facilities that generate industrial wastewater should indicate the wastewater discharge pathway by selecting one of the available options.

| Wastewater Discharge Pathway          | Additional Guidance                                                                          |
|---------------------------------------|----------------------------------------------------------------------------------------------|
| CETP                                  | Central Effluent Treatment Plant                                                             |
| METP                                  | Municipal Effluent Treatment Plant                                                           |
| Discharge directly to the environment | Industrial wastewater is discharged directly to the environment following on-site treatment. |

For full definitions, please see the [ZDHC Glossary](#).

Where industrial wastewater is discharged directly to the environment, the wastewater treatment processes operated within the facility should also be identified.

## Wastewater Treatment Processes

Wastewater treatment processes are the treatment technologies physically operated within the facility to treat industrial wastewater before discharge.

The available wastewater treatment processes are:

- Primary treatment/sedimentation
- Secondary (biological breakdown of organic matter)
- Tertiary (advanced treatment to remove remaining contaminants)
- Zero liquid discharge (ZLD)
- None, wastewater is treated off-site

Only wastewater treatment processes physically operated within the facility boundary should be considered. Treatment processes operated by external organisations, including CETPs and METPs, should not be included.

## Sludge Generation

Facilities should indicate whether sludge is generated from on-site wastewater treatment activities.

Where sludge is not generated, the sludge disposal pathway question is not applicable.

## Sludge Disposal Pathway

The sludge disposal pathway identifies the primary method for managing sludge generated from on-site wastewater treatment during the assessment period.

The following sludge disposal pathways are available:

- Disposal Pathway A: On-site or Off-site Incineration at >1000 °C
- Disposal Pathway B: Landfill with Significant Control Measures
- Disposal Pathway C: Building Products Processed at >1000 °C
- Disposal Pathway D: Landfill with Limited Control Measures
- Disposal Pathway E: Off-site Incineration and Building Products Processed at <1000 °C
- Disposal Pathway F: Landfills with No Control Measures
- Disposal Pathway G: Land Application for a Specific Purpose in Approved Areas or disposal pathways that are otherwise unknown

# Supplier to Zero Requirements and Performance Criteria

Supplier to Zero evaluates performance across three focus areas aligned with the [ZDHC Suppliers Roadmap to Zero](#): Input, Process and Output. This section of the manual outlines the Supplier to Zero requirements and performance criteria for each focus area. In addition, evaluation guidance is provided, and the requirement's intent and the type of facility to which it applies are defined.

## [Supplier to Zero Level assignment](#)

### Focus Area: Input

The Input focus area focuses on the purchasing and traceability of chemicals, input materials and components used within the facility.

#### Chemical Purchasing

##### IN 1 - The facility has a chemical purchasing policy

###### Intent

To establish a clear and consistent approach to chemical purchasing that supports responsible chemical management and communicates expectations to relevant personnel and suppliers.

###### Applicability

Applicable to all facilities that use production chemicals, including chemical formulations, commodity chemicals, and/or solvents.

###### Performance Criteria

###### IN 1.1 - Level 1

The facility shall have a documented chemical purchasing policy that:

- Covers all chemicals used by the facility, with particular requirements defined for chemical formulations, commodity chemicals and solvents.
- Is established, implemented and communicated to all responsible staff and chemical suppliers.

The chemical purchasing policy shall include all of the following:

- The conditions under which chemicals may be purchased, including conformance with applicable legal requirements and the ZDHC MRSL.
- The process for reviewing and approving chemicals before purchase.
- The process for communicating chemical purchasing requirements to chemical suppliers, via relevant purchase documents and contracts.
- The chemical purchasing requirements that chemical suppliers should comply with including the provision of all relevant chemical inventory data and the GHS-compliant safety data sheet.

## Evaluation Guidance

The chemical purchasing policy should define the facility's requirements for the selection, approval, and purchase of chemicals. The facility should be able to demonstrate that the policy has been communicated to relevant personnel and suppliers, and is applied in practice.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## IN 2 - The facility uses ZDHC MRSL conformant chemicals

### Intent

To minimise the risk of using substances banned for intentional use in the ZDHD MRSL by promoting the selection, monitoring and continuous improvement of ZDHC MRSL conformant chemical formulations used by the facility.

### Applicability

This requirement applies to facilities that use chemical formulations.

To ensure that expectations are proportionate to the scale and complexity of chemical use, different requirements and performance thresholds apply depending on the volume of chemical formulations used by the facility and the type of products manufactured.

For the purposes of this requirement, facilities are grouped into the following categories:

| Category                             | Description                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard Chemical Users              | Facilities that use more than 10 chemical formulations per month on average and more than 100 kg of chemical formulations per month on average, excluding footwear and accessory manufacturers (e.g. textile processing facilities and leather processing facilities such as beamhouses and tanneries).                                                    |
| Footwear and Accessory Manufacturers | Facilities that manufacture footwear and/or accessories as a finished product (e.g. bags, wallets, belts, luggage, and similar accessories), excluding leather processing facilities such as beamhouses and tanneries, and use more than 10 chemical formulations per month on average and more than 100 kg of chemical formulations per month on average. |
| Low Chemical Users                   | Facilities that use 10 or fewer chemical formulations per month on average and 100 kg or less of chemical formulations per month on average.                                                                                                                                                                                                               |

## Performance Criteria

### IN 2.1 - Level 1

The facility shall request and maintain available information on ZDHC MRSL conformance for each chemical formulation from its chemical suppliers.

In addition, Standard Chemical User and Footwear and Accessory Manufacturer facilities shall:

- Maintain an active ZDHC InCheck subscription.
- Generate at least one ZDHC InCheck Report within the three months preceding the assessment.

### IN 2.2 - Level 2

#### *Mandatory for achieving Level 2*

The facility shall:

- Monitor the ZDHC MRSL conformance of chemical formulations.
- Establish improvement targets.
- Demonstrate continuous improvement over time.

Standard Chemical Users and Footwear and Accessory Manufacturers shall additionally generate 12 monthly ZDHC InCheck Reports during the assessment period. For facilities undergoing their first Supplier to Zero Assessment a minimum of six monthly reports may be accepted.

Low Chemical Users shall calculate and record their ZDHC MRSL conformance rate on a monthly basis.

The facility shall achieve the following minimum average ZDHC MRSL conformance rates (by count) during the assessment period:

| Facility Category                    | Minimum Conformance Rate |
|--------------------------------------|--------------------------|
| Standard Chemical Users              | 50%                      |
| Footwear and Accessory Manufacturers | 30%                      |
| Low Chemical Users                   | 30%                      |

## IN 2.3 - Level 3

### *Mandatory for achieving Level 3*

The facility shall achieve the following minimum average ZDHC MRSL conformance rates (by count) during the assessment period:

| Facility Category                    | Minimum Conformance Rate |
|--------------------------------------|--------------------------|
| Standard Chemical Users              | 85%                      |
| Footwear and Accessory Manufacturers | 60%                      |
| Low Chemical Users                   | 60%                      |

## Evaluation Guidance

This requirement is intended to demonstrate that the facility understands the ZDHC MRSL conformance status of the chemical formulations it uses and is actively working to improve performance over time.

Facilities should maintain information on the ZDHC MRSL conformance status of chemical formulations and use this information to support purchasing and chemical management decisions. Where ZDHC InCheck is required, reports should be based on a complete and up-to-date inventory of chemical formulations used by the facility over the assessment period.

For Level 2 and 3, facilities are expected to demonstrate a structured approach to monitoring performance, setting improvement targets and progressively increasing the proportion of ZDHC MRSL conformant chemical formulations used on site. Where InCheck

is applicable, facilities undergoing a third-party assessment should hold a valid verified InCheck at the time of the assessment or plan the InCheck verification as an additional part of the Supplier to Zero on-site assessment, provided this has been confirmed in advance with the ZDHC Approved Assessor.

IN 3 - The facility implements a due diligence system for evaluating and selecting commodity chemical suppliers for restricted substance risk

Intent

To reduce restricted substance risks associated with commodity chemicals by implementing a structured supplier evaluation and risk management process.

Applicability

Applicable to facilities that use commodity chemicals.

Performance Criteria

IN 3.1 - Level 1

The facility shall identify all commodity chemicals used on site and maintain a list of the corresponding commodity chemical suppliers.

The facility shall communicate its chemical purchasing policy requirements to its commodity chemical suppliers.

The facility shall request self-declarations from commodity chemical suppliers confirming the following:

- They are aware of the latest ZDHC MRSL.
- They assess their products for ZDHC MRSL risks through in-house systems or third-party laboratories.
- They have a quality control procedure in place.
- They have not intentionally added any ZDHC MRSL-listed chemicals.
- They have provided all available documentation and information for their products, such as GHS-compliant Safety Data Sheets, Technical Data Sheets, Certificates of Analysis, batch numbers, and expiry dates.

The facility shall maintain records of these declarations and supporting documentation.

IN 3.2 - Level 2

The facility shall evaluate all commodity chemical suppliers using a documented supplier evaluation methodology aligned with the [ZDHC Commodity Chemical evaluation methodology and assessment](#), and categorise them into A, B, and C categories.



The facility shall purchase, on average per year, at least 15% of its commodity chemicals by weight from category B suppliers and at least 15% from category A suppliers.

The facility shall set improvement targets to increase sourcing from category A suppliers and monitor progress against these targets annually.

## IN 3.3 - Level 3

The facility shall purchase, on average per year, at least 30% of its commodity chemicals by weight from category B suppliers and at least 30% from category A suppliers.

### Evaluation Guidance

This requirement aims to ensure that commodity chemical suppliers are selected and managed using a risk-based approach. Facilities should understand the restricted substance management practices of their suppliers and progressively increase sourcing from suppliers demonstrating stronger chemical management performance.

## IN 4 - The facility uses ZDHC MRSL conformant solvents and chemical substances

### Intent

To identify, control, and progressively eliminate ZDHC MRSL restricted solvents and chemical substances that may present environmental, occupational health, or product compliance risks.

### Applicability

Applicable to facilities that use production chemicals (any type).

### Performance Criteria

#### IN 4.1 - Level 1

The facility shall evaluate and document all solvents and chemical substances, including volatile organic compounds, for ZDHC MRSL conformance.

The facility shall indicate, where restricted solvents are used, which meet the condition for emission and exposure control (EC\*), according to the ZDHC MRSL.

#### IN 4.2 - Level 2

*Mandatory for achieving Level 2*

The facility shall define, document, and implement a process to phase out non-conformant solvents and chemical substances that do not meet the condition for emission and exposure control (EC\*), according to the ZDHC MRSL. The process shall include measurable targets and a defined timeline for implementation.

The facility shall define, document and implement a process to control non-conformant solvents and chemical substances that meet the condition for emission and exposure control (EC\*), according to the ZDHC MRSL, by installing appropriate control measures, such as closed loop processes. The process shall also include measurable targets and a defined timeline for phasing out these solvents and chemical substances where technically feasible.

## IN 4.3 - Level 3

### *Mandatory for achieving Level 3*

The facility shall demonstrate measurable progress towards achieving the targets defined in the phase-out processes for ZDHC MRSL non-conformant solvents and chemical substances, including those that meet the condition for emission and exposure control (EC), according to the ZDHC MRSL.

### Evaluation Guidance

Facilities should identify all solvents and chemical substances used on site and determine their ZDHC MRSL conformance status. Where non-conformant solvents and chemical substances are identified, facilities should prioritise their elimination or substitution. Where continued use is permitted under the ZDHC MRSL emission and exposure control (EC\*) provisions, appropriate controls should be defined and implemented.

If no non-conformant solvents and chemical substances are used, this requirement is considered met.

IN 5 - The facility maintains a Chemical Inventory List, or equivalent records, for all production chemicals

### Intent

To maintain accurate and up-to-date information on chemicals used by the facility, enabling effective chemical management, risk assessment, traceability, and informed decision-making.

### Applicability

Applicable to facilities that use production chemicals, including chemical formulations, commodity chemicals, solvents, and other production chemicals.

## Performance Criteria

### IN 5.1 - Level 1

The facility shall maintain a Chemical Inventory List, or equivalent records, for all production chemicals used by the facility, and it is updated at least monthly.

The following fields shall be captured and maintained:

- Formulation / Chemical Name
- Manufacturer Name (if available)
- Chemical Supplier Name
- Chemical Category (formulation, commodity chemical, solvent, other)
- Chemical Type
- Application Area / Where Used
- Monthly Usage (kg)
- Lot or Batch Number (if available)
- Hazard Classification and Precautions for Identified Hazards
- Storage Location
- Specific Storage Precautions and Compatibility Information
- Purchase Date
- Expiry Date (if available)
- Safety Data Sheet Availability
- Safety Data Sheet Issue Date (if available)
- CAS Number(s) (if available)
- ZDHC MRSL Conformance Status, including EC\* information for restricted solvents
- ZDHC MRSL Conformance Level (if available)
- ZDHC PID (if available)
- Commodity Chemical Supplier Self-Declaration Availability (if applicable)

### IN 5.2 - Level 2

These additional fields shall be captured and maintained:

- Commodity chemical supplier categorisation (if applicable)
- Action to phase out and substitute identified solvents, which are listed in the ZDHC MRSL (if applicable)

### IN 5.3 - Level 3

These additional fields shall be captured and maintained:

- Chemical resource efficiency information (if available)
- Environmental indicators (if available)
- Follow-up actions on the categorisation of commodity chemicals and targets for their completion (if applicable)

- Information on waste solvent recovery (yes/no) (if applicable)
- Deadline to complete the follow-up actions to phase out and substitute identified solvents (if applicable)

## Evaluation Guidance

The Chemical Inventory List, or equivalent records, should provide a complete and accurate overview of all production chemicals used by the facility and serve as the foundation for chemical management activities, including chemical purchasing, storage, risk assessment, traceability and ZDHC MRSL conformance monitoring.

The inventory should reflect the chemicals currently purchased, stored, and used by the facility and should be updated regularly to maintain accuracy. Information recorded in the inventory should be consistent with supporting records such as Safety Data Sheets, purchase records, chemical labels, supplier information and ZDHC conformance documentation.

Fields identified as "if available" are conditional and required only when the information is available to the facility. All other fields are considered core fields and should be maintained for all applicable chemicals.

Missing information is only acceptable for conditional fields where reasonable efforts have been made to obtain the information. All other applicable Level 3 fields shall be maintained in the Chemical Inventory List or equivalent records. Missing applicable Level 3 information should result in the performance criterion being assessed as not met.

## Traceability Of Chemicals

IN 6 - The facility implements an internal traceability system that tracks chemicals used in production

### Intent

To enable traceability of chemicals used in production and support investigations, risk management, product compliance activities, and effective response to chemical-related incidents or non-conformities.

### Applicability

Applicable to facilities that use production chemicals, including chemical formulations, commodity chemicals, and solvents.

## Performance Criteria

### IN 6.1 - Level 1

The facility shall document a standard operating procedure (SOP) that defines how chemicals used in production are:

- Identified
- Recorded
- Tracked

The procedure shall link the chemicals used with the finished article and/or product produced by the facility.

### IN 6.2 - Level 2

The facility shall implement the procedure by linking finished articles and/or products to the corresponding:

- Chemical batch(es) or lot number(s)
- Chemical supplier(s)

## Evaluation Guidance

The traceability system should enable the facility to identify which chemicals were used in the production of a specific finished article or product. Traceability may be maintained through production records, recipe sheets, batch cards, ERP systems or equivalent records.

For Level 2 and Level 3, the facility should be able to demonstrate traceability from finished articles and/or products back to the corresponding chemical batches or lots and suppliers.

**Note:** There is no Level 3 performance criterion for this requirement.

IN 7 - The facility implements a FEFO (First Expired, First Out) and/or FIFO (First In, First Out) system to manage chemical use by expiration date or purchase date

## Intent

To ensure chemicals are used within their intended shelf life and minimise risks associated with expired, degraded, or obsolete chemicals.

## Applicability

Applicable to facilities that use production chemicals.

## Performance Criteria

### IN 7.1 - Level 1

The facility shall:

- Record all chemicals received in the Chemical Inventory List (CIL) or equivalent records, including expiry dates where available and purchase dates.
- Document and implement a standard operating procedure for managing chemical use by expiry date to ensure older chemicals are used first, and chemical expiration is avoided (FEFO).
- Use chemicals according to purchase date where an expiry date is not available (FIFO).

### IN 7.2 - Level 2

The facility shall maintain shelf-life records for chemicals where an expiry date is not available.

Supporting records may include:

- Certificates of Analysis (CoA)
- Chemical test reports
- Supplier technical information
- Other equivalent records

## Evaluation Guidance

The facility should have a systematic approach to stock rotation and shelf-life management. Chemicals should be used before expiry, where expiry dates are available and managed according to purchase date, where expiry dates are not provided.

For Level 2 and 3, the facility should be able to demonstrate how shelf life is determined, monitored, and reviewed, for chemicals without supplier-defined expiry dates.

**Note:** There is no Level 3 performance criterion for this requirement.

## Input Material Purchasing

IN 8 - The facility maintains a Material Inventory List or equivalent records for all processed and part-processed input materials and components.

## Intent

To maintain visibility of processed and part-processed input materials and components and support effective management of restricted substance risks.

## Applicability

Applicable to facilities that purchase and use processed and part-processed input materials or components, excluding 100% subcontractors and fibre manufacturers.

## Performance Criteria

### IN 8.1 - Level 1

The facility shall maintain a Material Inventory List (MIL) or equivalent records that is updated at least monthly and captures information on all input materials and components.

The following information shall be captured and maintained:

- Supplier name
- Supplier ZDHC Gateway AID (if available)
- Supplier ZDHC Supplier to Zero level (if available)
- Material or component description
- Material or component category
- Purchase date
- Quantity and unit of measure
- Lot or batch number
- Recycled content status (Yes/No)
- Restricted substance risk self-declaration availability (Yes/No)

### IN 8.2 - Level 3

In addition to IN 8.1, the following information shall be captured and maintained:

- Restricted substance testing requirements
- Testing frequency or cadence
- Non-conformity test status
- Root cause analysis status for non-conformities
- Corrective or preventive actions taken

## Evaluation Guidance

The Material Inventory List should provide a complete overview of all applicable input materials and components used by the facility and support material traceability, supplier management, and restricted-substance risk management.

Fields identified as "if available" are conditional fields and are only required where the information is available to the facility. All other fields are considered core fields and should be maintained for all applicable materials and components.

Missing information is only acceptable for conditional fields where reasonable efforts have been made to obtain the information. All other fields shall be maintained in the Material

Inventory List or equivalent records. Missing applicable information should result in the performance criterion being assessed as not met.

**Note:** There is no Level 2 performance criterion for this requirement.

IN 9 - The facility implements a system for managing processed and part-processed input materials and components for restricted substance risk

Intent

To identify, assess and manage restricted substance risks associated with purchased materials and components before they enter production.

Applicability

Applicable to facilities that purchase and use processed and part-processed input materials or components, excluding fibre manufacturers and facilities that are solely operating as subcontractors and do not take legal ownership of any of the materials or components that they process (100% subcontractors).

Performance Criteria

IN 9.1 - Level 1

The facility shall:

- Maintain one or more restricted substance lists (RSLs).
- Communicate the applicable RSL requirements to input material and component suppliers.
- Implement a process for collecting restricted substance risk self-declarations from input material and component suppliers.

IN 9.2 - Level 3

The facility shall:

- Assess and mitigate restricted substance risks associated with processed and part-processed input materials and components.
- Determine restricted substance testing requirements and testing frequency based on risk.
- Document a standard operating procedure for root cause analysis and corrective action plans addressing restricted substance non-conformities.
- Conduct a root cause analysis for all identified non-conformities.
- Implement corrective action plans for all identified non-conformities.



## Evaluation Guidance

The facility may use its own Restricted Substance List or one specified by its customers, provided it is applicable to the materials and products supplied.

At Level 3, the facility should demonstrate a risk-based approach to managing restricted substance risks, including testing, investigation of non-conformities, and implementation of corrective and preventive actions to reduce future risk.

**Note:** There is no Level 2 performance criterion for this requirement.

## Input Material Traceability

IN 10 - The facility implements an internal traceability system that tracks processed and part-processed input materials and components used in production, including those received from suppliers and those processed through subcontractors, and implements a system for managing restricted substance risk in finished articles and/or products.

### Intent

To establish traceability between input materials, components, subcontracted materials, and finished products, and to support effective management of restricted substance risks.

### Applicability

- Facilities that purchase and use processed and part-processed input materials or components, excluding 100% subcontractors and fibre manufacturers
- Facilities that use subcontractors

### Performance Criteria

#### IN 10.1 - Level 1

The facility shall document a standard operating procedure that defines how processed and part-processed input materials and components used in production, including materials processed by subcontractors, are identified, recorded and tracked.

The procedure shall link the processed and part-processed input materials and components used, including those processed by subcontractors where applicable, with the finished article and/or product produced by the facility.

## IN 10.2 - Level 2

The facility shall implement the procedure by linking finished articles and/or products to the corresponding:

- Input material or component batch(es) or lot number(s)
- Input material or component supplier(s)
- Subcontractor(s), where applicable

## IN 10.3 - Level 3

The facility shall:

- Assess and mitigate restricted substance risks in finished articles and/or products.
- Determine restricted substance testing requirements and testing frequency.
- Document a standard operating procedure for root cause analysis and corrective action plans addressing restricted substance non-conformities identified during testing.
- Conduct a root cause analysis for all identified non-conformities.
- Implement corrective action plans for all identified non-conformities.

## Evaluation Guidance

At Levels 1 and 2, this requirement focuses on traceability. The facility should be able to identify the processed and part-processed input materials and components used in a specific finished article and/or product and trace them back to the corresponding suppliers and batch or lot numbers. Traceability may be maintained through production records, work orders, batch cards, ERP systems or equivalent records.

At Level 3, the focus expands beyond traceability to include management of restricted substance risks in finished articles and/or products, whether manufactured in-house or processed externally by subcontractors. Facilities should demonstrate a risk-based approach to determining testing requirements and frequency, taking into account product, material, supplier, customer, and regulatory requirements where applicable.

Where testing identifies non-conformities, the facility should investigate the root cause, implement corrective and preventive actions, and verify the effectiveness of those actions to reduce the risk of recurrence.

## Focus Area: Process

The Process focus area covers the management of chemicals within facility operations. This focus area includes requirements related to the implementation of effective chemical management processes and operational practices.

### Chemical Management Policy

PRO 1 - The facility has a documented chemical management policy

#### Intent

To establish the facility's commitment to sustainable chemical management and provide direction for the implementation and continual improvement of its chemical management system.

#### Applicability

Applicable to facilities that use production chemicals.

#### Performance Criteria

##### PRO 1.1 - Level 1

The facility shall establish, implement and maintain a documented chemical management policy that includes a commitment to:

- Adopting and implementing the ZDHC Roadmap to Zero Programme.
- Incorporating sustainable chemical management practices into production processes.
- Continuous improvement in chemical management system effectiveness.
- Ensuring the safe use of chemicals at the facility to protect worker health and safety and minimise environmental impact.
- Establishing traceability and transparency within the facility's operations.
- Capacity building and training of staff on the chemical management system.

The policy shall be:

- Communicated to all stakeholders, including staff.
- Signed and endorsed by the facility's leadership.
- Reviewed periodically based on internal and external changes.

#### Evaluation Guidance

The chemical management policy should clearly communicate the facility's commitment to responsible chemical management and provide a foundation for the chemical management

system. The policy should be approved by senior management, communicated to relevant stakeholders and reviewed periodically to ensure it remains current and relevant.

Note: There are no Level 2 or 3 performance criteria for this requirement.

## Chemical Management Strategy

PRO 2 - The facility has a documented chemical management strategy

### Intent

To establish a structured and resource-backed approach for implementing and continually improving chemical management practices aligned with the ZDHC Roadmap to Zero Programme.

### Applicability

Applicable to all facilities.

### Performance Criteria

#### PRO 2.1 - Level 1

The facility shall have a documented chemical management strategy that defines:

- The scope of the strategy, including the Supplier's own single manufacturing facility or multiple facilities (in case the Supplier has multi-locational facilities) and engagement with direct upstream input material suppliers and subcontractors.
- The infrastructure and resources required for implementation.
- An action plan with goals for improving chemical management practices aligned with the ZDHC Roadmap to Zero Programme.

The action plan shall define:

- Methodology
- Timeline
- Resources
- Budget
- Staff responsible and accountable for each goal

## PRO 2.2 - Level 2

### *Mandatory for achieving Level 2*

The facility shall:

- Implement its chemical management strategy.
- Set and internally communicate time-bound goals to progressively improve chemical management performance.
- Monitor progress against these goals at least annually.

### Evaluation Guidance

The strategy should translate the commitments defined in the chemical management policy into measurable actions. Facilities should be able to demonstrate that goals are implemented, monitored and reviewed, and that sufficient resources have been allocated to support delivery of the strategy.

**Note:** There is no Level 3 performance criterion for this requirement.

PRO 3 - The facility engages with its direct upstream input material suppliers and subcontractors to improve their chemical management practices, aligned with the ZDHC Roadmap to Zero Programme

### Intent

To extend responsible chemical management practices beyond the facility and support improvement throughout the upstream supply chain.

### Applicability

Applicable to:

- Facilities that purchase and use processed and part-processed input materials or components, excluding 100% subcontractors and fibre manufacturers
- Facilities that use subcontractors

Where a facility can demonstrate that its suppliers and/or subcontractors are not in scope for the [ZDHC Suppliers Roadmap to Zero](#), this requirement may be considered met.

## Performance Criteria

### PRO 3.1 - Level 1

The facility shall communicate its commitment to improve chemical management practices, aligned with the ZDHC Roadmap to Zero Programme, to its direct upstream input material suppliers and subcontractors.

### PRO 3.2 - Level 2

#### *Mandatory for achieving Level 2*

The facility shall perform a risk assessment of its direct upstream input material suppliers and subcontractors at least annually based on:

- Production volume (i.e. the supplier's significance to the facility's production volume)
- High chemical intensity
- Wet processing
- Chemical processing
- Worker exposure to chemicals
- Effluent generation
- Air emissions

Based on the risk assessment, the facility shall:

- Identify and document a subset of suppliers and subcontractors that are significant to the facility.
- Set and communicate a time-bound goal for the identified subset to undergo and progressively improve their Supplier to Zero performance.
- Measure and monitor progress towards the goal over time.

### PRO 3.3 - Level 3

#### *Mandatory for achieving Level 3*

The facility shall demonstrate that at least 50% of the significant direct upstream input material suppliers and subcontractors identified through the risk assessment have completed a Supplier to Zero assessment and achieved at least Level 1.

## Evaluation Guidance

This requirement is intended to encourage engagement with suppliers and subcontractors that have the greatest potential chemical management impact on the facility's operations and products, taking into account production volume and other risk assessment criteria.

At Level 2, facilities should use a risk-based approach to identify significant suppliers and subcontractors, taking into account all specified assessment criteria, including production

volume. At Level 3, facilities should demonstrate measurable progress by encouraging these significant suppliers and subcontractors to complete a Supplier to Zero assessment and improve their performance over time.

PRO 4 - The facility assigns resources for implementing, maintaining, and continually improving the chemical management strategy

Intent

To ensure that adequate responsibility, accountability, and management oversight are in place to support implementation of the chemical management strategy.

Applicability

Applicable to all facilities.

Performance Criteria

PRO 4.1 - Level 1

The facility shall assign roles and responsibilities for staff responsible for each goal defined in the chemical management strategy.

PRO 4.2 - Level 3

The facility shall report on the progress against the goals defined in the chemical management strategy to senior management at least annually.

Evaluation Guidance

Roles and responsibilities may be demonstrated through job descriptions, organisation charts, responsibility matrices, committee structures, or equivalent records.

Facilities should be able to demonstrate that individuals responsible for implementing the strategy understand their responsibilities and that progress toward strategic goals is reviewed by senior management on a regular basis.

**Note:** There is no Level 2 performance criterion for this requirement.

## Safe Chemical Storage

PRO 5 - The facility assesses and designs all chemical storage areas for safety

### Intent

To minimise health, safety, environmental, and operational risks associated with the storage and handling of chemicals.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 5.1 - Level 1

The facility shall:

- Assess all chemical storage areas for safety and install appropriate safety measures.
- Assess chemical compatibility and document specific storage precautions.
- Store chemicals according to their compatibility.
- Make Safety Data Sheets accessible to all staff and available in relevant languages.
- Store gas cylinders in an upright position and in a separate location.

Safety measures shall include, where required:

- Fire safety precautions
- First aid provisions
- Emergency response provisions (e.g. eye and body wash stations)
- Warning signs or signal words
- Unobstructed emergency exits
- Designated area for expired chemicals
- Chemical safety information covering hazards, exposure controls, personal protection, first aid, and emergency response
- Chemical spill kits
- Impermeable floors for liquid chemicals
- Appropriate ventilation, lighting, and controlled temperature and humidity
- A displayed chemical compatibility chart
- Secondary containment for liquid chemicals



## PRO 5.2 - Level 2

The facility shall designate an area for non-conformant chemicals that are to be returned to the chemical supplier.

In addition, safety measures shall include, where required:

- Storage areas connected to the effluent treatment plant for spillages

### Evaluation Guidance

Chemical storage areas should be designed and managed to prevent chemical incompatibility incidents, spills, leaks, worker exposure and environmental releases.

The safety measures required will depend on the types and quantities of chemicals stored. Facilities should assess all chemical storage locations, including main stores, sub-stores, mixing areas and gas cylinder storage areas, and implement controls appropriate to the risks identified.

Where applicable, facilities should have measures in place to segregate and manage expired, non-conformant, and returned chemicals.

Note: There is no Level 3 performance criterion for this requirement.

## Chemical Handling and Worker Safety

### PRO 6 - All chemicals are labelled

#### Intent

To ensure that chemicals can be readily identified and that workers have access to essential hazard and safety information throughout storage, handling, and use.

#### Applicability

Applicable to facilities that use production chemicals.

#### Performance Criteria

### PRO 6.1 - Level 1

The facility shall label all chemicals with the chemical product name.

The facility shall label all chemical containers in chemical storage areas with the following information:

- Chemical product name
- Batch number (if applicable)
- Expiry date (if applicable)
- GHS label elements, including:
  - Hazard pictograms
  - Signal word
  - Hazard (H) statements
  - Precautionary (P) statements

## Evaluation Guidance

Chemical labels should remain legible, accurate and attached to chemical containers throughout storage and use. Labels should be consistent with available chemical safety information, including Safety Data Sheets.

Where chemicals are transferred, decanted, or repackaged, facilities should ensure that appropriate labelling is maintained on secondary containers.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## PRO 7 - Engineering controls for worker safety are implemented

### Intent

To reduce worker exposure to chemical hazards through the implementation of appropriate engineering controls.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 7.1 - Level 1

The facility shall:

- Identify chemical exposure risks and appropriate engineering control measures.
- Implement engineering controls where applicable to limit worker exposure to chemicals.
- Maintain engineering controls and periodically verify their effectiveness.

## Evaluation Guidance

Engineering controls should be selected based on the risks associated with chemical storage, handling, mixing, transfer and use. Examples may include local exhaust ventilation,

enclosed systems, automated dosing systems, containment systems, or other measures designed to reduce worker exposure.

Facilities should be able to demonstrate that engineering controls are maintained and periodically assessed to ensure continued effectiveness.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## PRO 8 - Administrative controls for worker safety are implemented

### Intent

To reduce worker exposure to chemical hazards through documented procedures, work practices, and management controls.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 8.1 - Level 1

The facility shall:

- Identify chemical exposure risks and appropriate administrative control measures.
- Formally define and implement administrative controls to limit worker exposure to chemicals.
- Periodically review and revise administrative controls to maintain effectiveness.

### Evaluation Guidance

Administrative controls should be based on identified risks and may include work instructions, restricted access, hygiene requirements, permit-to-work systems, exposure time limitations, job rotation, signage or other management controls.

Facilities should review administrative controls periodically, as well as when there are significant changes that may affect worker exposure.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

PRO 9 - Appropriate personal protective equipment (PPE) and chemical safety equipment are used to protect workers from chemical-related hazards

Intent

To ensure workers are adequately protected from chemical-related hazards through the selection, use, maintenance, and management of appropriate PPE and chemical safety equipment.

Applicability

Applicable to facilities that use production chemicals.

Performance Criteria

PRO 9.1 - Level 1

The facility shall document and implement a procedure to identify required PPE and safety equipment for chemical storage, handling, use and emergency response based on:

- Chemical hazard classification
- Chemical safety information from GHS-compliant Safety Data Sheets (SDS), including:
  - Section 4 - First-Aid Measures
  - Section 5 - Fire-Fighting Measures
  - Section 8 - Exposure Controls / Personal Protection

Appropriate PPE and safety equipment shall:

- Be available where chemicals are stored, handled and used.
- Be accessible to workers who may be exposed to chemical hazards.
- Be clearly identified through signage or other visual means.

The facility shall:

- Ensure PPE and safety equipment are properly used.
- Replace and maintain PPE and safety equipment periodically.
- Maintain records of inspections, maintenance, and replacement activities.

The facility shall provide regular training to workers covering:

- Selection and correct use of PPE
- Limitations of PPE
- Storage and disposal of PPE
- The importance of PPE as part of overall chemical risk control
- Emergency procedures and response measures

- Accidental release, containment, and clean-up procedures

## Evaluation Guidance

PPE should be selected based on the specific hazards associated with the chemicals used and the tasks being performed. Selection should be supported by chemical hazard information and SDS recommendations.

Facilities should ensure that workers understand when PPE is required, how to use it correctly and its limitations. Emergency equipment such as eyewash stations, safety showers, spill kits and fire-fighting equipment should be maintained, readily accessible and appropriate to the identified risks.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## Document and Process Control

PRO 10 - The facility maintains key documents to support its chemical management system

### Intent

To ensure that the documents required to implement, maintain, and improve the chemical management system are identified, controlled, and accessible.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 10.1 - Level 1

The facility shall identify and maintain documents required to support implementation of its chemical management system.

These documents may include, but are not limited to:

- Regulatory requirements
- Organisation policies and strategies
- ZDHC-related requirements
- Chemical Inventory List
- Relevant supplier information
- Staff training records
- Health and safety documentation

- Continuous improvement records
- Chemical emergency response documentation

## Evaluation Guidance

The facility should maintain a structured and accessible document management system that supports implementation of the chemical management system.

Documents should be current, controlled where appropriate and available to personnel responsible for implementing the relevant requirements. Facilities should periodically review documents to ensure they remain accurate and up to date.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## PRO 11 - Document control for documents related to the chemical management system

### Intent

To ensure that documents supporting the chemical management system are controlled, maintained, accessible and kept up to date.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 11.1 - Level 1

The facility shall have a standard operating procedure for document control.

The procedure shall define:

- The location and retention of chemical management system documents
- Employee access levels for chemical management system documents
- The document review process, including review frequency and assigned responsibilities
- The document approval process
- Procedures for updating, replacing, archiving, and withdrawing obsolete documents

#### PRO 11.2 - Level 2

The facility shall implement and maintain the document control procedure for all documents supporting the chemical management system.

## Evaluation Guidance

The document control system should ensure that employees have access to current versions of relevant documents and that obsolete documents are removed from use or clearly identified as obsolete.

Facilities should maintain a document register or equivalent system to track document ownership, version status, approval and review history.

**Note:** There is no Level 3 performance criterion for this requirement.

## PRO 12 - A chemical incident management system is implemented

### Intent

To ensure chemical-related incidents are consistently identified, reported, investigated and addressed to prevent recurrence, and minimise impacts on workers, operations and the environment.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 12.1 - Level 1

The facility shall document and implement a chemical incident management system to identify, report, investigate, respond to and follow up on chemical-related incidents that disrupt normal operations or pose risks to workers or the environment.

The chemical incident management system shall include:

- Procedures for identifying, recording and reporting chemical-related incidents, near misses, and emergency situations
- Defined roles and responsibilities
- Employee training on incident recognition and reporting
- Root Cause Analysis (RCA) processes
- Corrective and Preventive Action (CAPA) processes
- Emergency preparedness and response procedures relevant to chemical incidents
- Appropriate emergency response equipment
- Periodic emergency response drills

## Evaluation Guidance

The system should cover both actual incidents and near misses, as both provide opportunities for learning and improvement.

Facilities should investigate chemical-related incidents in a structured manner, identify underlying causes and implement corrective and preventive actions to reduce the likelihood of recurrence.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

## PRO 13 - General facility maintenance and housekeeping are managed

### Intent

To maintain a safe, orderly and well-functioning facility environment that supports effective chemical management and reduces operational risks.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 13.1 - Level 1

The facility shall document a standard operating procedure for maintenance and housekeeping activities related to:

- Chemical storage areas
- Areas where chemicals are handled and used
- Production machinery

The procedure shall define responsibilities, frequencies, inspection requirements and escalation processes.

#### PRO 13.2 - Level 2

The facility shall:

- Fully implement the maintenance and housekeeping procedures.
- Record all maintenance and housekeeping activities.

## Evaluation Guidance



Maintenance and housekeeping activities should help prevent spills, leaks, chemical contamination, equipment failures and unsafe working conditions.

Facilities should ensure that identified issues are addressed in a timely manner and that records demonstrate completion of planned activities.

**Note:** There is no Level 3 performance criterion for this requirement.

## Continuous Improvement Actions

PRO 14 - The facility reviews its chemical management strategy and action plan periodically

### Intent

To ensure that the chemical management strategy remains effective, relevant and aligned with changing risks, business needs, and stakeholder expectations.

### Applicability

Applicable to all facilities.

### Performance Criteria

#### PRO 14.1 - Level 1

The facility shall document a process for periodically reviewing its chemical management strategy and action plan according to a predefined frequency.

#### PRO 14.2 - Level 2

The facility shall:

- Conduct internal audits of its chemical management strategy and action plan according to a predefined frequency.
- Prepare and implement corrective action plans to address identified gaps and improvement opportunities.
- Define responsibilities and timelines for corrective actions.
- Document and communicate audit results to relevant departments.

#### PRO 14.3 - Level 3

The facility shall communicate audit results to facility top management through management review meetings or equivalent processes to support strategic decision-making.

## Evaluation Guidance

Periodic reviews should consider progress against goals, internal audit findings, incidents, corrective actions, supplier engagement activities, output performance, and relevant changes to legal, customer or ZDHC requirements.

At higher performance levels, facilities should demonstrate that review outcomes inform decision-making, resource allocation and continual improvement activities.

PRO 15 - Chemical management training is provided to staff members who are responsible for chemical management

## Intent

To ensure that personnel responsible for chemical management have the knowledge and competence required to implement and continually improve the chemical management system.

## Applicability

Applicable to facilities that use production chemicals.

## Performance Criteria

### PRO 15.1 - Level 1

The facility shall develop and implement a chemical management training plan for:

- Staff responsible for chemical management
- Staff who are in frequent contact with chemicals

The facility shall:

- Provide periodic training to maintain relevant knowledge and competencies.
- Maintain training records.
- Ensure that staff responsible for chemical management participate in ZDHC webinars related to the Supplier to Zero Programme, ZDHC InConnect events, and/or other relevant ZDHC learning opportunities on the ZDHC Academy.

### PRO 15.2 - Level 2

*Mandatory for achieving Level 2*

Relevant staff members shall successfully complete the ZDHC Advanced Chemical Management System training course.

Where applicable, a valid ZDHC CMS TIG training certificate may be accepted in accordance with current ZDHC transition requirements.

## Evaluation Guidance

Training should be appropriate to each employee's responsibilities and level of chemical exposure.

The training plan should define training topics, frequency, target audiences, and refresher requirements. Facilities should be able to demonstrate that personnel responsible for chemical management maintain current knowledge of relevant chemical management practices and ZDHC requirements.

**Note:** There is no Level 3 performance criterion for this requirement.

## Chemical-Related Waste Management

### PRO 16 - Chemical-related waste is stored appropriately and safely

#### Intent

To ensure chemical-related waste is identified, classified, segregated and stored in a manner that protects workers, the environment and the facility.

#### Applicability

Applicable to facilities that use production chemicals.

#### Performance Criteria

##### PRO 16.1 - Level 1

The facility shall:

- Identify all types of chemical-related waste generated within the facility.
- Classify chemical-related waste as hazardous or non-hazardous.
- Quantify chemical-related waste generated by the facility.
- Segregate chemical-related waste according to waste type and compatibility.
- Store chemical-related waste in clearly designated waste storage areas.

##### PRO 16.2 - Level 2

The facility shall assess all chemical-related waste storage areas and implement appropriate safety and environmental protection measures based on the waste types, quantities and associated risks.

Where applicable, these measures shall include:

- Adequate weather protection
- Waste labelling
- Segregation of chemical-related waste and empty chemical containers according to compatibility
- Fire safety precautions
- Warning signs
- Personal protective equipment
- Emergency response provisions, such as eye and body wash stations
- Spill response equipment
- Impermeable flooring (for liquid waste)
- Secondary containment for liquid waste
- Connection to the effluent treatment plant for spillages
- Adequate ventilation

## Evaluation Guidance

Facilities should have visibility of all chemical-related waste generated on site and understand how it is classified, stored and managed.

Waste storage areas should be designed and maintained to prevent spills, leaks, incompatible storage, worker exposure, and environmental releases. The controls required may vary depending on the type and quantity of waste generated by the facility.

**Note:** There is no Level 3 performance criterion for this requirement.

## PRO 17 - A chemical-related waste inventory is maintained

### Intent

To maintain accurate information on the types, quantities, storage requirements and disposal routes of chemical-related waste generated by the facility.

### Applicability

Applicable to facilities that use production chemicals.

### Performance Criteria

#### PRO 17.1 - Level 1

The facility shall maintain a waste inventory using the [ZDHC Waste Inventory Template](#) or equivalent records, and update it at least monthly.

The following information shall be captured and maintained:

- Type of waste
- Description of waste
- Hazard classification
- Source of waste
- Quantity of waste and unit of measurement
- Specific storage requirements
- Frequency of disposal
- Names of personnel trained to handle waste
- Waste disposal contractor name (if applicable)
- Waste disposal route

## Evaluation Guidance

The waste inventory should provide a complete overview of all chemical-related waste generated by the facility and support waste management, legal compliance, contractor management and continuous improvement activities.

Fields identified as "if applicable" are conditional and required only where relevant to the facility's waste management activities. All other fields are considered core fields and should be maintained for all applicable waste streams.

The inventory should be updated regularly and be consistent with supporting records such as manifests, disposal records, internal transfer records, contractor documentation and waste tracking records.

**Note:** There are no Level 2 or 3 performance criteria for this requirement.

PRO 18 - A chemical-related waste assessment is conducted periodically

## Intent

To evaluate the effectiveness of the facility's chemical-related waste management practices and identify opportunities for continual improvement.

## Applicability

Applicable to facilities that use production chemicals.

## Performance Criteria

### PRO 18.1 - Level 1

The facility shall conduct a chemical-related waste management assessment annually.

## PRO 18.2 - Level 2

The facility shall prepare a corrective action plan to improve chemical-related waste management based on the findings of the annual assessment.

The corrective action plan shall include:

- Actions to be completed
- Assigned responsibilities
- Defined timelines
- Status tracking

Where no corrective actions are identified, this performance criterion is considered met.

## PRO 18.3 - Level 3

The facility shall implement, monitor and verify the effectiveness of the corrective action plan.

Where no corrective actions are identified, this performance criterion is considered met.

## Evaluation Guidance

The annual assessment should evaluate all chemical-related waste streams generated by the facility and review how waste is identified, classified, stored, handled, transported and disposed of.

Corrective actions should address identified gaps, risks or improvement opportunities and be proportionate to the significance of the findings. Facilities should be able to demonstrate progress in implementing corrective actions and improving waste management performance over time.

Where no corrective actions are identified, the facility should be able to demonstrate that the assessment was completed and that the conclusion is justified based on the assessment findings.

## Focus Area: Output

The Output focus area covers the management of chemical-related outputs generated by the facility. This focus area includes requirements related to the monitoring and management of wastewater, sludge, air emissions and chemical-related waste.

### Output Streams

OUT 1 - All output streams are identified, measured, and records are kept

#### Intent

To ensure the facility understands, monitors and maintains records of all environmental output streams generated by its operations.

#### Applicability

Applicable to all facilities.

#### Performance Criteria

##### OUT 1.1 - Level 1

The facility shall:

- Identify and maintain an inventory of all applicable output streams and discharge points within the facility boundary, including wastewater, sludge, air emissions and solid waste, where applicable.
- Maintain records for all output streams on a monthly basis.

Records shall include:

- Output stream type
- Discharge location
- Amount, where applicable, including:
  - Wastewater volume
  - Sludge weight

#### Evaluation Guidance

Facilities should maintain a clear understanding of all environmental output streams generated by their operations and where those outputs are discharged, treated, stored or disposed of.

Output stream records should be maintained consistently and supported by appropriate measurements, estimates or operational records.

Note: There are no Level 2 or 3 performance criteria for this requirement.

## Wastewater and Sludge Quality

### OUT 2 - Wastewater is tested and managed in accordance with the ZDHC Wastewater and Sludge Guidelines

#### Intent

To monitor wastewater quality and support continual improvement of wastewater management practices in alignment with the ZDHC Wastewater and Sludge Guidelines.

#### Applicability

##### Applicable to:

- Facilities that generate less than 15 m<sup>3</sup>/day of industrial wastewater and are classified as direct discharge
- Facilities that generate 15 m<sup>3</sup>/day or more of industrial wastewater and are classified as:
  - Direct discharge
  - Indirect discharge with pretreatment (with sludge)
  - Indirect discharge with pretreatment (without sludge)
  - Indirect discharge without pretreatment
  - Zero Liquid Discharge (ZLD)

#### Performance Criteria

##### OUT 2.1 - Level 1

The facility shall review the ZDHC Wastewater and Sludge Guidelines and create an implementation plan for wastewater testing that defines applicable:

- Parameters
- Limits
- Test methods
- Testing frequency

in accordance with the facility's wastewater discharge type.

For facilities classified as direct discharge, the facility shall additionally:

- Maintain its effluent treatment plant and keep maintenance records.
- Conduct wastewater testing at least quarterly.
- Demonstrate average conformance with the Foundational Level Limits for:
  - BOD



## Ø ZDHC

- COD
- TSS
- Total Nitrogen
- Phosphorus

### OUT 2.2 - Level 2

#### *Mandatory for achieving Level 2*

The facility shall:

- Test wastewater for applicable parameters using the corresponding limits and test methods defined in the ZDHC Wastewater and Sludge Guidelines.
- Generate at least one ZDHC ClearStream Report annually.

For facilities classified as direct discharge, the facility shall demonstrate:

- Full conformance with Foundational Level Limits for conventional parameters, heavy metals, and anions
- Full conformance with Progressive Level Limits for:
  - BOD
  - COD
  - TSS
  - Total nitrogen
  - Phosphorus

### OUT 2.3 - Level 3

#### *Mandatory for achieving Level 3*

The facility shall generate at least two ZDHC ClearStream Reports annually.

For facilities classified as direct discharge, the facility shall demonstrate full conformance with Aspirational Level limits for:

- BOD
- COD
- TSS
- Total Nitrogen
- Phosphorus

as specified in the ZDHC Wastewater and Sludge Guidelines.

## Evaluation Guidance

Facilities should determine their wastewater discharge type and ensure that wastewater testing is conducted in accordance with the applicable requirements of the ZDHC Wastewater and Sludge Guidelines.

As performance levels increase, facilities are expected to demonstrate progressively stronger wastewater performance through ZDHC ClearStream reporting and conformance with increasingly stringent wastewater quality limits.

## OUT 3 - Sludge is tested and managed in accordance with the ZDHC Wastewater and Sludge Guidelines

### Intent

To ensure sludge generated from wastewater treatment processes is appropriately tested, managed, and disposed of in accordance with the ZDHC Wastewater and Sludge Guidelines.

### Applicability

Applicable to facilities that:

- Generate 15 m<sup>3</sup>/day or more of industrial wastewater and are classified as:
  - Direct discharge
  - Indirect discharge with pretreatment (with sludge)
  - Zero Liquid Discharge (ZLD)

### Performance Criteria

#### OUT 3.1 - Level 2

##### *Mandatory to achieve Level 2*

The facility shall:

- Test sludge for applicable parameters, limits, and test methods in accordance with the ZDHC Wastewater and Sludge Guidelines and applicable sludge disposal pathway.
- Declare its major sludge disposal pathway in the ZDHC Gateway.
- Generate at least one ZDHC ClearStream Report annually.

Where relevant to the disposal pathway, the facility shall demonstrate full conformance with applicable conventional parameter, heavy metal and anion limits specified in the ZDHC Wastewater and Sludge Guidelines.

## OUT 3.2 - Level 3

### *Mandatory to achieve Level 3*

The facility shall generate at least two ZDHC ClearStream Reports annually.

Where relevant to the disposal pathway, the facility shall demonstrate full conformance with the applicable conventional parameter, heavy metal and anion limits specified in the ZDHC Wastewater and Sludge Guidelines.

### Evaluation Guidance

Facilities should understand how sludge is managed and disposed of and ensure that testing is aligned with the declared disposal pathway.

Testing should be conducted at an appropriate frequency to demonstrate ongoing conformance with applicable ZDHC requirements and support responsible sludge management.

**Note:** There is no Level 1 performance criterion for this requirement.

OUT 4 - A root cause analysis is conducted, and a corrective action plan is prepared for non-conformities identified during wastewater and sludge testing

### Intent

To ensure wastewater and sludge non-conformities are systematically investigated and addressed to prevent recurrence and drive continual improvement in environmental performance.

### Applicability

Applicable to facilities in the scope of OUT 2 and/or OUT 3.

### Performance Criteria

## OUT 4.1 - Level 1

The facility shall document a standard operating procedure for conducting root cause analyses and preparing corrective action plans for non-conformities identified during wastewater and sludge testing.

The procedure shall define:

- Roles and responsibilities

- Root cause analysis methodology
- Corrective action planning process
- Timelines for implementation
- Follow-up and verification activities

### OUT 4.2 - Level 2

*Mandatory to achieve Level 2*

The facility shall:

- Conduct root cause analyses for wastewater and sludge testing non-conformities.
- Prepare corrective action plans in accordance with the ZDHC Wastewater and Sludge Guidelines.
- Upload corrective action plans to the ZDHC Gateway.

Where no wastewater or sludge testing non-conformities are identified during the assessment period, this performance criterion is considered met.

### OUT 4.3 - Level 3

*Mandatory for achieving Level 3*

The facility shall document successful implementation of corrective action plans.

Where no wastewater or sludge testing non-conformities are identified during the assessment period, this performance criterion is considered met.

### Evaluation Guidance

Facilities should investigate non-conformities in a structured manner and identify the underlying causes rather than only addressing immediate symptoms.

Corrective actions should be proportionate to the significance of the non-conformity and focus on preventing recurrence. Where corrective actions are implemented, facilities should be able to demonstrate that actions have been completed and that their effectiveness has been evaluated.

## Air Emissions

OUT 5 - Potential Volatile Organic Compound (VOC) emissions are measured and reduced over time

### Intent

To understand, monitor, and progressively reduce VOC emissions associated with production processes and chemical use.

### Applicability

Applicable to facilities that use VOC-containing chemicals in production processes, including but not limited to printing, cleaning, coating, finishing, laminating, adhesive application, and similar operations.

### Performance Criteria

#### OUT 5.1 - Level 1

The facility shall:

- Identify all chemical formulations containing VOCs.
- Calculate annual potential VOC emissions (kg/year).
- Report annual VOC emissions in the ZDHC Air Emissions Module.

#### OUT 5.2 - Level 2

The facility shall:

- Establish a VOC emissions baseline.
- Set a VOC emissions reduction target.
- Monitor progress against the target at least annually.

The calculation shall include:

- Annual total potential VOC emissions (kg/year)
- Average monthly VOC intensity (kg per unit of production)

#### OUT 5.3 - Level 3

The facility shall demonstrate a reduction in VOC emissions against the established baseline, in line with the defined reduction target.

Facilities that do not use VOC-containing chemicals are considered to meet this performance criterion.

## Evaluation Guidance

Facilities should understand which chemical formulations contribute to VOC emissions and use this information to identify opportunities to reduce emissions.

VOC emission calculations should be based on a consistent methodology and supported by chemical inventory records, supplier information, Safety Data Sheets or equivalent documentation.

Reduction measures may include chemical substitution, process optimisation, improved application efficiency, engineering controls, or other actions that reduce VOC use or emissions over time.

OUT 6 - Scope 1 and 2 greenhouse gas (GHG) emissions are measured and reduced over time

### Intent

To understand, monitor, and progressively reduce Scope 1 and Scope 2 greenhouse gas emissions associated with facility operations.

### Applicability

Applicable to all facilities.

### Performance Criteria

#### OUT 6.1 - Level 1

The facility shall calculate its annual Scope 1 and Scope 2 greenhouse gas (GHG) emissions in kilograms of carbon dioxide equivalent (kg CO<sub>2</sub>e).

#### OUT 6.2 - Level 2

The facility shall:

- Establish a Scope 1 and Scope 2 GHG emissions baseline.
- Set a GHG emissions reduction target.
- Monitor progress against the target annually.
- Report its annual Scope 1 and Scope 2 GHG emissions in kilograms of carbon dioxide equivalent (kg CO<sub>2</sub>e) in the ZDHC Air Emissions Module annually.

#### OUT 6.3 - Level 3

The facility shall demonstrate a reduction in Scope 1 and Scope 2 GHG emissions from the established baseline in line with the reduction target.

## Evaluation Guidance

Facilities should calculate Scope 1 and Scope 2 GHG emissions using a recognised methodology, such as the GHG Protocol Corporate Accounting and Reporting Standard or ISO 14064.

The calculation should include all relevant direct emissions sources within the facility boundary (Scope 1) and purchased energy sources (Scope 2). Facilities should use a consistent methodology, emission factors and reporting boundary when establishing baselines and tracking progress over time.

At higher performance levels, facilities are expected to establish measurable reduction targets and demonstrate progress through initiatives such as energy efficiency improvements, renewable energy use, process optimisation, or fuel switching.

## Chemical-Related Waste Disposal

OUT 7 - Chemical-related process outputs are reduced, reused, or recycled where possible

### Intent

To minimise waste generation and promote circularity by identifying opportunities to reduce, reuse or recycle chemical-related process outputs.

### Applicability

Applicable to facilities that use production chemicals, including chemical formulations, commodity chemicals, and/or solvents.

### Performance Criteria

#### OUT 7.1 - Level 2

The facility shall identify and measure chemical-related process outputs with the potential for:

- Reduction
- Reuse
- Recycling

## OUT 7.2 - Level 3

The facility shall:

- Document and track reuse and recycling routes for chemical-related outputs, including contractor details where applicable.
- Set reduction targets.
- Monitor progress against the targets annually.

### Evaluation Guidance

Chemical-related process outputs may include sludge, solvent residues, spent chemicals, contaminated packaging, by-products or other outputs generated during production and wastewater treatment processes.

Facilities should assess opportunities to reduce these outputs, reuse them internally where feasible or direct them to appropriate recycling routes. Where external contractors are used, facilities should maintain visibility of the recycling or recovery route and monitor progress against reduction objectives.

**Note:** There is no Level 1 performance criterion for this requirement.

## OUT 8 - Chemical-related waste is transported and disposed of safely

### Intent

To ensure chemical-related waste is managed, transported and disposed of in a manner that protects workers, communities and the environment.

### Applicability

Applicable to facilities that use production chemicals, including chemical formulations, commodity chemicals and/or solvents.

Waste is considered any process output that cannot be reused or recycled.

### Performance Criteria

## OUT 8.1 - Level 1

The facility shall identify the appropriate final disposal route for each type of chemical-related waste according to its hazard classification.



## OUT 8.2 - Level 2

The facility shall document and track chemical-related waste disposal routes, including:

- Waste disposal contractor details
- Authorisations or permits for waste disposal
- Waste manifests and shipping documentation, where applicable

### Evaluation Guidance

Facilities should classify chemical-related waste in accordance with applicable legal requirements and determine disposal routes appropriate to the waste type and hazard classification.

Where waste is transported or managed by external contractors, facilities should verify that contractors are appropriately authorised and permitted to handle the relevant waste streams. Disposal records should be maintained and should allow waste streams to be traced from generation through to final disposal.

Facilities should periodically review disposal routes to ensure they remain appropriate, compliant and aligned with the waste hierarchy, prioritising reduction, reuse and recycling before disposal wherever feasible.

**Note:** There is no Level 3 performance criterion for this requirement.

## About this Document

The ZDHC Supplier to Zero Manual is designed to help suppliers understand everything they need to know about undertaking a Supplier to Zero assessment. It serves as a supplementary document to be used together with the [ZDHC Supplier Platform](#), the [ZDHC Suppliers Roadmap to Zero](#), and other relevant ZDHC programme documents and resources.

Although primarily developed for suppliers, the manual is also intended to be utilised by ZDHC Approved Assessment Providers and assessors, engaged in the assessment process.

This manual provides an overview of the Supplier to Zero framework, including its scope, applicability, assessment methodology, performance levels, assessment types, and certification requirements. It also contains the Supplier to Zero requirements and performance criteria. It is intended to help suppliers understand how Supplier to Zero works, how performance is evaluated, and what outcomes can be achieved through participation in the programme.

Detailed guidance on the assessment of requirements and evidence expectations is available within the ZDHC Supplier Platform. Suppliers should refer to the platform for the most current information when preparing for and completing an assessment.

## Implementation Timeline

The development of Supplier to Zero Version 2 began in 2025. The primary objective of the revision was to align Supplier to Zero with the [Suppliers Roadmap to Zero](#) framework, both in structure and content, while introducing a new performance-based assessment model and new assessment options.

The revised framework is organised around the three Suppliers Roadmap to Zero focus areas of Input, Process, and Output, providing a holistic and harmonised approach to evaluating sustainable chemical management practices. Supplier to Zero Version 2 also introduces three progressive performance levels, enabling suppliers to measure and demonstrate increasing levels of implementation maturity and performance.

From July 2026 both Version 1 and Version 2 are available to suppliers, allowing organisations to familiarise themselves with the revised framework and transition at their own pace.

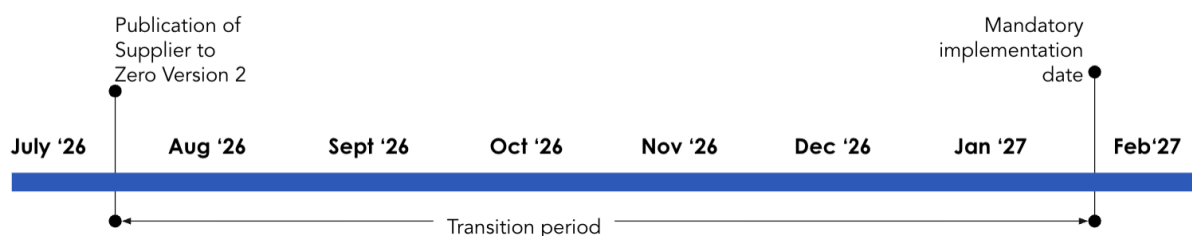
On 1 February 2027, six months after publication, Version 2 will become the mandatory version of the programme. From this date, all new assessments and certifications must be conducted in accordance with Version 2 requirements, and Version 1 will be discontinued.

Facilities do not need to transition to Supplier to Zero Version 2 until their existing Version 1 certificate expires. All Version 1 certificates issued before the mandatory transition date will remain valid until their stated expiry date. When a certificate is due for renewal, the facility must complete its next assessment against Supplier to Zero Version 2.

To maintain continuity of assessment and certification, facilities are only required to renew their assessment prior to the expiry date of their existing certificate. At the point of renewal, the assessment must be completed against the version of Supplier to Zero that is applicable at that time.

The transition timeline:

- Publication of Supplier to Zero Version 2 - 31 July 2026
- 6-month transition period - 1 August 2026 to 31 January 2027
- Mandatory implementation date - 1 February 2027



## Supporting Documents and Platforms

This manual should be used together with other relevant ZDHC documents, tools, and platforms, including:

- [ZDHC Suppliers Roadmap to Zero](#)
- [ZDHC MRSL](#)
- [ZDHC Wastewater and Sludge Guidelines](#)
- [ZDHC Gateway](#)
- [ZDHC Supplier Platform](#)
- [ZDHC Knowledge Base](#)
- [Supplier to Zero webpage](#)
- Other documents referenced within specific requirements

Additional guidance, assessment instructions, and supporting resources may be made available through ZDHC platforms from time to time.

## Definitions

Refer to the [ZDHC Roadmap to Zero Glossary](#) for definitions of terms used in this document.

## Interpretation and feedback

ZDHC welcomes feedback on Supplier to Zero and this manual. Questions, comments, and suggestions help improve the clarity, consistency, and effectiveness of the programme and support its ongoing development.

Points of clarification may be incorporated into supplementary guidance, frequently asked questions, [ZDHC Knowledge Base articles](#), or other supporting resources prior to the next formal revision of this document, where appropriate. More substantial feedback, proposed changes, or recommendations for improvement will be collected and considered during the next scheduled review and revision of Supplier to Zero.

Where uncertainty exists regarding the interpretation of a requirement or performance criteria, suppliers should refer to the relevant guidance provided within the Supplier Platform and this manual, including the criterion description, intent, applicability, and any supporting notes.

Feedback, questions regarding interpretation, and suggestions for future revisions may be submitted to ZDHC at: [suppliertozero@zdhc.org](mailto:suppliertozero@zdhc.org).

## Collaborative Process and Acknowledgements

Supplier to Zero Version 2 was developed through ZDHC's collaborative, multi-stakeholder approach, supported by a structured process of technical review, stakeholder consultation and pilot assessments. Development was guided by ZDHC Signatories, with input from suppliers, brands, solution providers, sustainability scheme owners and other industry stakeholders to promote industry alignment, reduce conflicting requirements and support assessment harmonisation.

Findings and feedback from stakeholder consultations and pilot assessments informed successive iterations of the framework and assessment methodology, culminating in on-site pilot assessments and final refinements prior to publication.

ZDHC gratefully acknowledges the contributions of all participating organisations, including suppliers, brands, solution providers, sustainability scheme owners and subject matter experts, whose expertise, experience and constructive feedback helped shape Supplier to Zero Version 2.

## Disclaimer

The ZDHC Foundation (hereinafter “ZDHC”) ZDHC Supplier to Zero Manual is not intended to replace brand-specific or regulatory requirements for chemical management, waste, wastewater or air emissions, but to be supportive or complimentary to such requirements.

The information in this Supplier to Zero Manual is provided for information only and does not guarantee the following:

- A. Compliance with, or take the place of, legal or regulatory requirements. Examples might include: stricter legal, local or regional regulatory requirements on the use, storage and transport of chemical products; or other requirements relating to the handling and disposal of chemical products, which shall supersede any requirements as set forth in this document.
- B. Compliance with, or conformance to, any national or international environmental or workplace safety requirements, including, but not limited to, relevant regulations and/or standards. Nor do the Supplier to Zero Manual replace above-mentioned regulations and/or standards.

The Supplier to Zero Manual is not intended nor can it be used as a statement of legal requirements.

Whilst ZDHC takes every reasonable effort to make sure that the content of this Supplier to Zero Manual is as accurate as possible, ZDHC makes no claims, promises, or guarantees about the accuracy, completeness, or adequacy of the contents of this manual.

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- C. For any results obtained or not obtained from the use of the Supplier to Zero Manual.

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