

---

# ZDHC Gateway Electronic Data Reporting System Guidelines

---

Ø ZDHC

Version 3.0

*November 2022*

# Contents

<b>1.0 Revision History</b>	<b>4</b>
<b>2.0 Introduction</b>	<b>6</b>
<b>3.0 Purpose of the Document</b>	<b>6</b>
<b>4.0 Reference Documents</b>	<b>7</b>
<b>5.0 Expectations</b>	<b>8</b>
<b>6.0 ZDHC Gateway Electronic Data Reporting System Framework</b>	<b>9</b>
6.1 System Design	9
6.2 System Design Rationale	10
6.3 Specification for Data Upload	10
6.4 Generation of ZDHC ClearStream Report	11
<b>Appendix A: EDR Data Entry Requirements</b>	<b>12</b>
<b>Appendix B: Specific Parameter Instructions</b>	<b>13</b>
<b>Appendix C: How to Update and Delete Test Reports</b>	<b>15</b>
C.1.0 Update	15
C.2.0 Delete	16
<b>Appendix D: EDR Parameter Codes and Unit of Measure</b>	<b>17</b>
D.1.0 Multiple Codes	17
D.2.0 Parameter Codes	17

# 1.0 Revision History

In the spirit of continuous improvement, the ZDHC Gateway Electronic Data Reporting System Guidelines may be revised as needed to incorporate learnings and opportunities identified during the practical application and implementation of the ZDHC Wastewater Guidelines. A historical record of the updates to the Guidelines is noted in the table below.

Version Number	Changes	Publish Date
Version 3.0	Aligned all parameters to ZDHC Wastewater Guideline V2.1	November 2022
Version 2.1	Replaced Faecal Coliform with E.coli test	April 2021
Version 2.1	The addition of Chloride, Sulfate, Faecal Coliform and Total Dissolved Solids parameters as per the Leather Wastewater Guidelines Addendum V1.0.	January 2021
Version 2.0	Changes to field names, i.e. "Sampling Location" changed to "Sample type", "Extraction Method" changed to "Test method": Additional optional fields added i.e. "Field ID Latitude" and "Field ID Longitude".  Additional required fields added i.e. "EDR Version Number",  Changes to field material i.e. switch from "CAS" to "Parameter Code"	February 2020

Version 2.0	Changes to Parameters i.e. Changes in from "Colour (436nm; 525; 620nm)" to "Colour (436nm)", "Colour (525nm)", and "Colour (620nm)".  Removal of fields including "Extraction Method", "Sub-test method".  Removal of fields requesting QA/QC data such as "Spike Added" and "Surrogate".  The addition of data validation on input values. Every field listed on the EDR has a set of specific validation rules. Only data that meets every validation rule will be accepted into the ZDHC Gateway.  The addition of smart logic on the EDR including the inability to fill out corresponding fields without the correct prerequisites. I.e. inability to report "Percent Solid" if the "Sample Type" field is not reported to be "Sludge".  Updates to the ZDHC Gateway in accordance with the changes made in ZDHC Gateway Electronic Reporting Guidelines.	February 2020
Version 1.0	ZDHC Gateway Electronic Data Reporting System Guidelines	August 2019

## 2.0 Introduction

ZDHC Gateway Wastewater Module was launched in July 2017. To ensure the data upload procedure is efficient and accurate these guidelines for the ZDHC Gateway Electronic Data Reporting System were created. Moving forward, it is vital that the data integrity is at its highest possible standard in order to support the textile, apparel, leather, and footwear industry to make scientific and data driven decisions in shaping the future of the ZDHC Foundation's Roadmap to Zero Programme.

## 3.0 Purpose of the Document

This document provides a detailed framework for the ZDHC Approved Wastewater Laboratories to report the wastewater and sludge test results onto the ZDHC Gateway Wastewater Module using a standard data scheme. The scope of this document may be expanded in the future should other means of output (for example Air Emissions) be required to be reported.

## 4.0 Reference Documents

Before implementing the ZDHC Gateway Electronic Data Reporting System Guidelines, it is necessary to understand the related work within the ZDHC that supports the implementation efforts. The key documents are listed as follows, and readers should refer to the latest version of the documents unless specifically stated:

- ZDHC Manufacturing Restricted Substances List (ZDHC MRSL) V2.0 released in November 2019.
- ZDHC Wastewater Guidelines V2.1
- ZDHC Sludge Reference Document
- ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan (SAP).
- ZDHC List of Approved Wastewater Laboratories for ZDHC Wastewater Guidelines Testing
- ZDHC Gateway
- ZDHC Academy for Wastewater Training and ETP Operator Qualification
- ZDHC Root Cause Analysis and Corrective Action Plan Template
- Supplier Platform for Effluent Treatment Module and for Support on Root Cause
- Analysis and Corrective Action Plan (Guidance and Template)
- ZDHC Knowledge Base for Frequently asked Questions and Detailed User Guidance

The latest version of the documents specified above are available on the Roadmap to Zero website [here](#).

- ZDHC Gateway User Terms and Conditions.
- ZDHC Root Cause Analysis and Corrective Action Plan Template.

The latest version of these specified documents are available on the ZDHC Gateway under "Help and Support" (login required).

## 5.0 Expectations

ZDHC Approved Wastewater Laboratories are expected to fully meet the requirements stated in the latest versions of:

- a. ZDHC Wastewater Guidelines
- b. ZDHC Gateway Laboratory Acceptance Programme - Wastewater Guidelines
- c. ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan (SAP)

In addition, when the ZDHC Gateway Electronic Data Reporting System latest version becomes available on the ZDHC Gateway Wastewater Module, ZDHC Approved Wastewater Laboratories are expected to meet the requirements stated in this document.

ZDHC reserves the right to:

- Require existing ZDHC Accepted Laboratories to demonstrate that they meet the technical and data integrity conditions of ZDHC Gateway Electronic Data Reporting System
- Require all applicant laboratories:
  - » To successfully demonstrate that they are able to use the ZDHC Gateway Electronic Data Reporting System
  - » To show the ability to meet all technical and data integrity conditions of the ZDHC Gateway Electronic Data Reporting System.
- Conduct random data audits as part of the performance review of the ZDHC Accepted Laboratories
- For those who repeatedly do not meet the requirements of the ZDHC Gateway Electronic Data Reporting System the ZDHC will temporarily deactivate the account of the laboratory ZDHC Gateway and/ or discontinue acceptance status.

## 6.0 ZDHC Gateway Electronic Data Reporting System Framework

### 6.1 System Design

The current design of the ZDHC Gateway Electronic Data Reporting System is based on a standardised data template, in which the data rules have been set (See [Appendix A](#) for more information). The procedure for uploading the test data onto the ZDHC Gateway are as follows:

1. Define the Suppliers' Discharge Types and Sample Locations by completing the ZDHC Gateway Supplier Profile.
2. Drawing from the data from the Laboratory Information Management System (LIMS), the ZDHC Approved Wastewater Laboratories are expected to populate test results and related data onto the ZDHC Gateway Electronic Reporting Template with a complete dataset. This means every single parameter / analyte must be reported, unless indicated otherwise within this document or within the latest version of the ZDHC Wastewater Guidelines. In the event that a parameter / analyte was not analysed, then a reason must be provided. The possible options are listed within [Appendix A](#), column: 'Result Text.
3. When the ZDHC Approved Wastewater Laboratories are ready to upload the data onto the ZDHC Gateway, the ZDHC Approved Wastewater Laboratories shall drag and drop the completed Electronic Reporting Template onto the Gateway.
4. ZDHC Gateway will conduct an automated data validation. ZDHC Gateway will only accept the entire dataset when it is fully compliant to the data rules set forth in the documents.
5. In case the system detects issues with specific data points, the ZDHC Gateway will reject the entire dataset and point out which data point(s) need to be rectified. The Approved Laboratories must re-upload the entire dataset after these data points have been fixed. After the dataset is uploaded another round of automated data validation will be processed before any acceptance of data. This process will repeat until all

data on the Electronic Data Reporting Template is compliant with the validation rules described in [Appendix A: EDR Data Entry Requirements](#).

6. After successfully submitting the dataset, suppliers can then generate the ZDHC ClearStream report and review the information and the results. Suppliers have 20 business days from the date that lab uploads results, to “Accept and publish results” or to “Decline lab results”. Accepted test reports will be automatically shared with active Brands and Retailer ‘connections’. If no action is taken by the supplier to Accept or Decline results following the after 20 days period, the system will automatically accept the results. Publication of the test data on the ZDHC Gateway will be done in accordance with the latest version of the ZDHC Gateway Terms and Conditions.

---

## 6.2 System Design Rationale

The ZDHC Gateway Electronic Data Reporting System is designed based on the Drag and Drop approach directly via the interface of the ZDHC Gateway. This provides the ZDHC Approved Wastewater Laboratories the full in-app experience and necessary feedback after the data validation is completed.

---

## 6.3 Specification for Data Upload

The file format must be Excel Macro (.**xlm**) and no larger than **10 MB**.

ZDHC Approved Wastewater Laboratory should be aware that in case there are any issues with the data integrity or data rules set forth in the most current version of the ZDHC Gateway Electronic Data Reporting System Guidelines not being met, the entire dataset will be rejected by the ZDHC Gateway automatically. Therefore, ZDHC Approved Wastewater Laboratory must fix the data issues before the dataset is accepted. For this reason, the ZDHC Approved Wastewater Laboratory may consider uploading the dataset on an individual test report basis until the ZDHC Approved Wastewater Laboratory is confident with the data integrity.

---

## 6.4 Generation of ZDHC ClearStream Report

Once the testing is conducted the laboratory will upload suppliers test report via ZDHC Electronic Data Reporting System into the ZDHC Gateway. Suppliers can then generate the ZDHC ClearStream report via the ZDHC Gateway and review and share their results. The ClearStream is an easy-to-read facility wastewater performance report, accepted globally by leading brands, helping Suppliers to demonstrate their wastewater performance against the ZDHC Wastewater Guidelines. ClearStream helps facilities to understand the impact of wastewater management and identify opportunities for improvements. It can be shared with all customers to avoid duplicative testing.

# Appendix A

## EDR Data Entry Requirements

In this table highlights the standardised data entry requirements. The rules apply as part of the data validation process when the dataset is uploaded onto the ZDHC Gateway

You can find Appendix A [here](#).

# Appendix B

## Specific Parameter Instructions

Parameter Name	Instructions
Temperature Difference	<p>If Temperature Difference cannot be reported due to risks in sampling, this should be specified in the Custom EDR Builder. If this is specified, then the EDR file will be auto-populated with "NA - Risk". This is the only value that should be used for Temperature Difference within column, Result Text, if a numeric value cannot be reported.</p> <p>For instructions on how calculate Temperature Difference, please refer to the latest version of the ZDHC Wastewater Guidelines and ZDHC Wastewater and Sludge Laboratory Sampling and Analysis Plan.</p>
Wastewater Flowrate	<p>If Wastewater Flowrate cannot be reported due to risks in sampling, this should be specific in the Custom EDR Builder. If this is specified, then the EDR file will be auto-populated with "NA - Risk". This is the only value that should be used for Wastewater Flowrate within column, Result Text, if a numeric value cannot be reported.</p> <p>For instructions on how to sample Temperature Difference, please refer to the latest version ZDHC Wastewater Guidelines.</p>
Persistent Foam	<p>When reporting Persistent Foam the only acceptable values are either "Absent" or "Present".</p>

Parameter Name	Instructions
Colour	<p>The Colour parameter is divided into three separate parameters, by colour wavelengths. The Colour parameters are:</p> <p>COLOUR 436 nm                      COLOUR 525 nm                      COLOUR 620 nm</p> <p>All colour parameters will be reported using the unit of measure m-1.</p>
Paint Filter Test	<p>When reporting Paint Filter Test the only acceptable values are either "Pass" or "Fail"</p>

Additional Instructions for Not-Analysed and Non-Detected Instructions:

- Not-Analysed ("NA") is not accepted for the following parameters: pH, Temperature difference and Paint Filter Test.
- Non-Detected ("ND") is not accepted for the following parameters: pH, Temperature difference, Persistent Foam and Wastewater Flowrate.

# Appendix C

## How to Update and Delete Test Reports

Using the EDR and the 'Action' column a Test Report may be updated or deleted.

### Appendix C.1.0 Update

The update function has two options:

- Update Delete Attachments - This removes the files currently linked to the Test Report. If the attachments are deleted then the update file must reference a new .pdf file.
- Update Keep Attachments - The attachments linked to the Test Report are retained through the deleted process. There is no need to upload a new pdf version of the test report or other attachments.

Both Update options use a 'delete-and-replace' method for the sample header information and parameter details. The first step of the update is to delete the entire Test Report except for the TRID. The second step is to create the Test Report from the data in the file. The end result is the Test Report will be identical to the data in the EDR.

Requirements for the Update Action:

1. The update option may be called by either the text "Update Delete Attachments" or "Update Keep Attachments" into the Action Column.
2. When updating a Test Report, you may use either the TRID or the Lab Test Ref ID to identify the Test Report in the Gateway system.
  - a. If the file contains the Lab Test Ref ID the Individual Test Report is identified by the Lab Test Ref ID and the Supplier AID.
3. The user updating the Test Report MUST have permissions to view and edit the test report.



4. In the EDR, every row of the Updated Test Report MUST have the identical update action.
5. After the Update the Test Report is set to a status of "Pending" and follows the standard approval process.
  - a. If a supplier has an inactive account the Test Report will automatically be approved after 10 days.
6. If there is an error during Update, the entire update will be rolled back and the Test Report will be changed or altered.
7. Once the Update is successful, the change can NOT be reversed. Updates are irreversible.

---

## Appendix C.2.0 Delete

The delete Action can be used to remove the "Inactive" Test Report.

Requirements for Delete Action:

- The Delete function can be called by adding 'Delete' into the Action column
- The EDR must contain only 1 delete row per Test Report. To delete 5 test reports the EDR will have 5 rows. Each row will have a unique TRID.
- The Test report MUST be 'Inactive' to be deleted. Active test reports will raise an error.
- Delete MUST reference the Test Report using the TRID.
- Delete actions are irreversible. Once a delete action is successful it cannot be rolled back.

---

# Appendix D EDR Parameter Codes and Unit of Measure

---

## Appendix D.1.0 Multiple Codes

Some ZDHC Parameters have multiple CAS No. or identifiers. If the specific CAS No. is not on the parameter list you may use the generic name. For example, for the ZDHC Parameter MONO-, DI- AND TRI-BUTYLTIN DERIVATIVES, you may report under the CAS No. 0818-08-06 or the generic name 'BUTYLTIN'

---

## Appendix D.2.0 Parameter Codes

You can find the parameter codes table [here](#).

