# MCERTS - EDM Inspection Report

## Trevine WwTW

## 22 July 2025

## Report No. CFS/ 18687

Version No. 25.7

# Site Information

| | |
|---|---|
| **Site Name:** | Trevine WwTW |
| **Consent/Permit Holder:** | Dŵr Cymru Welsh Water |
| **Site Address:** | Nr 42 Ffordd Y Felin<br>Trefin<br>Pembrokeshire<br>SA62 5AX |
| **Site Contact:** | Statutory & Regulatory Maintenance Manager |
| **Contact Phone Number:** | mcerts@dwrcymru.com |
| **Site Ref or Postcode:** | 50800 |
| **Grid Ref (Sensor):** | SM 83690 32318 |
| **Consent/Permit No:** | BH0052401 |
| **Location of EDM Sensor:** | Last in line overflow |
| **Number of EDMs:** | 1 |
| **Instrument Type:** | Type A (non contact) - R |
| **Instrument/Device(s):** | Vega Vegamet 862 with C 22 |
| **Level Meter Serial Number:** | 69915196 |
| **Sensor Serial Number:** | 73229606 |
| **Date of Inspection:** | 22/07/2025 |
| **Inspector:** | Tom Green - MI 25 036 |
| **Inspection Report No:** | CFS/ 18687 |
| **Survey Pack:** | I |
| **Uncertainty:** | ± 1.2 mm |

* Kit Inventory and calibration data recorded on central QMS database

**P A S S**

**Site Compliance:** Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency *MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard.* Published 28th August 2024

# Site Details

| Site Description |
| --- |
| Trevine WwTW is a sewage treatment works with biological trickling filters (see process diagram). |

| Location of Event Monitor(s) |
| --- |
| The EDM is located above the Dual sided storm weirs |

| Overflow Point(s) Requiring Event Monitoring |
| --- |
| Last in line overflow (See Process Diagram.) |

| Verification / Calibration |
| --- |
| The sensor was mounted on a rigid bracket with a removable datum plate to reference the sensor height relative to the hydraulic datum. The reference height of the datum plate has been set accurately and recorded. |

| Site Maintenance Arrangements, Evidence and Suitability |
| --- |
| A routine maintenance schedule has not been confirmed but is required as part of the consent holders Quality Management System, as audited by CSA.<br>The level measurement system was found to be in a satisfactory condition at the time of the Inspection. |

| MCERTS Approved Product |
| --- |
| The installed meter has a valid MCERTS Approved product certificate. Certificate number: CSA MC210360/01 |

| System Observed in Operation |
| --- |
| The EDM was not observed in a storm condition during the inspection. However, there is no evidence to suggest that the system would not be suitable, during a storm event. |

| Indicated Discharge Status |
| --- |
| The indicated discharge status can be observed on site by:<br>A secondary display/indicator. |

| Telemetry Arrangements |
| --- |
| The Event Monitor data is collected on the SCADA system.<br>The data is transmitted using an analogue 4/20mA signal |

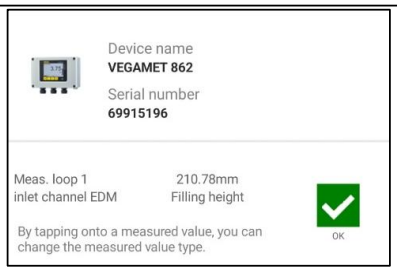
| Inspector's Judgements or Comments About the Installation |
| --- |
| |

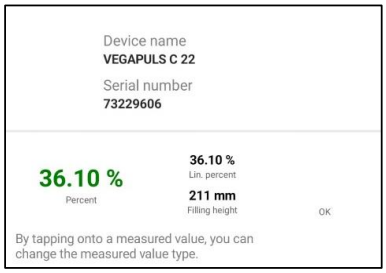

MCERTS EDM Display


MCERTS EDM System

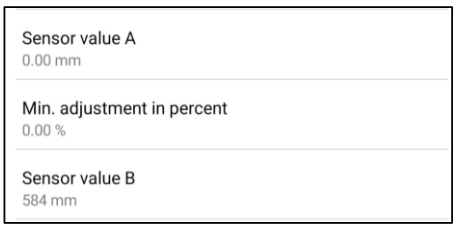

MCERTS EDM Sensor

Storm Overflow Weir




Display & Sensor Details

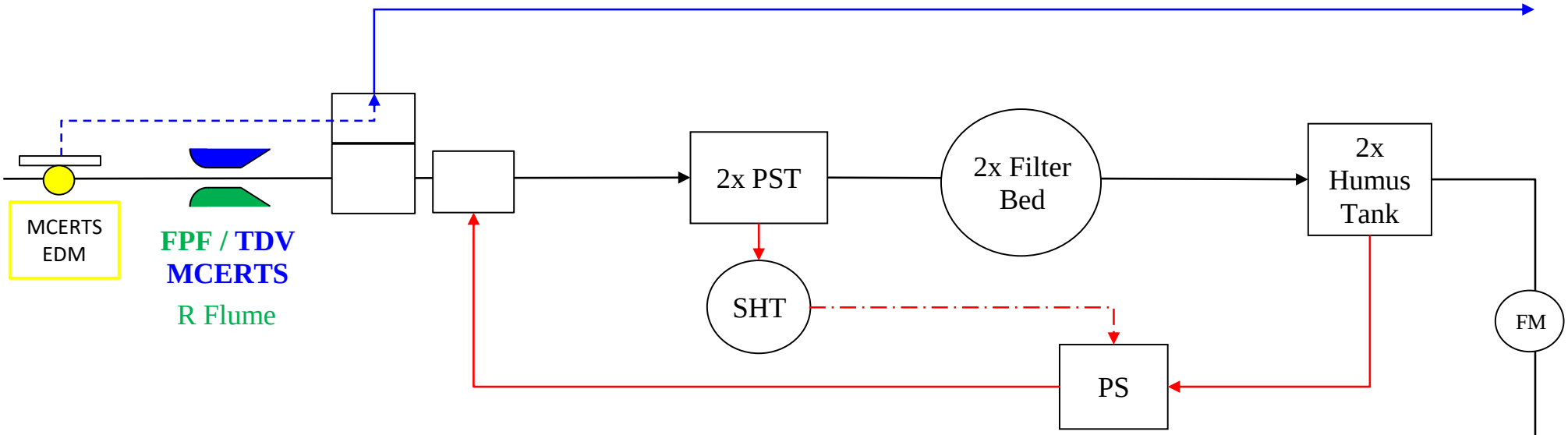




Empty Distance & Scaling

IF IN DOUBT - ASK

NOT TO SCALE




Treated Flow
Storm Flow
Storm Overflow
Humus Returns
Top Liquors
De-Sludge

**NB**. This process has been established during the site visit and has not been confirmed by the Operator.

Critical Flow Systems Ltd
Coln Park, Andoversford Cheltenham Glos

Trevine WwTW

22/07/2025

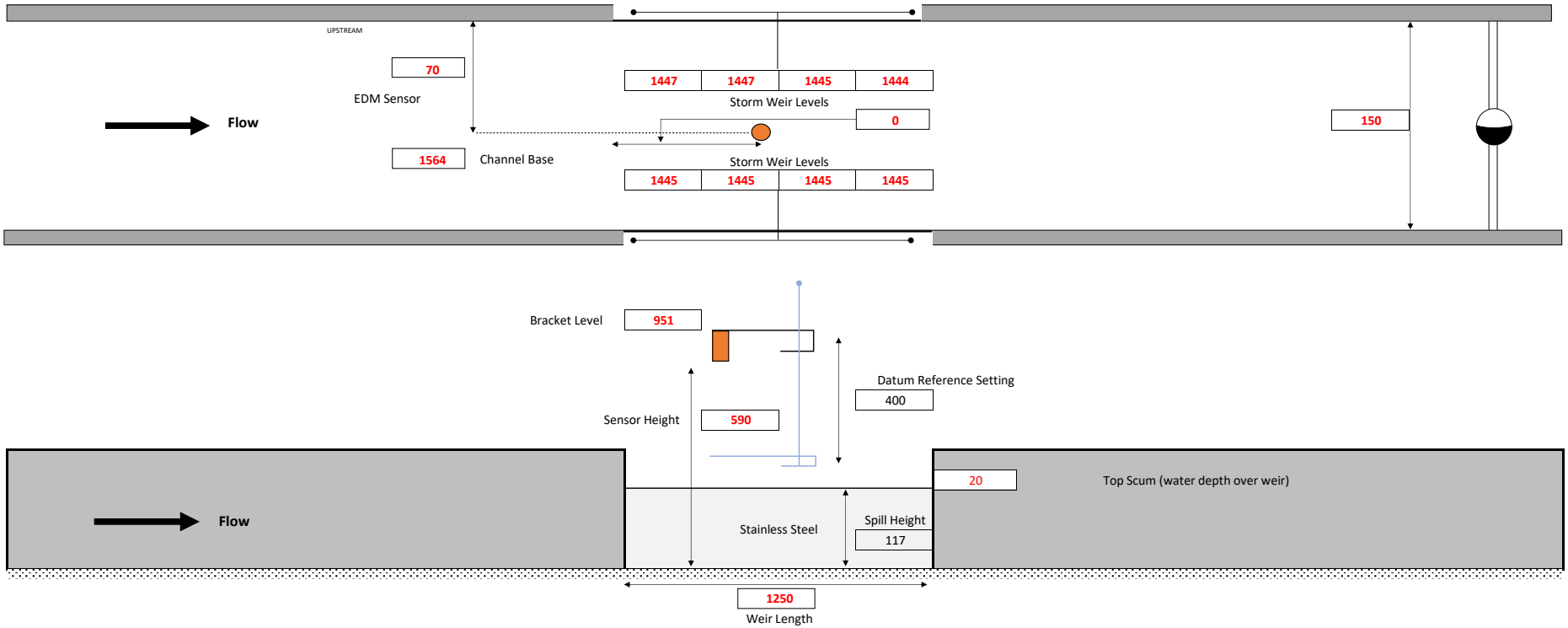
Water Company
Dŵr Cymru Welsh Water

Rev. C

CFS/C

| Site Name | Trevine WwTW | EDM Level Meter | Vega Vegamet 862 with C 22 | Location | Storm Overflow |
|---|---|---|---|---|---|
| Event Duration Monitor | Date | 22 July 2025 | | | |
| Total Uncertainty | 1.2 mm | | | | |

## DUAL SIDED STORM WEIRS




| Depth Readings | |
|---|---|
| 213 | 213 |
| 213 | 213 |
| 213 | 213 |
| 213 | 213 |
| 213 | 213 |
| VAR +1 | 1.00 |

| | |
|---|---|
| Measured Temp. | 0 °C |
| Instrument Temp. | 0 °C |
| **Error** | **0.0** mm |
| Datum Level | 213 mm |
| Instrument Level | 213 mm |
| **Error** | **0** mm |
| Sensor height above spill | 473 mm |
| Accuracy | 0.09 % |
| **Error** | **0.43** mm |
| **Estimate of wave height** | **2** mm |
| **Repeatability**[#1] | **0.4** mm |

| | |
|---|---|
| **Total Uncertainty** | **1.2 mm** |

| | |
|---|---|
| Sensor Height | 590 mm |
| Base Level | 1564 mm (Staff Reading) |
| Lowest Weir Level | 1447 mm (Staff Reading) |
| Spill Height | 117 mm |

| | |
|---|---|
| Analogue Output | 0 mm - 4mA |
| | 584 mm - 20mA |
| Storm Event Activated | 118 mm - 7.23 mA |
| Event De-Activated | 113 mm - 7.1 mA |

| | | |
|---|---|---|
| Bracket Level | 951 | Staff Reading |
| Bobbin | White | (400 mm) |
| Datum Reference Height | **213** | mm |

| Compliance Check | |
|---|---|
| Uncertainty < ±5mm | OK |
| Logging Intervals <2min | OK |
| Sensor location upstream from weir | Not applicable |
| Sensor distance to weir | OK |
| Sensor securely mounted | OK |
| Sensor Height | OK |
| Sunshade Required | No |
| Sunshade Installed | No |
| Sensor in channel centre | OK |

Notes: #1 Repeatability uses IS4359 14.5.1
Total Uncertainty uses Error items in 'bold'

All dimensions in mm, unless stated otherwise.