

# MCERTS - EDM Inspection Report

## Beulah (Ceredigion) WwTW

07 August 2025

Report No. CFS/ 18859



Version No. 00.1

<b>Site Name:</b>	Beulah (Ceredigion) WwTW	
<b>Consent/Permit Holder:</b>	Dŵr Cymru Welsh Water	
<b>Site Address:</b>	Track off Heol y Mynydd Beulah Ceredigion SA38 9QF	
<b>Site Contact:</b>	Statutory & Regulatory Maintenance Manager	
<b>Contact Phone Number:</b>	mcerts@dwrwymru.com	
<b>Site Ref or Postcode:</b>	50544	
<b>Grid Ref (Sensor):</b>	SN 29235 46288	
<b>Consent/Permit No:</b>	BN0015801	
<b>Location of EDM Sensor:</b>	Waste water overflow to storm management system	
<b>Number of EDMs:</b>	1	
<b>Instrument Type:</b>	Type A (non contact) - R	
<b>Instrument/Device(s):</b>	Vega Vegamet 861 with C 22	
<b>Level Meter Serial Number:</b>	73681592	
<b>Sensor Serial Number:</b>	73229701	
<b>Date of Inspection:</b>	07/08/2025	
<b>Inspector:</b>	Phil Rose - MI 10 018	
<b>Inspection Report No:</b>	CFS/ 18859	
<b>Survey Pack:</b>	D	* Kit Inventory and calibration data recorded on central QMS database
<b>Uncertainty:</b>	± 2.1 mm	<b>P A S S</b>
<b>Site Compliance:</b>	Following a site inspection, the measurement system was found to meet the requirements of the Environment Agency <i>MCERTS: requirements for installing and using event duration monitors - MCERTS Performance Standard</i> . Published 28th August 2024	

# Site Details

Site Description
Beulah (Ceredigion) WwTW is a sewage treatment works with RBC treatment (see process diagram).
Location of Event Monitor(s)
The EDM is located above the Dual sided storm weirs
Overflow Point(s) Requiring Event Monitoring
Waste water overflow to storm management system (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. 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:  A secondary display/indicator.
Telemetry Arrangements
The Event Monitor data is collected on the SCADA system. The data is transmitted using an analogue 4/20mA signal
Inspector's Judgements or Comments About the Installation



Level Meter & Label

Distance A (max. adjustment) 0 mm >

Distance B (min. adjustment) 635 mm >



Device name VEGAPULS C 22  
Serial number 73229701

1.06 %  
Percent

1.06 %  
Lin. percent  
7 mm  
Filling height



By tapping onto a measured value, you can change the measured value type.



Device name VEGAMET 862  
Serial number 73681592

Meas. loop 1  
Inlet Channel EDM

112mm  
Scaled



By tapping onto a measured value, you can change the measured value type.

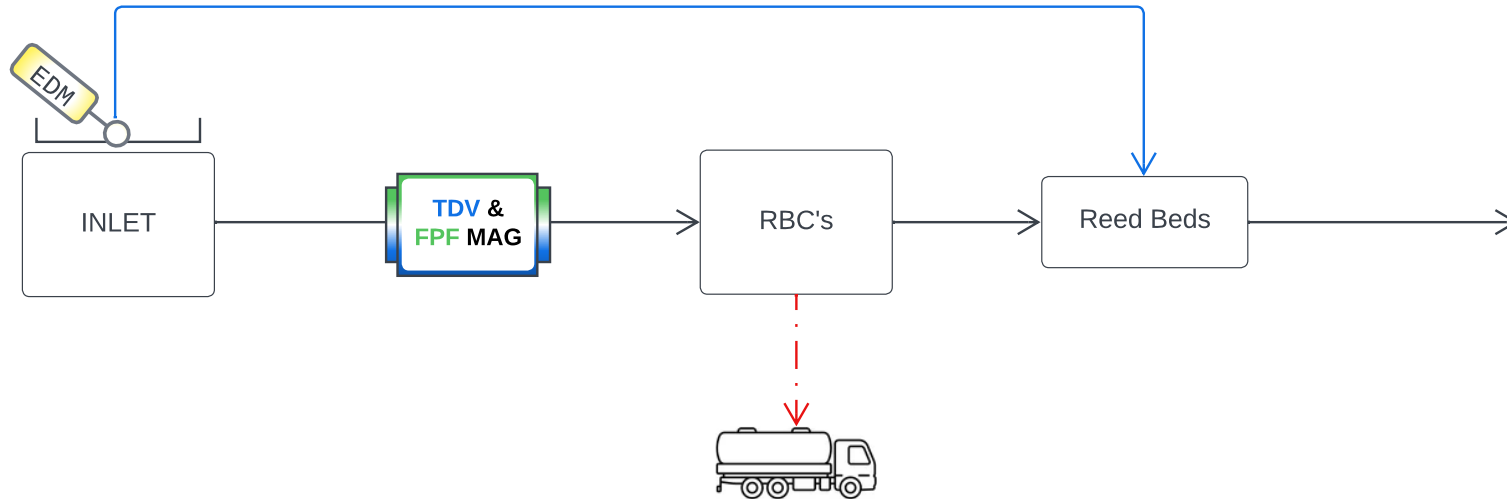
Level Meter & Sensor Serial Number



EDM Location



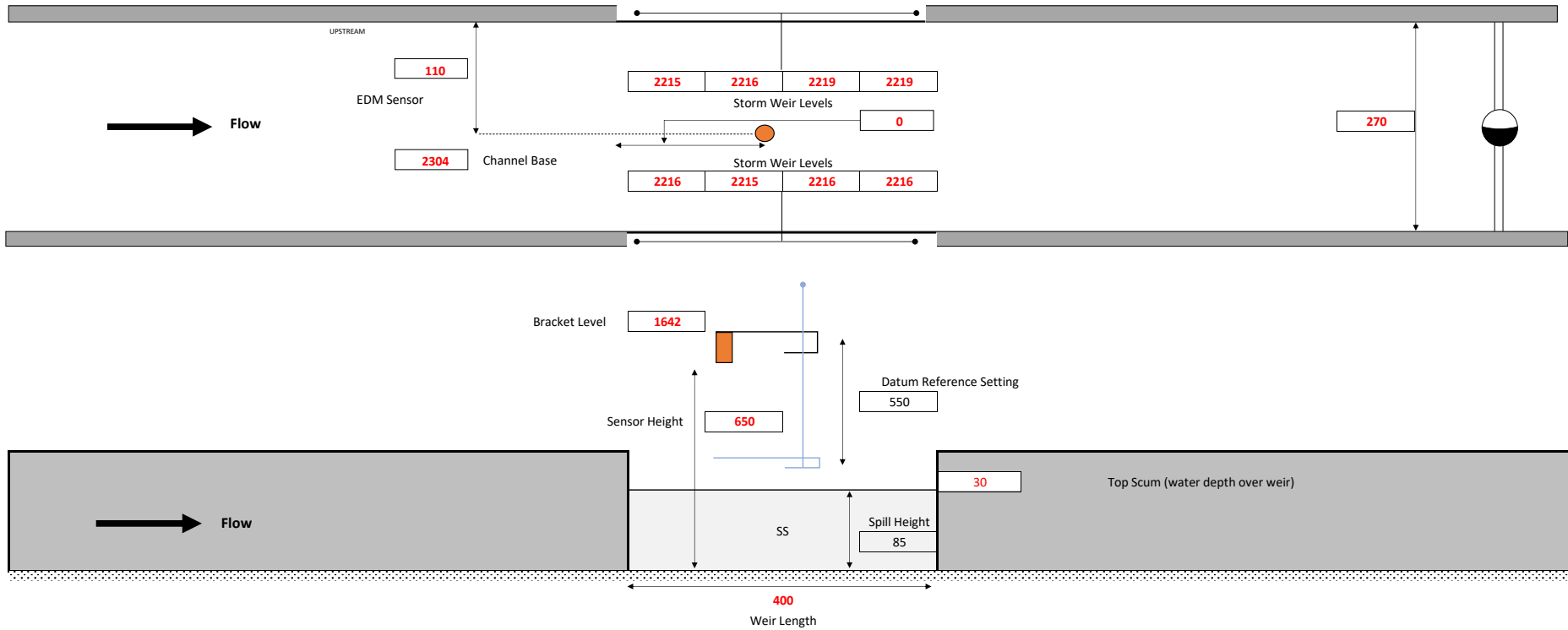
Sensor & Weirs



Treated Flow → Storm Flow → Storm Overflow → Humus Returns → Top Liquors → De-Sludge → Washwater →	<i>Process interpreted from site visit and has not been confirmed</i>  Comments -		Process Diagram - Beulah (Ceredigion) WwTW	Site Owner - DCWW	Date - 07/08/25
		<b>Rev</b>	<b>Date</b>	<b>Drawn By</b>	<b>Notes</b>
		A	11/08/25	AJB	

Site Name	Beulah (Ceredigion) WwTW	EDM Level Meter	Vega Vegamet 861 with C 22	Location	Storm Overflow
Event Duration Monitor	Date	07 August 2025			
Total Uncertainty	2.1 mm				

**DUAL SIDED STORM WEIRS**



Depth Readings	
112	112
112	112
112	112
112	112
112	112
VAR +1	1.00

Measured Temp.	0 °C
Instrument Temp.	0 °C
<b>Error</b>	<b>0.0 mm</b>
Datum Level	112 mm
Instrument Level	112 mm
<b>Error</b>	<b>0 mm</b>
Sensor height above spill	565 mm
Accuracy	0.09 %
<b>Error</b>	<b>0.51 mm</b>
<b>Estimate of wave height</b>	<b>4 mm</b>
<b>Repeatability<sup>#1</sup></b>	<b>0.4 mm</b>

<b>Total Uncertainty</b>	<b>2.1 mm</b>
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Sensor Height	650 mm
Base Level	2304 mm (Staff Reading)
Lowest Weir Level	2219 mm (Staff Reading)
Spill Height	85 mm

Analogue Output	0 mm - 4mA
	635 mm - 20mA
Storm Event Activated	86 mm - 6.17 mA
Event De-Activated	81 mm - 6.04 mA

Bracket Level	1642	Staff Reading
Bobbin	Black	(550 mm)
Datum Reference Height	112	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.