MCERTS - EDM Inspection Report

Neyland WwTW

25 June 2025

Report No. CFS/ 18398

Version No. 25.7

Site Information

Site Name:	Neyland WwTW
Consent/Permit Holder:	Dŵr Cymru Welsh Water
Site Address:	Military Road (B4325) Neyland Pembrokeshire SA73 1QN
Site Contact:	Statutory & Regulatory Maintenance Manager
Contact Phone Number:	mcerts@dwrcymru.com
Site Ref or Postcode:	50726
Grid Ref (Sensor):	SM 95707 05081
Consent/Permit No:	BH0069602
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:	73349411
Sensor Serial Number:	67547485
Date of Inspection:	25/06/2025
Inspector:	Tom Green - MI 25 036
Inspection Report No:	CFS/ 18398
Survey Pack:	I
Uncertainty:	± 2.2 mm

* Kit Inventory and calibration data recorded on central QMS database

PASS

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
Neyland WwTW is a sewage treatment works with an aeration process(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. 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

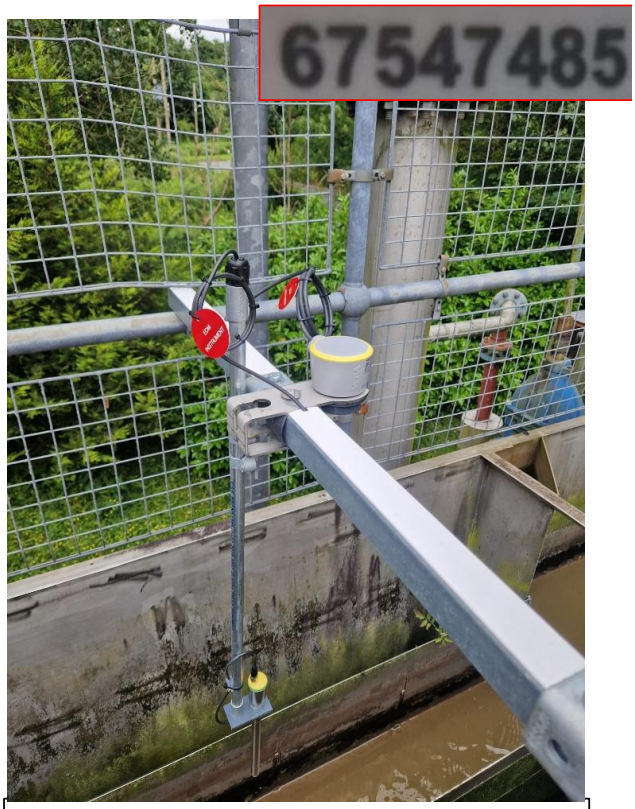
System Observed in Operation
The EDM was not observed in a storm condition during the inspection. However, there is no evidence to suggest that the system would not be suitable, during a storm event.

Indicated Discharge Status
The indicated discharge status can be observed on site by: The level activation - Access to telemetry required.

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

MCERTS EDM System



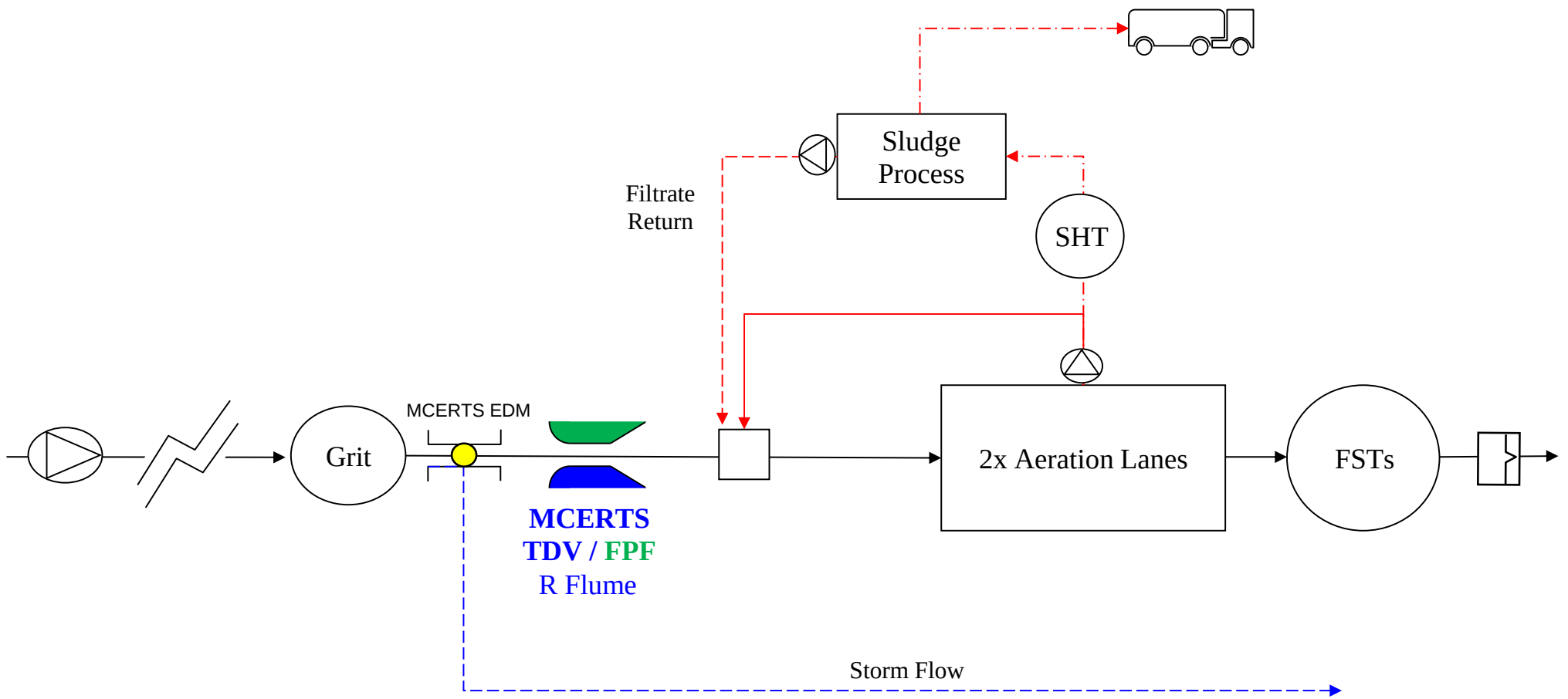
Level Meter Sensor Head

Storm Overflow Weir

MCERTS EDM Level Meter Display

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

Neyland WwTW

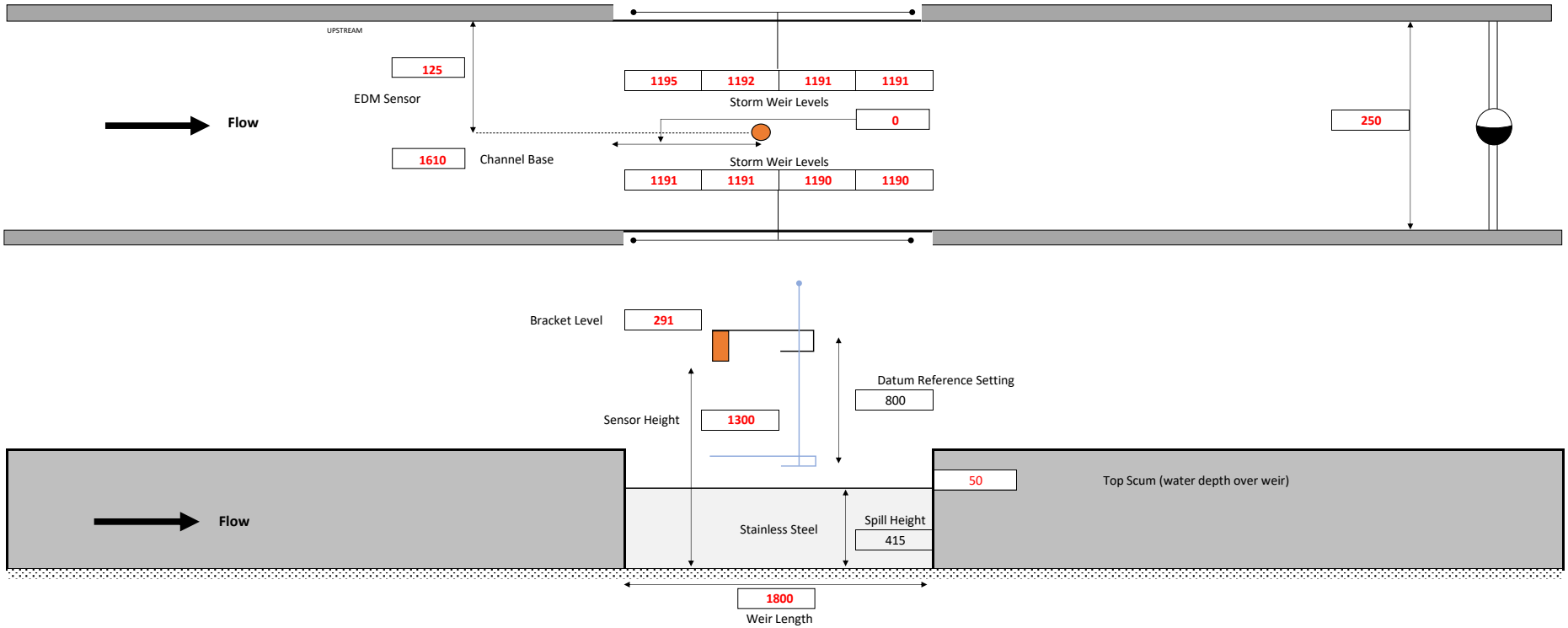
25/06/2025

Water Company
Dŵr Cymru Welsh Water

CFS/15319

Site Name	Neyland WwTW	EDM Level Meter	Vega Vegamet 862 with C 22	Location	Storm Overflow
Event Duration Monitor	Date	25 June 2025			
Total Uncertainty	2.2 mm				

DUAL SIDED STORM WEIRS



Depth Readings	
519	519
519	519
519	519
519	519
519	519
VAR +1	1.00

Measured Temp.	0 °C
Instrument Temp.	0 °C
Error	**0.0** mm
Datum Level	519 mm
Instrument Level	519 mm
Error	**0** mm
Sensor height above spill	885 mm
Accuracy	0.09 %
Error	**0.81** mm
Estimate of wave height	4 mm
Repeatability[#1]	**0.4** mm
Total Uncertainty	**2.2 mm**

Sensor Height	1300 mm
Base Level	1610 mm (Staff Reading)
Lowest Weir Level	1195 mm (Staff Reading)
Spill Height	415 mm

Analogue Output	
Storm Event Activated	416 mm
Event De-Activated	411 mm

Bracket Level	291	Staff Reading
Bobbin	Red	(800 mm)
Datum Reference Height	**519**	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.