

# Executive summary: Churchstoke STW, Hall Bank, Churchstoke, SY15 6EN

Date of event:	09/03/2026	NIRS ref:	2602302		Outfall type – Permitted FE -River Camlad	
Asset permit ref:	S/01/56174/R	SAP ref:	N/A		Watercourse type	River
Grid reference:	X: 327265 , Y: 294697	PIRs ref:	27066		Not a watercourse, dry ditch, canal, lake/pond, river/stream	
Address /site name	Churchstoke STW, Hall Bank, Churchstoke, SY15 6EN	Creator:	Leo Rutter		Watercourse depth	>600mm
		Type of discharge	Treated Final effluent		<150mm, 150 – 600mm, >600mm	
					Watercourse width	>5m
					<1, 1-5, >5m	

## Incident Classification and Response Summary

**Event Classification:** Hafren Dyfrdwy classify this event as **Category 3**, because discharge had no visual or biological impact to watercourse.

**Incident Details:** On 09/03/2026 HD ops conducted typical daily visit to Churchstoke (stw). Whilst completing through site sampling it was flagged that the FE aluminium was reading high at 1.45 mg/l. This was considered to be unusual because all other site sampling was correlating within typical healthy range and there were no further issues with the site or it's associated assets. Steps were immediately taken to switch off poly aluminium chloride dosing and isolate FE flows for tankering. HD suspect that 3<sup>rd</sup> party trade waste interfered with chemical processes for dosing, phosphate removal and back-end monitoring.

**Actions Taken: Tanker support** - tanker support was mobilised as soon as access was established.  
**Dosing** – Aluminium dosing switched to off as soon as high sample came through.

# ANALYTICAL EVIDENCE

Location of sample	Record PPM Ammonia
Sample readings At discharge point (FE)	1.12 mg/l
Sample readings Upstream watercourse (30m U/S)	<0.01 mg/l
Sample readings Point of Entry to watercourse	0.16 mg/l
Sample readings Downstream watercourse (30m D/S)	0.14 mg/l
Sample readings Downstream watercourse (60m D/S)	0.24 mg/l

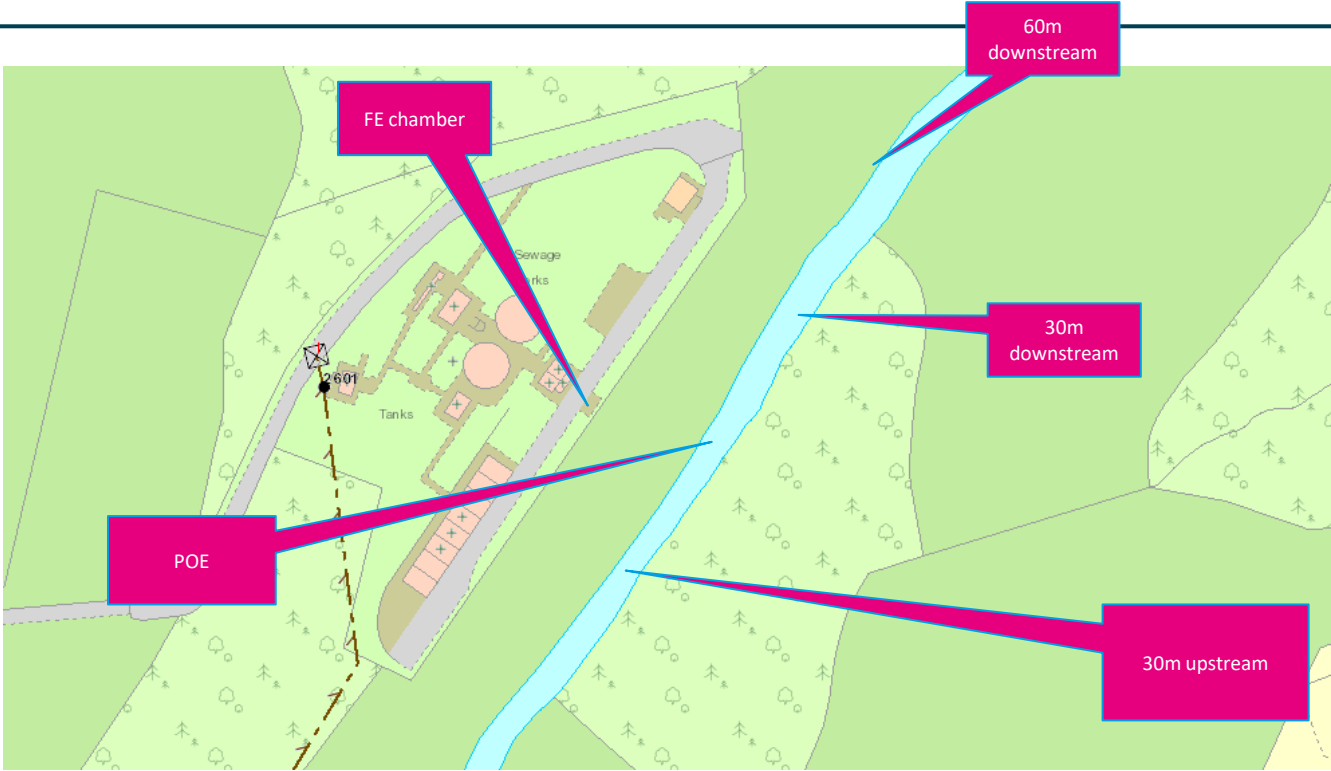
# ANALYTICAL EVIDENCE

<b>Location of sample</b>	<b>Record Aluminium (lab results)</b>
Sample readings At discharge point (FE)	3.410 mg/l
Sample readings Upstream watercourse (30m U/S)	0.161 mg/l
Sample readings Point of Entry to watercourse	0.196 mg/l
Sample readings Downstream watercourse (30m D/S)	0.207 mg/l
Sample readings Downstream watercourse (60m D/S)	0.235 mg/l

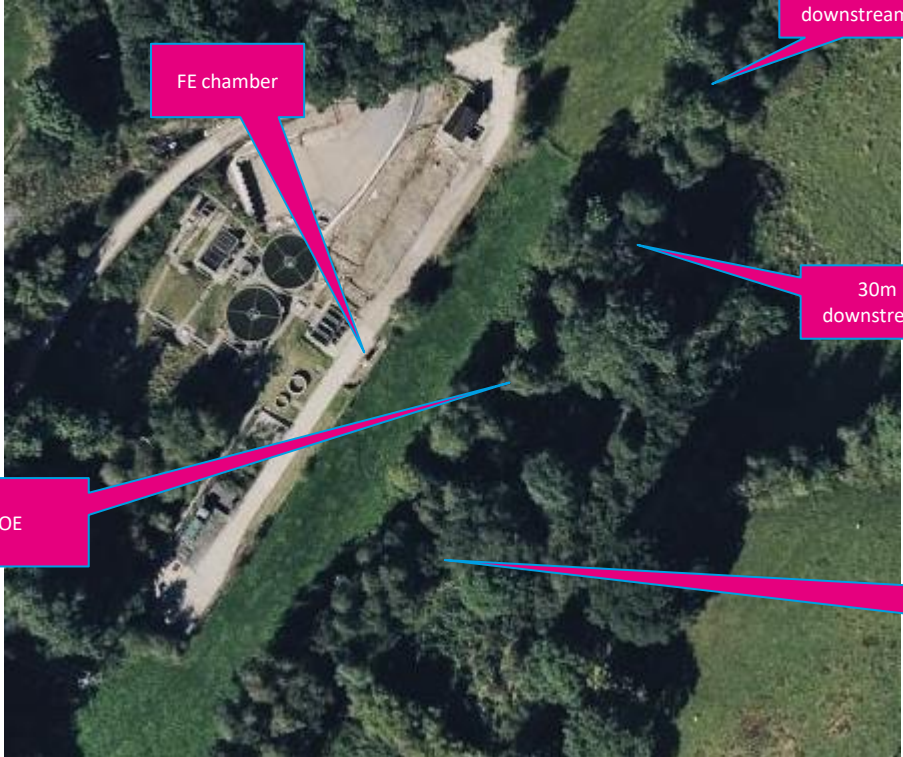
# ANALYTICAL EVIDENCE

Location of sample	Record DO (Dissolved Oxygen)
Sample readings Upstream watercourse (30m U/S)	11.05 mg/l
Sample readings Point Entry to watercourse	11.08 mg/l
Sample readings Downstream watercourse (10m D/S)	11.07 mg/l
Sample readings Downstream watercourse (20m D/S)	11.06 mg/l

# LOCATION PLAN



# LOCATION PLAN



FE chamber

60m downstream

30m downstream

POE

30m upstream

# PHOTOGRAPHIC EVIDENCE - DISCHARGE



Ammonia reading  
1.12mg/l



Bottled Sample

# PHOTOGRAPHIC EVIDENCE – 30M UPSTREAM



Watercourse



Ammonia reading at  
<0.01 mg/l



Bottled sample

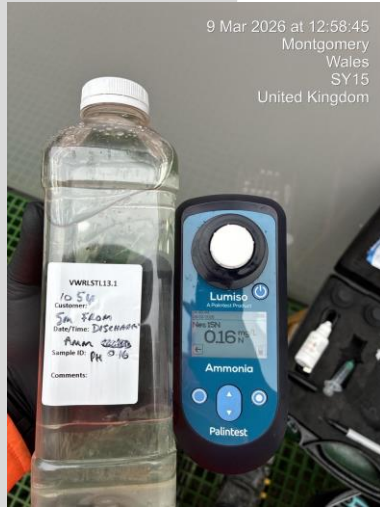


Dissolved Oxygen reading  
11.05 mg/l

# PHOTOGRAPHIC EVIDENCE – POINT OF ENTRY



Watercourse



Ammonia reading at  
0.16mg/l

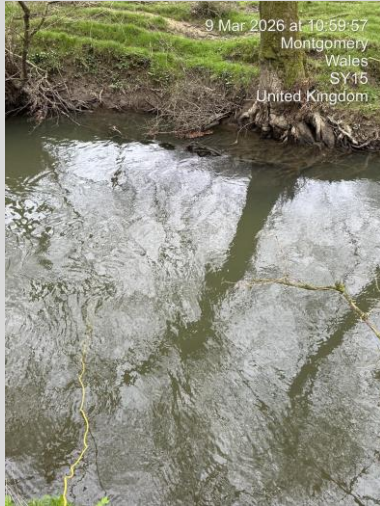


Bottled sample



Dissolved Oxygen reading  
11.08 mg/l

# PHOTOGRAPHIC EVIDENCE – 30M DOWNSTREAM



Watercourse



Ammonia reading at 0.42 mg/l



Bottled sample



Dissolved Oxygen reading 11.07 mg/l

# PHOTOGRAPHIC EVIDENCE – 60M DOWNSTREAM



Watercourse



Ammonia reading at  
0.15mg/l



Bottled sample



Dissolved Oxygen reading  
13.17mg/l

# ESCADA DATA



# EVENT TIMELINE

Date	Incident timeline comments
<b>09/03/2026</b> <b>09:30-10:25</b>	Daily on-site testing completed. Aluminium recorded at 1.45 mg/l, all other results within expected ranges.
<b>10.25-10:40</b>	Potential pollution escalated and second sample taken to ensure first wasn't spurious. Flow diverted to storage well and tanker ordered.
<b>10:40-11:11</b>	Pollution investigation started and samples taken. Second samples confirm pollution.
<b>13:05</b>	Pollution impact assessment completed with network control.
<b>15:00</b>	Servitech complete calibration on final effluent aluminium monitor and confirm it is performing to it's expected operation.

## NEXT STEPS

---

Date	Next Steps – Immediate
07/01/26	Tanker ordered to site to manage flows.
07/01/26	Poly aluminium chloride dosing switched off to allow works to recover.

Date	Next Steps – Broader
2026	Installation of storage tanks at the head of the works. Allowing storage/ bypass of flocculator to contain aluminium in flocculator.
2026	Given complexity within the chemistry of the site HD require more time to investigate root cause of event. Commissioning team are working with other stakeholders to better understand make up of incoming flow, including external chemical experts.
2026	Investigation into suitable interstage monitoring which will indicate if levels of aluminium are increasing.
2026	Investigate inconsistency of final effluent monitors. Working with commercial partners to establish whether current or alternative monitor would be more accurate.