

ASSET INVESTIGATION DETAILS					
SAP Asset Name:	HEOL PENYFELIN NANT		Asset Template reference	CM0191001-COEDPOETH NANT PS-2199-Stage 1 - OC-Flintshire & Wrexham	
Investigation Type	SOAF (River)				
Year of breach:	2020	Spill Trigger cause:	OC Infiltration		
Year of Investigation:	2022	Investigation year performance:	25		
Population of Asset	708	Modelled Performance: (DESIGN) / (CALIBRATED)	20 / 20		
Permit Details					
Storm Permit ID:	CM0191001	Storm Permit Name:	COEDPOETH NANT PS		
Asset NGR:	SJ2841050369	Waterbody ID	GB111067051720		
Discharge NGR:	SJ2839350381	Water body Discharge location	Clywedog - above Black Brook		
Brief description of asset (Screen, PFF flow control, Storage, outfall)					
Incoming Pipe: 300 mm ; CSO Type: Single-sided, high level weir; Screening: 6mm 2d; Flow Control: Pumps; PFF Pipe: Rising Main; Storage Provision: 5m3; Consent: None - Deemed consent; SocA:16.6/l/s					

SOAF STAGE 1						
Details of assessment:	Asset condition surveys supported by hydraulic model assessment of the asset performance.					
Permit Compliance						
PFF	Deemed Permit – Meets SocA					
Storage	Compliant					
Screening	Compliant					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
<p>Primary Cause: OC Infiltration Secondary Cause: None</p> <p>Following the hydraulic model assessment, the cause of the high spills at the asset is concluded to be OC Infiltration.</p> <p>The asset has a deemed Permit and hydraulic assessment shows PFF exceeds SocA.</p> <p>Telemetry trends clearly show the effects of rainfall induced groundwater infiltration during the winter months which has a significant effect on the predicted spill count. Representations using an industry standard, average level of infiltration (40% PG) predict a spill count for the assessment year below that of the threshold for investigation level (3).</p> <p>The predicted pass-forward flow is more than SocA prior to the first spill. The model is fit for use, based on the flow monitor trends, reported spill numbers, and telemetry trends.</p>						
Cause of spill count :	Other Cause	Yes	Catchment Hydraulic	No	Infiltration & IRP required	Yes
Future Operational Management Proposal:	The primary cause of the spills are operational factors that have been assessed as requiring longer term (1+ year) intervention programmes. Given the scale of the issue, the asset will progress under a bespoke intervention programme with details to be supplied to with the regulator and other stakeholders outside of the normal SOAF processes.					
Operational intervention required:	Infiltration Reduction Plan					
SOAF Operational Intervention						
Start Date:	Jan-24	Completion Date:	TBC	Indicative future annual spill performance (less than 40 do not continue to stage 2)	20	
Intervention Description:	Infiltration has been identified as a factor in excess spills at this asset. An infiltration reduction plan (IRP) is in the process of development to address the problem. It is recognised in the Storm Overflow Assessment Framework that investigation and resolution of infiltration issues can be difficult and that solutions may be iterative with IRPs potentially only succeeding over the medium to long-term.					
Proposed Completion Date:	Jan-29	Data years to be excluded from future SOAF triggers calculations	-	Request to hold stage 2 surveys for environment recovery		

SOAF STAGE 2						
Receiving Waterbody WFD Status			Moderate			
Stage 2a						
Aesthetic survey:	Spring	2022	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)	55	High	
	Autumn	2022		55	High	
Stage 2b				Yes / No unable due to culverted watercourse		
Invertebrate survey:	Spring	2022	Invertebrate survey score:	1	Very Low	
	Autumn	2022		2	Very Low	

Stage 2c Required:				Yes / No
Stage 2c screening:	0	Progressed through screening?	0	Stage 2c water quality assessment Score: Not Required

SOAF STAGE 3 - STEP 1>3						
Options assessed	Rainscape		Traditional Storage	N	PFF Increase	N
Equivalent storage volume required	0	Rainscape Cost		£0.00	CBR	N/A
Bespoke future trigger agreement	40	Traditional Storage		£0.00	CBR	N/A
		Other		0	CBR	-
Key Constraints						
Future Active Management Proposal						

Conclusion and Future Spill Reduction Proposals				
Summary	<p>COEDPOETH NANT PS was Shown to have a other cause issue resulting in higher spills which are expected to reduce once a resolution has been implemented. Once the assets New spill performance is established, if this is shown to still be in excess of 10 the impact of the asset will be established as part of DCWW's Storm Overflow Water Quality Assessment Strategy (SOWQAS) in AMP8</p>			
Asset Prioritisation Level	Priority 5		Delivery Predicted Period	AMP11/12
Asset NEP ID	DCWW102009a	Asset NEP Driver Code	W_U_O_IMP1	Detailed Design Predicted Period
Progression to Stage 5 In AMP	No	Proposed Solution yet to be taken through detailed design developed		

SOAF AGREEMENT					
Date	SOAF STAGE	Name	Contact Details	Location of Output	
DCWW Approval	27/01/2024	Stage 1 - OC	Christian Phillips Adams	christian.phillipsadams@dwrwymru.com	Email
Regulator Liaison Date	Click here to enter a date				
CSO Classification					
Satisfactory	N	Unsatisfactory	Y	Sub Standard	N
		Any operation in dry weather conditions?	N	Does not meet modern standards of engineering and aesthetic control for storm overflow structures set out in the British standard BS EN 752:2017 drain and sewer systems outside buildings	N
		Any operation in breach of permit conditions?	N	Does not have sufficient hydraulic capacity compared to accepted minimum design standards	N
		Any significant visual or aesthetic impact due to solids or sewage fungus?	Y	Risks becoming unsatisfactory because discharges have increased beyond the original design due to infiltration, growth and urban creep	N
		Cause or significantly contributes to a deterioration in the biological or chemical status of the receiving water?	N		
		Causes or significantly contributes to failures in bathing water quality standards for identified bathing waters?	N/A		
		Causes or significantly contributes to failures in shellfish quality standards for identified shellfish waters	N/A		
		Causes or significantly contribute to failures in water quality standards in coastal and transitional waters?	N/A		
		Causes pollution of groundwater?	N/A		