

Bluewin.com Audit Statement Technical Guidance for further information

ASSET INVESTIGATION DETAILS					
SAP Asset Name:	Ruabon SPS		Asset Template reference	CM0190801-RUABON PS-70641-Stage 1 - OC- Flintshire & Wrexham	
Investigation Type	SOAF (River)				
Year of breach:	2019	Spill Trigger cause:	OC Continuation Restriction (Flow Control)		
Year of Investigation:	2022	Investigation year performance:	25		
Population of Asset	840	Modelled Performance: (DESIGN) / (CALIBRATED)	22 / 22		
Permit Details					
Storm Permit ID:	CM0190801	Storm Permit Name:	RUABON PS		
Asset NGR:	SJ3035243652	Waterbody ID	GB111067051700		
Discharge NGR:	SJ3034943646	Water body Discharge location	Black Brook		
Brief description of asset (Screen, PFF flow control, Storage, outfall)					
Incoming Pipe: 280mm; CSO Type: Hole in the wall; Screening: No; Flow Control: PFF Pump ; PFF Pipe: Rising Main; Storage Provision:N/A; Consent: None – Deemed permit; SoCA: 14.7l/s;					

SOAF STAGE 1						
Details of assessment:		Asset condition surveys supported by hydraulic model assessment of the asset performance against available telemetry information (EDM and radar rainfall datasets). Additional flow and rainfall monitoring was undertaken to improve the baseline model accuracy and assist in defining the root cause of spills.				
Permit Compliance						
PFF	Compliant					
Storage	N/A					
Screening	N/A					
Bespoke/Other	N/A					
SOAF Stage 1 findings						
Following the hydraulic model assessment, the primary cause of the high spills at the asset is concluded to be a historical operational cause (Flow control) that has been rectified prior to the investigation occurring. The predicted pass-forward flow is within 1% of SocA prior to the first spill. The model is fit for use, based on the flow monitor trends, reported spill numbers, and telemetry trends, and indicates the asset was not a high spiller during the assessment year						
Cause of spill count :	Other Cause	OC Continuation Restriction (Flow Control)	Catchment Hydraulic		Infiltration & IRP required	No
Future Operational Management Proposal:	Based on current hydraulic model predictions, the primary cause of spills was found to be hydraulic, however these were below the investigation threshold for a SOAF high spilling asset (40 spills) and as such further investigation has not been undertaken.					
Operational intervention required:	Maintenance activities between 2019 and 2022 have delivered spill reduction observed in the EDM reporting, however these are likely to relate to the pump performance at the asset leading to increased spills and as such the cause of high spills has been concluded as OC Continuation Restriction (Flow Control).					
SOAF Operational Intervention						
Start Date:	-	Completion Date:	-	Indicative future annual spill performance (less than 40 do not continue to stage 2)		22
Intervention Description:	Delivered prior to the outcome of the SOAF investigations					
Proposed Completion Date:	-	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					
Stage 2a					
Aesthetic survey:	Spring	2022	Aesthetic Total score (inclusive of amenity classification, previous complaints & pollutions)		Low Impact
	Autumn	2022			Very Low Impact
Stage 2b				Yes / No unable due to culverted watercourse	

Invertebrate survey:	Spring	2022		Invertebrate survey score:		Very Severe
	Autumn	2022				Very Severe
Stage 2c Required:					Yes / No	
Stage 2c screening:	N/A	Progressed through screening?	N/A	Stage 2c water quality assessment Score:	N/A	

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

Conclusion and Future Spill Reduction Proposals					
Summary	Based on the direction from the Welsh Government led Better River Quality Task Force, DCWW Storm overflow spill recution programme will target the elimination of ecological harm and prevention of adverse ecological impact of any SO. With a large programme of assets requiring improvment priority will be given to CSOs having the greatest impact in the most sensitive receiving waters. To ensure that the improvement delivered is long term, the improvements for each site will be based on the expectation that water quality upstream of the discharge meets good or high ecological status (GES) irrespective of the actual status of the water. This approach has formed the basis of DCWW's portfolio investment plan for Storm Overflows. RUABON PSRUABON 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 Assement Strategy (SOWQAS) in AMP8				
Asset Prioritisation Level	Priority 1			Delivery Predicted Period	AMP8/9
Asset NEP ID	DCWW102008a	Asset NEP Driver Code	W_U_O_IMP1	Detailed Design Predicted Period	AMP7/8
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	29/11/2023	Stage 1 - OC	Christian Phillips Adams	christian.phillipsadams@dwrcymru.com	Email
Regulator Liaison Date	Click here to enter a date				
CSO Classification					
Satisfactory	N	Unsatisfactory	Y	Sub Standard	-
		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	Y
		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?	N	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?	Y		
		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		