

Site Risk Management Record			Site			Cynwyd Hydro					
Revision Control: Originator: D Needle Date: 13/12/2021 Reason: Annual Scour Valve Testing Revision: 1			Likelihood Rating 0 = Zero to very low Rating 1 = Very unlikely Rating 2 = Unlikely Rating 3 = Likely Rating 4 = Very Likely Rating 5 = Almost certain			Severity Rating 0 = No injury or illness Rating 1 = First aid injury or illness Rating 2 = Minor injury or illness Rating 3 = "3 day" injury or illness Rating 4 = Major injury or illness Rating 5 = Fatality, disabling injury etc.					
			Date Inspected								
Ref.	Task	Hazard	Risk			Immediate Action / Control Measures	Residual Risk			Residual Action	Comment
			L	S	Risk		L	S	Risk		
Health and Safety Aspects											
1.0	Access	Slips and trips	2	5	10	Maintain a tidy site. Do not store materials or tools on walkways or access routes. Hold on to hand rails and do not cross safety barriers when crossing the dam.	1	2	2		
1.1	Access	Public use of the downstream reach of the Afon Trystion	3	5	15	Undertake a visual inspection of the immediate downstream reach to ensure no people are likely to be affected by an increase in river flows.	1	5	5		Natural and man-made ponds in the immediate downstream reach will attenuate the flow variation to lower reached of the Afon Trystion.
1.2	Access	High water level over dam crest	4	5	20	Do not attempt to cross the dam crest if water depth of velocity make walking in wellington boots hazardous.	0	5	0	Foot access should instead be made via the Secondary Dam Access point.	The safe wading depth should be assessed on site. As a guide, it is anticipated that maximum safe wading depth will be around 150mm.
2.0	Manual Handling	Muscular damage.	2	3	6	All staff to have manual handling training; wear grip enhancing gloves; ensure a sturdy standing position to operate the valve.	1	1	1	Consider the impact of weather conditions. For example, wet or icy conditions could increase the risk of slipping when operating the valve.	
3.0	Environmental	COVID-19	3	5	15	Observe social distancing practices.	1	5	5	Anyone displaying symptoms of COVID-19 is requested to self-isolate and avoid attending site.	
Environmental Risks											
1.0	Reservoir Drawdown	Sediment transfer	1	3	3	Abort testing and close valve if signs of failure occur.	2	2	4	If the drive shaft or handwheel fail it may still be possible to operate the valve itself. The disused scour valve is also retained in the open position. It may be possible to close the disused valve in an emergency scenario.	Possible occurrence if the scour valve fails during testing
1.1	Reservoir Drawdown	Release of stratified water	3	4	12	Minimise scour valve test time - aim two minutes in total. Testing to be completed during Autumn months. This increases chances that the dam will be spilling, diluting any stratified water. Cooler ambient conditions also reduces water stratification.	2	1	2		
1.2	Reservoir Drawdown	Scouring, damage to structures or risk to animals caused by artificially increased flows in the downstream watercourse	0	0	0	Scour flow rate is well within the normal seasonal flow rates.	0	0	0		The water course is ordinarily subjected to flow fluctuations of 234lps in relation to hydro operation.
1.3	Reservoir Drawdown	Release of fish	2	2	4	Minimise scour valve test time - aim two minutes in total.	1	2	2		Coarse fish (the general population of the reservoir) are not expected to be drawn unintentionally through the scour valve during testing.
1.5	Reservoir Drawdown	Affect on downstream environmental or other protected designations	3	3	9	Minimise scour valve test time - aim two minutes in total.	1	2	2		River Dee at the confluence with the Afon Trystion is designated SAC and SSSI. There are no designations on the Afon Trystion.

