Site evaluation criteria for proposed mine water treatment schemes on the River Nent

Criteria	What this means practically	Scoring Method	Score
a) Access to the potential treatment site (closest boundary)	It is important to be able to get to and from the site easily. The ideal form of access would be directly off a public highway and without too many tight twists and turns.	Up to 50m from 'A' Road Up to 50m from 'B' road Up to 50m from unclassified road Up to 50m from a track Greater than 50m from anything	5 4 3 2 1
b) Closeness to housing and businesses (from site boundary to nearest building)	The sites which are further away from houses where people live would be optimal.	500m+ from a building 400-499m from a building 300-399m from a building 200-299m from a building Lower than 199m from a building	5 4 3 2 1
c) Distance from the mine water discharge point to the potential treatment area (closest boundary to discharge point)	The further from the discharge point, the more complex and expensive the scheme becomes. Therefore, sites closer to the discharge point would be optimal.	Lower than 500m 501-1000m 1001-1500m 1501-2000m 2001-2500m	5 4 3 2 1
d) Pumping costs and carbon footprint (average across elevation the whole area)	Pumping mine water is expensive and uses energy. To reduce costs and the carbon footprint of the proposed scheme we would prefer to transfer the water via gravity flow. Therefore a downhill pipeline from the discharge point to the treatment site would be preferred.	Lower than the discharge elevation 0-33m above the discharge elevation 34-66m above the discharge elevation 67-100m above the discharge elevation 101+m above the discharge elevation	5 4 3 2 1
e) Site size	The site needs to be big enough for the treatment to work. Larger sites would be preferred as this gives us extra space for landscaping and planting.		
Caplecleugh and Rampgill (flow: 30 litres per second – subject to change following further data collection)		Greater than 7.5 hectares (plenty of scope to shape & landscape) Between 5 and 7.5 hectares (some flexibility for shape) Between 2.5 and 5 hectares (limited flexibility in shape) Between 1.8 hectares and 2.5 hectares (very little flexibility in shape) Lower than 1.8 hectares (not suitable for whole flow)	5 4 3 2 1
Caplecleugh only (flow : 20 litres per second – subject to change following further data collection)		Greater than 6 hectares (plenty of scope to shape & landscape) Between 4 and 6 hectares (some flexibility for shape) Between 2 and 4 hectares (limited flexibility in shape) Between 1.2 hectares and 2 hectares (very little flexibility in shape) Lower than 1.2 hectares (not suitable for whole flow)	5 4 3 2 1
Rampgill only (flow: 10 litres per second- subject to change following further data collection)		Greater than 4 hectares (plenty of scope to shape & landscape) Between 2.0 and 4.0 hectares (some flexibility for shape) Between 1.0 and 2.0 hectares (limited flexibility in shape) Between 0.6 hectares and 1.0 hectares (very little flexibility in shape) Lower than 0.6 hectares (not suitable for whole flow)	5 4 3 2 1
Haggs (flow: 15 litres per second – subject to change following further data collection)		Greater than 4 hectares (plenty of scope to shape & landscape) Between 3 and 4 hectares (some flexibility for shape) Between 1.5 and 3 hectares (limited flexibility in shape) Between 0.9 hectares and 1.5 hectares (very little flexibility in shape) Lower than 0.9 hectares (not suitable for whole flow)	5 4 3 2 1

Criteria	What this means practically	Scoring Method	Score
f) Current and previous land use – ease of construction (average across the whole area)	Greenfield sites with no history of contamination would be optimal as costs will be lower.	No potential contaminative land use Potential contamination on less than 25% of the site area Potential contamination on between 26-50% of the site area Potential contamination on between 51-75% of the site area. Potential contamination on between 76-100% of the site area.	5 4 3 2 1
g) Degree of slope (average across the whole area)	Sites that were too steep to be feasible have been left off the Long List. From the sites left, sites with a gentle slope to allow the water to flow down by gravity would be optimal.	Ideal slope (1:25) or flat site Minor re-profiling (Slope 1:20-1:24) Some re-profiling necessary (Slope 1:17-1:19) Significant re-profiling required (Slope 1:14-1:16) Major re-profiling required (Slope 1:11 – 1:13)	5 4 3 2 1
h) Ecological issues (average across the whole area)	The site with the least amount of ecological issues would be preferred.	No obvious ecological constraint Habitat suitable for one or more protected/notable species or S41 habitat present within 25m of a non-statutory designated site Habitat suitable for one or more protected/notable species and S41 habitat present or in a non-statutory designated site Habitat suitable for one or more protected species and S41 habitat present (or non-statutory site) and one or more records of a protected/notable species within or within 50m Habitat suitable for one or more protected species and S41 habitat present and one or more records of a protected/notable species within or within 50m and within a non-statutory designated site	5 4 3 2 1
i) Flood risk - surface water flooding (average across the whole area)	The sites with the lowest risk of flooding would be preferred.	No risk of flooding Greater than 0% to 25% of site at risk of possible surface water flooding 26-50% of site at risk of possible surface water flooding 51-75% of site at risk of possible surface water flooding 76-100% of site at risk of possible surface water flooding	5 4 3 2 1
j) Route of the pipeline to transfer the mine water to the potential treatment area and then from the potential treatment area to a nearby watercourse. (total pipe length)	The more complicated the pipe route, the more complex, disruptive and expensive it becomes. The most direct route which involves the least number of landowners would be optimal. As an indication to determine pipe lengths we have followed the roads as far as possible to the potential areas. We have taken the most direct route to a nearby watercourse. If a watercourse is already crossing the area we have not included a discharge pipeline length.	Up to 500m Up to 750m Up to 1000m Up to 1500m 1500m+	5 4 3 2 1
k) Visual impact	The sites which are less overlooked by houses, footpaths or roads would be optimal.	Not overlooked Overlooked by traffic on a public highway/users of a footpath but no properties Overlooked by 5 properties Overlooked by 10 properties Overlooked by 20 properties	5 4 3 2 1