Proposed measures to clean up the River Nent

Final design details for the proposed Nent Haggs mine water treatment scheme and information regarding the planning process

January 2018
Contents

Engagement process 3
Selection criteria 5
Outcomes in selection 6
Frequently asked questions 7
Site location and design 8
Odour control 9
Construction 10
The planning application 11
Next steps 12
Engagement process: How did we get here?

**Business/scheme objective:** To find an acceptable way of treating polluted mine water from the Haggs, Caplecleugh and Rampgill Levels, from concept to operation.

**Consultation objective:** To work with stakeholders to find an acceptable way of treating polluted mine water from the Haggs, Caplecleugh and Rampgill levels, from concept through to operation.

<table>
<thead>
<tr>
<th>Decision process</th>
<th>Define problem and decision to be made</th>
<th>Gather information</th>
<th>Establish decision criteria</th>
<th>Develop alternatives (long list)</th>
<th>Evaluate alternatives (short list)</th>
<th>Preferred site - draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oct/Nov 2016</td>
<td>Define problem and decision to be made</td>
<td>Gather information</td>
<td>Establish decision criteria</td>
<td>Develop alternatives (long list)</td>
<td>Evaluate alternatives (short list)</td>
<td>Preferred site - draft</td>
</tr>
<tr>
<td>Agree search area</td>
<td>Review 'long list' sites</td>
<td>Comment on advantages/disadvantages of each option</td>
<td>Review 'Short list' sites</td>
<td>Comment on evaluation and scores</td>
<td>Identify preferred option</td>
<td></td>
</tr>
<tr>
<td>Develop evaluation criteria</td>
<td>Identify sites to be shortlisted for assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gather additional data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>March 2017</td>
<td>Review 'long list' sites</td>
<td>Comment on advantages/disadvantages of each option</td>
<td>Review 'Short list' sites</td>
<td>Comment on evaluation and scores</td>
<td>Identify preferred option</td>
<td></td>
</tr>
<tr>
<td>May/June 2017</td>
<td>Identify sites to be shortlisted for assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sept/Oct 2017</td>
<td>Review of draft design for preferred site</td>
<td>Discuss layout, shape and landscaping</td>
<td>Review of final design for preferred site</td>
<td>Review construction activities</td>
<td>Review operational activities</td>
<td></td>
</tr>
<tr>
<td>Oct/Nov 2017</td>
<td>Review of final design for preferred site</td>
<td>Review construction activities</td>
<td>Review operational activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jan 2018</td>
<td>Final design and planning information available for public information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Community input required at these points
Engagement process

April 2016: **Event 1**
We held an open community event where the initial proposal was presented. The proposal was withdrawn and a new engagement approach was developed.

October/November 2016: **Event 2**
We held 2 community events where open discussions took place about the new approach to finding alternative land areas. The site evaluation criteria identified.

November 2016/March 2017
- providing information - questions answered. Reports on Gov.uk
- developing site evaluation criteria
- wider mail outs, contacting business, contacting wildlife groups
- contacting landowners
- extended search area
- potential areas identified that might be suitable for a mine water treatment scheme

March 2017: **Event 3**
Discussion with stakeholders on new areas identified. A long list of possible sites drawn up.

July 2017: **Event 4**
A further public meeting looked at 3 possible sties for Nent Haggs and Caplecleugh. A short list of possible sites discussed.

September 2017: **Event 5**
Preferred site for Nent Haggs and further investigation for Caplecleugh are shown at the September event.

September 2017 - October 2017
Dry-dredge of 9 sediment traps on the River Nent completed. 1,000 tonnes of sediment, containing at least 20-30 tonnes of zinc, cadmium and lead, removed from river and taken to landfill. New check weir installed in the River Nent near Nent Hall to capture more sediment. Works completed to river bank around Foreshield Shaft to reduce erosion of spoil into river and to prevent river water entering the mine shaft.

January 2018
Final review prior to planning submission for Nent Haggs. Update on Caplecleugh.
What criteria did we consider for a mine water treatment scheme?

a) Access to the potential treatment site (closest boundary)
b) Closeness to housing and businesses (from site boundary to nearest building)
c) Distance from the mine water discharge point to the potential treatment area (closest boundary to discharge point)
d) Pumping costs and carbon footprint (average across elevation the whole area)
e) Site size
f) Current and previous land use – ease of construction (average across the whole area)
g) Degree of slope (average across the whole area)
h) Ecological issues (average across the whole area)
i) Flood risk - surface water flooding (average across the whole area)
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)
k) Visual impact
What were the outcomes of applying evaluation criteria and public consultation?

We looked at a wide range of possibilities for mine water treatment schemes and identified 40 possible sites.

We reduced the options to a “Short lists” in July, 3 sites each for the Nent Haggs adit in Nentsberry and Caplecleugh adit in Nenthead.

After the July public meeting a single preferred site emerged for both Nent Haggs and Caplecleugh.
Frequently asked questions

The following FAQ’s were addressed in the September meeting with regard to the preferred site.

How big will the mine water treatment scheme be?
The site area is approximately 2 hectares (5 acres). The 3 treatment ponds and wetlands will total approximately 6,250 sqm. A typical football pitch is about 6,500 sqm.

Will it smell?
The scheme will be engineered to ensure that there will be no odour nuisance outside of the treatment site boundary.

What will the scheme look like?
The treatment ponds will be open water with the water level a little below the existing ground level. They will be surrounded by grassed or gravel tracks with grass or planted areas in between. The ponds and wetland will be shaped to look as natural and un-engineered as possible.

The wetland will be a reedbed. There will be two single storey stone buildings on site designed to look like farm buildings. The site will be secured with posts and wire fencing or in keeping with field boundaries in the area. The access will be through a timber field gate adjacent to the road.

What will be the visual impact on the area?
The site is overlooked by properties at Foreshield, the nearby roads and footpaths. The layout and landscaping will be designed to make the scheme look as natural as possible. Additional tree planting may be possible although it will take some years for trees to fully grow.

How will the construction traffic reach the site?
Traffic will arrive along the existing highway network from the A689 and B6294.

Will there be any other works associated with the scheme?
There will be a new pumping station constructed near to the adit to pump water to the site (possibly on site 38). It will need a small building to house control equipment.

How much say do I have?
The site we have chosen, with your help, has very limited room for variation from the plan now shown as the preferred site.
Proposed measures to clean up the River Nent

Key issue: Site and design
Proposed measures to clean up the River Nent

When treated mine water leaves the ponds and mixes with air, it has the potential to cause odour.

To prevent any odour nuisance beyond the site boundary, we will add chemicals in an underground tank before the treated mine water mixes with air.

We will monitor the water and air around the site and automatically adjust the amount of chemicals used as required.

An automatic feedback system will report any problems directly to the Coal Authority.
Nent Haggs preferred site
Headline construction information

Area 4
Main treatment pond works (Site 4)
Start: July 2018
Finish: November 2019

Area 3
Pump rising main pipeline
Start: March 2019
Finish: November 2019

Area 2
Pump Station and rising main pipeline
Start: September 2018
Finish: November 2018

Site compound/Storage area for pipeline installation
Start: September 2018
Finish: November 2018

Area 1
Gravity Drain pipeline
Start: July 2018
Finish: October 2018

All dates are subject to planning and other permissions.
The planning application

The planning application is broadly made up of 2 sections - the planning statement and the environmental statement.

Planning statement:
The planning statement is designed to demonstrate that the applicant has taken account of current planning regulations in the application, with particular regard to planning policy and guidance at a local and national level. The planning statement also includes a Design and Access Statement showing how the design has been developed and how access to the site has been considered. The planning authority considers the application and takes an overall balanced judgement and makes its recommendation to the Planning Committee.

Environmental statement
The environmental statement will cover the following:

- Ground conditions and hydrogeology
- Hydrology and flood risk
- Socio-economics
- Waste management
- Climate change adaptation
- Health Impact Assessment
- Cumulative and combined effects
- Summary of significant effects
- References

Design and Access statement
The design and access statement will cover the following:

- Background and scheme overview
- Scheme description
- Alternatives and design evolution
- Environmental Impact Assessment methodology
- Landscape and visual amenity
- Noise and vibration
- Air Quality and odour
- Traffic and transport
- Cultural heritage
- Biodiversity

The planning application to Cumbria County Council will be submitted in either February or March 2018. The planning process is set out by central government legislation and is designed to allow the input of expert and interested parties into the making of decisions on applications for development affecting the built and natural environment.

To find out about the 7 stages of the planning application process go to:


To view the application, once submitted go to:

https://planning.cumbria.gov.uk/Disclaimer?returnUrl=%2F

To comment on the application go to:

http://www.cumbria.gov.uk/planning-environment/DC/applications/comment.asp
Next steps

Progress of Caplecleugh
Further investigations to establish the most appropriate scheme to treat mine water from the Caplecleugh adit are taking place and we will report further in Spring 2018.

Working with the community during construction and operation
If planning consent is granted the Coal Authority and the Environment Agency will continue to work closely with the local community to ensure that full information is available about the development and the various stages of construction.

Thanks to everyone who has participated in the process
The Coal Authority and the Environment Agency would like to thank everyone who has given their views during the engagement process.