

The Coal Authority

# Nenthead Site 101

Preliminary Planning Appraisal

**TABLE OF CONTENTS**

1. Introduction ..... 3

2. Site Description ..... 3

    2.2. Policy Designations ..... 5

3. Proposed Development ..... 6

4. Cumbria Minerals and Waste Local Plan 2015 -2030 ..... 7

    POLICY SP1 - Presumption in favour of sustainable development ..... 7

    POLICY SP13 - Climate Change Mitigation and Adaptation ..... 7

    POLICY SP14 - Economic Benefit ..... 7

    POLICY SP15 - Environmental Assets ..... 7

    POLICY SP16 - Restoration, Aftercare and Afteruse ..... 8

    POLICY DC2 - General Criteria ..... 8

    POLICY DC6 - Cumulative Environmental Impacts ..... 9

    POLICY DC9 – Criteria for Waster Management Facilities ..... 9

    POLICY DC16 – Biodiversity and Geodiversity ..... 9

    POLICY DC17 – Historic Enviroment ..... 9

    POLICY DC18 – Landscape and Visual Impact ..... 10

    POLICY DC20 - The Water Environment ..... 10

    POLICY DC21 – Protection of Soil Resources ..... 11

5. Eden Local Plan 2014 – 2032 ..... 11

    POLICY DEV2 - Water Management and Flood Risk ..... 11

    POLICY DEV5 - Design of New development ..... 11

    POLICY ENV1 - Protection and Enhancement of the Natural Environment, Biodiversity and Geodiversity .... 12

    POLICY ENV2 - Protection and Enhancement of Landscapes and Trees ..... 12

    POLICY ENV3 – The North Pennines Area of Outstanding Natural Beauty ..... 12

    POLICY ENV4 - Green Infrastructure Network ..... 13

    POLICY ENV9 – Other Forms of Pollution ..... 13

    POLICY ENV10 – The Historic Environment ..... 13

6. Evaluation ..... 14

    Biodiversity and Geodiversity: ..... 14

    Historic Environment: ..... 14

    Landscape and Visual Impact: ..... 14

    forms of Pollution: ..... 14

Conclusion ..... 15

## 1. INTRODUCTION

Currently the water quality of River Nent is impacted by metal mining legacy in the Nent Valley as concentrations of zinc, cadmium and lead exceed Environmental Quality standards. The River Nent is heavily polluted with aquatic life in the River Nent being damaged by high metal concentrations. This pollution from the River Nent contributes to the pollution in the River South Tyne up to 40km downstream. In order to reduce pollution a mine water treatment scheme (MWTS) is required to deal with discharge from the Caplecleugh Level Adit, located in the Nenthead Mines car park. The purpose of this report is to provide a preliminary planning appraisal for the proposed Nent Head MWTS at site 101 (S101); establishing likely planning constraints, providing information on how to overcome and highlighting key considerations. The report discusses the planning status of S101 and relevant policies to judge the likelihood of planning permission to be granted.

## 2. SITE DESCRIPTION

S101 is located approximately 0.9km to the south east of Nenthead; the northern boundary of the site is adjoined by the A689 while the southern boundary is adjoined by a quarry track, beyond this is the Smallcleugh Mine SSSI (hashed green as shown in figure 2). To the eastern boundary of the site is open grassland while the western boundary steeply descends to the Nenthead Mines Museum. Key features of the site are listed below:

- Handsome Mea Reservoir,
- Two pipelines from the reservoir to a hydropower station at Nenthead Mines Museum,
- Historical mine features including leats, shafts, crown holes, adits and tips,
- Chimney Flue that runs at ground level up the hillside,
- Grassland areas are boggy,
- The site slopes down from east to west.

The current owner of S101 is Cumbria County Council and they are in negotiations to potentially transfer the site to The Nenthead Mines Conservation Society. It is likely the actual transfer of ownership will take place in about a year's time. Current site access is the access point off the A689 that serves the quarry road; this access is gated and currently serves heavy vehicles. It would probably be likely that agreement would need to be negotiated to share this access point from the A689 with Allstone Natural Stone Ltd. quarry operators and other landowners. In addition, there is an existing public right of way with a footpath crossing S101 from north to south.



**Figure 1: Site Location (to be viewed in conjunction with the Indicative Layout)**

Neighbouring properties and receptors within 500m of S101 include, Mill Cottage Bunkhouse, Hilltop Cottage, Nenthead House, Thornleigh and Granary Cottage. The site can be seen from various points along the A689. Key stakeholders which need to be considered for the proposed MWTS at S101 are listed below:

- Neighbouring properties and Residents
- Nenthead Mines Conservation Society
- Natural England, Historic England and AONB Partnership
- Cumbria County Council and Eden District Council

There are no notable planning applications in the area which have significant relevance to the S101 or the proposed MWTS.



## 2.2. POLICY DESIGNATIONS

S101 falls within the North Pennines Area of Outstanding Natural Beauty (AONB) which demands great weight is afforded to the conservation of the landscape. The significance of this policy designation should be considered a key consideration and likely planning constraints from this are discussed within the subsequent policy context of Cumbria Minerals and Waste Local Plan 2015 – 2030 (CMWP) and Eden Local Plan 2014 – 2032 (ELP). Notable policies include **SP15**, **DC2**, **DC6**, **DC16** and **DC18** of the CMWP and **ENV1**, **ENV2**, **ENV3**, and **ENV4** of the ELP. In addition, specific North Pennines AONB Supplementary Planning Guidance (SPG) should be taken into account.

A large part of the western half of S101 falls within a Scheduled Ancient Monument (SAM) for the lead mines, ore works and smelt mill at Nenthead (hashed brown shown in figure 2). Notable policies include **SP15**, **DC2**, and **DC17** of the CMWP and **ENV10** of the ELP. The significance of this policy designation should also be considered a key consideration and likely planning constraints will be discussed within the policy context. Discussions with Historic England, who manage SAMs, have already ascertained that the proposed MWTS needs to be designed to conserve archaeology wherever possible and access is preferred from the north side due to less archaeological value in this area. Figure 2 shows policy designations discussed thus far in relation S101.

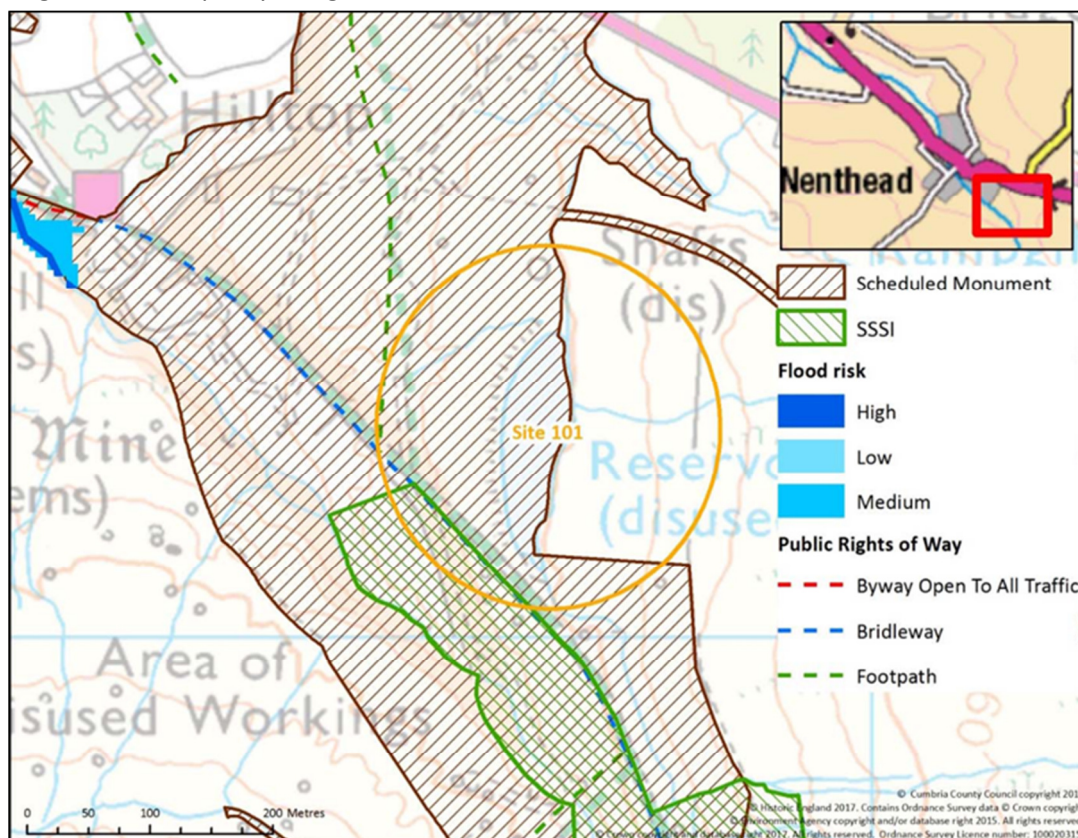
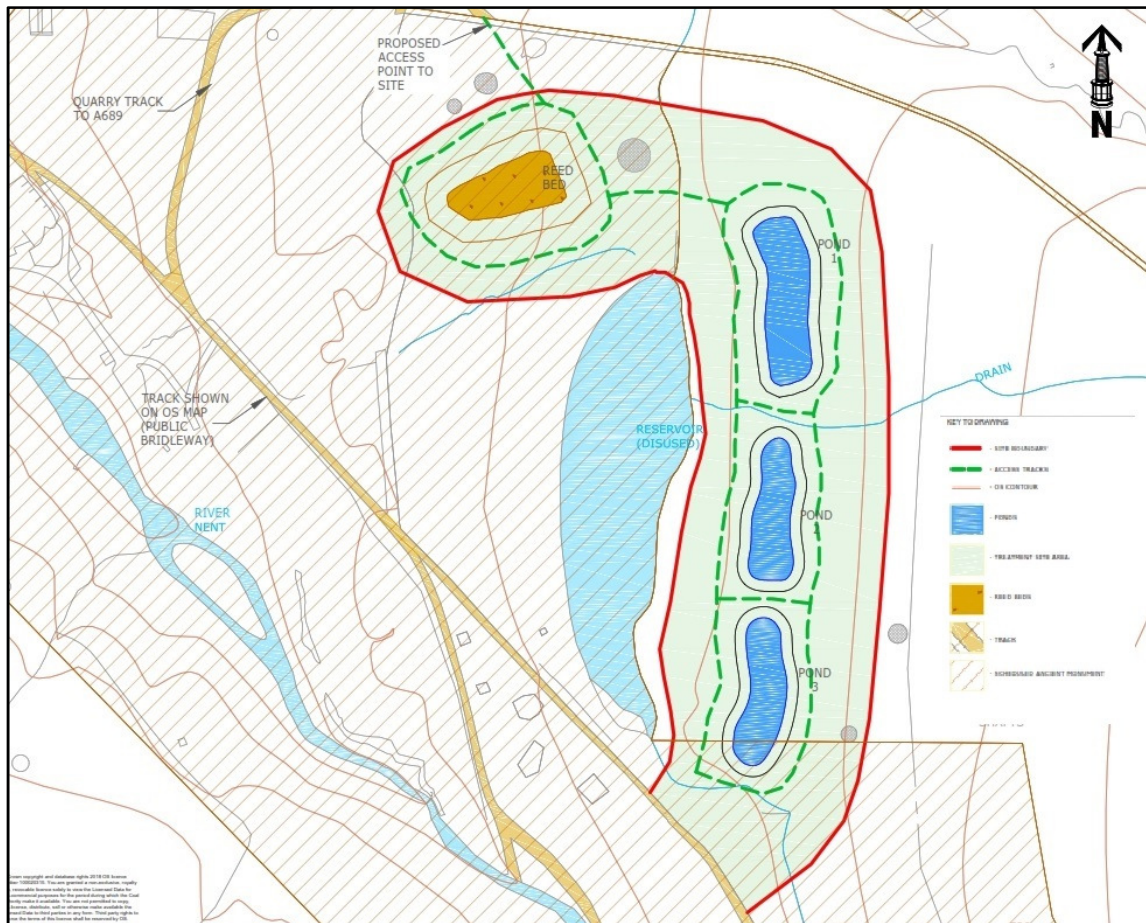


Figure 2: Policy Designations

### 3. PROPOSED DEVELOPMENT



**Figure 3: Indicative Layout**

The proposed MWTS at S101 seeks to capture untreated mine water before it enters the River Nent; this requires a capture structure at the Caplecleugh Adit. Untreated mine water will be transferred by a gravity pipe to a pumping station located within the Mine Museum car park which will transfer the untreated mine water to the treatment site. The treatment site is proposed to consist of 3 no. flow ponds and 1 no. polishing reed bed pond. The water at this point will drain via gravity from flow ponds to the polishing reed bed pond before finally making its return via a gravity pipeline before being discharged to the River Nent. In the event of an emergency situation an emergency overflow may be required. The proposed MWTS at S101 is likely to generate excess hydrogen sulphide which could generate an odour nuisance to neighbouring premises identified in the site description. At this preliminary planning appraisal stage the proposed development is at a point of outline design; the layout shown and discussed in this section of the report should be considered indicative with potential to change at a later detailed design stage. It is the aim of this report to now highlight likely planning constraints within a policy context of the CMWP and ELP.

## 4. CUMBRIA MINERALS AND WASTE LOCAL PLAN 2015 -2030

### POLICY SP1 - PRESUMPTION IN FAVOUR OF SUSTAINABLE DEVELOPMENT

The council takes a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF. The council works to secure development which improves economic, social and environmental conditions. The proposed MWTS aims to reduce metal pollution into the River Nent which is associated with the environmental role of sustainable development.

### POLICY SP13 - CLIMATE CHANGE MITIGATION AND ADAPTATION

SP13 is in accordance with the NPPF that a key planning role is meeting the challenge of climate change; stating restoration and afteruse proposals should mitigate for or adapt to climate change. The council recognises water treatment can require high energy inputs as strategic object 3 of CMWP states specific opportunities should be taken to manage waste close to its source. The proposed MWTS is a passive treatment requiring far less energy input than active treatment systems making use of gravity pipelines etc. However, some pumping will be required, although it can be demonstrated that effort has been made in locating the MWTS to manage untreated water as close to source as possible; fulfilling a role for climate change and thus supporting SP13 and objective 3.

### POLICY SP14 - ECONOMIC BENEFIT

SP14 seeks proposals to demonstrate how they would provide economic benefit, such as jobs safeguarded or directly and indirectly created. The construction phase of the proposed scheme arguably will support a wide range of existing jobs as well as once it becomes operational. But such benefit is likely to be marginal and negligible. However, the council does view inward investment associated with recreational investment as a possible economic benefit. Accordingly, discussions to create an accessible education feature as part of the MWTS to enhance the historic Nenthead Mine visitor attraction should be considered as forming part of an economic argument. In addition, opportunities to use locally sourced materials in the proposed development should also be considered as part of economic benefits. Therefore, a minor case of economic benefit can be made in favour of the proposed MWTS supporting SP14.

### POLICY SP15 - ENVIRONMENTAL ASSETS

SP15 take the approach that development should not cause significant harm to Cumbria's environmental assets and that development should incorporate enhancement measures to increase



biodiversity resources. Where harm cannot be prevented, mitigated or compensated for then planning permission will be refused. In regards to the historic environment, development should not harm the significance of an asset but should aim to enhance the significance of that asset. Further discussion of the Historic environment in relation to the proposed MWTS is provided under **DC17**.

SP15 will put significant constraints upon S101's development potential unless it can be demonstrated that this proposal, as a major development, is of exceptional circumstance and clearly lies within public interest and benefit. The pollution within the River Nent presents the imperative of exceptional circumstance to these ends. Furthermore, it can be demonstrated that effort has been and is being made to prevent and mitigate adverse impacts on designated assets:

- Ponds are likely to fit the landscape considering there is already a body of water at S101 linked to the former mining heritage of the wider area,
- Ponds are sited as far down the hill side as possible to limit impacts on views,
- Treating pollution provides great benefits for aquatic life and biodiversity in general,
- Reedbeds are relatively rare in the North Pennines so this should provide a biodiversity gain,
- S101 has been selected after a site selection process.

#### POLICY SP16 - RESTORATION, AFTERCARE AND AFTERUSE

SP16 contains a non-exhaustive list of issues to be considered in restoration, aftercare and afteruse schemes. The proposed MWTS should demonstrate best practicable measures have been taken to deliver sustainable objectives of CMWP as discussed in relevant policies of this report. This should take into consideration biodiversity, geodiversity, landscape enhancement, water quality, ameliorating contaminated land and securing land stability.

#### POLICY DC2 - GENERAL CRITERIA

DC2 covers the potential impacts of a development on sensitive receptors, such as those highlighted within the site description. Proposals should be accompanied by relevant assessments identified in pre-application discussions or if a scoping opinion has been requested. Such relevant assessments likely to be identified include noise, dust, quality and quantity of surface and ground water, health impact and migration of contamination from the site. The proposal needs to demonstrate that it is designed in a way that addresses its potential impact on human health and the natural and historic environment. Furthermore, it should demonstrate it does not adversely

impact upon local air quality, public rights of way and that the developments carbon footprint has been minimised. S101 has a public right of way on site; the impact of the construction phase on the right of way needs to be considered and a permanent or temporary diversion may be required. Further considerations will include sensitive siting and design and visual screening and proximity to sensitive receptors including species, landscapes and neighbouring land uses discussed in the site description. Odour is key consideration for the proposed MWTS and is discussed in the **ENV9** along with the potential effect the pumping station may have on residential amenity.

#### POLICY DC6 - CUMULATIVE ENVIRONMENTAL IMPACTS

In particular cases specific impacts may be acceptable on their own. However, the development may exacerbate impacts caused by other developments. These cumulative impacts are similar to issues covered under **DC2** such as noise, traffic, landscape, water resources, and local communities. If cumulative impacts are raised as a potential issue later on, it should be demonstrated that this has been assessed and addressed in the planning application and the Environmental Statement (assuming it is not possible to screen out the need for such).

#### POLICY DC9 – CRITERIA FOR WASTER MANAGEMENT FACILITIES

This policy indicates the type of locations where it is considered these facilities could be suitably sited. Part G of the policy supports waste water treatment if adverse environmental impacts can be minimised and if there are no unacceptable impacts on business and housing. The proposed MWTS attempts to minimise impacts and has taken into consideration impacts on surrounding land use and it should continue to do so in order to be compliant with the criteria of DC9.

#### POLICY DC16 – BIODIVERSITY AND GEODIVERSITY

DC16 derives from SP15, highlighting that proposals need to avoid significant harm to assets and enhance them where possible. The MWTS will be required to identify impacts on assets and show potential to enhance them and show contributions to national and local biodiversity and geodiversity objectives and assets. In addition, the proposal needs to demonstrate reasoning for the location for the development over other sites and demonstrate appropriate measures to mitigate effects – S101 was selected after a feasibility study clearly demonstrating reasoning for MWTS location here. Further discussion of biodiversity and geodiversity is provided under **ENV1**.

#### POLICY DC17 – HISTORIC ENVIROMENT

DC17 derives from SP15, having the policy objective of conserving heritage assets; seeking their preservation and enhancement. This should also be understood in terms of the surroundings in which a heritage asset is experienced. Where a proposal leads to substantial harm of a designated heritage asset planning permission will be refused unless substantial public benefits are demonstrated. Where a scheduled monument would be affected, prior scheduled monument consent from Historic England is required. Discussions with Historic England have already and continue to take place; identifying that the reed bed pond is acceptable within the SAM due to the smaller and less visual intrusive nature. In addition, the proposed MWTS is likely to incorporate methods to reduce erosion mining soil which will enhance and preserve heritage assets making the proposed MWTS more acceptable under DC17. Pumping stations and other buildings should be sympathetic to surrounding architecture and be made from locally source stoned. Continued collaboration with Historic England and further efforts to minimise impacts on the historic environment will ensure the proposed MWTS complies with and supports DC17. It is recommended that an initial Heritage Impact Assessment is completed early on in the process to understand the heritage constraints on or nearby the site. As an additional benefit we should also consider the possibility of erecting an interpretation board close to the site to explain the nature of the development linked to mining heritage; the development must be positively recognised that the treatment of polluted mine water represents another chapter in the legacy of historic mining in the area.

#### POLICY DC18 – LANDSCAPE AND VISUAL IMPACT

DC18 requires proposals are compatible with the distinctive characteristics of their host landscape; avoiding adverse impact on the natural landscape. It seeks to ensure developments are directed to less sensitive locations to prevent adverse impacts on local characteristics including views within the AONB. In summary, DC18 requires high quality design and sensitive siting, to ensure adverse effects are minimised. The proposed MWTS should use Landscape Character Assessment to inform the capacity of the host landscape to accommodate the development. A Landscape Visual Impact Assessment will be required to support the application along with proposed visual images. The consultant used will need to agree viewpoints with the Council's Landscape Architect.

#### POLICY DC20 - THE WATER ENVIRONMENT

This policy requires proposals to demonstrate that they would not have an unacceptable impact on the water environment within the application site and its surroundings, including surface

waters. Mineral and waste developments have the potential to facilitate chemicals or waste contaminants as well as soil and silt to be carried in surface water run-off and facilitate erosion due to excess water run-off. The proposed MWTS will have a significantly beneficial effect on the River Nent and River South Tyne. However, risks do exist in potential for contamination of surface waters or groundwaters from accidental discharge of pollutants or contamination during construction. Necessary safeguards and measures should be considered to ensure no inadvertent impacts; overall the MWTS will improve the water environment therefore supporting and complying with DC20.

#### POLICY DC21 – PROTECTION OF SOIL RESOURCES

DC21 aims to safeguard the potential of the best agricultural land and to maintain the soil resources for reuse. Proposals need to demonstrate soil resources are conserved in a viable condition or are used effectively on undeveloped areas of the site. The council has secured management and protection of soil resources through conditions on planning consents before. However, although this was the case for Nenthaggs MWTS, it is unlikely for S101 owing to it being largely located on spoil rather than a greenfield site.

### 5. EDEN LOCAL PLAN 2014 – 2032

#### POLICY DEV2 - WATER MANAGEMENT AND FLOOD RISK

DEV2 aims to place safeguards to ensure developments will not compromise existing water supply and avoid development which would be at risk from flooding or increase flood risk outside the site. Surface water should be managed at site and not transferred. In addition, the proposed MWTS needs to avoid any risk to the water supply and ensure sufficient mitigation measures to these ends. Therefore, a surface water drainage system will be required to manage surface water.

#### POLICY DEV5 - DESIGN OF NEW DEVELOPMENT

DEV5 requires proposals to incorporate high quality design that reflects local distinctiveness. Proposals need to demonstrate understanding of the form and character of the local built and natural environment. This means using quality materials which complement local surroundings – such as local sourced materials as discussed in **SP14**. This is especially important in regards to buildings such as the pumping station and also the siting of ponds. Close and ongoing liaison with the AONB Partnership will be necessary throughout the evolution of the design owing to the AONB status of the site.

## POLICY ENV1 - PROTECTION AND ENHANCEMENT OF THE NATURAL ENVIRONMENT, BIODIVERSITY AND GEODIVERSITY

ENV1 requires developments to avoid net loss to biodiversity and geodiversity and where possible enhance existing assets. There may be Calaminarian plants and lichens within S101 and the wider area which will need to be avoided. In addition, there is a SSSI to the south of the site that is of geological interest, as shown in Figure 2. However, it is unlikely the proposed MWTS at S101 will have any adverse impact on the SSSI. Therefore, the proposed MWTS will have to seriously consider biodiversity and geodiversity in order to comply with ENV1 and **DC16**; an ecology survey will be required. Never-the-less, the design objective of the MWTS is to reduce metal pollution into the River Nent, in the long term this should have net benefits for wider biodiversity and support ENV1. It is recommended that a Phase 1 Habitat Survey is completed early on in the process to understand the ecological constraints on or nearby the site.

A further consideration is the potential impact of the scheme on wider SAC/SSSI designations. The decision on the proposed Nent Hags MWTS has been significantly delayed due to the perceived potential impact of the treatment scheme on the downstream SAC (Calaminarian grasses). Any concern in this regard may be raised by the Planning Officer from Cumbria CC in the forthcoming pre-application meeting.

## POLICY ENV2 - PROTECTION AND ENHANCEMENT OF LANDSCAPES AND TREES

Development will only be permitted where it conserves and enhances distinctive elements of landscape character and function. Proposals should take into account natural elements such as local topography. In addition, development should take into account visually sensitive skylines or hill sides as well as the tranquillity of the open countryside. The proposed MWTS needs to avoid introducing new features into the open landscape and must seriously consider genuine need for fencing and buildings in order to comply with ENV2. The completion of a Tree Survey is recommended prior to submission if any new development lies close to any existing trees or if any are to be removed (this proved to be a late request in the planning process for the determination of the proposed Nent Hags MWTS).

## POLICY ENV3 – THE NORTH PENNINES AREA OF OUTSTANDING NATURAL BEAUTY

Major development will only be permitted in exceptional circumstances where there is a long term public interest and consideration has been given to the following:



- Need for the development, national considerations and local economy,
- Cost / scope for the development outside the AONB or meeting the need by other means,
- Effect on environment, landscape and recreational opportunities and related mitigation.

A clear and coherent argument can be made that the proposed MWTS is of exceptional circumstance with national considerations and that it has to be sited within the AONB. It is only the effect on the environment which is of concern – every attempt should be made to mitigate impact in line with all relevant policies discussed in the CMWP and ELP. As previously mentioned a close liaison with the AONB Partnership is recommended throughout the early design process.

#### POLICY ENV4 - GREEN INFRASTRUCTURE NETWORK

Development which will lead to degradation of green infrastructure will be resisted unless there is evidence that there is wider public benefit. Green infrastructure includes the accessible countryside, green corridors including rivers and their banks, cycle ways and rights of ways. The impact to the existing public right of way, with a footpath crossing S101 from north to south, especially during construction needs to be considered and mitigated to comply with ENV4. As with the proposed Nent Hags MWTS do we need to consider the possibility of improving the footpath as a wider public benefit?

#### POLICY ENV9 – OTHER FORMS OF POLLUTION

Development likely to create dust and odour must be supported by an assessment of acceptability of their risk and ensure mitigation is put in place. An odour impact assessment is required in all cases where the development has the potential to impact neighbouring premises to ensure that appropriate mitigation is put in place so resultant odours do not impact neighbours. Odour, as a ‘other form of pollution’ should be a key consideration of the proposed MWTS. However, a hydrogen sulphide/odour abatement system could potentially provide a solution to help the development comply with ENV9. Noise, especially during construction, could become a constraint when considering sparsely populated areas are more sensitive too new noise pollution but can be managed through scheduled construction times. As mentioned earlier on the pumping station will need careful consideration insofar as potential noise pollution is concerned. A Noise Report will be necessary as part of the ultimate submission.

#### POLICY ENV10 – THE HISTORIC ENVIRONMENT

The council will require all proposals to conserve and where appropriate enhance the significance of Eden's heritage assets and their setting. Key parts of the historic environment include the remains of industrial activity such as Nenthead; their needs to be strong emphasis on the protection and enhancement of these sensitive environments. Discussion is provided under **SP15** and **DC17**.

## 6. EVALUATION

It is essential that for every component of the proposed MWTS development for which planning permission is required that evidence is provided in order to confirm the scheme as sustainable development; especially when considering S101's landscape sensitivities and policy designations. This is easily evaluated through economic, social and environmental roles. A minor beneficial economic case can be made in favour of the proposed development. Socially, the development will improve the wider environment in the long-term and thus quality of life and will also enhance the educational role of the existing mining heritage in the area. However, environmentally the MWTS still has short-term adverse impacts that require evaluation:

**BIODIVERSITY AND GEODIVERSITY:** The case for why the MWTS needs to be located at S101 over other locations needs to be clearly demonstrated. While the overall design objective of the development must be stressed in relation to negative impacts. Never-the-less every effort must be made to demonstrate mitigation of impact on geodiversity and biodiversity.

**HISTORIC ENVIRONMENT:** This is an equally significant constraint which requires continued discussion with Historical England to overcome obstacles. Consideration should not just be given to specific heritage assets but the wider setting in which the SAM is experienced. Therefore, opportunities should be taken to use the proposed MWTS as a vehicle to enhance heritage assets and preserve them fulfilling a social and environmental role.

**LANDSCAPE AND VISUAL IMPACT:** This is a significant constraint and key consideration which could lead to the proposed MWTS becoming contentious due to visual impact. Again, the overall design objective and rationale for locating the MWTS at S101 must be stressed over impact. Genuine need for fencing and buildings must be considered and opportunities to use local material and architectural styles must be taken.

**FORMS OF POLLUTION:** Arguably the MWTS fulfils a role towards climate change. However, serious consideration for odour assessment and abatement needs to be given. A condition for soil management and protection is a likely potential of planning permission. Risks of potential

contamination of groundwater's and surface waters needs to be considered and mitigation clearly demonstrated.

## CONCLUSION

The proposed MWTS, as a major development, within the area and setting of S101 needs to consider all the above policies and demonstrate significant material benefit in the public interest. The proposed MWTS needs to present its sustainable credentials and needs specific locational justification over any other potential site. In addition, the imperative of the MWTS's 'exceptional circumstance' to treat and reduce pollution and improve environmental conditions needs to be argued as nationally significant. Finally, the proposed development needs to consider the impacts on S101 and the wider setting; continued stakeholder engagement with Natural England, the AONB Partnership and Historic England is key to getting the design right. Every opportunity taken to incorporate measures to enhance and preserve environmental and historic assets will alleviate the contentious landscape and visual impacts of the MWTS. To conclude, if mitigation is taken to avoid the most significant impacts of the proposed MWTS at S101 then planning permission should be viewed favourably.