SCOPING OPINION

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017

Ref. SCO-3/19/03 **Date:** 3 July 2019

Proposal: Development of a Mine Water Treatment Scheme

Location: Land south-east of Nenthead, adjacent to the Nenthead Mines Heritage Centre, south of the A689, Nenthead, Alston, Cumbria

1 INTRODUCTION

1.1. This is a Scoping Opinion adopted by Cumbria County Council, as the Local Planning Authority (LPA) for minerals and waste developments, under Regulation 15 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (*the 2017 EIA Regulations*). The Scoping Opinion has been undertaken as a result of a request for such received on 3 June 2019 from AECOM, acting on behalf of the Coal Authority, in respect of their client's proposals to establish a Mine Water Treatment Scheme on land south-east of Nenthead, adjacent to the Nenthead Mines Heritage Centre.

1.2. The purpose of a scoping opinion is to establish in writing an LPA's view as to the information that will need to be included within an Environmental Statement (ES) on potential significant effects to accompany a forthcoming planning application.

Structure of this Document

1.3. This document is structured as follows:

Section 2 - Statutory Requirements of a Scoping Opinion and Information Taken into Account

Section 3 - Summary of the proposed project and its location and context

Section 4 - Scoping Opinion: View on ES Approach and Topic Areas

Appendix 1 - Respondents to Consultation and Copies of Replies

2 STATUTORY REQUIREMENTS

2.1. Regulation 15(2) of the 2017 EIA Regulations states that a request for a Scoping Opinion must include:

a) a plan sufficient to identify the land;
b) a brief description of the nature and purpose of the development, including its location and technical capacity;
c) an explanation of the likely significant effects of the development on the environment; and

The Council considers that this has been provided for in the "Nenthead (Caplecleugh) Mine Water Treatment EIA Scoping Report" - Rev.4 - dated June 2019 (and the associated figure plans and appendices contained within) prepared by AECOM Infrastructure and Environment UK Ltd.

Information Taken into Account

Documents/Drawings

2.2. This scoping opinion has been produced based on the information submitted by AECOM which comprises of:-

- Letter dated 3 June 2019 from AECOM requesting a Scoping Opinion;
- Nenthead (Caplecleugh) Mine Water Treatment EIA Scoping Report" - Rev.4 - dated June 2019 prepared by AECOM Infrastructure and Environment UK Ltd (and the associated figure plans and appendices contained within);

Consultation Responses

2.3. Regulation 15(4) of the 2017 Regulations sets out that an LPA shall not adopt a Scoping Opinion until it has consulted "the consultation bodies" in order to give them the opportunity to identify significant environmental effects and any other issues which they consider the applicant should address.

2.4. In this case the County Council has consulted and taken into account the responses of the following consultation bodies:

- Cumbria County Council's Ecological Consultant;
- Cumbria County Council's Historic Environment Officer;
- Eden District Council's - Environmental Health department;
- Environment Agency;
- Historic England;
- Natural England;

2.5. Copies of the responses received from the above are provided in Appendix A. The applicant should refer to these responses when undertaking the ES.

2.6. Eden District Council's Planning Department, The North Pennines Area of Outstanding Natural Beauty Staff Unit, and the County Council's Highways, Local Flood Risk and Countryside Access Teams were also consulted but no written responses were received.

2.7. Regulation 15(6) of the 2017 EIA Regulations requires the Council to take into account the following matters before adopting a Scoping Opinion:

a) any information provided by the applicant about the proposed development;
b) the specific characteristics of the particular development;
c) the specific characteristics of development of the type concerned; and
d) the environmental features likely to be significantly affected by the development.

These matters are set out and taken into account within Sections 3 and 4 of this Scoping Opinion.

2.8. Regulation 18(3) and Schedule 4 of the 2017 EIA Regulations set out the information that an ES must contain, which includes a non-technical summary and an outline of the main alternatives considered by the applicant. It also sets out, in more general terms, the information that may reasonably be required to assess the environmental effects of a proposed development, and states that the direct; indirect; secondary; cumulative; short, medium and long-term; permanent and temporary; positive and negative effects of the proposals should be assessed. All residual impacts should be clearly set-out. This Scoping Opinion has taken into account these requirements and makes reference to the main aspects to which the Coal Authority should have regard.

2.9. Paragraph 035 (*Reference ID: 4-035-20170728* of the *Planning Practice Guidance* (PPG) states that the emphasis of Schedule 4 is on the "main" or "significant" environmental effects to which a development is likely to give rise. It explains that impacts which have little or no

significance for the particular development in question will need only brief treatment to indicate that their possible relevance has been considered.

2.10. Regulation 15(9) of the 2017 EIA Regulations provides that an LPA shall not be precluded, after a scoping opinion has been adopted, from requesting additional information from an applicant once the relevant planning application and Environmental Statement have been submitted.

3 PROJECT LOCATION, SURROUNDS AND OVERVIEW

The Proposed Site Location and its Surrounds

3.1. The proposed project would take place within the North Pennines Area of Outstanding Natural Beauty (AONB) within a remote upland river valley. The proposed project footprint would be situated on former mining land located to the south-east side of the small village of Nenthead. The majority of the land now forms part of the Nenthead Mines Heritage Centre.

3.2. The proposed minewater treatment ponds are proposed to be sited to the north and east of a former reservoir situated on the north-eastern side of the river valley upstream of the main building complex of the Nenthead Mines Heritage Centre. The former reservoir is currently utilised as party of a hydroelectric power scheme. Marshy/Acid grassland communities are the predominant habitat around this former reservoir. The wider landscape here includes further moorland habitat, the River Nent and mine workings. Access to the project site is proposed to be taken from the A689 at Fairhill (to the eastern edge of Nenthead) utilising an old quarry track.

3.3. Approximately 17 properties, including residential buildings and farms, are located within 500m of the site of the proposed minewater treatment ponds. These properties lie approximately north-west of the proposed minewater treatment ponds. The closest (Mill Cottage and Hilltop Cottages) lie just over 200m from the area where the minewater treatment ponds are proposed.

3.4. The Caplecleugh adit, from where it is proposed to intercept and divert minewater, is situated to the south-side of the car park adjacent to the Nenthead Mines Heritage Centre. The minewater discharge from the Caplecleugh adit outfalls into the upper reaches of the River Nent. The lower levels of the river valley to the west of the adit are primarily rural in character and dominated by farmland / pasture.

3.5. A large portion of the project site would be within the designated extent of a scheduled monument – namely the Nenthead Lead mines, ore works and smeltmill. The citation for this scheduled monument sets out that:

> "the Nenthead mining complex is regarded as the most intact mining landscape within the North Pennines. The main importance of the site lies in the unusually high level of preservation not only of the obvious features such as the buildings and dams, but also the network of roadways… The wide range of mining features provide an important resource for the study of the developments in mining technology in the 18th and 19th centuries, particularly the development of deep mining based on long adits (levels). The monument also preserves a good example of the inter-relationships between the mining features, buildings and water managements system."

3.6. Other heritage assets in broad proximity to the scheme include Perrys Dam Scheduled Monument which lies approximately 1.2km south of the proposed minewater treatment ponds extent. A small number of Grade II listed buildings are scattered about Nenthead – with the nearest being approximately 135m from the Caplecelugh Adit (namely No.1 Dene Terrace). A number of Grade II listed milestones are also present along the A689.

3.7. Some elements of the project may be in proximity to, and some elements of access may affect land within the nationally designated Smallcleugh Mine Site of Special Scientific Interest (SSSI). This site is selected as the largest and most detailed example of limestone flat-type mineralisation in the country, and is the only site for the minerals melanterite and epsomite. The majority of this resource is underground, however the citation notes that the site also has surface exposures of typical replacement flat type orebodies in limestone.

3.8. The south-western boundary of an area of land overwhich multiple designations overlap lies approximately 1.1km north-east of the proposed minewater treatment ponds. This land is designated as The North Pennines Moors Special Protection Area (SPA), North Pennine Moors Special Area of Conservation (SAC) and Allendale Moors SSSI. The SPA covers 147,246ha and is designated as the land is used regularly by more than 1% of the British population of Hen Harrier, Merlin, Peregrine and Golden Plover. The SAC covers 103,014ha and is primarily designated for dry heath, calcareous grassland, blanket bogs, petrifying springs, Siliceous rocky slopes with chasmophytic vegetation, and old sessile oak woods. The Allendale Moors SSSI covers 5,282ha. It is designated as a SSSI as it comprises of two upland moorland ridges with extensive areas of blanket mire, heath, flush and upland grass communities which supports a nationally-important assemblage of moorland breeding birds.

3.9. Whitesike Mine and Flinty Fell SSSI lies approximately 0.7km in distance from the Caplecleugh Adit and over 200m AOD above it. It is notified for its extensive and varied assemblage of heavy metal tolerant plants (aka calaminarian grasslands). Haggs Bank SSSI, which lies some 2km north-west of the Caplecleugh adit near Nentsbury, is also designated for calaminarian grassland (and for its species rich calcareous grassland). The River Nent at Blagill Site of Special Scientific Interest (SSSI), lies approximately 4.5km north-west of the Caplecleugh Adit and is designated as a SSSI for its river morphology.

3.10. A number of components of the Tyne and Nent SAC are located to the east of the project site. The three nearest components are coterminous with the SSSI extents of Whitesike Mine, Haggs Bank and River Nent at Blagill. (N.B. the first two of these components are upstream of the River Nent, while the Blagill component covers the river banks either side of the river) 4.5km downstream of the Caplecleugh Adit. This land is designated as a SAC solely for its calaminarian grassland habitat.

3.11. A public bridleway runs in parallel to the River Nent from the Heritage Centre to Priorsdale gamekeepers cottage on Flinty Fell. A public footpath (public right of way no. 302108) runs from the A689 at Fairhill to this bridleway and would seem to cut across the project area. A short length of bridleway also cuts across the quarry track off the A689. In the wider area there are a number of other public footpaths.

The Proposal

3.12. This project seeks to create a treatment system to remove the high concentrations of trace metals (notably zinc, lead and cadmium) from water discharging from the abandoned Caplecleugh Level/Adit of Nenthead Mine into the River Nent in order improve water quality within this watercourse and the wider downstream South Tyne catchment. The treatment system would be designed to treat a maximum flow rate of 10l/s.

3.13. It is proposed that water discharging from the Caplecleugh drainage adit will be intercepted before it enters the River Nent by a capture structure. It would then be transferred across the river via an above water level pipeline to a pumping station where a pumped rising main pipeline would transfer the water flows uphill to the treatment site.

3.14. It is proposed to treat the minewater by passing it through Compost-Based Treatment Ponds (CBTP) and then to "polish" it by passing it through an aerobic shallow reed-bed wetland lagoon. The reactive compost material contained within the treatment pond is likely to contain a mixture of compost (45%), wood chips (45%) and activated digested sewage sludge (10%). This compost material facilitates the removal of the elevated metals present in the minewater through a Bacterial Sulphate Reduction (BSR) process – a chemical reaction which sequesters metals as low solubility metal sulphides. These metal sulphides are retained within the compost medium. Hydrogen Sulphide gas can be generated as a bi-product of this reaction. To address this the Coal Authority propose to install an odour dosing plant. It is proposed that the odour dosing plant would be housed in a single-storey, pitched, stone-clad building sited in proximity to the CBTPS.

3.15. It is proposed to create 3no. CBTPs as part of this scheme. Incoming minewater would be split into three flows at a balancing pond and each seperated flow piped into a CBTP at the upper water surface level. A network of under-drainage pipes set-out in a limestone aggregate beneath the compost medium would establishes a downwards (i.e. vertical) flow of water through the compost bioreactor layer. The project promoter sets out that, typically, a 40cm depth of water would cover the compost medium. In terms of the technical capacity of the proposed scheme, each of the three CBTPs are proposed to have a volume of 1,000m^3 (i.e. 3,000m^3 total).

3.16. The creation of the CBTPs and wetland lagoons would require ground engineering/re-profiling works. Access tracks would also be created around the CBTPs and reed bed in order to facilitate maintenance access.

3.17. The treated water is proposed to be returned to the River Nent via a new outfall constructed at a location in close proximity to the existing adit discharge point. It is proposed to be conveyed to this outfall by gravity along a new pipeline largely installed in parallel to the rising main.

4 THE SCOPING OPINION

4.1. Please note that the council's comments set out in this Scoping Opinion are restricted to those areas in which we wish to stress items of particular significance or have specific comments or qualifications to make to the submitted Scoping Report. Where we have made no comments on an aspect please assume that we agree with your approach set out in the submitted Scoping Report and that we have nothing further to add at this stage. It is also advised that the project team addresses the finer detailed comments and requirements set out in the consultation responses compiled in Appendix A and any further comments that may arise from any further continued dialogue and technical input they may seek or receive from the relevant statutory consultees and stakeholders.

ES Topic Areas (Scope) and Approach

4.2. The LPA is satisfied that the technical topic areas and issues identified in paragraph 3.2.3 of the Scoping Report encompass those matters identified in Schedule 4 and Article 4(2) of the Regulations. The approach proposed in respect of climate change and public health set out at paragraphs 3.2.5 and 3.2.6; that is to say, of addressing these subjects within other relevant topic chapters and then of synthesising and summarising of these each in their own separate chapter; is noted and welcomed.

Scope of the ES – Thematic Topic Areas

4.3. It is agreed that the topics set-out in Table 3.1 of the scoping report that are proposed to be fully "scoped out" (i.e. 'Socio-Economics' and 'Major Accidents & Disasters'), and therefore not included in the ES, should be scoped-out, given the extremely low likelihood of any significant environmental effects arising in relation to these. Whilst it is agreed that the

proposed development is not likely to have any socio-economic implications that would result in significant environmental effects and that this matter does therefore not warrant addressing within the ES; it should be noted that the potential for positive and adverse socio-economic effects (particularly in relation to the areas tourism economy) should be considered within the Planning Supporting Statement submitted as part of the planning application. In respect of 'Major Accidents & Disasters', it is agreed that there is limited potential for major accidents and/or disasters resulting from or impacting upon this development. It is noted that the project team intend to consider potential for accidents and disasters within the 'Hydrology and Flood Risk' topic area. In doing so the potential for the scheme to damage/breach the nearby damn or for any breach of a CBTP should be considered.

4.4. It is agreed that the topics set-out in Table 3.1 of the scoping report that are proposed to be "scoped in", and therefore addressed in the ES, should be included and addressed within the ES. It is noted that 'Traffic & Transport' and 'Ground Conditions & Hydrogeology' are proposed to be considered in term of the construction phase only (i.e. the operational impacts of the scheme are not considered likely to result in significant environmental). In terms of 'Traffic & Transport', whilst it is agreed that operational traffic is unlikely to lead to significant environmental effects on the whole, it is recognised that compost substrate replacement operations (which would take place every 10-15 years) have the potential to generate a notable number of HGV movements in a relatively short concentration of time. Accordingly, it should be made clear within the ES and/or any other relevant planning application submission documents how many HGV movements could arise from this and how these operations would be managed to avoid adverse impact. In respect of 'Ground Conditions & Hydrogeology', it is agreed that the physical operation of the minewater treatment scheme is not likely to have any effects upon the environment. This view is reached subject to the expectation that the hydrological assessment of the physical presence of the minewater treatment infrastructure on groundwaters will make reference to and take account of the hydrogeological baseline and proposed ground conditions (that is to say taking into account imported material utilised to engineer the ponds).

4.5. It is noted that within table 3.1, for "Air Quality & Odour" it is proposed to focus upon odour only during the operational phase. Whilst it is agreed that operational traffic is unlikely to impact upon air quality during the operational phase; there is the theoretical potential for other adverse air quality emissions (other than odour) during the compost substrate replacement process. This should be discussed within the ES and addressed appropriately and proportionately within the consideration of operational effects.

4.6. More detailed comments in respect of each topic are set out in the "Topic by Topic Comments" section of this Scoping Opinion.

Alternatives

4.7. It is agreed that the consideration of alternatives should look at both alternative sites for the proposed scheme and the alternative minewater treatment technologies considered. It should also briefly consider alternative layouts/arrangements of the proposed site, clearly explaining how the preferred site layout proposed reduces potential impacts. A "do nothing" / "no-project" baseline option should also form part of the assessment of alternatives. In the case of each alternative, a description of its specific characteristics and a clear indication of the main reasons for the choice made, including a comparison of the potential environmental effects, should be provided. For clarity, the applicant is advised to present all text relevant to alternatives in the same chapter/section of the ES.

The Site, its Location and the Proposal

4.8. A description of the application site and its surroundings should be provided toward the beginning of the ES. This should include distances from the boundary of the application site to:

- residential and other developments;
- identified areas and designated sites of environmental and nature conservation interest;
- public rights of way and open access land;
- watercourses and other water bodies;
- agricultural land;
- the road network.

4.9. This should be followed by a detailed description of the proposed development. This description should include operational information regarding the production processes – in particular the nature and quantity of materials used, the scheme's technical capacity (for example the maximum rate of water input; the CBTPs' physical capacity and anticipated residence time for water being treated) and details of the chemical reactions that take place as part of the treatment process. The description should be clear about what elements would be situated below ground level and above ground level. Where an element is proposed to be sited below ground, but ground levels are to be raised above existing ground levels to achieve this, then this should also be made clear.

General Approach to Assessment

Competence

4.10. The names, qualifications and relevant expertise of those undertaking surveys and the subsequent assessment of each topic chapter should be clearly set out within a 'Statement of Competence' within the ES so that the LPA can be satisfied that the ES has been prepared by competent experts in line with Article 18(5) of the 2017 EIA regulations. Such a 'statement of competence' should be included either within the introductory section of each topic specific chapter or as a consolidated document within the appendices.

Study Areas

4.11. It is recognised that no single study area will be applicable to all topics; that is to say that study areas will vary according to the geographical scope of the potential effects relevant to each topic. Similarly, it is also recognised that for each topic spatial buffers may focus upon different elements of the proposed development (for example, assessment of operational noise may focus upon land in and around the proposed pumping station while construction traffic impact will focus on the wider highway network).

4.12. It is essential that the study area to be applied in the assessment of the different environmental topics, along with a justification for its use, is clearly delineated within each topic chapter. The applicant should ensure that the geographic scope of the study area is sufficiently robust in order to undertake the assessment. The extent of the study areas should be established on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant technical specialist consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. Study areas should be clearly identifiable within each topic chapter of the ES and also identified on figures where appropriate. It would be helpful if a table summarising the study area of each topic, and the principle reasons for this, is provided.

Baseline Data & Assessment Years

4.13. Each topic chapter should provide a clear description of the relevant baseline environmental conditions within the topic specific study area so as to account for any changes likely to occur before scheme construction and operation commences. This should include any independent

changes that can be predicted (such as other developments with a level of commitment established – for instance those which have gained planning permission or that are under construction). The baseline therefore requires first the identification of the existing situation and then the prediction of any likely changes to occur between the date of assessment and project commencement and operation. The description of the baseline and future baseline conditions must clearly identify all receptors that may be affected by the proposals.

4.14. In terms of the initial/current baseline, each topic chapter of the ES should clearly set out the dates upon which the surveys that inform the baseline assessments of each topic have been undertaken.

4.15. The core temporal baseline timeframes - i.e. the date immediately before the anticipated commencement of construction; the anticipated date of commencement of operation; and the future baseline (usually taken to be 15 years from a development's completion and commencement of operation) should be clearly set out in the general introduction to the ES. Where they differ for a specific topic, this should be clearly set-out in the topic specific chapter. The assessment years set out in paragraph 7.1.6 of the Scoping Report are duly noted.

Assessment Depth and Interrelationships

4.16. The scope of environmental assessment should cover the full breadth of each topic area and acknowledge and highlight key inter-relationships with other topic areas.

Identifying, Assessing and Classifying potential impacts and effects

4.17. The approach to identifying, assessing and classifying potential impacts and effects set out across paragraphs 3.2.11 - 3.2.19 (and within Table 2.2) of the scoping report are considered clear and sound on the whole. However please note that the generic matrix approach to classifying effects set out at paragraph 3.2.16 and Table 2.2 of the Scoping Report is not appropriate in respect of ecological effects – instead the Chartered Institute of Ecology and Environmental Management (CIEM) September 2018 Guidelines for Ecological Impact Assessment should be utilised.

4.18. The list of potential direct construction and operation phase impacts and effects arising from this proposed development set out across paragraphs 3.2.14 - 3.2.15 is considered to be comprehensive. Indirect operational impacts/effects, such as the possibility of local fauna interacting with the CBTPs, should also be considered.

Topic by Topic Comments

Landscape and Visual Impact

4.19. It is agreed that the ES must include a full landscape and visual impact assessment (LVIA) of the construction and operational phases and that this should be undertaken in accordance with the 'Guidelines for Landscape and Visual Impact Assessment' (The Institute of Environmental Assessment and Landscape Institute, Third Edition; April 2013). The assessment methodologies set out in paragraphs 5.2.7 – 5.2.11 are considered to be in accordance with these guidelines.

4.20. The comments in the "General Approach to Assessment" section of this scoping opinion in respect of competence, study areas, baseline data and assessment years should also be addressed in this topic chapter.

4.21. Baseline information as regards landscape character should also make reference to Natural England's National Character Area Profiles and to The Cumbria Landscape Character

Guidance and Toolkit (CLCGT). The CLCGT was published in March 2011 and provides the most up-to-date assessment of the character of the County's landscapes and establishes a strategic framework that includes visions and objectives to help protect, manage and plan changes to maintain and enhance landscape distinctiveness. The immediate landscape setting of the project straddles two character areas classified by the CLCGT as "8d: Main Valleys – Dales" and "13b: Fells and Scarps - Moorland, High Plateau". The character assessment for these sub-types should act as baseline and the LVIA take into account its sensitive characteristics and current condition.

4.22. The LVIA should provide assessment of the proposals in terms of impacts upon visual receptors, key views and local landscape character (*N.B. the impacts of any lighting should also be taken into account*). Reasons for the selection of key views and omission of other potential candidate views and receptors should be clearly set out. The project team should continue to liaise with the County Council Development Control Team in respect of the viewpoints to be taken forward for assessment. The assessment should also take into account any wider drainage improvements that may be brought forward as part of this project.

4.23. The LVIA must clearly identify and evaluate any embedded mitigation and enhancement measures incorporated into the scheme design and provide reiterative assessment of the proposed impacts on the landscape character, key viewpoints and visual receptors.

4.24. The LVIA must also provide consideration of the proposals direct and indirect affects upon the AONB designation, in particular, its effect upon the purpose of this designation and the content of the relevant management plan for the North Pennines AONB.

4.25. The Scoping Report does not set-out how the potential mitigation for landscape and visual effects will be monitored. Information should be provided in respect of any monitoring measures considered appropriate (and their parameters) in order to ensure the efficacy of mitigation proposed.

Noise and Vibration

4.26. It is agreed that noise and vibration should be scoped-in and that both the construction and operational phases should be addressed.

4.27. The comments in the "General Approach to Assessment" section of this scoping opinion in respect of competence, study areas, baseline data and assessment years should also be addressed in this topic chapter.

- Baseline Considerations:

4.28. Noise monitoring should be undertaken to indicate baseline day-time and night-time noise levels. Where properties are closely grouped together, a single baseline measurement from the boundary of the nearest property may be appropriate. The methodology in respect of the baseline noise survey set out in paragraphs 5.3.6 – 5.3.8 of the scoping report is considered sound. The project team's intention to agree baseline noise/vibration monitoring locations with Eden District Council's Environmental Health Department and the County Council Planning department is welcomed. The selection of monitoring locations should be informed by likely noise sources and their approximate noise-level ranges for both construction and operation.

4.29. Paragraph 5.3.2 of the Scoping Report identifies a number of potential residential receptors. This appears to omit a number of properties in a similar vicinity to the scheme as those identified (for example:- those related to Dene Terrace, Thornleigh, Granary Cottage, etc.). This matter should be reviewed and ground-truthed once the precise location and broad

design of the pumping station and any other key noise generating infrastructure or construction earthworks is known. Clear reasoning for the inclusion and omission of properties within a set-radius of key noise generating components / elements of the construction phase should be provided.

4.30. It is noted and welcomed that the Scoping Report Baseline will take into account and consider potential effects upon sensitive ecological receptors. The quiet enjoyment of nearby public rights of way which are in close proximity to regular sources of operational noise emission should also be taken into account given the sites' rural location within an AONB.

Potential effects

4.31. **Construction:** The ES should clearly set out the working hours that have been assessed in consideration of noise and vibration effects. The ES should include consideration of the impact of construction vibration upon the nearby land reservoir and the stability of surrounding land and mine-shafts.

4.32. **Operation:** Careful justification should be provided as to the framework proposed to be used to evaluate the noise/vibration impact of the removal of waste and replacement of reactive material based on the processes involved in this operation. Where potential effects are identified the efficacy of mitigation proposed should also be evaluated.

4.33. The ES should:

- Determine appropriate noise limit criteria in accordance with British Standards and the *Planning Practice Guidance*. It is strongly encouraged that these are agreed with Eden District Council's Environmental Health Department;
- Calculate predicted noise levels;
- Assess the predicted noise levels against the agreed noise limits to determine the significance of the impacts;
- Identify mitigation measures to address any significant impacts;
- Set out proposals for the monitoring and review of noise/vibration emissions to ensure compliance with agreed limits, and procedures to be followed should complaints be received.

Air Quality and Odour

4.34. The proposed site is located in a rural area with good air quality. The main potential impacts in relation to air quality/odour relate to the construction, operation and maintenance/servicing (*i.e. replacement of reactive substrate*) of the CBTPs at the MwTS. Fugitive emissions of dust and/or particulate matter from construction operations; fugitive emissions (and their mal-odourous properties) from the operational CBTPs; and dust/particle emission/odour from substrate replacement have the potential to effect nearby residential receptors / businesses, users of the public rights of way network and wildlife. All potential receptors should be clearly set out in the baseline.

4.35. **Scope:** Table 3.1 within the Scoping Report proposes that air quality should be scoped in for the construction phase and to concentrate only on odour for the operational phase. Whilst it is agreed that operational traffic is unlikely to impact upon air quality during the operational phase; there is the theoretical potential for other adverse fugitive air quality emissions (other than odour) during the compost substrate replacement process. This should be discussed within the ES and addressed appropriately and proportionately within the consideration of operational effects.

4.36. The air quality assessment should not only consider the potential for nuisance dust but also any relevant pollutants covered in the National Air Quality Strategy. The potential impacts

upon human health relating to the potential release of particulate air pollution (PM10 and the finer PM2.5) should be considered across the whole development.

4.37. The comments in the "General Approach to Assessment" section of this scoping opinion in respect of competence, study areas, baseline data and assessment years should also be addressed in this topic chapter.

4.38. ***Construction Phase Air Quality:*** The scope and content of the construction phase assessment set out in paragraphs 5.4.4 - 5.4.8 of the scoping report is considered reasonable and sound. Dependent on findings of the assessment a Dust Management Plan (DMP) may be required. If so, this could be a stand-alone document or incorporated into a Construction Environment Management Plan (CEMP). An outline DMP or CEMP should be included within the appendices to the ES.

4.39. ***Operational Phase:*** The ES should clearly catalogue and detail all likely forms of emissions to air that would be generated by the minewater treatment process and quantify the likely range of concentration of the emissions at source and at key receptor points.

4.40. The proposed use of dispersion modelling to quantify levels of hydrogen sulphide emissions at receptors is supported. This should quantify the amount of the compound present in air and the odour level of that concentration of the compound at each receptor point. The odour level should be quantified based on European odour units per cubic metre of air.

4.41. The ES (either in its main body or within its appendices) should include discussion and justification of the values utilised in the key input parameters for the dispersion modelling. Discussion should also be provided in respect of the degree of sensitivity of the various model inputs and how changes to any inputs may influence results/conclusions. If wind rose data is not readily available for the immediate locale, then clear justification as to the suitability of the weather monitoring location used will need to be provided taking into account the landform of the site and its surrounds. It is considered that it would be prudent for local wind direction data to be harvested, compiled and utilised to inform the dispersion modelling so as to help ensure its veracity.

4.42. As part of the operational phase, maintenance activities, including those which happen on an infrequent periodic basis should be taken into account. In particular compost substrate replacement operations should be considered and assessed in respect of its potential for odour emission and for generation of dust / emission of fine particulate matter. Potential mitigation strategies relating to this should be considered and their efficacy discussed.

4.43. The odour assessment undertaken should make reference to the following publications:

- Department of Environment, Food and Rural Affairs [DEFRA] (2006), *Code of Practice on Odour Nuisance from Sewage Treatment Works;*
- DEFRA (2010), *Odour Guidance for Local Authorities;*
- Environment Agency [EA] (2011), *Technical Guidance Note: H4 - Odour Management*;
- Chartered Institution of Water and Environmental Management [CIWEM] (2012), *Policy Position Statement: Control of Odour*;
- Institute of Air Quality Management [IAQM] (2014), *Guidance on the Assessment of Odour for Planning*;

4.44. It is essential that all embedded mitigation measures (physical and managerial) are made explicitly clear and their efficacy discussed.

4.45. The ES should:

- Determine an appropriate odour limit(s) at the nearest residential receptors. It is strongly

encouraged that limits are agreed with Cumbria County Council's Planning Department and the local Environmental Health Department;
- Assess the predicted odour levels against the odour limits to determine the significance of the impacts;
- Identify odour abatement measures to mitigate and address any significant effects and re-run the models with mitigation applied;
- Set out proposals for the management, monitoring and review of odour emissions to ensure compliance with agreed limits, and procedures to be followed should complaints be received. This "Odour Management Plan" should set out odour monitoring locations that should be agreed with Cumbria County Council's Planning Department and the local Environmental Health Department.
- Identify any residual impacts relating to odour.
- Provide a framework and/or mechanisms for monitoring dust and odour throughout the operational life of the development.

Traffic and Transportation

4.46. Whilst it is agreed that operational traffic is unlikely to lead to significant environmental effects on the whole and can therefore be scoped-out; it is recognised that compost substrate replacement operations have the potential to generate a notable number of HGV movements in a relatively short concentration of time, especially if backhauling is not employed and all three proposed ponds are refreshed simultaneously. Accordingly, either the ES or Planning Supporting Statement should briefly address how many HGV movements could arise from this and how these operations would be managed to avoid adverse impact.

4.47. The approach set out towards baseline conditions and the assessment methodology set out at section 5.5 of the Scoping Report are considered proportionate and sound. The new traffic baseline survey should be undertaken outside school holiday periods so as to ensure it does not under-represent morning or evening peak numbers. The potential effects identified within paragraph 5.5.4 are considered to constitute the key potential effects that the ES should address.

4.48. The comments in the "General Approach to Assessment" section of this scoping opinion in respect of competence, study areas, baseline data and assessment years should also be addressed in this topic chapter.

Cultural Heritage

4.49. It is considered that the degree of impact of the proposal upon the Nenthead Lead mines, ore works and smeltmill Scheduled Monument and other as yet unknown underground archaeological resources is a key issue that the ES will need to address in great detail. These include direct impacts such as physical loss and erosion of visual and evidential integrity (i.e. interruption of historic inter-relationships) and indirect impacts such as the potential to alter surface-water and ground-water regimes so as to damage above and below ground heritage assets, changes to the setting of heritage assets and the alteration of the wider historic landscape.

4.50. The scope of this topic issue set out in paragraph 5.6.1 is considered to be appropriate to this project. The variance of the areas of study to include all existing known and potential heritage assets within 1km of the proposed development boundary and all known designated heritage assets 1-3km from the proposed development boundary is considered logical, sound and robust. A 3km study area for the consideration of the setting of assets is considered reasonable given the lower valley location of the proposed project and the topography surrounding the site.

4.51. In addition to the baseline data sources referenced within paragraph 5.6.15 of the scoping report it is advised that any records the Nenthead Mines Conservation Society/Trust may possess should also be consulted. It may also be prudent for them to be involved on the site-walkover. The methodology for assessing potential impacts set out across paragraphs 5.6.14 – 5.6.19 is considered to be acceptable. It would be helpful if clear reference to current guidelines and best practise followed in terms of establishing the baseline and assessing impact are clearly flagged in the ES.

4.52. The detailed comments made by Historic England and the County Council's Historic Environment Officer (set out in the Appendix A) should be taken into account.

Ecology and Nature Conservation

4.53. The submitted Scoping Report identifies all the internationally and nationally designated sites within the potential sphere of influence of the proposed development site. It is also considered to establish a generally comprehensive approach to identifying the habitats and species present in the immediate vicinity of the project site that will form the baseline. The ES will need to identify all the important ecological features across the full development site (and their immediate surrounds). It is noted that to date two separate extended phase 1 habitat surveys, each covering a different part of the site (*i. the Car Park and Adit; & ii. The bulk of the proposed minewater treatment site around the reservoir*), were carried out in 2018 and that several additional areas are programmed to be surveyed in 2019. It is recommended that the ES clearly synthesizes the baseline data and findings of the phase 1 habitat surveys. It should also fully detail the competence of surveyors for all surveys – habitats, vegetation and species-specific (detailing their qualifications and experience) and illustrate on a map the areas of land subject to phase 1 (whilst denoting the different timings of surveys within this).

4.54. It is noted that the Phase 1 surveys undertaken to date identify valuable wetland habitats (such as mire) within the study area and finds them to be in a degraded condition. As part of the iterative design process, due consideration should be given to avoiding impacts on these wetland habitats and to restoring them to favourable condition (in line with the mitigation heirarchy). This consideration should be detailed in the ES. Consideration of impact should include direct loss and indirect harm resulting to changes in the local water environment resulting from the development.

4.55. It is noted that further survey effort is proposed to be undertaken in respect of Otter and Water Voles. The Water Vole survey should include the site and its wider surrounds – including the Nent river corridor and key tributaries and be conducted in in accordance with the protocol described in the Water Vole Mitigation handbook (2016). The Council trusts that the Environment Agency's comments in respect of these species set out in Appendix 1 will be taken forward. It is also noted that the project team intend to undertake a bat roost survey of the Caplecleugh adit if potential for impacts on bats is considered likely. Consideration of impacts upon these species should consider the construction phase in the vicinity and any potential noise impact resulting from the operation of the proposed pumping station in proximity to this.

4.56. The Zone of Influence (ZoI) of the proposal upon the different important ecological features should be clearly stated (drawing upon best available evidence to determine these) and there should be a clear characterisation of the nature of any impacts and, crucially, utilise a clear basis as to whether these are significant. Within the characterisation of impacts it is essential that inter-disciplinary cross-referencing is utilised in respect of matters such as air quality and hydrology reports. It is also important that the examination of potential impacts upon species should not be confined to the construction phase. The presence of the operational development, particularly the CBTPs and Reedbeds and their accessibility to species, the

potential for species to interact with these and any potential consequences that might arise to these species, should be duly considered as part of the assessment.

4.57. The potential impact of the operational scheme on river flows, including water condition, (and associated potential impact on river habitat and species) should be noted, assessed and any embedded mitigation in respect of this laid bare in the ES. This should include consideration of potential periods of reduced flows and temperature changes that could occur to the Caplecleugh adit discharge as a result of the treatment process/location – as both these issues could potentially affect Brown Trout populations within the River Nent. Potential impacts on aquatic species present within the reservoir should also be considered, detailed and mitigation flagged.

4.58. The potential impact of the reduced dissolved fraction of metals within treated water from the Caplecleugh Adit upon calaminarian grassland further downstream in the river Nent Catchment should be considered in the ES. Should any measures be brought forward into the scheme that would serve to prevent metal rich sediments from entering the river system, then the potential impact of such interventions upon downstream calaminarian grassland should also be clearly considered. From wider discussions with the project team, it is understood that a further survey of the calaminarian grassland habitat downstream from the site at Blagill (which forms a component part of the Tyne and Nent SAC) has been commissioned for this summer. This survey, the results of previous surveys, and a project specific shadow HRA in respect of this, should be included as a technical appendix to the ES.

4.59. The ES must demonstrate a rigorous and transparent approach to impact assessment that is in accordance with *CIEEM (2018) Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. The proposed matrix approach to classifying effects is considered out dated and inappropriate for assessing ecological impacts. The assessment of effects should be carried out in line with the above CIEEM Guidelines. Information submitted should also be in accordance with Section 8 of *BS42020:2013 'Biodiversity - Code of practice for planning and development*.

4.60. For all important Ecological Features, the ES should detail how the mitigation hierarchy has been followed in construction and operational phases and detail avoidance, mitigation, compensation and any enhancement measures for each. This should follow the approach described in Chapter 6 of CIEEM 2018 Guidance as well as Chapter 5 of British Standard 42020:2013. This will need to cover the key Species and Habitats of Principle Importance within the ZoI. The ES should provide clear discussion and conclusions in relation to mitigation and as to the significance of residual impacts.

4.61. The intention to produce a Habitat Management Plan to cover the construction and operational phases and to use this to identify opportunities for habitat creation and biodiversity enhancement is welcomed.

4.62. Ongoing Monitoring requirements in order to comply with Schedule 4 of the EIA Regulations should also be clearly set out. This should include ecological reviews of habitat establishment at appropriate intervals. The project team may wish to set this out in a table, providing clear timescales for surveys and their duration/repetition.

Ground Conditions (Soils, Stability and Land Contamination) and Hydrogeology

4.63. The assessment methodology set out across paragraphs of 5.8.13 – 5.8.18 focuses primarily upon potential land contaminations issues associated with made ground at the project site. The baseline and assessment methodology identified, in so far as it relates to land contamination considerations, is considered sound. However, this topic chapter should also encompass soil, geological and hydrogeological conditions and in doing so should address

the potential impact of the scheme (particularly the development and presence of the CBTPs) upon land stability in the area and any potential perched water that may be present in the shallower bedrock strata. Consideration of how to preserve and best utilise peat resources should also be included within the assessment.

4.64. The assessment in respect of contaminated land should make reference to the Environmental Protection Act 1990 (amended 1995); the Environmental Protection (Duty of Care) Regulations 1991 (amended 2003) and the Environment Agency's Model Procedures for the Management of Land Contamination (CLR 11) (Sept 2004) (and any guidance which may supersede this such as the online Land contamination: risk management [LCRM] resource).

4.65. To enable a clear understanding of impacts, the ES should include figures to visually depict the geographic locations of the varying risks of landslides and compressibility across the study area.

4.66. The ES will need to demonstrate that the project will not create any unacceptable risks to human health or the wider environment and provide sufficient detail of the mitigation measures that will secure this. Where mitigation/remediation is required, the range of mitigatory measures and/or remediation options considered should be clearly set-out and the reasons for the selection of the preferred measures explained. Should any contaminated material be present and remediation by removal is required the associated traffic movements should be considered within the Traffic and Transport section. Reiterative assessment of other topic areas may be required if in-situ remediation is proposed.

4.67. It is expected that a sufficiently detailed outline CEMP and Soil Management Plan should form part of the mitigation package and that these should be included as appendices to the ES.

4.68. The comments in the "General Approach to Assessment" section of this scoping opinion in respect of competence, study areas, baseline data and assessment years should also be addressed in this topic chapter. In particular, it is important that the qualifications (and experience) of those undertaking species-specific surveys are clearly set-out.

Hydrology (Flood Risk and the Water Environment)

4.69. This chapter should cover water quality, flood risk, geomorphology and drainage implications of the proposed development.

4.70. The range of baseline data set-out within paragraph 5.9.4 of the scoping report is considered to be sound. It is expected that flow data in respect of the Caplecleugh adit and the River Nent and data in respect of the quality and level of water within the adjacent reservoir (and its maximum holding capacity), across the seasons, should also form part of the baseline. Ground Investigation results (in particular those in respect of ground permeability – undertaken in line with Building Research Establishment [BRE] Digest 365) should also be incorporated into the baseline. Potential construction and operational impacts upon the reservoir water body should be fully considered within this section.

4.71. Within the ES, the mitigation measures should be set out in as much detail as possible. Design details of sustainable drainage systems should be included. The mitigations and residual effects identified will require clear cross-referencing to other ES chapters (in particular the Ecology and Nature Conservation chapter).

4.72. Details of how the mitigation measures to protect the water environment during the construction phase will be monitored should be clearly setout. Similarly, details of how the

efficacy of drainage measures provided will be monitored should be stipulated in the ES. Details of how the key watercourses (flow-rates and water quality) and water bodies (reservoir, CBTPs and the reedbed) will be monitored should also be set-out.

Waste and Materials

4.73. It is noted that this topic covers potential impacts and effects related to the use of materials and the management of waste and that this is primarily pertinent to the construction phase but is also of relevance to compost substrate replacement operations. In terms of waste management capacity the availability of sites within Northumberland and beyond should also form part of the baseline. The location, availability and capacity of specialised waste processing and landfill facilities able to handle heavy metal rich materials should be examined as part of this chapter. Methodologies/technologies for managing compost substrate replacement operations should be considered and assessed. Any additional mitigation measures should be specified and the residual impact assessed (with potential impacts upon human health and habitats and species being distilled).

Climate Change

4.74. The three aspects of climate change identified in paragraph 5.11.1 of the Scoping Report are considered to be the key aspects of relevance to this project. It is agreed that examination of the scheme's climate resilience should focus upon extreme rainfall and temperature events. The approach to assessing and mitigating potential impacts set out in section 5.11 of the Scoping Report is considered sound and proportionate to the project. The assessment should follow the principles and guidance provided by IEMA (Institute of Environmental Management and Assessment) in relation to Climate Change Adaptation & EIA. The assessment should clearly identify potential impacts/effects and clearly identify adaptations incorporated into the proposal to make it more resilient to climate change.

Health

4.75. The 2017 EIA Regulations require that ES' include consideration of potential impacts and effects on human health. The ES should therefore provide for systematic assessment of the positive and negative impacts of the proposal on health.

4.76. Given the level of public concern raised in respect of the potential for adverse health impacts arising from hydrogen sulphide emissions in relation to the nearby Nent Haggs Minewater Treatment Scheme project; it is considered prudent for the bulk of this section of the ES to focus upon potential physical biological health impacts associated with air quality emissions. It is agreed that the ES should also provide consideration of potential for direct human contact with existing mining legacy contaminants and the treatment substrate (in both "new" and heavy metal loaded forms). Public perceptions of potential physical biological health impacts and related anxiety in respect of these (as manifested in mental and physical health) should also be addressed in the ES and mitigation measures set-out. Other more indirect social and wellbeing impacts of the scheme are considered unlikely to result in significant environmental impacts, so need only be briefly considered within this section.

4.77. The ES should set-out key health guideline thresholds in relation to Hydrogen Sulphide (H_2S) (and any other fugitive emissions that may be cause for health concern). In doing so it should seek to ensure as much internal consistency in the measurement units ($\mu g/m^3$, mg/m^3 or ppm) deployed in the ES as possible. A clear discussion of the relevant health limits and how the levels of emission predicted at source and at receptors within the dispersion modelling, both across a range of scenarios, should be included within this chapter of the ES. In terms of quantifying fugitive emissions of H_2S, this should include discussion of the removal rate of this achievable by the hydrogen sulphide abatement technology proposed to be applied to this scheme. The range of scenarios should take into consideration variations in

concentration of emissions that can arise over the commissioning / bedding-in phase/period of the CBTPs and clear epochs of this defined. These epochs should be taken into account in the assessment of levels of emissions, potential effects and impacts and the efficacy of mitigation measures.

4.78. This section should clearly detail all the relevant mitigation proposed to address identified potential impacts/effects and assess the likely efficacy of these measures in order to determine the likely residual effects. The ES should provide for monitoring of emissions and the mitigation alongside the health and wellbeing of the community throughout the construction phase and the operational life of the proposed development.

Cumulative and in-combination effects

4.79. The approach set-out in respect of cumulative and combined effects across paragraphs 5.13.1 – 5.13.5 of the Scoping Report is considered sound. We trust that the project team will include specific consideration of the implemented check weir development near Nentsberry alongside its consideration of the Nent Haggs Minewater treatment scheme and wider WAMM programme especially in connection with cumulative/combined water quality impacts/effects (and related knock-on ecological impacts/effects) and in terms of wider landscape and visual effects within the AONB. In undertaking this assessment it is advised that you follow the guidance set out in the Planning Inspectorates' Advice Note 17: Cumulative Effects Assessment.

Other Aspects/Matters

4.80. The effects of any artificial lighting associated with the proposal needs to be considered within the ecological, public health and landscape/visual impact sections of the ES. This should take into account both fixed and mobile lighting.

Proviso

4.81. This Scoping Opinion relates solely to the development as outlined and described within the submitted Scoping Report received . If subsequent changes are proposed to the scheme prior to submission of a planning application to the Local Planning Authority following the adoption of this Scoping Opinion, it may be necessary to request a further Scoping Opinion from the Local Planning Authority.

Signed: Angela Jones,
Acting Executive Director for Economy and Infrastructure
on behalf of Cumbria County Council

Dated 3 July 2019

Note in Respect of Public Consultation

The County Council's Statement of Community Involvement (adopted July 2017) establishes an expectation that EIA projects will have carried out pre-submission publicity and consultation with the local community on the proposed development prior to submitting the planning application. It is also expected that the planning application will include details of the publicity and consultation and the issues and aspirations that were raised, and that the applicant will demonstrate within the planning application how these have been addressed.

APPENDIX A – Consultation Responses

Cumbria County Council's Ecological Consultant's Response – 3 July 2019

The supporting document is very comprehensive and is most welcomed as it clearly describes the intended scheme and the key ecological receptors. Overall, therefore, I am content that the broad scope of the document and surveys detailed therein are comprehensive. I have a few comments on issues which need to be altered/addressed, and these are as follows:

Please note that in terms of scoping, the proposed matrix approach to impact assessment is outdated and not appropriate for ecological impacts. Rather than the matrix described in 3.2.16 of the Scoping Report, CCC's scoping opinion should request that assessment of effects is carried out in accordance with the CIEEM Guidelines for Ecological Impact Assessment (Sept 2018).

In relation to the Conservation of Habitats and Species Regulations 2017, reference to the previous EA Appropriate Assessment and Simply Ecology's Addendum adopted by CCC for Nent Haggs is made in 3.3.1 - 3.3.5. I do have strong concerns about the comment at 5.7.32 that the compensatory measures already agreed for Nent Haggs will be sufficient to address the impacts of the Caplecleugh scheme. In relation to the HRA, the applicant will need to clearly address the impact of this proposal as best as they are able. I do not view any compensatory measures put in place for Nent Haggs as relevant to this scheme and this should be made clear in CCC's scoping response. I appreciate that the multiple adits discharge into the same watercourses and isolating the effects of each is known to be exceedingly difficult. However, given that there is a likely cumulative impact upon the calaminarian grasslands from the number of adits which have clearly been identified by the WAMM project, a proportionate degree of compensatory measures for the impacted SACs will need to come forward for EACH minewater treatment scheme.

Therefore as these issues still do not seem to be clear, the sake of clarity, I would definitely welcome a clear review/update of the shadow HRA rather than re-submission of the previous EA HRA or any previous Natural England correspondence over the likely effects upon the Calaminarian Grassland SACs. There has been so much correspondence and communication with the SoS that I think it is clear that the conclusions of the EA and NE assessments for Nent Haggs need to be set to one side and a new and fresh document produced that addresses Caplecleugh neatly and succinctly in its own right.

In relation to other habitat and protected species, my comments mirror those of the EA - I would like to see effort to retain or restore elsewhere in the site the mire and flush communities rather that working on the presumption of loss - this should reflect the mitigation hierarchy. Also the water vole survey updated please and conducted in accordance with the protocol described in the Water vole Mitigation handbook (2016).

Finally I agree with the other information provided on species groups and the judgements expressed in the scoping document on the value of the various ecology elements of the site. Only those identified as relevant need to be assessed within the EcIA chapter

Cumbria County Council's Historic Environment Officer's Response – 11 June 2019

The proposal will have a physical and visual impact on the remains of the Nenthead lead mines complex, which are legally protected as a scheduled monument. You should therefore consult Historic England on this scoping opinion. The proposal also has the potential to disturb currently unknown archaeological assets that lie outside of the designated area.

I agree with the submitted scoping opinion report that the forthcoming Environmental Statement should include information on how the significance of archaeological assets that survive within the site will be impacted upon by the proposed development by means of a thorough archaeological desk-based assessment and a walkover survey of the site. I am content with the suggestion that the assessment is

limited to an area of 1km from the proposed development. I suggest that you consult with Historic England as to whether the suggested 3km study area for the consideration of the setting of assets is appropriate.

I also agree with the scoping opinion report that the results of the assessment and walkover survey will, in consultation with myself and representatives from Historic England, inform the need for, and scope of, an archaeological evaluation or other archaeological fieldwork as part the EIA process prior to the determination of the planning application.

An informed judgement can be made as to whether, in the event planning consent is granted, provisions will need to be included for the preservation of significant archaeological assets in situ and for the recording of assets of lower importance.

Eden District Council Environmental Health Department Response – 25 June 2019

Confirm that they approve of the proposed approach set-out within the scoping report.

Environment Agency Response - 21 June 2019

Our ref: NO/2019/111783/01-L01
Your ref: SCO-3/19/03

EIA SCOPING OPINION REQUEST
DEVELOPMENT OF A MINE WATER TREATMENT SCHEME; LAND SOUTH-EAST OF NENTHEAD, ADJACENT TO THE NENTHEAD MINES HERITAGE CENTRE, SOUTH OF THE A689, NENTHEAD, ALSTON, CUMBRIA

Thank you for referring the above Scoping Opinion request which we received on 4 June 2019.

We have no objection to the proposed development, as the scheme is anticipated to improve overall water quality as part of the Coal Authority and Environment Agency Water and Abandoned Metal Mines programme. We are pleased to see that the scoping report details the considerations to protected sites and to biodiversity and have the following comments to make with regards to the scheme going forward.

It is noted that two separate Preliminary Ecology Assessments (PEA) have been carried out on site and are included in the EIA Scoping Report. Any areas not covered by the PEA reports will need to be subject to the same level of survey effort. It is recommended that these reports and any subsequent surveys be combined into a single ecological appraisal. Combining these reports will provide consistent baseline information on the site and will allow it to be assessed as one, including in combination effects, rather than a series of reports that are assessing different elements of the site.

Should any impacts be predicted to the Caplecleugh adit, bat surveys to best practice guidelines by experienced and licenced ecologists will be required.

It is positive to see that a water vole survey has been carried out. It is unclear what year the survey was carried out, as both 20 July 2017 and 20 July 2018 are listed in the report. This will need to be clarified within the EIA.

We also note that the survey work for water vole has been carried out in select locations, and has only carried out a single visit as opposed to two within a single survey season (which are more conclusive in determining likely absence as per best practice guidelines). There are a number of water vole records directly within this area, which may indicate presence, and while some habitat may not be considered

good quality for water vole, in upland areas such as this, water voles will occupy areas that are usually considered sub-optimal. Given these concerns, we recommend a full suite of surveys for water vole in order to ensure that their presence or absence can be fully assessed.

The EIA states that an assessment of the riverbank for use by water vole and otter where any headwall/outfall into the River Nent would be placed, will be carried out. We also request that areas affected by alterations in flow and where any pipeline crossing is needed, also be subject to survey and assessed for both construction works and long term operational use.

It is good to see that otter have been subject to survey. We are happy to discuss the potential otter resting place with the applicant that is mentioned in Section 5.7 of the report. This is in order to aid in future surveys and to ensure no detrimental impact to an otter resting site.

We are pleased to see that a habitat management plan will be included in the EIA, and that better quality and higher conservation value communities are maintained on and around the site, including calaminarian and acid grasslands. We do however note the removal of priority wetland habitats such as mire. While it was found to be degraded, efforts to avoid impacts to these habitats and restore them to favourable condition, rather than removal as part of the treatment design, should be considered as part of the scheme.

The discharge from the existing adit is thought to offer some localised benefit to brown trout in the Nent by providing a favourable stable temperature regime, compared to natural conditions that may be particularly important during periods of very warm weather and low flows. Consequently, the effect of the treatment process on the temperature of the adit water at the new outfall point, and hence, the Nent downstream of it, needs to be assessed.

Hansome Mea (Smallcleugh) Reservoir is thought to support a population of brown trout. The design and construction of the treatment scheme should therefore be such that it does not impinge on any of the watercourses feeding into the reservoir that may be providing spawning and nursery habitat for these fish.

The project should aim to achieve biodiversity net gain, an approach to development that leaves biodiversity in a better state than before. This should apply to both the river improvements and the site footprint. Principals and guidance on biodiversity net gain are available from Chartered Institute of Ecology and Environmental Management.

The applicant will be required to apply for an Environmental Permit for the discharge to the receiving watercourse. The applicant should also implement silt management strategies to prevent pollution to the watercourse during the construction phases of the scheme.

The development will require an application for a Water Resource Licence in respect of the abstraction of water from the Mine Water Adit. The applicant has already been in extensive discussion with Environment Agency North East Area staff regarding the development of this proposal.

If it is intended to abstract more than 20 cubic metres of water per day from a surface water source e.g. a stream or from underground strata (via borehole or well) for any particular purpose then an abstraction licence from the Environment Agency will be required. The applicant/developer is advised that there is no guarantee that a licence will be granted as this is dependent on available water resources and existing protected rights.

Should you require any additional information, or wish to discuss these matters further, please do not hesitate to contact me on XX XXX XXXXX.

Yours sincerely

Jeremy Pickup
Planning Advisor - Sustainable Places

E-mail clplanning@environment-agency.gov.uk

Historic England Response – dated 21 June 2019 (received 26 June 2019).

Our ref: PL00587926

Re: NENTHEAD (CAPLECLEUGH) MINE WATER TREATMENT
ENVIRONMENTAL IMPACT ASSESSMENT (EIA) SCOPING REPORT

Thank you for your letter of 4 June 2019 consulting us about the above EIA Scoping Report.

This development could, potentially, have an impact upon designated heritage assets and their settings in the area around the site, and in particular the lead mines, ore works and smeltmill at Nenthead, which is scheduled as an ancient monument underthe provisions of the Ancient Monuments ans Archaeological Areas Act 1979 (as amended) - National Heritage List for England entry number 1015858. In line with the advice in the National Planning Policy Framework (NPPF), we would expect the Environmental Statement to contain a thorough assessment of the likely effects which the proposed development might have upon those elements which contribute to the significance of these assets.

We would also expect the Environmental Statement to consider the potential impacts on non-designated features of historic, architectural. archaeological or artistic interest, since these can also be of national importance and make an important contribution to the character and local distinctiveness of an area and its sense of place. This information is available via the local authority Historic Environment Record (www.heritagegateway.org.uk) and relevant local authority staff. We would strongly recommend that you involve the Conservation Officer of Carlisle City Council and the archaeological staff at Cumbria County Council in the development of this assessment. They are best placed to advise on: local historic environment issues and priorities; how the proposal can be tailored to avoid and minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets.

It is important that the assessment is designed to ensure that all impacts are fully understood. Section drawings and techniques such as photomontages are a useful part of this.

The assessment should also take account of the potential impact which associated activities (such as construction, servicing and maintenance, and associated traffic) might have upon perceptions, understanding and appreciation of the heritage assets in the area. The assessment should also consider, where appropriate, the likelihood of alterations to drainage patterns that might lead to in situ decomposition or destruction of below ground archaeological remains and deposits, and can also lead to subsidence of buildings and monuments.

If you have any queries about any of the above, or would like to discuss anything further, please contact me.

Yours sincerely,

Andrew Davison
Inspector of Ancient Monuments

Natural England Response - 26 June 2019

Subject: NE Response 284819 (02) Mine Water Treatment Project (Cumbria CC) SCO-3/19/03

Dear Edward

Thank you for consulting Natural England on this scoping request. Natural England are satisfied with the scope of the EIA and have no further comments to make.

Yours sincerely

Kate Berry
Sustainable Development Adviser
Solway, Coast & Sustainable Development Team
Cumbria Area Team
Natural England
Murley Moss
Kendal, LA9 7RL