



The Coal
Authority

Environmental Impact Assessment

Screening Request

Proposed erection of a replacement active mine water treatment scheme, comprising a new process building, a repurposing of the existing process building for use as offices and welfare accommodation, minor drainage improvements to the retained passive reed beds and associated development

Ynysarwed Mine Water Treatment Scheme, Land adjacent to

Neath Road (B4242), nr. Resolven, Neath, SA11 4DF

(Grid Ref. SN808017 – Active treatment plant and SN8040011 – Passive reed beds)



May 2021

Environmental Impact Assessment Screening Request

Proposed erection of a replacement active mine water treatment scheme, comprising a new process building, a repurposing of the existing process building for use as offices and welfare accommodation, minor drainage improvements to the retained passive reed beds and associated development at Ynysarwed Mine Water Treatment Scheme, land adjacent to Neath Road (B4242), nr. Resolven, Neath, SA11 4DF (GRID REF. SN808017 – Active treatment plant and SN8040011 – Passive reed beds)

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

1. Introduction

This Environmental Impact Assessment Screening Request has been submitted to comprise part of the documentation to support the proposed *'Erection of a replacement active mine water treatment scheme, comprising a new process building, a repurposing of the existing process building for use as offices and welfare accommodation, minor drainage improvements to the retained passive reed beds and associated development'*.

This Screening Request should be read in conjunction with the Supporting Statement for the separate application for Prior Approval, which provides additional information about the background to the project and the development proposal.

The proposed development is necessary as the current plant is reaching the end of its intended operational life and the Coal Authority (the 'CA') needs to ensure ongoing and consistent treatment of the polluted mine water, which emanates from an adjacent mine entry (which acted as a drainage adit) prior to being discharged into the River Neath.

In order to assist the assessment of the proposed development, this request and the supporting information hereby provided, including the detailed drawings and plans submitted separately with the application for Prior Approval,¹ sets out the justification for the Applicant's conclusion that the project does not qualify as statutory EIA development.

Supporting Reports

- **Coal Mining Risk Assessment Report** prepared by the Coal Authority's commercial arm, dated August 2020;
- **Heritage Impact Assessment** prepared by Wardell Armstrong, dated February 2021;
- **Landscape and Visual Appraisal** prepared by Aecom, dated July 2020;
- **Ecological Constraints and Opportunities Report**² prepared by Aecom, dated May 2021;
- **Preliminary Bat Roost Assessment and Ground-level Tree Assessment** prepared by Aecom, dated April 2021;
- **Ynysarwed Mine Water Treatment Works Reedbed GCN eDNA & Manual Survey File Note** prepared by Aecom, dated April 2021;
- **Ynysarwed Mine Water Treatment Works Pond GCN File Note** prepared by Aecom, dated April 2021;
- **Reptile Method Statement** prepared by Aecom, dated April 2021;
- **Otter and Water Vole Survey Report** prepared by Aecom, dated April 2021; and
- **Tree Survey Report** prepared by Aecom, dated July 2020.

2. Environmental Impact Assessment

Under Regulation 6.(1) of the The Town and Country Planning (Environmental Impact Assessment) (Wales) Regulations 2017 (the 'Regulations'), the CA requests that Neath Port Talbot County Borough Council, as the Minerals Planning Authority ('MPA') adopts a Screening Opinion for the above proposed replacement active mine water treatment scheme ('MWTS') at the site of the existing Ynysarwed MWTS.

¹ A complete list of the drawings and plans provided are stated within **Section 1** of the Supporting Statement.

² Accompanied by a previous **Preliminary Ecological Appraisal** prepared by RSK, dated January 2019.

The proposed development is not a Schedule 1 development under the Regulations, nor is it located within a '*Sensitive Area*' as defined in Regulation 2(1). However, as the area of the proposed development exceeds 1,000sq.m, it does fall within the definition of a Schedule 2. 11. '*Other projects*', (c) *Waste-water treatment plants (unless included in Schedule 1)*, hence the CA seeks a Screening Opinion from the MPA.

The CA therefore succinctly sets out the information specified in Regulation 6.(2) to determine whether the proposed development is likely to have significant environmental effects, taking into account, where relevant, the selection criteria in Schedule 3 ('*Selection criteria for screening Schedule 2 development*') to the EIA Regulations, i.e.:

- Characteristics of the development;
- Location of the development; and,
- Types and characteristics of the potential impact.

It is recognised that only a very small proportion of Schedule 2 development will require the submission of an Environmental Statement. Nevertheless, the Regulations have been fully considered throughout the project evolution to inform the early design phase of the scheme. In recognising that a robust Screening Request can help ensure environmental considerations are taken into account from the outset, this request is accompanied by a plethora of detailed drawings³ of the proposed development as well as a wide range of supporting environmental reports, as previously identified.

Typically the key issues to consider for this type of project are: size, treatment process, pollution and nuisance potential, topography, proximity of dwellings and the potential impact of traffic movements.

Characteristics of the development

Schedule 3 Part 1 of the Regulations identifies that the characteristics of development must be considered having regard to the size of the development, its cumulative impact, use of natural

³ Including the **Site Location Plan** as required under the EIA Regulations.

resources, production of waste, pollution and nuisance, potential for accidents and risks to human health.

The proposed development seeks to erect a *replacement* active mine water treatment scheme, comprising a new process building, a repurposing of the existing process building for use as offices and welfare accommodation, minor drainage improvements to the retained passive reed beds and associated development. The emphasis added to the word '*replacement*' is significant here insofar as the site has been previously developed and the principle of a fully operational MWTS on the site already long established.

With reference to the **Existing** and **Proposed Layout Plans** submitted as part of the separate application for Prior Approval, it is evident that the proposal is largely contained within the confines of the existing developed area. The size of the development is broadly similar to the existing MWTS, save the office/welfare facility which is larger providing a more appropriate facility than the porta cabins presently on site. The size of the development is not significantly larger than other active MWTS across Great Britain.

The CA is not aware of any directly relevant developments that exist or are proposed in close proximity of the site that could be considered in any cumulative impact on the environment.

In terms of the use of natural resources, the proposal seeks to repurpose the existing process building for use as office/welfare accommodation. The proposal will make sustainable use of the existing shell and footprint of the existing process building therefore limiting the use of undeveloped land and natural resources used to create construction materials.

The existing internal concrete tank storage area will be repaired, finished with a synthetic render and a dual pitched composite panel roof added to create a dedicated weatherproof storage area.

The slab of the existing process plant room will be utilised as the base and a two storey office/welfare facility created in the same position as the existing process area.

In terms of sustainable design, the CA commissioned a **BREEAM⁴ Assessment** of the development proposal. The BREEAM rating benchmark levels enable a client or other stakeholder to compare an individual building's performance with other BREEAM rated buildings and the typical sustainability performance of new non-domestic buildings in the UK. The study has concluded that the proposed buildings have been afforded a **BREEAM rating of 'Good'**, which is considered a great achievement for a functional MWTS. To strive for an even higher rating would require significant investment which is not presently available and if it was would need to be carefully balanced against value for the tax payer for what is a functional development.

The proposed building does not only provide a modern facility built to current Building Regulations insofar as energy efficiency is concerned but also provides:

- An office, meeting room and kitchen which will reduce the need for staff and visitors to travel elsewhere to work and hold meetings after visiting the site;
- Solar powered openable roof lights over the office area to facilitate natural cooling and ventilation;
- Heating will likely be a mixture of radiant panels with use of mine water via a heat exchanger or use of an air source heat pump;
- Large windows to make use of natural light as much as possible;
- The installation of photovoltaic panels on the roofs of both the office/welfare building and the process building in order to offset some energy costs; and
- Staff lockers, changing rooms and shower facilities to support the possibility of transport by means other than the motor vehicle.

In addition, the proposal will, where possible, make use of any machinery and equipment that remains viable to ensure further prudent use of resources.

Whilst the active element of the treatment process relies on the continual use of resources, be it electricity or chemicals, it must be acknowledged that this retains the status quo, with the additional benefit of the new development being a more efficient and effective process.

⁴ which stands for Building Research Establishment Environmental Assessment Method.

With regard to understanding the production of waste it is necessary to briefly explain the treatment process. In simple terms in an active treatment plant the acid mine water from the adit is pumped into the reaction vessel and dosed with an alkaline reagent and air to promote iron oxidation. Then the partially treated mine water is allowed to settle in the clarifiers where flocculants are used to promote settling and clarification. The clean overflow from the clarifier is then discharged to the reed bed, while the sludge generated from the clarifier is collected in the sludge storage tank and the sludge dewatered via a centrifuge to remove the moisture before disposal off site. The dry sludge is collected into the skips and disposed of once every two weeks via suitably approved landfills.

The proposed replacement scheme does not differ to the existing operations in principle terms, but significantly it *does* provide the opportunity to reduce the amount liquid lime dosing for treatment and also reduce the quantity of sludge generated by 10 - 20%. This reduces both the disposal of sludge to landfill and therefore the carbon foot print caused by transport for skip replacement and disposal.

From an operational perspective the traffic to and from the MWTS will continue as it does at present; that is a visit by a small van two or three times per week.

With regard to the consideration of pollution insofar as the characteristics of the development are concerned it is prudent to identify the history behind the treatment process on this site. The Ynysarwed MWTS was constructed in 1998 following a mine water outbreak in 1997 from the Ynysarwed mine entry associated with the former Blaenant and Ynysarwed collieries. The uncontrolled outbreak caused metal rich mine water (net acidic and iron rich) to discharge into the Neath Canal. This historically impacted a 12km length of the Neath Canal, causing environmental damage and ochre staining. The establishment of a treatment scheme on the site has since been preventing such pollution from reoccurring.

Notwithstanding the above, the Ynysarwed MWTS has, over recent years, been identified on the CA's portfolio of treatment sites as a '*Red site*'. The efficiency of the treatment process has reduced owing



to various components reaching the end of their operational lives, including the clarifiers, submersible pumps, dosing pumps, flash mixers and centrifuge. Allied to this, is an unsatisfactorily high annual operational cost as a result of frequent repairs/machinery replacement.

Accordingly, the development is urgently necessary in order to continue to adequately manage and treat rising mine water within the underground mine network. Without the proposed replacement scheme, the existing MWTS is likely to fail leading to the pollution and deterioration of the watercourses, contrary to the requirement of the Water Framework Directive.

The principal driver behind the scheme is to prevent pollution of the watercourses in the area and therefore the proposed development is of significant environmental benefit.

Where the treatment of mine water is concerned, hydrogen sulphide can be present in low concentrations and is limited to very specific areas of the plant while noise obviously emanates from most mechanical/industrial processes. It is the extent of such which is the key consideration. That said, the modern day active MWTS is not particularly characterised as a source of nuisance.

In this instance, it must be noted that the CA has a permit from Natural Resources Wales in place to treat mine water at this location and a new permit is expected to be forthcoming for the proposed replacement scheme.

The risk of major accidents will continue to be closely controlled using risk assessments, method statements and compliance with the relevant standards and guidance during both construction and continuing operation of the plant.

A Hazard and Operability Study (HAZOP) has been undertaken following the completion of the design of the replacement scheme to identify potential hazards to human health and the environment. Mitigation options and design modifications have been incorporated to avoid potential hazards.

With regard to operating this particular active MWTS, the key risk to human health, other than from operating machinery is from exposure to liquid lime used in the treatment process, which may cause eye irritation, skin irritation or dermatitis. Operators are exposed to lime during delivery, operations or maintenance.

Turning to major accidents as far as the environment is concerned, the predominant concern relates to lime spillage, which can cause a rise in pH levels in surrounding watercourses following infiltration.

In order to prevent trespass/interference with the treatment scheme and considering the potential for accidents, the main body of the site will be securely fenced off.

It is considered that the proposed development would not present any greater risk to human health, than the existing situation which is considered to be low.

Accordingly, the characteristics of the development largely reflect the current situation with regard to treating polluted mine water at this location.

Location of the development

Schedule 3 Part 2 of the Regulations states that the environmental sensitivity of geographical areas likely to be affected must be considered having regard to the existing land use, natural resources within the locality and the absorption capacity of the natural environment including coastal zones and the marine environment, European sites and other areas classified or protected under national legislation.

Firstly, it is imperative to acknowledge that this site was originally selected for treatment due to the proximity of the adjacent mine entry (drainage adit) from which polluted mine water is continually issuing. The scheme is also appropriately located adjacent to the River Neath into which the treated water will be discharged.

As the proposal seeks to provide a *replacement* active MWTS, the principle of the use of the land for mine water treatment purposes has already been established and has been uninterrupted in its use since the establishment of the plant in 1998.

In terms of surrounding land use, the site lies within a largely rural area. The nearest residential properties as the crow flies from the active plant is the Ynysarwed Farm complex to the east or dwellings comprising Ynysarwed Terrace fronting the B4242 to the south west, both some 0.2 to 0.3km distant. The nearest residential properties to the reed beds lie approximately 0.7km to the south.

Further detail relating to the location of the site is found in **Section 4** (Site Location) of the separate application for Prior Approval.

The ongoing and improved treatment of polluted mine water will have a positive effect on the environmental sensitivity of the geographical area having regard, in particular to, *'the relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground'* (Schedule 3 2.(b) of the Regulations).

Schedule 3 Part 2.(c) requires the absorption capacity of the natural environment to be considered, paying particular attention to environmental designations and natural habitats.

There are no ecological or heritage based environmental designations within the subject site and the site is previously developed. Accordingly, the site is not environmentally sensitive and therefore the development can be readily assimilated into its immediate setting.

Beyond the site there are two designated heritage assets within the 500 metres. These are two late 18th century bridges crossing the Neath Canal, giving access to Ynysarwed Farm and Abergarwed Lock.

With regard to statutory environmental sites, there are none within 2 km of the site boundary and just two non-statutory sites adjacent to the proposal, the Neath Canal SINC and Neath Port Talbot Watercourses SINC.

It is considered that the identified historical and environmental sites of significance close to the site have the capacity to accommodate the replacement MWTS and additional repurposed building for office/welfare accommodation. Furthermore, the development is not within or within influencing proximity of a 'Sensitive Area'⁵ as defined in Regulation 2(1).

The proposed development is situated within Landscape Character Area (LCA) 19: Neath Valley of the **Neath Port Talbot Landscape Character Assessment (2004)**, which has the following relevant key characteristics:

- Broad U-shaped valley with valley bottom ranging approximately 20m AOD to approx. 70m AOD;
- Mosaic landscape throughout, the valley bottom and minor tributaries containing substantial deciduous tree cover; and
- Settled and enclosed nature in valley bottom.

In addition, the Proposals Map comprising part of the Neath Port Talbot County Borough Council Adopted Local Development Plan (2011 – 2026) identifies both parts of the site to lie within the 'Special Landscape Area'.

Ironically, the landscape character relevant to the site context as identified above, in particular the U-shaped valley, substantial tree cover and the enclosed nature in the valley bottom serves to form natural features that help protect that very landscape from any adverse impact of the proposal.

⁵ i.e. Sites of Special Scientific Interest and European sites; National Parks, the Broads and Areas of Outstanding Natural Beauty; and World Heritage Sites and scheduled monuments.

It could also be viewed that the creation of a replacement MWTS further enhances the imprint of the mining past on the landscape, representing a modern-day response to address the ongoing impact of coal mining legacy.

The proposal would not require use of any resources that are in scarce supply and there would be no loss of any high-quality resources as a result of its development. With regard to the absorption capacity of the environment, it is considered that the site suitably accommodates the proposed development without any adverse effects. Indeed, in terms of treating polluted mine water, the wider environment will unequivocally benefit from the proposed development.

Characteristics of the potential impact

Schedule 3 Part 3 of the Regulations states that the potential significant effects of a development must be considered, having regard to (inter alia) the extent of and nature of the impact in terms of geographical area and size of affected population, its magnitude and the probability of the impact, the duration, frequency and reversibility of the impact.

The proposed development seeks to erect a *replacement* active mine water treatment scheme. The emphasis added to the word '*replacement*' is significant here insofar as the site has been previously developed and the principle of a fully operational MWTS on the site already established.

Accordingly, an active treatment scheme on this site and within the wider geographical context has already been assimilated into the immediate environment with no material environmental impacts identified.

In the interests of brevity, the highly significant matter of the proposal representing a replacement scheme on the same site is not repeated when assessing each and every one of the potential impacts below but remains the most relevant environmental consideration to appreciate during this screening process.

To ensure a robust screening request the CA has commissioned a number of environmental reports, as identified in **Section 1**, to comprise part of the submission. The most pertinent conclusions of the reports are as identified within the relevant sections below.

Landscape and visual

With regard to the setting of the proposal, it is acknowledged that the site lies within a largely rural area and is identified in the Development Plan as a 'Special Landscape Area'. That said, the site *is* relatively well screened from wider vantage points in the vicinity by a combination of the surrounding topography, trees and canal-side landscaping. The reed beds to the south west will continue to be visually appealing in the mature landscape setting.

As previously mentioned, when considering the relevant landscape character features such as the U-shaped valley, substantial tree cover and the enclosed nature in the valley bottom, these qualities serve to form natural features that help protect that very landscape from any adverse impact caused by the replacement MWTS.

There are no ecological or heritage based environmental designations within the subject site and the site is previously developed. Accordingly, the site itself is not environmentally sensitive and therefore the development can be readily assimilated into its immediate setting. Furthermore, the proposal, which includes a repurposing of the existing process building, would be a significant improvement in terms of design and appearance to the existing scheme⁶ in both the wider and localised landscape contexts.

A more detailed objective analysis of landscape impact is provided in the accompanying **Landscape and Visual Appraisal** (prepared by Aecom, dated July 2020). It identifies that the direct effects on landscape character within LCA 19: Neath Valley will be minor in construction and negligible during operation. Effects on LCA 18: Mynydd Resolfen, Craig-y-Lyn & Mynydd Ynyscorrwg and LCA 24: Hirfynydd will be negligible in construction and in operation. Factors determining these conclusions primarily include location of the development in the context of an existing facility, no loss of landscape elements of importance, the small footprint of the development, and the limited influence of the existing site and proposed development on the wider area.

⁶ In this context refer to **Photographs 1, 3, 6 and 9** in **Appendix 1** of the accompanying application for Prior Approval.

Of the twelve viewpoint locations chosen to represent the typical range of views experienced by receptor groups such as residents, footpath users and highway users, eight are considered likely to experience a discernible change in visual amenity. However, significantly, in conclusion, the report states that “...***there are no important landscape effects of the proposed development that would result in unacceptable changes in landscape character***”.

Heritage

A **Heritage Impact Assessment** (prepared by Wardell Armstrong, dated February 2021) was commissioned to fully understand any potential impact of the development on heritage assets in the vicinity.

The report has identified four⁷ heritage assets which may be affected by the development proposals, with all four lying within the vicinity of the replacement MWTS. All of these are considered to be of local significance although only the Neath Canal has been highlighted as of particular concern in local planning legislation. The four assets comprise:

- Neath Canal (Asset 1);
- The coal level (Asset 4);
- The site of a former smithy and associated structures (Asset 6);
- The site of a ruined structure (Asset 8).

The Neath Canal (Asset 1) runs adjacent to the proposed replacement scheme, and to the west of the reed beds, and the report considers that any alterations, particularly from the built development, will have an impact on its setting. This is likely to have a noticeable change on the setting, categorised as a **‘less than substantial impact’ resulting in a ‘very limited impact’ on heritage significance**.

⁷ Assets 1, 4, 6 and 8 as referred to in the Heritage Impact Assessment report.

The coal level (Asset 4) is the adit from which discharged water from the former mine workings is being treated by the scheme, and thus the report considers is **unlikely to be greatly affected by the development proposals**.

No upstanding remains of the former smithy and adjacent structures (Asset 6) or ruined structure (Asset 8) are identifiable, although it is possible sub-surface remains do survive. If the development proposals require foundation or service trenching, this could result in the 'loss' of such features. The 'loss' of such heritage assets of local significance would result in a **limited impact on heritage significance**. This means some level of mitigation may be required which will be carefully considered and reported accordingly.

Significantly, the report usefully acknowledges that as the development proposals will ultimately result in the continued long-term treatment of pollutants into the canal, it is unlikely that the small impact on setting, by replacing the existing plant structures within Area A with new structures, will result in a rejection of the development proposals, as the overall long-term effect would be beneficial.

In summary, it is not considered that the proposed development poses a serious threat to any heritage asset which would warrant an EIA in the context of heritage.

Amenity

As explained in the section headed 'Location of the development' above, there are a limited number of sensitive receptors in the area with the nearest being a small number of residential properties comprising Ynysarwed Terrace and the Ynysarwed Farm complex approximately 0.2 – 0.3km away beyond intervening road side trees.

The existing site has been operating effectively since 1998 without causing any undue nuisance with all of the active processes taking place within the confines of the buildings and tanks. The replacement scheme, built to modern standards will, if anything, reduce the chances of any nuisance occurring and will continue to be operated and managed effectively.

With regard to odour, the CA has developed and operates 82 MWTS across Great Britain in order to enhance the environment in coal mining areas, this scheme being one of them. Based on the extensive experience from operating these schemes, the proposal will not create any odour nuisance and therefore prevent any risk to human health.

Indeed, in this context, a detailed planning application⁸ in 1997 for the original MWTS in an alternative position (slightly further to the south west) to the current site was accompanied by a Noise Survey and an Odour Survey by Hyder Consulting. With regard to the former, the summary stated that, '*...noise complaints are not likely to occur at the nearest residential property*' and the summary of the latter report stated that, '*...limited odour nuisance would be expected. At a pH 7.5 a typical odour radius would be 1 metre*'.

Whilst the construction of the plant in that location was not pursued due to financial and technical reasons, crucially, that proposal was just 60 metres from the residential properties comprising Ynysarwed Terrace fronting the B4242 to the south west. The site of the existing plant and the replacement presently proposed is approximately 265 metres away and therefore odour will not be an issue with the replacement scheme.

In the same context, the noise report previously produced stated that, '*...noise complaints are not likely to occur at the nearest residential property*'.

No adverse noise or odour effects have been identified at the site since operations began in 1998. The characteristics of the development would therefore not give rise to significant effects on residential amenity.

Ecology

There are no ecological based environmental designations within the subject site and the site is previously developed. Accordingly, the site is not in itself environmentally sensitive.

⁸ Application ref. P/97/0813. An Application for Full Planning Permission being required in that instance as the applicant was the Council and not the Coal Authority.

Notwithstanding that, it is important to consider the impact of the proposal on any protected species and therefore an **Ecological Constraints and Opportunities Report** (prepared by Aecom, dated May 2021) is provided. This report identified the requirement for further surveys, which are as follows:

Reedbed GCN eDNA & Manual Survey File Note (prepared by Aecom, dated April 2021) and **Ynysarwed Mine Water Treatment Works Pond GCN File Note** (prepared by Aecom, dated April 2021).

The former report concludes that after taking all available information into account (eDNA, HSI, potential contamination, pond likely to be very low/dry out during breeding season, nil manual survey results, local desk study information) combined with the professional judgement of the surveying NRW great crested newt licenced ecologist, it was concluded that the reedbed was not capable of supporting great crested newt.

With regard to the latter report, it concludes that, after taking all of the available information into account (eDNA, HSI, local desk study information), the pond and surrounding terrestrial habitat are unlikely to support great crested newt.

Otter and Water Vole Survey Report (prepared by Aecom, dated April 2021).

Evidence of otter including an active otter holt was recorded within the survey boundary.⁹ An active otter holt was recorded on the bank of the River Neath between two boulders, which showed clear evidence of use. At the time of the survey no evidence of otter was found adjacent to the Neath Canal but is likely to be used for commuting and foraging otter. The reed bed, wet ditches and pond provide suitable habitat for use by otter, however no evidence of this was recorded during the survey.

The watercourses and pond on site are surrounded by vegetated banks which provide suitable habitat for water vole, therefore two water vole surveys were undertaken. However, no evidence of

⁹ But not within the application site boundary.

water vole was found during the surveys and no records were received during the desk study undertaken in December 2019. It appears likely water vole are absent from the survey area.

The report subsequently makes recommendations to carry out a pre-construction survey, to undertake specific works outside the period one hour either side of dusk and dawn and to implement pollution control measures during construction through the production of a Construction Environmental Management Plan (CEMP).

Preliminary Bat Roost Assessment and Ground-level Tree Assessment (prepared by Aecom, dated March 2021).

The report identifies twenty-two trees within the site as having suitability for roosting bats. Without mitigation, potential impacts include the removal of features suitable for roosting bats in trees which overhang the B4242 and the site. Further surveys are recommended for trees suitable for supporting roosting bats should tree or limb removal be required to facilitate the development, though it is not currently envisaged that any such trees will need to be cut back.

Any additional lighting during construction or operation has the potential to impact roosting bats and disturb or deter bats from using the woodland, Neath Canal and River Neath as commuting and foraging features.

Recommendations have therefore been made with regards to avoidance of lighting features suitable for supporting roosting bats, and commuting and foraging bats, provision of bat boxes to enhance retained habitats, working methods for felling of trees or tree limb removal on trees suitable for supporting roosting bats, and when a European Protected Species Licence will be required. Prior to commencement of development the existing buildings will be reassessed for their suitability to support roosting bats by appropriate ecologists.

With reference to the **Proposed Tree Retention and Removal Treatment Site** (Dwg no. MWTS-AEC-YN-XX-DR-C-2009 Rev P2) comprising part of the application for Prior Approval, it is evident that some trees will need to be removed to facilitate the development. However, the extent of the tree removal is limited and will have only a negligible effect on the visual amenity of the immediate

vicinity. Moreover, as identified on the above drawing, the significant majority of the trees to be removed are categorised in the accompanying **Tree Survey Report** (prepared by Aecom, dated July 2020) as Category 'C' or 'U'. Only a very small area of Category 'B' trees to the south west of the site will be removed.

The Category C trees to be removed along the south east boundary of the proposed process building and repurposed process building will be replaced.

It is not considered that the proposal is likely to have a significant effect on protected fauna or flora. The continued and improved treatment of the mine water will have significant environmental benefits, particularly to the aquatic environment. The reed beds retain the established significant biodiversity interest in the area, an increasingly rare habitat in Great Britain.

All advice contained within the Ecological Constraints and Opportunities Report and the accompanying specific species related reports will be adhered to prior to and during construction and during operation where it is possible and practicable. Specific ecological advice will be sought where it is deemed necessary as per advice within the reports.

Accidents

Operatives dealing with lime are advised to wear suitable PPE, gloves, goggles and suitable clothing. A well-established procedure is in place for all instances where lime is dealt with on site and an eye wash and safety shower have been designed-in to the scheme at the relevant position within the development.

The CA manages the potential for accidents on its MWTS very effectively and therefore the likelihood of this impact is low.

Site stability

Whilst the proposed development is located on the site of the existing MWTS where the site would be expected to be stable, the Coal Authority records indicate that part of the site is likely to have been subject to historic unrecorded coal mine workings at shallow depth associated with a thick

coal outcrop. Accordingly, a **Coal Mining Risk Assessment** (prepared by the commercial arm of the Coal Authority, dated August 2020) is provided to comprise part of the documentation.

The report indicates that the Consultants Coal Mining Report records the 'No.2 Rhondda' coal seam (locally known as the 'Ynysarwed') to outcrop within the site boundary, orientated approximately SW-NE and with the seam being considered of a workable thickness in the locality. The generalised vertical section on the OS geological sheet records the seam to be 2-4ft (0.61-1.22m) in thickness. The report highlights Abandonment Plan 8049 'Ynysarwed Upper and Lower', which records the seam to be worked north of Neath Road with no workings extending under the site. The workings closest to the site appear to be truncated by faults, suggesting the coal seam was unlikely to have been workable up to outcrop in the area.

Accordingly, in conclusion the report identified that the proposed development site is not known to have been subject to past shallow coal mining activity and that **the risk to the site from legacy mining features is low.**

In considering all of the above (Characteristics of the potential impact), the duration and frequency of *any* impact will be short-term and temporary during the construction phase. To mitigate this all construction works will be managed under a CEMP which will be prepared by the contractor prior to commencement of site works.

Finally, it must be reiterated that the proposal is an **environmental improvement project** without which the water quality in the River Neath and beyond is likely to be significantly compromised.

Given the assessment of the proposal under criteria set under Schedule 3 of the Regulations, it is deemed that the characteristics of the development are such that it is unlikely to have significant effects on the environment by virtue of factors such as its nature, size or location. **It is not considered that the development requires a statutory EIA.**

Conclusion

Having regard to the above in conjunction with the supporting plans, drawings and the environmental reports, the Minerals Planning Authority's formal consideration of whether the proposed replacement MWTS is likely to have significant effects on the environment is requested.

Given the assessment of the proposal under criteria set under Schedule 3 of the Regulations, it is considered that the characteristics of the development are such that it is unlikely to have significant effects on the environment by virtue of factors such as its nature, size or location. The CA does not consider that the development requires a statutory EIA.

We trust that you have sufficient information to be able to confirm a negative EIA Screening Opinion to allow the CA to deliver this important replacement active mine water treatment scheme in order to continue to successfully manage the coal mining legacy.

End.

May 2021



Appendix 1

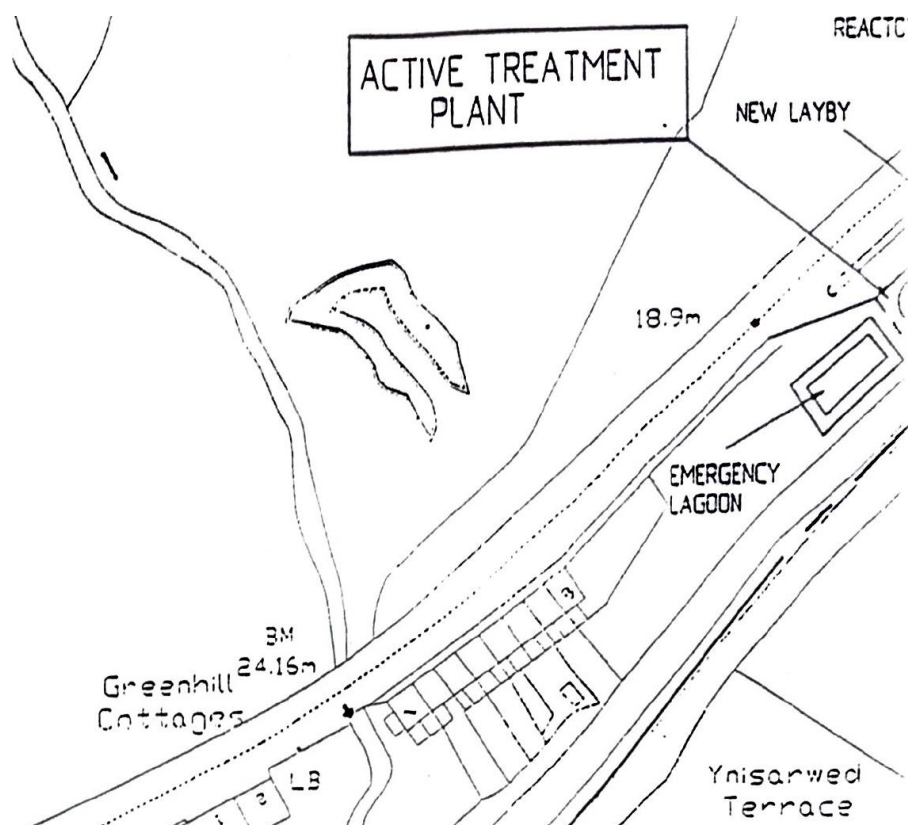


Figure 1 - Site subject to previous planning application in 1997 (south west of the existing plant)