

Anglo American Woodsmith Project



Overland Conveyor and Port Handling Facility

Environmental Statement

Non-Technical Summary

February 2024



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Non-Technical Summary

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Acronyms

CO ₂	Carbon Dioxide
EIA	Environmental Impact Assessment
ES	Environmental Statement
GHG	Greenhouse Gas
HRA	Habitats Regulations Assessment
LSE	Likely Significant Effect
LVIA	Landscape and Visual Impact Assessment
MHF	Materials Handling Facility
MTS	Mineral Transport System
NTS	Non-Technical Summary
OLC	Overland Conveyor
PHF	Port Handling Facility
RCBC	Redcar and Cleveland Borough Council
SBR	Shaft Boring Roadheader
TBM	Tunnel Boring Machine

Anglo American Port Handling Facility and Associated Overland Conveyor

Environmental Impact Assessment Non-technical Summary

1 Introduction

1.1 Background to the Proposed Development

1.1.1 The Woodsmith Project comprises a mine site located south of Whitby and a 37km tunnel that will transport the mined polyhalite material to processing and shipping facilities located on Teesside.

1.1.2 The Woodsmith Project is setting new standards for sustainable mining, while helping to boost food production and support sustainable farming practices and consists of six key elements:

- The underground mine with a surface access point at Woodsmith Mine, Sneatonthorpe;
- A Mineral Transport System (MTS) consisting of a 37km long tunnel that will transport the polyhalite material from the Woodsmith Mine to a Materials Handling Facility (MHF) located at Wilton International, Teesside;
- Two intermediate shafts, located along the MTS route at Lockwood Beck and Ladycross Plantation;
- The MHF, located at Wilton International, which will granulate the polyhalite material to produce polyhalite products;
- A Port Handling Facility (PHF) and associated overland conveyor (OLC) to transport the polyhalite products from Wilton International to Redcar Bulk Terminal (the subject of this application); and,
- Harbour facilities and associated development at Teesside.

1.1.3 Good progress has been made with the construction of the Woodsmith Project, with first product to market expected in 2027. As of the beginning of October 2023, the tunnel boring machine (TBM), which is being used to construct the underground MTS, had reached over 25 km from its starting point at Wilton on its 37km journey to the mine site. At Woodsmith Mine, the two 1.6km deep shafts are being sunk using innovative shaft boring roadheader (SBR) machines. At the beginning of October 2023, the service shaft had reached a depth of 550 m. The production shaft, in which the SBR started in April 2023, was at 340 m. The two intermediate shafts along the tunnel route, at Lockwood Beck and Ladycross Plantation, which are being used to support the construction of the tunnel, have both been sunk to their full depth of ~340 m. Tunnelling crews are now accessing the TBM from Lockwood Beck.

1.2 This Application

- 1.2.1 In order to facilitate the movement and storage of materials associated with the Woodsmith Project and to support operational infrastructure, Anglo American now seeks full planning permission for an updated design of the OLC and PHF at Teesside, hereafter referred to as 'the Proposed Development'. This follows outline planning permission for a very similar form of development that was granted in April 2018 (ref. R/2017/0906/OOM).
- 1.2.2 The EIA encompasses an assessment of temporary and permanent activities during the construction, operational and decommissioning Phases of the Proposed Development in its own right and also cumulatively with other projects.
- 1.2.3 As a result of this assessment process, potential measures to avoid or minimise any adverse impacts ('mitigation measures') can be identified. The EIA is documented in an Environmental Statement (ES), the full version of which is available in the application documents and can be viewed on the Redcar and Cleveland Borough Council (RCBC) Planning Portal. A paper or electronic copy of the Environmental Statement can be obtained from Anglo American's offices at:

Resolution House
Lake View
Scarborough
YO11 3ZB

- 1.2.4 Reasonable copying and printing charges will be applied to paper or CD copies.
- 1.2.5 **Section 2** of this Non-Technical Summary (NTS) describes the Proposed Development. **Section 3** provides a summary of the EIA process and how planning policies were taken into account. **Sections 4 – 13** of this NTS summarise each of the environmental topic areas which were assessed, including the consideration of mitigation measures and the potential effects of this Proposed Development alongside other major projects being considered by RCBC. The overall conclusions are provided in **Section 14**.

2 Description of the Proposed Development

- 2.1.1 The Proposed Development comprises a Port Handling Facility and overland conveyor, above and below-ground infrastructure, internal access roads, car parking, landscaping and supporting utility infrastructure on land between Wilton International and the River Tees.

3 Approach to EIA

3.1 Environmental Impact Assessment

3.1.1 An ES for the Proposed Development, presenting the conclusions of the EIA process, has been prepared. The range of environmental topics proposed to be assessed as part of the EIA was first agreed with RCBC via the submission of an Environmental Scoping Report (reference 4600-RHD-PA-RP-00001) and its subsequent Scoping Opinion (reference R/2023/0754/SCP).

3.1.2 The EIA covers the activities involved in the construction, operation and decommissioning of the PHF and OLC.

3.2 Assessment Methodology

3.2.1 Each ES chapter outlines the methodology used for the assessment of that topic. Assessment methodologies differ between topics but largely follow a similar overall approach. This approach identifies receptors, e.g. people or habitats, that may be affected and considers how sensitive a receptor is to the impacts. Any effects that could arise, due to the construction, operation and/ or decommissioning of the Proposed Development, are identified and the severity and magnitude of the potential effect are determined based upon factors such as proximity, duration, frequency, and severity.

3.2.2 The magnitude of an effect is dependent on how much change the receptor is likely to experience from existing conditions. The magnitude (of the effect) and the sensitivity (of a receptor) are then used to determine the significance of the 'impact'. Where impacts are predicted to be moderate or major, they are considered to be 'significant'.

3.2.3 If any negative environmental impacts are predicted to occur, reasonable mitigation is identified that could potentially reduce the impact as far as possible. The EIA was undertaken by competent experts with relevant professional qualifications and experience.

3.3 Planning Policy

3.3.1 The key national and local planning and environmental policy and legislation, and relevant technical guidance that underpins and informs the EIA, are detailed in **Chapter 4: Planning and Regulatory Regime** of the full ES. In summary, the EIA followed all appropriate methods, and the construction and operation of the Proposed Development would not be contrary to such policies or current legislation.

4 Water Resources, Flood Risk, Drainage and Water Framework Directive

4.1.1 The assessment describes existing conditions in relation to surface- and groundwater and flood risk, and assesses the potential effect of the construction, operation and decommissioning phases of the Proposed Development.

- 4.1.2 The assessment determined that the greatest effects during the construction phase would be due to the potential for contaminated material already present in the ground to be mobilised and enter surrounding water. Such risk can be effectively controlled by standard construction management measures, and adherence to relevant legal requirements. The impact would be a minor adverse impact, in the worst case. Flood risk was considered negligible during construction.
- 4.1.3 During the operational phase, with implementation of appropriate mitigation measures, effects are considered to be improved compared to the existing situation. The assessment concludes that the significance of effect will be minor beneficial to surface- and groundwater and flood risk.
- 4.1.4 During the decommissioning phase, effects are expected to be similar to those for the construction stage, but of lesser magnitude.

5 Soils, Geology, Land Quality and Waste

- 5.1.0 The assessment describes existing conditions in relation to the soils, geology, land quality and waste, and assesses the potential effect of the construction, operation, and decommissioning phases of the Proposed Development.
- 5.1.1 The soils and geology are classified as having a low sensitivity primarily due to the industrial heritage of the site with evidence of land reclamation, infilling and industrial redevelopment since the early 1900s.
- 5.1.2 There have been numerous ground investigations within and surrounding the Proposed Development boundary. Ground within the site comprises a mixture of slag, ash, pulverised fuel ash, clinker, coal, coke, lime and general demolition rubble such as brick, concrete and metal wastes associated with steel work activities.
- 5.1.3 Due to the varying nature and topography of the OLC route, it will require a degree of preparation, excavation and structural fill to support the construction. Where land raising is required, suitable materials will be sourced and utilised, with a preference for the re-use of material wherever allowable. It was concluded that with the application of appropriate and practicable construction management, and adherence to relevant legal requirements, the impact would be minor, as a worst case.

6 Terrestrial Ecology

- 6.1.1 Information on ecological receptors within the Proposed Development area was collected through a desktop review and a range of ecological surveys undertaken between 2013 and 2023.
- 6.1.2 No statutory designated sites are present within the Proposed Development area. However, ecologically sensitive sites are located adjacent to part of the Proposed Development's boundary. The main habitats within the Proposed Development area are of negligible ecological interest. However, smaller areas of medium and low interest exist comprising grassland and small blocks of woodland and scrub habitat.
- 6.1.3 The habitats within the Proposed Development Area have the potential to support low numbers of breeding birds, reptiles and common toad. In addition, populations of two butterfly species, which are of conservation importance, are likely present.

- 6.1.4 Mitigation measures will be implemented during the construction phase to avoid, reduce and compensate potential ecological impacts. This will include habitat retention and protection, in addition to reinstatement and creation. Impacts upon species will be further minimised through sensitive clearance of habitats.
- 6.1.5 Cumulative effects upon ecological receptors from the Proposed Development, in combination with other nearby developments, has been considered. Following successful implementation of the recommended mitigation measures within the Proposed Development area, no significant cumulative effects are predicted.
- 6.1.6 Subject to the implementation of the recommended mitigation measures, no significant ecological impacts are anticipated as a result of the Proposed Development.

7 Coastal Ornithology

- 7.1.1 The Proposed Development area is located immediately adjacent to several ecologically sensitive sites. Bran Sands lagoon is adjacent to the PHF and provides a habitat for waterbirds.
- 7.1.2 Existing data gathered as part of estuary-wide surveys and specific surveys of Bran Sands lagoon and adjacent areas have been used to understand the numbers of waterbirds present and their distribution. The data show that there is significant waterbird use of Bran Sands lagoon and by a variety of bird species.
- 7.1.3 The main potential effects of the Proposed Development on the waterbird populations comprise noise and visual disturbance during construction, operation and decommissioning, effect on sightlines for birds and potential effect on the lagoon habitat due to shading from the Proposed Development. Measures are included in the design to minimise potential effects, including localised noise screening to reduce the effect of lighting.
- 7.1.4 To support the assessment of noise effects, modelling was undertaken to predict noise levels at various locations used by waterbirds. This demonstrates that while some birds may be temporarily disturbed, no significant effect on waterbird populations is predicted.
- 7.1.5 The potential effect on sightlines for birds, i.e. the ability to detect possible predators and effect on birds entering and leaving the lagoon, was assessed based on how birds use the lagoon, existing surrounding land levels and how this relates to the Proposed Development. This concluded that there is no potential to affect waterbird populations of the lagoon.
- 7.1.6 Modelling was undertaken to predict shading of the lagoon and the Tees due to the presence of the PHF structures. This focused on the October to March period, which is the most sensitive period when the waterbird populations are at their greatest. This concluded that there is some potential for overshadowing, but for the majority of the time there would be very little or no shading and therefore no effect on habitats or waterbird populations.
- 7.1.7 In summary, the potential impacts are not predicted to be significant, on a worst case basis.

8 Traffic and Transport

- 8.1.1 The potential traffic and transport impacts associated with the construction, operation and decommissioning phases of the Proposed Development have been assessed. The assessment was undertaken in accordance with approaches agreed with the relevant highway authorities, namely National Highways and RCBC, and in compliance with all relevant policy, statute, and guidance.
- 8.1.2 It was determined that the key concern for the relevant highway authorities is the impacts that could impede the safe and efficient operation of the highway network, defined as:
- Impacts on highway capacity (driver delay effects); and,
 - Impacts on highway network safety (road safety effects).
- 8.1.3 The potential for traffic borne environmental effects has also been assessed, namely pedestrian severance, amenity, and fear and intimidation. Demand management measures (e.g. avoiding network peaks, employee travel plans) are proposed to mitigate peak vehicle trips. It is proposed these measures will be agreed with the relevant highway authorities, managed and monitored through a conditioned Construction Traffic Management Plan and Travel Plan.
- 8.1.4 With the application of mitigation, the assessment concludes that the Proposed Development's construction, operational and decommissioning would result in negligible impacts on driver delay and road safety receptors, and residual traffic and transport effects are assessed as not significant.

9 Landscape and Visual Impact

- 9.1.1 The Landscape and Visual Impact Assessment (LVIA) identifies the effects of the Proposed Development, including physical effects on landscape features, e.g. loss of existing trees, and effects on the character of the landscape. Visual effects relate to the effect on views and visual amenity experienced by people, whether they are residents, walkers, travellers or other users of the area.
- 9.1.2 The Proposed Development Site is located in a heavily industrialised landscape. Existing views typically feature large scale industrial buildings, silos, electricity pylons, chimneys, pipelines, dockside cranes and flare stacks. Local roads are busy with frequent lorry movements. Future development in the area will include extensive new areas of industry, buildings and structures.
- 9.1.3 The LVIA concludes that the Proposed Development will be entirely in keeping with the existing and future industrial landscape and will not cause any significant effects to existing landscape character. At the construction stage, small areas of trees and shrubs will be removed to accommodate the OLC, but these losses will not be significant. Replacement planting will be established to roadside margins at the A1085 OLC crossing.
- 9.1.4 In terms of visual effects there are very few locations that will allow direct views of the Proposed Development. Residents at Dormanstown and users of the adjoining open spaces will obtain close range views of the OLC, partially screened by existing trees and shrubs. Effects to these views during construction stages have been identified as moderate adverse and will reduce during the operational phase as existing trees and shrubs continue to mature and provide better screening.

- 9.1.5 Close range views of the OLC will also be possible from Lord McGowan Bridge and sections of the Teesdale Way and King Charles III England Coast Path. Where the OLC crosses the A1085 will be very noticeable in the view. Views during the construction stages will be most adversely affected, with long term operational stage effects reduced, although remaining as moderate adverse and therefore significant. Overall effects will be offset by the architectural design of the A1085 conveyor crossing and cladding to sections of the OLC that will provide a positive focal point in local views.

10 Noise and Vibration

- 10.1.1 The potential noise and vibration impacts associated with the construction, operation and decommissioning phases of the Proposed Development have been assessed. The assessment was undertaken following consultation and in accordance with the approach agreed with RCBC, and in line with relevant statutory and technical guidance on noise and vibration impacts of infrastructure development.
- 10.1.2 The assessment concluded that the Proposed Development's construction and decommissioning phases would result in impacts of minor significance (not significant) from a noise and vibration perspective, taking into consideration the effects of the embedded mitigation (temporary screening and the application of plant selection and construction practices in plant design and noise control).
- 10.1.3 Without mitigation, potential worst-case impacts of major significance (significant) were predicted during the operational phase. A range of potential mitigation options were therefore considered. With mitigation in place, the assessment concluded that operational noise levels would not exceed the existing background sound level at the nearest sensitive properties.

11 Air Quality

- 11.1.1 During construction, dust and plant exhaust emissions will be suitably managed by contractor-led controls and site procedures. An assessment of the environmental dust risk of the site was undertaken, truck movements for deliveries and contractor travel were taken into account, and the distance and sensitivity of properties and ecological sites was considered. It was concluded that with appropriate and practicable mitigation measures, any impacts at receptors will not be significant.
- 11.1.2 During the operational phase, the transportation of material to the PHF will be entirely enclosed within the conveyor, and the storage buildings will be closed, with ventilation and air cleaning at the screening plant, and so there is a very low potential for release of dust and fine particles. Uncontrolled dust impacts were therefore considered to be insignificant.
- 11.1.3 Future ongoing maintenance of operations and any associated infrastructure downtime will be managed by appropriate procedures for dust control to ensure that workers and the local environment will be adequately protected. Once commissioned and operational, there are no heating processes or significant fuel combustion activities, and so no other sources of direct emissions to atmosphere, and there will be no significant external road vehicle movements associated with the development. Therefore, overall, the impacts on local air quality will be negligible.

12 Climate Change

- 12.1.1 The Proposed Development is located within an industrial brownfield site that is vacant, and therefore has no current emissions, however, the activities associated with the Proposed Development have the potential to result in the release of greenhouse gases (GHGs) to the atmosphere.
- 12.1.2 A GHG assessment was conducted in order to estimate the carbon dioxide (CO₂) emissions that will be released during the construction, operation and decommissioning phases of the Proposed Development. These CO₂ emissions were estimated from the materials used during construction, fuel consumption by vehicles and energy consumption during operation.
- 12.1.3 The Proposed Development will allow for the efficient export of polyhalite material, reducing the overall number of transport and vessel movements, and thus CO₂ emissions, that would otherwise be required if no PHF or OLC was constructed.
- 12.1.4 The estimate of CO₂ emissions from the Proposed Development was compared to the UK's Carbon Budgets, in order to identify how the Proposed Development would contribute to the UK's overall emissions. It is considered that the Proposed Development would not have a significant impact upon the UK's ability to meet its carbon reduction targets.

12.2 Shadow Habitats Regulations Assessment

- 12.2.1 The Habitats Regulations Assessment (HRA) assesses the potential effects of the Proposed Development on the waterbird populations of ecologically sensitive sites and is informed by the coastal waterbirds assessment.
- 12.2.2 The first stage of the assessment process, i.e. screening for likely significant effect (LSE), identifies any effects that could possibly affect waterbird populations. This stage concluded that there could be LSE for noise and visual disturbance during construction and decommissioning and, for some species, reduction in sightlines and shading of Bran Sands lagoon during operation. Because the Proposed Development is outside of the SPA and Ramsar site, there would not be any direct effect on habitats used by waterbirds.
- 12.2.3 The HRA also requires the potential for the combined effect of the Proposed Development with other projects to be assessed. Four other projects in the Tees were identified for assessment within the HRA process.
- 12.2.4 Based on the findings of the impact assessment, the most significant potential effect would be noise disturbance during the construction works, when some disturbance to waterbirds is expected. However, this will be temporary and while it could result in some redistribution within the lagoon, birds would not permanently leave the area, as such, no effect on waterbird populations is predicted.
- 12.2.5 The effect on sightlines and shading of the lagoon was assessed. This concluded that there would be no negative effects on how birds use Bran Sands lagoon and no effect on habitats that support the waterbird populations of the SPA and Ramsar site.

- 12.2.6 The HRA concludes that the Proposed Development would not have an adverse effect on the integrity of the SPA and Ramsar site, both alone and when assessed in-combination with the effects of other projects.

13 Cumulative Impacts

- 13.1.1 The EIA requires the consideration of the effects of the Proposed Development in combination with the effects of other projects located in proximity for both the construction and operational phases.
- 13.1.2 RCBC was consulted on which major projects in the locality the applicant should consider, and it provided a list of 29 development located within 4 km of the Proposed Development site. Some of these are already approved, and some are notified and part-way through the planning process. Of these cumulative projects, 21 were screened out as having no potential for in-combination environmental effects as they were located greater than 1 km from the Proposed Development site. Two projects at a greater distance than this were retained in a short-list for assessment, based on their close proximity to statutory designated ecological sites.
- 13.1.3 The remaining eight cumulative projects were considered for potential cumulative effects in combination with the Proposed Development, for each of the technical topics included in the EIA. All potential cumulative effects were either negligible or slight adverse, and the assessment concluded that cumulative effects of the Proposed Development and the short-listed project sites would not be significant.

14 Conclusions

- 14.1.1 The Proposed Development, in its industrial setting, does not represent a risk to the environment. Anglo American is committed to implementing appropriate and practicable construction industry practice to minimise on-site and off-site effects. The operational phase of the Proposed Development will allow for the efficient storage and transfer of polyhalite material, prior to export, and will thereby provide an essential component of the wider Woodsmith Project. The EIA demonstrated that these activities will not give rise to significant environmental effects, and that the Proposed Development will not be contrary to the principles set out in any relevant national or local policy.