

An  
Bord  
Pleanála

**Board Direction**  
**BD-017166-24**  
**ABP-315173-22**

The submissions on this file and the Inspector's report were considered at a Board meeting held on 01/08/2024.

The Board decided to grant permission generally in accordance with the Inspector's recommendation, for the following reasons and considerations, and subject to the following conditions.

### **Proper Planning and Sustainable Development**

In arriving at its decision, the Board had regard to the nature of the proposed development comprising the provision of rockfill buttress reinforcement to the existing embankment structure around the perimeter of Tailings Storage Facility (Stages 1 to 5) and took into account the specific purpose of the proposed buttress which is to increase the stability of the embankment structure in order to meet higher engineering standards identified by the Global Industry Standard on Tailings Management (GISTM) in 2020. The proposed development is designed to increase the factor of safety against the risk of 'brittle failure' from the liquefaction of the tailings and to limit the deformation of liquefaction in the event of such an occurrence. This is a stated requirement of the GISTM standard.

The Board noted that the recommendation for the buttress structure at the outset and the subsequent design of the buttress followed appropriate international GISTM standards and associated guidance, including 'Tailings Management: Good Practice Guide' issued by the International Council on Mining of Metals (ICMM) in 2021. The

Board was satisfied that, subject to compliance with the conditions set out below, the proposed development of the buttress structure would accord with European, national, regional and local planning and environmental policy, including the relevant provisions of the Meath County Development Plan 2021-2027, and would reduce the risk of 'brittle failure' of the embankment structure and associated environmental effects during the operation stage. The Board was also satisfied that during the construction phase, the proposed development would not give rise to a significant risk of pollution or increase the flood risk on site or downstream of the site, would be acceptable in terms of traffic movements, and would not seriously injure the residential amenities of the area. During construction and operation phases, the Board was satisfied that the proposed development would not have any unacceptable impacts on the visual amenities or the landscape character of the area and would not be detrimental to the natural heritage or biodiversity of the area. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

### **Environmental Impact Assessment**

The Board completed an Environmental Impact Assessment of the proposed development taking account of:

- (a) the nature, scale, location, extent and purpose of the proposed development,
- (b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application,
- (c) the submissions received from the prescribed bodies and a third party appellant, and
- (d) the Inspector's report.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development studied by the developer insofar as is relevant to the current proposal. Having regard to the nature and purpose of the development, providing a higher level of stability of the existing Tailings Storage Facility embankment structure, the Board was satisfied that, having regard to the presence of the existing embankment and the need to increase its engineering stability, the assessment of alternatives in the submitted Environmental Impact Assessment Report, that dealt with three technical alternatives was reasonable. The Board was also satisfied that the Environmental Impact Assessment Report, satisfactorily identifies and describes adequately the likely effects of the proposed development on the environment. The Board generally agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board considered that the main significant direct and indirect effects, including cumulative effects, of the proposed development on the environment are, and would be mitigated, as follows:

- **General (operation):** Significant positive effects would arise during the operation phase, by increasing the stability of the existing Tailings Storage Facility embankment structure and thereby reducing the risk of 'brittle failure' of the embankment and associated reduction of risk of significant negative environmental effects. During operation, no significant negative environmental effects are likely because of the design of the embankment to higher international standards with a higher factor of safety, and in the unlikely event of such failure and the consequential liquefaction of the tailings, the embankment with the added buttress structure is designed to limit deformation in such an occurrence. During the operation, under its Industrial Emissions licence, the operator is required to undertake an Environmental Liabilities Risk Assessment.
- **General (construction):** If unmitigated, there is a low risk of breach of the dam during construction, however, this risk is eliminated through a robust



design informed by geotechnical investigations, laboratory analyses and modelling. The design has been independently reviewed by an independent Dam Safety review team. The proposed development would be managed through a host of mitigation measures outlined in the Environmental Impact Assessment Report, including the preparation of a Construction and Environmental Management Plan and in the Naura Impact Statement. A key measure put forward in the Environmental Impact Assessment Report, is that the works will be undertaken under the supervision of a geotechnical engineer.

- **Biodiversity:** The habitats occurring within the area of the proposed works consist mainly of semi-natural grassland which is species rich. This is a short term negative reversible impact associated with the proposed works which will also give rise to a short term negative reversible impact on species (breeding birds, non-volant mammals and general invertebrates). The habitats to be removed from the creation of the earthen buttress structure will and can be replicated over time, through the implementation of the proposed measures outlined in the Habitat and Biodiversity Management and Conservation Plan. An Ecological Clerk of Works will be appointed, and monitoring will be carried out over the construction time period. An Alien Invasive Plant Species Management and Control Plan has been prepared and when implemented will ensure that no propagules of any plant species listed in Part (1) of the Third Schedule of the European Communities (Birds and Natural Habitats) Regulations of 2011 (as amended) will arise.
- **Water:** During construction, the proposed development could give rise to effects on surface water quality because of turbidity in uncontrolled construction site runoff and in surface and ground water quality because of construction-related accidental spillages and in ground water because of risk of seepage to groundwater from the interceptor channel. Temporary impacts to the hydromorphology of the Yellow River during construction could also arise. The mitigation measures proposed during construction, including those that will be incorporated into the Construction and Environmental

Management Plan will serve to avoid, prevent and reduce adverse effects, will ensure that effects can be managed and controlled, and the effects reduced to imperceptible.

- **Air:** The nearest residential sensitive receptors are located at a distance of circa 240 metres in a south-east direction from the application boundary works, therefore, the impact from construction activities can be considered to be imperceptible. Dust mitigation measures contained in the Construction and Environmental Management Plan (incorporating a dust minimisation plan), combined with the mitigation measures set out in the Natura Impact Statement that accompanies the application would be sufficient to safeguard impacts on sensitive habitats.
- **Climate:** The impact of the construction of the proposed development in relation to greenhouse gas emissions is considered not significant in Environmental Impact Assessment terms. During operation, the proposed development will render the Tailings Storage Facility less vulnerable to major accidents and natural disasters, which will enhance its resilience to climate change and would avoid significant environmental impacts on the environment.
- **Noise:** Increase in noise levels will arise during the construction period both on-site and on the surrounding road network from vehicle movement. The existing and anticipated noise levels are well understood and can be considered temporary and not significant. Noise control measures identified in BS 5228-1:2009 'Code of practice for noise and vibration control on construction and open sites' regarding the supervision, planning, preparation and execution of works will be incorporated into the Construction and Environmental Management Plan, restriction of working hours for noisier activities (Monday to Friday, 0700 hours to 1900 hours) would be adhered to and other appropriate control measures are outlined including the maintenance of equipment and training to construction workers regarding environmental controls.

- Cultural Heritage:** Potential construction phase impacts have been identified for nine cultural heritage sites, including the enclosure (Recorded Monument ME025-002), and Saint Anne's Church, burial vault and graveyard. Other features that may also be impacted are a townland boundary, and townland/civil/parish boundary, as well as the nearby Yellow River as it is considered an area of archaeological potential. Mitigation is intended to include archaeological surveys and the erection of protective barriers following which no long-term significant effects are predicted.
- Population and Human Health:** Construction traffic will give rise to some inconvenience on the road network; however, this will be temporary and will not be significant. A Traffic Management Plan, Resource and Waste Management Plan and an Invasive Species Plan for the construction stage has also been prepared and will be required to be adhered to.
- Vulnerability to Major Accidents and Disasters:** The proposed development, while a significant engineering project requiring large scale earthworks, is not of a type likely to cause significant effects on the environment arising out of major accidents or disasters within the meaning of the Environmental Impact Assessment Directive. The proposed development has been designed with a demonstrated knowledge of the baseline environment that included geotechnical site investigation, laboratory testing, soil modelling and stability analyses. The design of the proposed development followed the GISTM standard, and the supporting Tailings Management Good Practice Guide issued by the International Council on Mining of Metals (ICMM). Furthermore, it is designed on the basis of avoiding significant environmental effects and adopting appropriate mitigation measures.



## **Appropriate Assessment Screening**

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299) and the River Boyne and River Blackwater Special Protection Area (Site Code: 004232) are the European sites for which there is a possibility of significant effects and must therefore be subject to Appropriate Assessment.

## **Appropriate Assessment**

The Board considered the Natura Impact Statement and all other relevant submissions and carried out an Appropriate Assessment of the implications of the proposed development for European Sites in view of the sites' Conservation Objectives. The Board considered that the information before it was sufficient to undertake a complete assessment of all aspects of the proposed development in relation to the sites' conservation objectives using the best available scientific knowledge in the field. In completing the assessment the Board considered, in particular, the following

- (i) Site Specific Conservation Objectives for these European Sites,
- (ii) Current conservation status, threats and pressures of the qualifying interest features,
- (iii) likely direct and indirect impacts arising from the proposed development, both individually or in combination with other plans or projects,
- (iv) mitigation measures which are included as part of the current proposal.

In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report in respect of the implications of the proposed development on the integrity of the European sites, the River Boyne and River Blackwater Special Area of Conservation (Site Code:

002299) and the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), or any other European site, in view of the sites' Conservation Objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of European sites in view of the sites' Conservation Objectives and there is no reasonable scientific doubt as to the absence of such effects.

This conclusion is based on a full and detailed assessment of all aspects of the proposed project, including proposed mitigation measures set out in the Natura Impact Statement.

## **Conditions**

1. The development shall be carried out in accordance with the plans and particulars submitted with the planning application, as modified by further information submitted to the planning authority on the 12<sup>th</sup> day of September 2022. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

**Reason:** To clarify the plans and particulars for which permission is granted.

2. The proposed development shall be carried out in accordance with the mitigation measures and the timescale for their implementation contained in the submitted Environmental Impact Assessment Report and Natura Impact Statement received by the Board on the 16<sup>th</sup> day of February 2024, except as may otherwise be required by the following conditions.

**Reason:** To ensure that the mitigation measures contained in the Environmental Impact Assessment Report and Natura Impact Statement are implemented.



3. A Construction and Environmental Management Plan (CEMP) shall be submitted to and agreed in writing with the planning authority prior to the commencement of development. The CEMP shall include but not be limited to construction phase controls for dust, noise and vibration, waste management, protection of soils, groundwaters, and surface waters, site housekeeping, emergency response planning, site environmental policy, and project roles and responsibilities. This should include for a qualified and suitably qualified and experienced archaeologist, geotechnical engineer and Ecological Clerk of Works.

**Reason:** In the interest of environmental protection.

4. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall -
  - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations or enabling works) relating to the proposed development,
  - (b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and
  - (c) comply with the mitigation measures set out in Chapter 13 (Cultural Heritage) of the Environmental Impact Assessment Report during all phases of site preparation and construction activity, and
  - (d) provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

**Reason:** To ensure the continued preservation of the archaeological resource of the area.

5. The developer shall retain the services of a geotechnical engineer for the duration of the preparation and construction stage of the development. A submitted monthly geotechnical report shall be furnished to the planning authority for the duration of the construction stage and a final report shall be submitted on completion of the construction phase.

**Reason:** In order to facilitate monitoring and control of the development by the planning authority.

6.
  - (a) The developer shall implement the Habitat and Biodiversity Management and Plan to include mitigation measures outlined.
  - (b) An Ecological Clerk of Works shall be appointed in advance of the proposed development to oversee the management of ecological risks on site and ensure that all mitigation measures as relating to ecological issues are implemented effectively on the ground.

**Reason:** To restore and enhance biodiversity levels at the site.

7. The developer shall comply with the requirements of the planning authority with respect to transport requirements including the following:
  - (a) Construction shall be carried out as per Option C, over a three year period.
  - (b) Details of the road network to be used by construction traffic, including detailed arrangements for the protection of bridges to be traversed, shall

be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

- (c) The developer shall carry out before and after surveys of the condition of the road network affected by the proposed development. A proposal for these surveys, and for the ongoing monitoring of the road condition during the construction phase, shall be submitted to, and agreed in writing with the planning authority prior to commencement of development.
- (d) The developer shall bear full responsibility for the costs associated with any overlays due to any damage incurred on the L74141, R163, R162 and N51 and any additional safety measures to be carried out arising from traffic associated with the development.
- (e) The developer shall meet with the planning authority annually to monitor and address progress and issues in relation to traffic and road safety associated with the proposed development.

**Reason:** To minimise impacts on the road network and in the interest of traffic safety.

- 8. All over ground tanks containing liquids (other than water) shall be contained in a waterproof bunded area, which shall be of sufficient volume to hold 110 per cent of the volume of the tanks within the bund. All water contaminated with hydrocarbons, including stormwater, shall be discharged via a grit trap and three-way oil interceptor with sump to a watercourse. The sump shall be provided with an inspection chamber and shall be installed and operated in accordance with the written requirements of the planning authority.

**Reason:** In order to protect surface water and groundwater.

- 9. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area



of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

**Reason:** It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

10. The developer shall pay a financial contribution to the planning authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000, as amended, in respect of works to be carried out at the Sillogue Bridge to improve pedestrian and vehicular safety in the vicinity of the bridge which benefits the proposed development. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as may be agreed prior to the commencement of the development, and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the terms of payment of this financial contribution shall be agreed in writing between the planning authority and the developer.

**Reason:** It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority in respect of public services, which are not covered in the

Development Contribution Scheme and which will benefit the proposed development.

11. The developer shall pay a financial contribution to the planning authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000, as amended, in respect of the costs of works necessary for the overlaying of the Milestown Road (L74141) and Regional Roads, R162, R163 and N51 in the vicinity of Navan Town, which benefits the proposed development. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to An Bord Pleanála for determination. The contribution shall be paid prior to commencement of development or in such phased payments as may be agreed prior to the commencement of the development, and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the terms of payment of this financial contribution shall be agreed in writing between the planning authority and the developer.

**Reason:** It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority in respect of public services, which are not covered in the Development Contribution Scheme or and which will benefit the proposed development.

**Notes:**

1. In arriving at its decision, the Board noted the engineering information on file, including Appendix 1.A of the EIAR (Technical Memo-Butress Justification) that set out the geotechnical investigations, laboratory testing, analyses and soil modelling that were carried out and which collectively informed the recommendation for the buttress. The Board also noted that the buttress recommendation was endorsed by an Independent Tailings Review Board and that the subsequent design of the buttress was subject to an Independent Dam


Safety Review Audit. While concerns were raised in the appeal and noted in the inspector's report that cone penetration test results were not furnished by the applicant as part of the planning application or during the appeal stage, the Board was satisfied that these specific tests were carried out as part of the wider relevant geotechnical testing outlined in the application and that there was sufficient such testing and analyses carried out to inform the design.

2. The absence of a seismic risk assessment was raised as a concern in the appeal. In this regard, the Board found that, based on the totality of the information on file, including in the EIAR, specifically Chapter 3, the risk of failure of the embankment structure arising from a seismic event is very low in the Irish context and the recommendations for the buttress structure and its design were informed by seismic shear wave velocity measurements and other geotechnical testing of relevance. The Board was satisfied that, based on the evidence presented in the EIAR, the required factors of safety are achievable for both 'static' and 'seismic' loading conditions. The Board was satisfied that no significant effects on the environment are likely as a result of a seismic event and therefore did not require the furnishing of a seismic risk assessment.
3. The Board also noted the concerns raised in the appeal regarding the applicant's choice of 'factor of safety' for the stability of the buttress structure. In this regard, the Board was satisfied that the factor of safety required to comply with the criteria set out in GISTM, is as set out in the application documentation, that is a factor of safety greater or equal to 1.5 for the **peak strength** undrained scenario and greater or equal to 1.1 for the **residual strength** undrained scenario. The Tailings Management Good Practice Guide issued by The International Council on Mining and Metals (ICMM) recommends that the Factor of Safety is to be determined by the Engineer of Record and should be endorsed by an independent review. The selected factor of safety in this instance followed the appropriate guidance and was determined by the Engineer of Record as set out in Appendix 1.A of the EIAR and independently reviewed.
4. In relation to traffic concerns, the inspector's assessment noted that the traffic counts were obtained from traffic surveys carried out during the Covid 19 period pandemic and accordingly resulted in an underestimation of impacts on the



road network, however, the inspector concluded on this matter that notwithstanding this concern, traffic impacts would be appropriately mitigated, including that the construction period would be conditioned to occur over three years (Option C). In relation to the specific matter of the underestimation of traffic impacts, the Board noted that travel restrictions in place at the time of the traffic surveys on the 9<sup>th</sup> November 2021 (as set out in Appendix 5.A (Traffic and Transport Impact Assessment) of the EIAR) were very different to those imposed in 2020 and overall considerably less restrictive. The additional traffic of the overall traffic associated with the proposed buttress that is put forward by the applicant team, expressed as a percentage represents a total traffic on the N51 is between 0.43% (Option C as a three year construction period) and 0.82% (Option A as a 1.5 year construction period). Furthermore, the change to vehicle queues at the R162/N51 roundabout put forward by the applicant would be negligible. Overall, the Board was satisfied that there would no material change to the rating of traffic impacts as 'imperceptible' if the survey figures were to be adjusted for the travel restrictions that applied in November 2021 because of the Covid-19 travel restrictions. Accordingly the Board was satisfied that traffic impacts would not be significant and any minor traffic inconvenience or delays can be appropriately managed during the construction period, including the preparation and implementation of a Construction stage Traffic Management Plan and also the adoption of a three-year construction period (Option C), as recommended by the inspector and set out in condition 7 above, and would be acceptable.

**Board Member**

  
Patricia Calleary

**Date:** 02/08/2024