Our Case Number: ABP-318302-23



Your Reference: Aughinish Alumina Limited

Tom Phillips & Associates 80 Harcourt Street Dublin 2 D02 F449

Date: 02 February 2024

Re: Expansion of the Bauxite Disposal Area, extension to the existing Salt Cake Disposal Cell and extension of the permitted borrow pit at Aughinish Alumina Limited In the townlands of Aughinish East, Aughinish West, Island Mac Teige, Glenbane West, and Fawnamore at or adjacent to Aughinish Island, Askeaton, Co. Limerick

Dear Sir / Madam,

An Bord Pleanála has received your recent submission in relation to the above mentioned case. The contents of your letter have been noted.

If you have any queries in relation to the matter please contact the undersigned officer of the Board at laps@pleanala.ie

Please quote the above-mentioned An Bord Pleanála reference number in any correspondence or telephone contact with the Board.

Yours faithfully,

Breda Inglé Executive Officer Direct Line: 01-8737291

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Teil Tel Glao Áitiúil LoCall Facs Fax Láithreán Gréasáin Website Ríomhphost Email

64 Sráid Maoilbhríde Baile Átha Cliath 1 D01 V902

64 Marlborough Street Dublin 1 D01 V902

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TOM PHILL A S S O C I A T PLANNING FOR THE F An Bord Pleanála 64 Marlborough Street	E SAN	80 Harcourt Street BORD PLI 502 F449 1 3521 478 6055 1 9 JAN 20	Also at: 437 & 455 A phip day is May Cork T23 PPT8 - Q.3	* r e info@tpa.ie w www.tpa.ie	
Dublin 1 Dear Sir/Madam,	Fee: 6 Time:	Туре; <u>С146</u> Ву:	l+and	Friday 19 th January	/ 2024

RE: STRATEGIC INFRASTRUCTURE DEVELOPMENT APPLICATION FOR EXPANSION OF THE BAUXITE RESIDUE DISPOSAL AREA AT AUGHINISH ALUMINA LIMITED, IN THE TOWNLANDS OF AUGHINISH EAST, AUGHINISH WEST, ISLAND MAC TEIGE, GLENBANE WEST, AND FAWNAMORE AT OR ADJACENT TO AUGHINISH ISLAND, ASKEATON, CO. LIMERICK

An Bord Pleanála Ref: ABP-318302-23

Response to An Bord Pleanála Request

1.0 Introduction

Tom Phillips + Associates¹ (TPA) have been instructed by the Applicant, Aughinish Alumina Limited² (AAL), to submit a response to the request received from An Bord Pleanála (ABP), via letter dated 13th December 2023, in relation to the expansion of the Bauxite Residue Disposal Area (BRDA) at an existing alumina facility at Aughinish Island, Askeaton, Co. Limerick. This response is submitted on or before the 19th January 2023 as outlined in correspondence received from ABP. In this response Sections 2.0 and 3.0 below deal, respectively, with requests No's 1 and 2 in ABP's correspondence.

2.0 Submission in relation to the Application Documentation

It is acknowledged that ABP have invited the Applicant to make any further submission, if they wish to do so, on the application.

At the outset, it is important to note that the description of the proposed development remains exactly as applied for in the original application under ABP-312146-21. There are no physical (or other) changes sought in relation to the proposed development since ABP's decision to grant permission for the original application on 31st August 2022 (which decision was later quashed on consent of ABP). There are no further changes to the works involved in the proposed BRDA raise or to the nature and extent of the use applied for.

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¹ 80 Harcourt Street, Dublin 2.

² Aughinish Island, Askeaton, Co. Limerick.

Directors: Tom Phillips BA VBUP VA Urb Dest MKTPEFPE Managenge Gavin Lawlor BSoc SC MAUE MIPE Jerry Lucey BA (Hons) MRE MMEMS Jerva John Gannon BS (Surve MPUP VIP), and Stephen Barrett BSc (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Spatial Plenning) Bip ERM MCT Associates: Abife McCarthy BA (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Land Hort) MRUP Adv Dip PM MEFI AML). Bio Bip McCarthy BA (Hons) MA (Plenning) (MRUP (Hons) MRUP (Hons) MIP), Brian Minogue BSC (Land Hort) MRUP Adv Dip PM MEFI AML). Registered: Tom Phillips and Associates Limited. Registered in Ireland No. 353333. Registered Office: 80 Harcourt Street, Dublin 2, Dog F449, Ireland.



The AAL facility operates under the Environmental Protection Agency (EPA) Industrial Emissions Licence (IEL) P0035-07, which was issued to the Applicant on 28th September 2021. As part of the IEL, the Applicant is required to submit annual environmental reports to the EPA providing information regarding emissions. All such reports are publicly available on the EPA website. The most recent annual environmental report submitted to the EPA by the Applicant was in March 2023. This report contains data in relation to emissions to air and water.

Since the submission of the original application in December 2021, the operation of the Borrow Pit (permitted under ABP-301011-18) commenced in June 2022, including 4 No. blasts undertaken between June and September 2022. The monitoring of these blasts illustrate that they were fully compliant with mitigation outlined in the Environmental Impact Assessment Report (as outlined in the permitted Borrow Pit application and the current BRDA Raise application) and the IEL Licence. This data is provided as Attachment 7 of the annual reporting, which can be accessed at e6476152-7b9f-4d20-b332-70f61d68e996.pdf (epa.ie). ³

A review has also been undertaken of whether there are any other projects, existing and / or newly approved, since the original application was submitted to ABP, and which did not form part of the cumulative impact exercise conducted by the Applicant. Further to this additional review it is concluded that no significant cumulative impacts have been identified within the assessments carried out to inform the EIAR and NIS.

As regards recent updates of those statutory plans and policies that the Board is required to take into consideration, the Board will be aware of course of its duty under Section 15 of the Climate Action and Low Carbon Development Act 2015 to, in so far as practicable, carry out its functions in a manner consistent with the climate plans, strategies and objectives referred to in Section 15. In that regard, ABP will be aware that the most recently approved Climate Action Plan 2022 to 2028, this Plan was formally adopted in July 2022 prior to the Board's initial decision in August 2022. There have been no material changes or variations to the Development Plan; but for completeness commentary on the more recent Plan is presented below; followed by commentary on recent climate plans and policies.

The Applicant considers the information that the Board has available to it on foot of this Response and in the EIAR and NIS currently before the Board, together with the response to the third party and statutory consultee submissions during the original application and the state of relevant scientific knowledge enable the Board to reach complete, precise and definitive conclusions as to the effects of the project on the environment and on the relevant European Sites.

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³ https://leap.epa.ie/licence-profile/P0035/compliance/return/68a593a3-aacf-ed11-a34e-0050568a2d1a



2.1 Planning and Climate Policy Update

Limerick Development Plan 2022-2028

At the time of the initial application (December 2021), the Limerick County Development Plan (CDP) 2010-2016 (as extended) was the relevant statutory local plan for the area. The Limerick CDP has since expired and has now been replaced by the Limerick Development Plan ('Development Plan') 2022-2028, which was published in Draft when the application was originally submitted. The Draft Plan was addressed in the Planning Report submitted with the application, but for completeness, the planning policy context and support in the Limerick Development Plan in relation to the ongoing operation of AAL is presented below.

The Limerick Development Plan came into effect on the 29th July 2022. It sets out Limerick City and County Council's overall strategy for the proper planning and sustainable development of the County to 2028 and beyond. It seeks to develop and improve, in a sustainable manner, the social, economic, cultural and environmental assets of the County.

Chapter 5 of the Limerick Development Plan is titled 'A Strong Economy' and highlights the importance of Shannon Estuary to the economy of Limerick. Section 5.11 highlights that;

"The Local Authority recognises that it is crucial for the full potential of the Shannon Estuary, one of Limerick's natural assets to be realised. It is important to encourage existing and new industries around the Estuary to spread the economic impact of these throughout Limerick, generating local employment and providing a more diverse employment base."

Objective ECON 057 (*Safeguard Strategic Development locations along the Estuary*) is of specific relevance to the subject site as it identifies Aughinish Island as a Strategic Development Location which should be safeguarded for the sustainable growth and development of marine related industry and industrial development;

"It is an objective of the Council to safeguard the Strategic Development Locations at Foynes Port, Foynes Island and Aughinish Island for the sustainable growth and development of marine related industry and industrial development at Askeaton. All proposed developments shall be in accordance with regional and national priorities and the SEA Directive, Birds and Habitats Directive, Water Framework Directive, Shellfish Waters Directive, Floods Directive and EIA Directive. Buffer zones shall be incorporated into proposals for developments where necessary to preserve potentially valuable habitats, for example, areas of estuary, shallow bays and inlets, mudflats, lagoon, salt marsh and woodland habitat, which occur at or surrounding these Strategic Development Locations. The extent of such buffer distances shall be established in consultation with relevant statutory bodies. Detailed botanical, faunal and ornithological surveys should be undertaken in relation to proposed developments at these Strategic Development Locations, to fully consider the potential effects of the development and inform how to best avoid significant ecological effects."

[Our Emphasis]



Objective ECON O58 (a) Shannon Foynes Port states;

"It is an objective of the Council to: a) Support the expansion of the Port at Foynes and promote the economic and industrial development of the Shannon Estuary as a strategic transport, energy and logistics Hub, serving Limerick and the wider region by utilising naturally occurring deep water characteristics and by identifying and safeguarding existing and future strategic transportation links, subject to fulfilling the requirements of the Habitats Directive and the conservation objectives of the Lower River Shannon SAC site."

[Our Emphasis]

The Strategic Development Location of Aughinish Island is detailed in Map 5.5: Map of Aughinish of the Limerick Development Plan (shown in Figure 1).



Figure 1: "Map of Aughinish" - (Source: Map 5.5, Limerick Development Plan 2022-2028)

Climate Policy Update

Following on from the passing of the European Climate Law (EU, 2021), and as part of the EU's "Fit for 55" legislative package where the EU has committed to a domestic reduction of net greenhouse gas emissions by at least 55% compared to 1990 levels by 2020, the Effort Sharing Regulation has been strengthened, under Regulation (EU) 2023/857 amending Regulation (EU) 2018/842 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030 contributing to climate action to meet commitments under the Paris Agreements and

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Regulation (EU) 2018/1999, with increased ambition by the year 2030. The revised commitment for Ireland is to increase the GHG emission reduction target from 30% to 42% relative to 2005 levels. The EU Emissions Trading System (ETS) market will also have more stringent reductions, under Directive (EU) 2023/959 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union, from the previous reduction target of 43% by 2030 compared to 2005 to a 61% reduction by 2030 based on annual reductions of 4.3% from 2024 to 2027 and 4.4% from 2028 compared to the previous annual reduction level of 2.2% per year. AAL falls under the ETS and thus will need to reduce GHG emissions in line with the revised 2030 target. Maritime related emissions are regulated under *Regulation (EU) 2015/757 on the monitoring, reporting and verification of greenhouse gas emissions from maritime transport.* Regulation (EU) 2015/757 was amended in 2023 by Regulation 2023/957.

In terms of national policy and legislation, recent changes include the publication of the carbon budget programme in November 2021 which comprises three successive 5-year carbon budgets as was outlined in the Climate Action and Low Carbon Development (Amendment) Act 2021. The carbon budget produced 3 sequential budget periods with the third carbon budget in draft format. The carbon budget will be revised where new obligations are imposed under the law of the European Union or international agreements or where there are significant developments in scientific knowledge in relation to climate change. The total emissions allowed under each budget is set out below in Table 1, as well as the average annual reduction for each 5-year period.

Period	Mt CO2eq	Emission Reduction Target
2021-2025	295 Mt CO2eq	Reduction in emissions of 4.8% per annum for the first budget period.
2026-2030	200 Mt CO2eq	Reduction in emissions of 15.3% per annum for the second budget period.
2031-2035 (provisional)	151 Mt CO2eq	Reduction in emissions of 3.5% per annum for the third provisional budget.

Table 1 5-Year Carbon Budgets 2021-2025, 2026-2030 and 2031-2025

The Climate Action Plan 2023, published in December 2022, confirmed that the economy-wide carbon budgets are to be supplemented by sectoral emissions ceilings, setting the maximum amount of GHG emissions that are permitted in a given sector of the economy during each five-year carbon budget. The recently agreed Sectoral Emission Ceilings for each Sector are shown in Table 2. It should be noted that 5.25 MtCO_{2eq} of annual emissions reductions are currently unallocated on an economy-wide basis for the second carbon budget period (2026-2030). These will be allocated following a mid-term review and identification of additional abatement measures. The industrial sector emitted approximately 7 MtCO_{2eq} in 2018 and has a ceiling of 4 MtCO_{2eq} in 2030 which is a 35% reduction over this period.

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Sector	Baseline Carbon Budgets (MtCO2eq) (MtCO2eq)		2030 Emissions	Indicative Emissions % Reduction in Final Year of		
	2018	2021-2025	2026-2030	(MtCO2eq)	2025- 2030 Period (Compared to 2018)	
Transport	12	54	37	6	50	
Electricity	10	40	20	3	75	
Built Environment - Residential	7	29	23	4	40	
Built Environment - Commercial	2	7	5	1	45	
Agriculture	23	106	96	17.25	25	
LULUCF	5	ТВС	ТВС	ТВС	ТВС	
Industry	7	30	24	4	35	
Other (F-gases, waste, petroleum refining)	2	9	8	1	50	
Unallocated Savings	-	7	5	-5.25	-	
Total	68	n/a	n/a	-	-	
Legally Binding Carbon Budgets and 2030 Emission Reduction Targets	-	295	200	-	51	

Table 2 Sectoral Emission Ceiling 2030

The Long-term Climate Action Strategy was published on the 28th April 2023. In relation to electricity the Government commits to the full decarbonisation of the electricity system by 2050. In relation to the EU ETS, the Long-term Climate Action Strategy states that "A strong price signal, as part of a reformed EU ETS, including progressively more restrictive rules on how many allowances will be available within the EU ETS, is expected to drive decarbonisation over the coming decade by increasing the cost to firms in the EU ETS of doing nothing to reduce their emissions" (DOECC, 2023).

The 2023 Climate Action Plan (CAP) (Government of Ireland, 2022) provided a detailed plan for taking decisive action to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting us on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. The plan outlines the current status across key sectors including Electricity, Transport, Built Environment, Industry and Agriculture and outlined the various broadscale measures required for each sector to achieve ambitious decarbonisation targets. CAP 2023 also detailed the required governance arrangements for implementation including carbon-proofing of policies and establishment of sectoral emission ceilings and carbon budgets.

In relation to the 2023 Climate Action Plan, under Section 13.3.5 EU Emission Trading System, the 2023 CAP stated:

"The EU ETS is an important measure for reducing industry GHG emissions. The Fit for 55 proposals for the reformed EU ETS will increase emissions reductions in this sector from the current 43% to 61%, in the period 2005 to 2030. Changes include a steeper annual reduction in the emissions ceiling and reductions in free allowances, alongside the

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corresponding introduction of a carbon border adjustment mechanism." (2023 CAP, page 155).

The 2024 Climate Action Plan (CAP) (Government of Ireland, December 2023) builds on CAP23 with further specific details on the actions required to achieve a 51% reduction in overall greenhouse gas emissions by 2030 and setting Ireland on a path to reach net-zero emissions by no later than 2050, as committed to in the Programme for Government and set out in the Climate Act 2021. There is more specific focus on the roadmap to align with the legally binding economy-wide carbon budgets and sectoral ceilings compared to previous climate action plans.

CAP24 states that measures included in CAP21 and CAP23 would lead to a projected emissions reduction in 2030 of 42% which is 9% points below the 2030 target. Thus, CAP24 has set out further policies, measures and actions to close this gap and ensure compliance with the carbon budgets and sectoral emissions ceilings. In relation to the industrial sector, which is the sector most relevant to AAL, one specific additional measure is the development of a work program to implement the National Hydrogen Strategy and ensure appropriate governance arrangements are in place to ensure its delivery.

The Plan envisages that CAP24 in tandem with the Long-term Climate Strategy will set the strategic direction for meeting Ireland's climate targets with CAP24 assisting in delivering the required greenhouse gas emissions abatement to meet the climate targets.

In terms of the unallocated savings gaps first identified in CAP21, CAP24 has set out an approach to deal with these unallocated savings no later than 2025. The approach is focused on exploring emerging technologies where there is evidence of technical/commercial readiness and the deployment of carbon removal technologies.

In the Industry Sector, the key targets identified in CAP24 are:

- Carbon-neutral heating in industry: 50-55% share in 2025 rising to 70-75% by 2030,
- Decrease embodied carbon in construction materials: decrease by 10% embodied carbon for material produced in Ireland in 2025 rising to 30% by 2030,
- Reduce fossil fuel demand through energy efficiency: reduce by 7% in 2025 rising to 10% by 2030,

In terms of specific targets in the Industrial Sector, CAP24 states that:

"It is acknowledged that a number of measures within this chapter (Industry) are reliant on the development of new technologies and approaches, with uncertainty around the development of these technologies being a risk in the delivery of the associated climate goals. However, given the necessity to move away from the use of fossil fuels in industry, it is believed that the deployment of these new technologies is essential in decarbonising the industry sector." 11



In summary, CAP24, in tandem with the Long-term Climate Strategy and the carbon budgets and sectoral emission ceilings provides the national context within which all industry will have to operate in the future. AAL's greenhouse gas emissions are increasingly stringently regulated through AAL's mandatory participation in the EU Emissions Trading System, with the national aggregated total of the ETS sector emissions intended to make an important contribution to delivering the required greenhouse gas emissions abatement to meet Ireland's 2030 and 2050 climate targets.



3.0 Response to An Taisce Observation

Please see below response to the An Taisce Observation (dated 4th February 2022). We provide a response to the issues raised in the Observation where it is considered appropriate to do so. For clarity, it is not considered that there are any aspects raised in the An Taisce submission that have not already been fully addressed in the documentation submitted as part of the planning application.

3.1 Potential Impacts to Water Quality and the Shannon Estuary and WFD Compliance

An Taisce highlight that the '...potential risks to water quality... are well known and discussed in the ElAR' and remind ABP that the potential impacts on Natura 2000 sites in the vicinity of the site should be fully addressed. An Taisce state that the '... groundwater status in the area of the subject site is classified as 'poor' and 'at risk...' as set out in the Water Framework Directive (WFD).

The issue of groundwater has been thoroughly addressed as part of the Environmental Impact Assessment Report (EIAR) submitted with the application. In particular, we refer to Chapter 10: Hydrology and Hydrogeology of the EIAR and Section 10.16 of which provides a summary and conclusion as below:

'The groundwater aquifer beneath the majority of the BRDA site is a locally important aquifer while the eastern sector of the BRDA, the SCDC and the Borrow Pit Extension areas overlie a regionally important groundwater aquifer. However, within the Application Site the groundwater aquifers are largely subject to saline intrusion and do not have a significant resource potential for the wider area.

The Proposed Development design measures were accounted for in an assessment of initial impacts and effects. Where additional mitigation measures could be incorporated to reduce the initial impacts and effects further, these were identified and included in an assessment of residual impacts and effects.

In summary, the significance of residual effects on water (and on human health from water) resulting from the different potential sources of impact are predicted to be no greater than <u>slight adverse</u> and, therefore, <u>not significant</u> in terms of this assessment.'

An Taisce further states that ABP should ensure that a full assessment of the proposal is provided as it relates to Article 4 of the WFD and highlights a number of legal cases in this regard. Specifically, An Taisce request consideration of whether the proposed development may, within the context of Article 4 of the WFD, "jeopardise the attainment of good surface or ground water status or of good ecological potential and good surface or ground water chemical status".

The WFD status of groundwater bodies within 2 kilometres (km) of the proposed development (i.e. the 'study area' for Chapter 10 of the EIAR) are detailed in Section 10.6.10.3 and Figure 10.23 of the EIAR. The WFD status of surface water bodies are detailed in Section 6.8.7 of the NIS. The location of surface water features within the study area are presented in Figures 10.8 and 10.9 of the EIAR. The internationally designated sites within the study area are also presented on Figure 10.8 of the EIAR. Consideration of whether the local water features form potential receptors for



the proposed development is presented in Section 10.7 of the EIAR. Table 10.2: Magnitude of Impact and Typical Descriptions of the EIAR details there is deemed to be a 'High' magnitude of change where 'Pollution results in deterioration in the status of a water body, failure to meet good status objectives defined by the Water Framework Directive, or failure of a protected drinking water area to meet its objectives as defined by the Water Framework Directive.'

The EIAR and NIS both reference the WFD in numerous places (eg: Sections 10.4.1, 10.4.2 and Table 2 of the EIAR and Sections 6.8.3 and 6.8.7 of the NIS) as part of the overall legislative context and provides sufficient information in clear format to enable ABP to consider and assess the development in light of the WFD. However, for the assistance of ABP the position is reiterated below, including, for convenience, the WFD status of the water bodies within the study area summarised in Table 3 of this response document.

Waterbody Name/ID	WFD Code	WFD Overall Status	WFD Risk Status
Surface Water			
Glenbane West Stream_010	IE_SH_24G060100	Poor	Review
Aharcronane_020	IE_SH_24A010900	Poor	At risk
Shanagolden Steam_010	IE_SH_24S022000	Poor	At risk
Foynes_010	IE_SH_24F230770	Poor	Review
Transitional Water			
Lower Shannon Estuary	IE_SH_060_0300	Good	Not at risk
Foynes Harbour	IE_SH_060_0350	Goodª	Review
Poulaweala Lough / Quayfield Lough	IE_SH_060_0400	Unassigned	Review
Groundwater			
Industrial Facility (P0035-04)	IE_SH_G_252	Poor	At risk
Askeaton	IE_SH_G_010	Good	Not at risk
Ballylongford	IE_SH_G_030	Good	At risk
Shanagolden	IE_SH_G_203	Good	Not at risk

Table 3 - WFD Status of Waterbodies within 2 km (i.e. the study area for Chapter 10) of the Proposed Development (based on 2016 – 2021 classification data unless specified otherwise). WFD information derived from https://gis.epa.ie/EPAMaps/Water.

^a Status based on 2013-2018 classification

The legislation, guidance and policies which have been used to guide Chapter 10 of the EIAR are outlined in Section 10.4 and specifically notes that the WFD has been considered as part of the assessment. The potential impacts and associated effects from the construction, operation of the proposal on surface water and groundwater are listed, discussed and assessed in Section 10.9 of the EIAR. Table 10.10 subsequently provides an evaluation of their initial impacts and effect significance. A summary of the sources of impact, predicted magnitudes of residual impact (accounting for the Proposed Development design and additional mitigation) and subsequent residual effect significance is presented in Table 10.11. These tables are replicated in Appendix A for information.



In all cases the residual effect is deemed to be <u>Not Significant and not greater than Slight</u>. The significance of an effect classified as 'slight' is defined in Table 10.2 of the EIAR and is described as "an effect which causes noticeable changes in the character of the environment <u>without affecting its sensitivities</u>". In the context of Article 4 of the WFD, a change in the sensitivity of the water environment would likely constitute a change in the 'status' of the waterbody (for example, for adverse effects this may be a status change from 'high' to 'good'). However, as both the initial and residual effects are deemed to be Not Significant and not greater than Slight, then no adverse change to the local WFD status is expected due to the proposed development.

An Taisce also highlights that 'The board should therefore evaluate if the proposal has the potential to affect the achievement of compliance objectives of the water-dependent Natura 2000 sites...'. In this regard we refer ABP to Chapter 6: Biodiversity of the EIAR and the Natura Impact Statement (NIS) submitted as part of the application. In conjunction with Chapter 10: Hydrology and Hydrogeology, there has been a full consideration of the potential for direct, indirect and cumulative impacts upon groundwater and surface-water features, including designated sites and their conservation objectives.

Comprehensive information is provided describing the baseline environmental conditions, underlying geology and the groundwater and surface water connections. Information is presented describing the intensive monitoring regimen and the history of compliance with the Environmental Protection Agency (EPA) licence conditions for the operational facility. Section 6.8.3 of the NIS sets out the relevant legislation related to discharges from the AAL facility and Sections 6.8 and 6.9 describe the emissions to surface water, transitional water and the marine environment and the groundwater and geological conditions respectively. The potential of the project to result in direct, indirect or cumulative impacts on groundwater and surface water are fully assessed in the NIS.

In this regard, the NIS states that 'It has been objectively concluded that the proposed development will not adversely affect the integrity of any Natura 2000 site, and there is no reasonable scientific doubt in relation to this conclusion.'

3.2 Disaster Risks and Climate Change

An Taisce refer to the bauxite containment failure in Ajka, Hungary in 2010 as an example to illustrate that 'disaster risks' or a breach in containment need to be considered as part of the EIAR. In relation to the events that occurred in Hungary, we refer ABP to our previous submission on third party observations (dated 6th July 2022 in response to Environmental Trust Ireland) which clarifies that the method of bauxite storage at AAL is entirely different to that which was carried out in Hungary and that the system employed in AAL for bauxite residue disposal is in accordance with the Best Available Technology (BAT) with EU BREF Management of Waste from Extractive Industries.

An Taisce highlights that Chapter 16: Major Accidents and Disasters of the EIAR addresses numerous hazards in relation to potential failure of containment on site and acknowledges that climate relates risks are addressed but considers that this risk specifically should be considered across every EIAR chapter.



The EIAR considers those effects that are planned or reasonably foreseen as likely or probable and those which can be reasonably foreseen to be an inevitable consequence of the normal construction and operation of the project. This approach is in accordance with the *Draft Guidelines on the information to be contained in Environmental Impact Assessment Reports*, (EPA 2017), and *Guidelines on the information to be contained in Environmental Impact Assessment Reports*, (EPA 2022).

The assessment in Chapter 16: Major Accidents and Disasters of the EIAR was undertaken to address unforeseen and unplanned events. This assessment was carried out in accordance with Annex IV, Paragraph 8 of the EIA Directive. The purpose of the assessment was to assess the vulnerability of the Proposed Development to potential major accidents and/or disasters, the potential to cause major accidents and/or disasters, and to identify control and/or emergency preparedness measures which are in place, or that may need to be implemented, to prevent or mitigate the likely significant adverse effects.

We do not agree that the occurrence of two or more hazards simultaneously was not assessed. Wherever appropriate, simultaneous occurrence of hazard events was considered. By way of example, the potential tidal surge or wave event scenario considered climate change leading to increase sea level, as well as increasing magnitude and frequency of storm events, (Section 16.8.2.3 of the EIAR refers). The EIAR has fully considered the matters raised by An Taisce above in line with the appropriate EPA guidance.

An Taisce raises concerns regarding flood risk assessment for the site and states that CFRAM flood risk assessment mapping is not available for the site. We can confirm that Flood Risk Assessment for the site and subject proposal have been fully assessed as part of the planning application. We refer ABP to Chapter 10: Hydrology and Hydrogeology of the EIAR and particularly Section 10.6.7 which highlights that there are no recorded past flood events for the site and that the BRDA and surrounding catchment is defended by the OPW constructed flood tidal defence berm (FTDB). The FTDB is monitored and maintained and various repairs and improvement works have been conducted.

Under the CFRAM programme the OPW identified the western side of the Robertstown River (Foynes) as an area of potentially significant flood risk (referred to as an Area for Further Assessment, or 'AFA') and the CFRAM flood mapping published by the OPW provides predicted flood extents on the western side of the Robertstown River. The CFRAM programme did not identify Aughinish Island as an area of potentially significant flood risk (AFA) and no flood extents are indicated for the site on the CFRAM flood mapping. Additional 'National Coastal Flood Hazard Mapping' has been published by the OPW (2021), which indicates the extent of land that might experience coastal flooding for a worst-case scenario where flood defences are not considered. This coastal flood hazard mapping provides flood extents for Aughinish Island; however, this data does not change the outcome of the assessment of flood risk for the site given flood protection provided by the existing FTDB. Furthermore, Chapter 16 of the EIAR provides an assessment of the vulnerability of the proposed development to major accidents and/or disasters, including the potential for extreme storm, tidal surge and wave events.



3.3 Appropriate Assessment and Habitats Directive Legal Requirements

The An Taisce submission in this regard refers to the Appropriate Assessment (AA) and Habitats Directive requirements. They remind ABP of their requirements under law and submit that the Board satisfy themselves that no reasonable scientific doubt remain as to the absence of lasting adverse impacts on the integrity of any European conservation site.

An NIS was prepared by Ecology Ireland Ltd., in support of the planning application. As outlined in Section 3.1 above, the NIS objectively concluded that the proposed development will not adversely impact on any Natura 2000 site, citing no reasonable scientific doubt with regard to that conclusion.

We would welcome ABP's careful consideration of the NIS and are satisfied that they are aware of the legislative framework that applies as identified in the observation.

3.4 Assessment of Long-Term Plan

An Taisce highlights that that the long-term plan, beyond the extended production lifetime, should be established and assessed against Ireland's legal obligations, particularly with regard to Natura 2000 sites and water quality.

All aspects of the proposed development, including the closure plan and post-closure monitoring are described and assessed as part of the application. It is also noted that under Condition No. 10 of the EPA licence (IEL P0035-07), AAL are required to have an approved plan in place for the orderly closure, decommissioning and aftercare of the facility. This plan is called the Closure, Restoration and Aftercare Management Plan (CRAMP) and includes the BRDA and borrow pit. The most recently approved CRAMP update was conducted by AAL during 2019, as part of the licence review for IEL P0035-07. The CRAMP has taken account of flooding and storm events, both of which account for climate change. This plan was considered as part of the NIS and is also detailed in the Engineering Design Report: BRDA Raise Development (Appendix A of the EIAR) and accounts for climate change in the design.



4.0 Conclusion

The proposed development is wholly compliant with regard to National, Regional and Local planning policy and will not adversely impact the amenities of the area nor property in the vicinity of the facility, and would be acceptable in terms of environmental and residential amenity impacts.

The scientific data presented in the EIAR and NIS in relation to the environmental background and impact remains fully relevant to enable ABP to consider the proposal; there have been no changes to the proposed development since ABP's decision to grant permission in August 2022. The description of the proposed development remains exactly as applied for in the original application under ABP-312146-21 and the strong support for the proposal within the Limerick Development Plan 2022-2028 (as adopted in July 2022) remains in place.

Having regard to the An Taisce observation It is submitted that any issues raised have already been fully addressed to date in the EIAR and NIS submitted with the application and further addressed in the response provided.

The proposed development will assist in the long-term economic sustainability of AAL, an operator of strategic importance in the Region. We contend, therefore, that the proposal should be granted Planning Permission in the interests of the proper planning and sustainable development of the area.

Yours Sincerely,

Stephen Basnett

Stephen Barrett Director Tom Phillips + Associates

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Appendix A: Table 10.10 (Evaluation of Initial Impacts and their Significance) and 10.11 (Evaluation of predicted Residual Impacts and their Effect Significance) of the Environmental Impact Assessment Report



Project Phase	Receptor	Sensitivity	Source of Impact/Description of Change*	Impact Magnitude*	Level of Effect *
Construction and Operational	Groundwater	Medium	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Low (adverse), direct, long term, reversible (BRDA and SCDC) Negligible (adverse) indirect, medium term, reversible (Borrow Pit sites)	Slight Slight
			Changes in groundwater flows or levels within the Borrow Pit sites.	Negligible (adverse), direct, medium term, reversible	Slight
	Surface Water	High	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Low (adverse), indirect, long term, reversible	Slight
	Human water users High		Mobilisation of leachate or activities impacting water quality or use (seepage, leaks and spills caused by bauxite residue and/or salt cake or the unmanaged spillage of fuels or lubricants from plant or vehicles)	Negligible (adverse), indirect, long term, reversible	Slight

Table 10.10: Evaluation of Initial Impacts and their Effect Significance

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Project Phase	Receptor	Sensitivity	Source of Impact/Description of Change*	Impact Magnitude*	Level of Effect *
	Groundwater	Medium	Mobilisation of leachate or activities impacting water quality or use during closure activities, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Low (adverse), direct, long term, reversible (BRDA and SCDC) Negligible (adverse) direct, medium term, reversible (Borrow Pit sites)	Slight Slight
Closure	Closure		Changes in groundwater quality after closure of the BRDA/SCDC, i.e., following restoration at Stage 16.	Low (beneficial), direct, permanent, reversible (BRDA and SCDC)	Slight
			Changes in groundwater flows or levels within the Borrow Pit sites.	Negligible (beneficial), direct, permanent, reversible	Slight

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Project Phase	Receptor	Sensitivity	Source of Impact/Description of Change*	Impact Magnitude*	Level of Effect
	Surface Water	High	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA	Low (adverse), indirect, long term, reversible (BRDA and SCDC)	Slight
		area or Borrow Pit sites.	Low (beneficial) indirect, permanent, reversible (Borrow Pit sites)	Slight	
			Changes in surface water quality after closure of the BRDA/SCDC, i.e., following restoration at Stage 16.	Low (beneficial), direct, permanent, reversible (BRDA and SCDC)	Slight
	Human water users High	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites, either during closure activities or post-closure	Negligible (beneficial), indirect, permanent, reversible	Slight	

* Taking account of the Proposed Development Design

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
Construction and Operational	Groundwater	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Direct	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures.	Negligible	Not Significant / Slight
		Changes in groundwater flows or levels within the Borrow Pit sites	Direct	Permanent	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures.	Negligible	Not Significant / Slight

Table 10.11: Evaluation of Predicted Residual Impacts and their Effect Significance

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
	Surface Water	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Indirect	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures.	Negligible	Not Significant / Slight

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
	Human water users	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Indirect	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures.	Negligible	Not Significant / Slight

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
Closure	Groundwater	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Direct	Long term (BRDA and SCDC site) Medium term (Borrow Pit site)	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures. Regular aftercare monitoring and inspection. Good closure practice.	Negligible	Not Significant / Slight
		Changes in groundwater quality after closure of the BRDA/SCDC, i.e., following restoration at Stage 16	Direct	Permanent	Reversible	Good practice pollution prevention measures, closure design, implementation and regular plant and equipment maintenance procedures. Waste management procedures. Regular aftercare monitoring and inspection. Good closure practice.	Negligible	Not Significant / Slight

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
	Surface Water	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Indirect	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures. Regular aftercare monitoring and inspection. Good closure practice.	Negligible	Not Significant / Slight
	Surface Water	Changes in surface water quality after closure of the BRDA/SCDC, i.e., following restoration at Stage 16	Indirect	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures. Regular aftercare monitoring and inspection. Good closure practice.	Negligible	Not Significant / Slight

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Project Phase	Receptor (importance)	Potential Source of Impact	Direct or Indirect	Duration*	Reversible or Irreversible	Summary of Mitigation (Proposed Development Design and Additional Mitigation)	Residual Magnitude of Impact	Residual Effect Significance
	Human water users	Mobilisation of leachate or activities impacting water quality or use, e.g., seepage, leaks and spills caused by bauxite residue and/or salt cake within the BRDA/SCDC or the unmanaged spillage of fuels or lubricants from plant or vehicles within the BRDA area or Borrow Pit sites.	Indirect	Long term	Reversible	Good practice pollution prevention measures and regular plant and equipment maintenance procedures. Waste management procedures. Regular aftercare monitoring and inspection. Good closure practice.	Negligible	Not Significant/ Slight

* Maximum duration without intervention