

Inspector's Report ABP 301011-18

Development	Borrow pit
Location	Aughinish East, Aughinish West, Island Mac Teighe, Glenbane West, Morgan North and Fawnamore, Aughinish Island, Askeaton, Co. Limerick
Planning Authority	Limerick City and County Council
Planning Authority Reg. Ref.	17/714
Applicant	Aughinish Alumina Ltd.
Type of Application	Permission
Planning Authority Decision	Grant subject to conditions
Type of Appeal	3 <sup>rd</sup> Party v. Grant
Appellant	Pat Geoghegan, Cappagh Farmers Support Group
Observer(s)	None
Date of Site Inspection	27/07/18
Inspector	Pauline Fitzpatrick

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# 1.0 Site Location and Description

Aughinish Island is located on the southern side of the Shannon Estuary approximately 8 kilometres north west of Askeaton and c.33 kilometres west of Limerick City. The village of Foynes is located approximately 2 kilometres further west of the site. The Limerick Foynes railway line runs to the south of the island, as does the N69 National Secondary Route between Limerick and Foynes.

The overall landholding is stated to be c.338 hectares. The northern portion of the site accommodates the Aughinish Alumina Processing Plant. The lands to the south-west accommodate the Bauxite Residual Disposal Area (BRDA) which accommodates residual or leftover bauxite associated with the processing plant in the production of alumina. The BRDA is surrounded by retaining perimeter stack walls constructed of rock fill. As the bauxite is continually deposited on site these stack walls are raised systematically in 2 metre stages and stepped back from the outer perimeter with each additional stage. There is a storm water pond and liquid waste pond to the north-east of the existing BRDA.

The application site which has a stated area of 7 hectares, is rectangular in shape located roughly in the centre of the overall landholding and comprises of largely disturbed ground with the southern section comprising the former borrow bit associated with the construction of the original plant. The northern section of the site is currently used as a compound for the landscaping contractor with a small ancillary building. There is a difference of approx. 9 metres in ground levels between the two sections of the site arising from the previous extraction works.

The lands immediately to the east are laid as out as a nature trail/amenity area.

# 2.0 **Proposed Development**

The application was lodged with the planning authority on the 26/07/17 with further details submitted 29/11/17 following a further information request dated 18/09/17.

Within the 7 hectare site an extraction area of 4.5 hectares is proposed.

It is proposed to extract c. 374,000 m<sup>3</sup> of rock to provide for ongoing construction of the BRDA over the lifetime of the permitted development and other associated works within the applicant's landholding.

It is to be extracted in 7 phases over a 10 year period. Extraction is to occur in a northerly direction from the former borrow pit.

The borrow pit is to be operational between April and September with blasting to occur 6-7 times per annum.

It is expected to extract c. 37,400m<sup>3</sup> per annum. To allow for instances where there is an additional requirement for rock in any given year a maximum extraction rate of 45,000m<sup>3</sup> is proposed. This could reduce the extraction period to 8.3 years.

Blasted rock is to be fed into a mobile crusher located on the borrow pit floor with crushed rock stockpiled within the existing former borrow pit area.

Extraction is to occur to an elevation of c.8.5 metres OD. Extraction will take place above the water table. Rainwater will be allowed to naturally infiltrate the ground surface with any surface runoff collected in a sump on the pit floor prior to the plant effluent treatment system.

A pumped water system is to be installed in relation to dust emissions. A mobile bowser will be used for dust suppression on haul roads and on stockpiles.

Operating hours are to be between 0800 and 1800 Monday to Friday.

The site is accessed from the internal road system within the landholding.

Restoration landscaping proposals include an allowance for the natural regeneration of vegetation in certain areas together with additional hedge and tree planting.

The application is accompanied by an Environmental Impact Assessment Report and Non-Technical Summary.

# 3.0 **Planning Authority Decision**

## 3.1. Decision

Grant subject to 10 conditions of note: Condition 3: Permission for a 10 year period. Condition 4: All mitigation measures proposed in the EIS received 26/07/17 and 02/11/17 (sic) to be implemented in full.

Condition 7: During construction measures to limit sediment runoff from the site shall be agreed in writing with the planning authority prior to commencement of development.

Condition 10: Submission of site specific waste management plan.

## 3.2. Planning Authority Reports

#### 3.2.1. Planning Reports

The 1<sup>st</sup> **Planning** report dated **18/09/17** includes AA Screening. Further information is required on whether the proposed development is a licensable activity and amendments to the sections in the EIAR on population and human health and interaction between factors having regard to the designation of the site as a Category A Site under the Extractive Waste Directive and its implications for the External Emergency Plan. Conditions relating to blasting and noise limits to be attached should permission be granted. The 2<sup>nd</sup> report dated 31/01/18 following FI recommends a grant of permission subject to conditions.

A **supplementary** report dated **31/01/18** concludes that the necessary requirements in terms of procedural issues have been complied with.

The report from the **A/Senior Planner** notes that the assessment carried out by the planner contains a fair and reasonable assessment of the likely significant effects of the development on the environment. Having regard to the character of the landscape in the area and the previous use on site the proposal is considered acceptable subject to conditions.

3.2.2. Other Technical Reports

Executive Archaeologist states that there are no archaeological issues.

Assistant Engineer South Operational Division notes that no calculations have been provided that detail the volume of surface water that will be generated during storm events and the capacity of the plant effluent treatment system. A condition to be attached to provide such detail. A condition precluding discharge of surface water to surrounding watercourses until it has passed through the treatment plant also recommended. The traffic generated by the proposal would be minimal. A condition requiring a construction management and delivery plan recommended.

**Heritage Officer** notes that the quarry will operate from April to September each year. This could have the advantage of avoiding any possible disturbance to the wintering wildfowl which would be a feature of the River Shannon and Fergus SPA and the Lower River Shannon SAC. There are two habitats of ecological interest outside the area of the application, namely Dry Calcareous Grassland and Hay Meadows. These will not be affected by the proposed development. The AA Screening conclusions are accepted. The site is outside the Natura 2000 sites and the possibility of contamination through groundwater is much reduced by the fact that extraction will take place above ground water level. It will also take place during the summer months which should mean less rainfall and hence less run off and percolation of rain water through to ground water. It will also be at the same level as previous extraction (to 8.5OD) which means that there will be limited opportunity for the creation of sumps which might hold soiled water which percolate down to ground water level. Conditions detailed should permission be granted.

**Executive Engineer Environment Section** recommends blast vibration monitoring. Should the PPV, pore pressure displacement/settlement measurements exceed the predicted levels outlined in the Golder Associates Blast Vibration Assessment then blasting operations should cease immediately and the Environment Services Section be contacted immediately. Monitoring to be carried out at 150m, 100m and 53 m distances from the BRDA and all results analysed and compared to the predicted levels prior to commencement of the blast sequence.

**Executive Scientist Physical Development Directorate** considers that noise from the proposed development will likely have a significant impact on noise sensitive locations. A refusal of permission is recommended. A subsequent report by Senior Executive Engineer states that with regard to noise, when looked at in isolation, the proposed quarry would raise the background noise levels above the point where complaints would be expected. However, when looked at in the context of the current ambient noise regime, the impact of the quarry would be marginal. What is of concern is that the current ambient noise levels of up of 57dB  $L_{Aeq}$  exceed those generally imposed by the EPA (55dB  $L_{Aeq}$ ). Given the low background noise levels this is potentially a problem however this is an issue for the EPA IE licencing

process. If construction phase not covered by the IE licence then a condition should be attached limiting construction noise levels to not more than 5dB above background noise levels.

**Environmental and Planning Services** recommends a condition requiring submission of a site specific waste management plan for the recovery/disposal of all wastes arising from the demolition, refurbishment and/or construction related activities of the development.

A report from **Senior Executive Engineer**, **Planning and Environmental Services** dated **25/01/18** states the original risk assessment for the External Emergency Plan was carried out by Golder Associates in 2013 as part of the development of the EEP. It identified two 'Very Unlikely' failure scenarios ie. 1 in 10,000 year probability or less that could potentially result in the activation of the EEP. The EIAR in Appendix 11 identifies the borrow pit as a potential 3<sup>rd</sup> 'very unlikely' scenario. The EEP is due for review this year and it can take into account this 3<sup>rd</sup> scenario as part of that review. This, in itself, would not prohibit the granting of the application which, in accordance with the submission, would not increase the risks identified by Golder Associates and currently associated with the Bauxite Residue Disposal. There is no objection to a grant of permission in relation to the EEP.

#### 3.3. Prescribed Bodies

Transport Infrastructure Ireland has no observations.

**An Taisce** considers that the EIAR is limited to the consideration of impact in the extraction area. There are significant concerns arising from the proposa including blasting in direct proximity to the BRDA. The potential impact on its stability and integrity has not been adequately addressed. There is also the wider issue of climate proofing in the ongoing expansion of capacity of waste deposition at the BRDA. Of particular concern is the potential for increased risk of concentrated periods of high rainfall with more extreme weather.

**EPA** notes that the proposed development is within the licensed boundary for Aughinish Alumina Ltd (IE Licence Register No. P0035-06). The licence may need to be reviewed or amended to accommodate the changes proposed. If and when any licence review application is received by the Agency all matters to do with emissions to the environment from the activities proposed, the licence application documentation, and EIS will be considered and assessed by the Agency.

**Gas Networks Ireland** notes the gas transmission pipeline in the vicinity of the site. It has no comment or objection to the proposal. It recommends that should permission be granted a condition be attached requiring the applicant to contact same in advance of any site works.

**HSE** has no objection on public health grounds but recommends that consent should be subject to a robust emissions management plan and provision of an externally accredited Environmental Management Plan. The technical engineering expertise required for evaluating whether the BRDA infrastructure would be at risk is outside the scope of public health, but it would be highly relevant that this assessment is obtained by the Planning Authority to establish whether there are any implications for the existing BRDA External Emergency Plan whose development was coordinated by the Local Authority. No mention is made of Category A Site Designation under the Extractive Waste Directive and the implications for the External Emergency Plan. It is a significant omission from the Human Health section. A **2<sup>nd</sup> report** dated **16/01/18** following further information states that specialist technical engineering expertise required to assess this potential risk does not exist within the HSE and recommends that the planning authority obtains advice from an independent specialist source.

#### 3.4. Third Party Observations

The submissions received by the planning authority raise issues relating to health and safety, environmental risk arising from vibration and impact on stabilisation of BRDA, details on chemical make up of embankment walls, absence of risk assessment, impacts on groundwater and gas pipeline, assessment of borrow pit under Section 261 and Section 261A, compliance with EIA Directive, impact on SAC, consideration of mitigation measures in AA Screening, adequacy of financial bond and adequacy of public consultation.

# 4.0 **Planning History**

The extensive planning history is set out in Appendix 1 of the Planning Report accompanying the application. Of note:

PL13.217976 (05/1836) – permission granted in January 2007 for increase in production of alumina to 1.95 million tonnes per annum, provision of BRDA c. 80 hectares in area, increase in height of existing and permitted BRDA c.104 hectares in area and other associated works.

# 5.0 Policy Context

## 5.1. Development Plan

5.1.1. Strategic Integrated Framework Plan for the Shannon Estuary 2013-2020

SIFP MRI 1.2.9 – to safeguard the role and function of Aughinish Alumina as a key driver of economic growth in the region, encouraging its sustainable growth, expansion and diversification to facilitate greater and more competitive trade potential.

5.1.2. Limerick County Development Plan 2010-2016 (as extended)

Objective ED 04 - Safeguard Strategic Development Locations along the Estuary

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.

Objective ED O26 – Mineral Extraction and Environmental Impacts

It is the objective of the Council to:

- (a) Minimise environmental and other impacts of mineral extraction through rigorous application of development management and enforcement requirements for quarry and other developments; and
- (b) In particular, to have regard to visual impacts, methods of extraction, noise levels, dust prevention, protection of rivers, lakes and other water sources, impacts on residential and other amenities, impacts on the road network

(particularly with regard to making good any damage to roads), road safety, phasing, re-instatement and landscaping of worked sites.

Objective ED 04 – Safeguard Strategic Development Locations along the Estuary It is the objective of the Council to safeguard the Strategic Development Location 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 development where necessary to preserve potentially valuable habitats, for example areas of the estuary, shallow bays and inlets, mudflats, lagoon, salt marsh and woodland habitat which occur at or surrounding Strategic Development Locations. The extent of such buffer distances shall be established in consultation with relevant statutory bodies. Detailed botanical, faunal and ornithological surveys shall be undertaken in relation to proposed development at these Strategic Development Locations to fully consider the potential effects of the development and inform how to best avoid significant ecological effects.

## 5.2. Natural Heritage Designations

Lower River Shannon SAC (site code 002165) c. 120 metres to the west (at nearest point).

River Shannon and River Fergus Estuaries SPA (site code 004077) c. 200 metres to the west (at nearest point).

# 6.0 The Appeal

#### 6.1. Grounds of Appeal

The 3<sup>rd</sup> Party appeal by Pat Geoghegan Cappagh Farmers Support Group can be summarised as follows:

- Proper public consultation was not carried out. This contravenes Articles 6(3) and 6(4) of the Aarhus Convention.
- The purpose of the proposal is so as to secure additional rock to be used to increase the height of the embankment walls of BRDA 1 and BRDA 2 to store more waste. The applicant could source the material from the quarry across the road.
- Noise levels at the facility already exceed the limit applied by the EPA. A further increase in noise levels would have a serious negative impact on local residents.
- The External Emergency Plan in respect of the storage of 40 million tonnes of waste has not been adequately considered.
- There are negative environmental and human health impacts from rock blasting with vibration, noise and fly rock.
- There has been no assessment of the impact on blasting in close proximity to the BRDA and whether such disturbance would result in dust emissions from the waste or the breaching of the embankment. The proposal could have an effect on the integrity of the BRDA
- The applicant is not completely sure if there is a risk to the BRDA. The local authority should have sought independent specialist advice. The precautionary principle should have been applied.
- The fact that the site is in close proximity to BRDA is a significant omission from the human health section of the EIAR. No consideration was given to cumulative impacts.
- The local authority has failed to take into account the potential dangers to the gas pipe from blasting.

- No consideration has been given to plant failure or human error in terms of failure scenario.
- This operation would require a full IE Licence review.
- The real purpose of the rock extraction is so as screen the existing mud ponds from public view and that the borrow pit will be used in the future as a mud pond.
- Future development such as reopening of the Foynes Limerick railway line could be compromised. The local authority was vague in addressing this issue.
- The waste should be disposed of off site.
- The impact of blasting, dust, PM22, PM25 and fly rock on designated sites have not been adequately assessed.
- There is conflicting information in the application as to whether key habitats would be affected.
- The local authority should have required a financial bond to cover costs arising from potential environmental disaster.
- There is a conflict of interest between the applicant and the planning authority.

## 6.2. Applicant Response

The submission by Tom Phillips and Associates on behalf of the applicant, which is accompanied by supporting documents in appendices refers. It is stated that a number of issues raised in the appeal do not relate to the proposed borrow pit. The submission can be summarised as follows:

- 6.2.1. Public Participation
  - The applicant carried out public consultation as detailed in Chapter 6 of the EIAR.
- 6.2.2. Noise (report by AWN Consulting)
  - Noise emissions from the facility do not exceed/breach the EPA licence limits.
    The noise limits outlined in the site's licence relate to specific noise emissions

from the facility alone ie. not the total noise level, including other sources of noise not associated with the site.

- Section 10.6 of the EIAR states that with consideration of current site noise emissions and predicted noise emission values associated with the proposed borrow pit the cumulative noise emissions are expected to remain comfortably within the IE Licence noise criteria at all nearby noise sensitive locations.
- 6.2.3. Vibration (report by Golder Associates)
  - The potential impact of the proposal on the existing BRDA is assessed in the EIAR, specifically Chapter 11 dealing with noise and vibration and Appendix 11.2 dealing with Blast Vibration Assessment.
  - The Golder Report 'Borrow Pit: Phase 1 BRDA Blast Vibration Assessment' deals with an assessment of the ground vibrations from blasting at the borrow pit assuming a Maximum Instantaneous Charge (MIC) of 35kg.
  - The EIAR clearly assessed the impact of the proposal on the adjoining BRDA. It had regard to blasting which has previously been carried out at the overall facility.
  - Section 8 of the Golder report lists the recommendations for supporting the blast design for the proposed Borrow Pit. Estimated set back distances from blasts to limit the PPV to 5mm/s, assuming a maximum instantaneous explosive charge weight of 35kg (MIC) are:
    - (i) 53 m. to the BRDA embankment, and
    - (ii) 50 m. at the end of the life of the borrow pit to the GNI gas transmission pipeline.
  - Blast vibration monitoring at various locations within the BRDA is recommended.
  - The effect of blasting within the footprint of the borrow pit was evaluated and found to pose a very unlikely risk to the stability of the adjacent BRDA. The intensity of ground vibrations due to the blasting expressed as peak particle velocity (PPV) was calculated based on the type and size of blast and characteristics of the area. This was then calibrated with previous blasting

conducted in the area during the construction of the Phase 2 BRDA. The stability analyses undertaken found that the calculated PPV, for the blast analysed would not cause instability of the BRDA. The stability analysis consisted of a pseudo-static analysis which evaluated the stability based on the blast vibration, and a post blast analysis which evaluated the stability due to the increase in pore pressure within the red mud.

- The initial Phase 1 Blasting is proposed to be conducted at a distance of approx. 150 metres from the BRDA at the eastern extent of the face of the borrow pit. Vibration and monitoring data from the initial and subsequent blasts will be used to calibrate the PPV prediction model further and assess any impacts to the BRDA prior to progressing to blast the faces closest to the BRDA. As the borrow pit develops the blasting operations will progress further away from the BRDA.
- The Craggs to Aughinish 300mm diameter steel transmission gas pipe was installed in 2004 along the northern extent of the borrow pit footprint. The gas main is located approx. 340m from the proposed Phase 1 Blasts for the borrow pit at their nearest points. 6 years of blasting data will be available prior to the start of the Phase 7 Blasting, which will start at approx. 100 m from the gas main, at which stage the distance from the BRDA will be approx. 400 m.

Consultation has been had with Gas Networks Ireland. Blasting may take place within 400m of the pipelines with the consent of GNI and a limit of 75mm/s PPV on the ground surface above the pipeline shall be applicable before a stress analysis of the pipe is required. It is proposed to limit the threshold to 55mm/s to allow for a margin of error.

- 6.2.4. Human Health/External Emergency Plan
  - The proposed development has had regard to the External Emergency Plan and is not considered to impact on the implementation of the plan and, as a result, the local population.

#### 6.2.5. Failure Scenario

- The comments regarding BRDA storage are not relevant to the proposed development.
- The incident referred to in Hungary, namely the failure of Reservoir No.10 of the Ajka Tailings Pond at Magyar Aluminium Art Plant in 2010 where a containment wall failed leading to the significant spillage of run mud into the environment, is not relevant to the overall facility at Aughinish given the different tailings management operations and the construction methods undertaken for the containment areas.

#### 6.2.6. Industrial Emissions Licence

• At the time of the lodgement of the applicant it was considered that the operation of the borrow pit was not required to form part of the licensable activities at the overall landholding. Following a request for further information the EPA in a response states that the excavation of rockfill is not a licensable activity and does not require in industrial emissions licence in its own right, however it considers that the proposed borrow pit development is a directly associated activity within the licensable boundary consequently it is considered that the operation of the proposed development would require a full licence review. It is clear that the applicant addressed the licensing issue during the course of the application and was assessed by the planning authority in its determination of the application.

## 6.2.7. Impact on Natura 2000 Sites (report by Ecology Ireland Ltd.)

- There were no resting places (eg. otter holt, bat roost) recorded within the application area. Therefore, there is no requirement for application for derogation licences.
- Blasting will only occur outside of the over-wintering period when the key qualifying avian interests of the River Shannon and River Fergus Estuaries SPA will not be present in significant numbers in the wider area.
- The low level of blasting occurring over a 5 month summer period is unlikely to have significant adverse impact on bird species of the designated sites overall.

- There is no suitable habitat for breeding Cormorant within or adjacent to the proposed development boundary and it is highly unlikely that the infrequent blasting will be a source of any significant disturbance of the species during the breeding season.
- Extractions works will take place during daylight hours, minimising disturbance to roosting birds and mammals and birds active in the nocturnal/crepuscular period.
- Bird species are likely to be already somewhat tolerant of ongoing noise in view of the existing industrial activities and other activities in the area.
- There appears to some confusion on the sections of the report describing the in suit and potential ex situ impacts of the project. There is no disagreement or conflict.
- 6.2.8. Other Issues
  - The crushed rock will be stockpiled to the southern end of the proposed borrow pit at the excavated level and will not be stockpiled to protrude above the adjoining ground level. The proposed development will not obscure the public view of any features at the existing facility.
  - There are significant environmental and health and safety benefits to sourcing the rock within the site. Removing trucks from the roads will reduce the carbon footprint of the quarrying operation and reduce potential traffic accidents.
  - The EIAR has regard to the cumulative effects of the proposed development with other existing and/or approved projects in the area. The applicant's overall landholding extends to c.338 hectares relating to the entirety of Aughinish Island. It is therefore considered that no 3<sup>rd</sup> parties could propose development that could have a cumulative effect with the proposed development within this landholding. Notwithstanding the applicant is not aware of any such projects in the wider area.
  - The southern edge of the application site is located a minimum of c.1.5km to the north of the rail link between Foynes and Limerick. The proposal will not impact on its future operation.

- It is not considered that the development is of such a large scale or nature which requires significant restoration that merits the provision of a financial bond. The Board is requested to have regard to the planning authority's decision and not include a bond.
- The claims of conflict of interest are refuted.

# 6.3. Planning Authority Response

None received.

#### 6.4. **Observations**

None

## 6.5. Response to Applicant's Submission

The applicant's response to the 3<sup>rd</sup> party appeal was circulated to the relevant parties for comment.

The response from the appellant, which reiterates a number of the points made in its appeal submission, can be summarised as follows:

- The pre-consultation process was flawed.
- Noise emissions are currently being breached and will be breached further if blasting is allowed.
- The response on vibration by Golder Associates is not accompanied by the report that was referenced (Charlie et al 1987).
- The response confirms the concerns about the dangers of rock blasting.
- 100% confidence, only, should be required in terms of blasting. Probability is not sufficient.
- There are further equations in relation to the primary factors influencing ground-shock amplitude and frequency of ground motion than those cited.
- Without knowing the extent of the damage to sections of the original embankment in BRDA which has been happening over decades shows how

reckless the application is. The Board should request documents and maps of repairs carried out and where further weaknesses and damage are located.

- Other examples of breaches have arisen in China.
- The proposal is a larger scale development that will require significant restoration. This merits the provision of a financial bond should the embankments of the BRDA be breached.

#### 6.6. Section 131 Notice

On the basis that the proposal may have impact on nature conservation certain prescribed bodies were invited to make a submission/observation of the appeal. No responses received.

#### 6.7. Environmental Protection Agency

The most recent licence pertaining to the Aughinish Alumina Ltd. was issued 24/07/14. Ref. P0035-06

The licence may need to be reviewed or amended to accommodate the changes proposed in planning application.

# 7.0 Assessment

I consider that the issues arising in the case can be summarised as follows:

- Nature, extent and purpose of proposed development
- Principle of Development
- Public Consultation
- Noise
- Dust
- Health and Safety
- Miscellaneous Issues
- Environmental Impact Assessment
- Appropriate Assessment

#### 7.1. Nature, Extent and Purpose of Proposed Development

- 7.1.1. As per the public notices and the details provided in the application and supporting documentation, including the EIAR, the applicant is seeking a 10 year permission for a borrow pit of c. 4.5 hectares within an application site of c.7 hectares so as to extract approx. 374,000m<sup>3</sup> of rock to a maximum depth of c.8.5m OD with associated crushing and stockpiling of aggregate. Extraction is to occur between April and September each year. Ancillary works include the demolition of an existing contractor's shed.
- 7.1.2. The purpose of the rock is to provide for ongoing works associated with the Bauxite Residual Deposit Area (BRDA) located to the south-west of the application site within the applicant's landholding
- 7.1.3. I consider that the nature and extent of the proposed development for which permission is being sought has been adequately described.
- 7.1.4. The appellant has raised concerns about the potential future use of the site. The nature and extent of the development before the Board for adjudication is as described above. Any further proposal would be subject to a separate planning application and assessment.

#### 7.2. Principle of Development

- 7.2.1. The application site is situated roughly in the centre of a substantial and long established industrial site. It is to the south of the main processing plant and to the north-east of the BRDA. With a stated area of c. 7 hectares it constitutes a small percentage of the over landholding of 338 hectares. The nearest dwelling is c.1km to the east of the site.
- 7.2.2. As noted above the purpose of the borrow pit is to provide rock for the ongoing works associated with the BRDA. Permission was granted on appeal in 2007 under PL13.217976 for a further BRDA to the south of the existing BRDA in addition to an increase in the height of existing and permitted BRDA to 32 m OD. The said permission also permitted the increase in production at the plant to 1.95 million tonnes per annum. The current store of rock on the site which is used in the ongoing construction and maintenance works associated with the BRDA is due to be exhausted in the immediate term. The proposed borrow pit is to be worked in 7 phases from south to north to a depth of c.8.5 metres and is be operational between April and September with blasting anticipated 6/7 times per annum.
- 7.2.3. The proposal, will seek to ensure a level of self-sufficiency in terms of aggregate supply and will prevent the need to source the necessary material for the BRDA from an external source and, thus, reduce the potential impacts arising from additional vehicular movements.
- 7.2.4. The proposal, which would assist in ensuring there is sufficient aggregate to allow for the continuing development of Aughinish Alumina in accordance with the permission under ref. PL13.217976 would, therefore, be considered to aid in safeguarding the role and function of the industry as a key driver of economic growth in the region and encouraging its sustainable growth, expansion and diversification as set out in objective SIFP MRI of the Strategic Integrated Framework Plan for the Shannon Estuary 2013-2020. It will also advance the policies and objectives as set out in the Limerick County Development Plan 2010-2016, as extended, which seek to safeguard strategic development locations and promote economic and industrial development of the Shannon estuary. Therefore, I consider that the proposed development is consistent, in principle, with the said policies and objectives, subject

to satisfactory conclusions in respect of environmental effects and the other matters raised in the appeal.

7.2.5. Objective ED 026 and Section 10.8.1 of the County Development Plan sets out the requirements in terms mineral extraction and environmental impacts and I propose to address same in the sections below.

#### 7.3. Public Consultation

- 7.3.1. The Aarhus Convention establishes a number of rights of the public with regard to the environment, including the right to participate in environmental decision making for projects falling within Annex 1 of the Convention or other projects likely to have a significant effect on the environment. Included in Annex 1 are installations for the production of non-ferrous crude metals from ore, concentrates or secondary raw materials by metallurgical, chemical or electrolytic processes.
- 7.3.2. The European Union's EIA Directive embodies the requirements of the Aarhus Convention. Specifically, Article 6(2) requires that the public are informed of certain matters early in decision making procedures to ensure effective public participation. Article 6(4) states that the public shall be given early and effective opportunities to participate in environmental decision making procedures and shall be entitled to express comments and opinions before the decision on the request for development consent is taken. Within the planning system, these requirements are reflected in the statutory responsibilities for public notices and consultation set out in the Planning and Development Act 2000 (as amended) and Regulations 2001 (as amended).
- 7.3.3. I note that based on the information on file, the applicant has fulfilled its statutory requirements in terms of advertisement. In addition, I note Section 6 of the EIAR sets out the consultation undertaken by the applicant, both with statutory bodies and the public, prior to the lodgement of the application.
- 7.3.4. The public have had the opportunity to make submissions on the application to the planning authority. On foot of the decision the option to appeal has been availed of. Further, all matters raised are now before the Board and can be considered by it prior to making its decision. I consider, therefore, that the requirements of the

Aarhus Convention, EIA Directive and national legislation have been met in respect of public consultation.

### 7.4. Noise

- 7.4.1. The Aughinish Alumina Plan is subject of an IE Licence under reg. no. P0035-06. By way of condition 6.16 it is required to carry out annual noise monitoring. The results of the 2016 monitoring are used to define the baseline noise environment for the subject site, a copy of which is included in Appendix 11.1 of the EIAR. As noted measurements were conducted at 9 locations at the site boundary and at 5 nearby noise sensitive locations, the nearest being NSL2 and NSL5 c 1km to the southeast of the site boundary. I note that the daytime L<sub>Ar</sub> (30 minute) 55dB, evening time L<sub>Ar</sub> (30 minute) 50dB and night time L<sub>Aeq</sub> (30 minute) 45dB limits were not exceeded at any of the sensitive receptors due to facility related sound.
- 7.4.2. The range of activities during both the initial and operational phases of the quarrying operation which have the potential to generate nose are set out in section 11.4, most notably blasting activities, crushing of rock and rock breaking. Table 11.6 outlines typical plant items and associated noise levels that are anticipated at the nearest noise sensitive location to site works with a total operational noise of the site calculated to be 49 dB L <sub>Aeq, 1hr</sub> which is within the daytime operational noise criterion of 55dB L <sub>Ar, T</sub>.
- 7.4.3. The cited mitigation measures as set out in 11.5 reflect industry best practice including use of sound reduction equipment to the rock breaking tools and acoustic screen between compressor or generator and noise sensitive areas.
- 7.4.4. Blasting is anticipated to be required every 15 days during the operational period between April and September which equates to 6 to 7 blasts per year. Air overpressure is to be controlled at source by attention to blast design with the operator to prepare a method statement. Monitoring of air overpressure levels are also to be undertaken. Again, the mitigation measures detailed would be seen as industry best practice including advance notification to nearby residents.
- 7.4.5. I consider that sufficient information has been provided in support of the application to corroborate the assertion that the proposed quarrying activity would not give rise to significant impacts in terms of noise both in isolation and cumulatively with the

existing industrial operation. As noted above any permission granted by the Board will be subject to a review of the Industrial Emissions Licence which will control noise emissions.

#### 7.5. Dust

- 7.5.1. Results of dust deposition monitoring at 24 locations within the overall site from January 2011 to August 2016 are provided in Table 9.3 of the EIAR. The average dustfall levels measured were within the TA Luft limit value of 350mg/(m<sup>2\*</sup>day) with a maximum annual average of 117 mg/(m<sup>2\*</sup>day). The closest gauge to the site is DG13 which has an average concentration of 37 mg/(m<sup>2\*</sup>day). This is used as the background level for the area. It is predicted that the proposed development would increase ambient dust deposition levels by a maximum of 4.96 mg/(m<sup>2\*</sup>day). Thus, the overall ambient concentrations would remain materially lower than the TA Luft Limit Value.
- 7.5.2. PM <sub>2.5</sub> is also predicted to be significantly lower than the limit value of 25 ug/m<sup>3</sup>.
  Based on a background PM <sub>2.5</sub> concentration of 10.5ug/m<sup>3</sup> in the vicinity of the site the annual PM 2.5 concentration including the extraction works peaks at 11.48 ug/m<sup>3</sup>
- 7.5.3. The measures to be employed at the site in terms of dust minimisation as set out in section 10.5 and Appendix 10.3 of the EIAR are comparable to those found in other quarry development and represent industry best practice.
- 7.5.4. I consider that sufficient information has been provided in support of the application to corroborate the assertion that the proposed quarrying activity would not give rise to significant impacts in terms of dust both in isolation and cumulatively with the existing industrial operation. As noted above any permission granted by the Board will be subject to a review of the Industrial Emissions Licence which will control air emissions.

#### 7.6. Health and Safety

7.6.1. The appellant in its submission raises concerns about the potential impact of blasting on the embankments of the BRDA and issues of health and safety.

- 7.6.2. The application is accompanied by a report by Golder Associates titled *Borrow Pit: Phase 1 BRDA Blast Vibration Assessment*. Regard is had to previous blasting and vibration data pertaining to the site during the construction of the Phase 2 BRDA. The response to the grounds of appeal further expand on this issue. The effect of blasting within the footprint of the borrow pit was evaluated and it is concluded that it would pose a very unlikely risk to the stability of the adjacent BRDA. The intensity of ground vibrations due to the blasting expressed as peak particle velocity (PPV) was calculated based on the type and size of blast and characteristics of the area. This was then calibrated with previous blasting conducted in the area during the construction of the Phase 2 BRDA. The stability analyses undertaken found that the stability analysis consisted of a pseudo-static analysis which evaluated the stability based on the blast vibration, and a post blast analysis which evaluated the stability due to the increase in pore pressure within the red mud.
- 7.6.3. The initial Phase 1 Blasting is proposed to be conducted at a distance of approx. 150 metres from the BRDA at the eastern extent of the face of the borrow pit. Vibration and monitoring data from the initial and subsequent blasts will be used to calibrate the PPV prediction model further and assess any impacts to the BRDA prior to progressing to blast the faces closest to the BRDA. As the borrow pit develops the blasting operations will progress further away from the BRDA.
- 7.6.4. The said report also addresses the issue of blasting on the Gas Networks Ireland 300mm diameter transmission gas pipeline that runs to the north of the site. The applicant has engaged with the Gas Networks Ireland with a series of technical recommendations for blasting in addition to a monitoring regime detailed. Further detail in support of these conclusions are set out in the applicant's response to the grounds of appeal.
- 7.6.5. I consider that sufficient detail has been provided by the applicant to support its assertion that the blasting required can be carried out without giving rise to concerns about the stability of the BRDA or impact on the gas transmission pipeline. Further, blasting will be controlled and monitored under the terms of a revised IE Licence.
- 7.6.6. I note that there are a range of conditions attached to the IE licence pertaining to monitoring of the physical structure of the BRDA, and the operation and control of

the area. Condition 9 of the licence addresses Accident Prevention and Emergency Response in which an Internal Emergency Plan is required and that on at least an annual basis the operator is required to consult with the Local Authority and the Principal Response Agencies in relation to any information that may be required by them regarding external emergency planning for major accidents at the BRDA. The licensee is obliged to meet the requirements of the conditions of the licence.

- 7.6.7. The plant operates a safety management system which will also incorporate operations within the borrow pit and is accredited to International Safety Rating System (ISRS). The issue of the Category A Designation of the site under the Extractive Waste Directive and the implications for the External Emergency Plan (EEP) in place since 2013 as a requirement of the Directive was raised in the planning authority's further information request. The said plan is consequent to the EPA license issued in 2012 which designated the BRDA as a Category A Facility. The applicant in response to the 3<sup>rd</sup> party appeal states that it is fully aware of the EEP and has considered the proposed development as part of the plan. The said plan is developed and approved by Limerick County Council. It is stated that the borrow pit is outside the boundary of the Specified Area referenced in the EEP. The Senior Executive Engineer, Planning and Environmental Services in his assessment of the applicant notes that the EEP is due for review this year and that the borrow pit can be taken into account.
- 7.6.8. In conclusion, I consider that sufficient information has been provided with the application to support the assertion that the proposed development can be carried out without giving rise to health and safety concerns.

#### 7.7. Miscellaneous Issues

- 7.7.1. The appellant asserts the veracity of the decision made by the planning authority due to an alleged conflict of interest. This is not a matter for comment at this juncture save to note that the application is now before the Board for assessment de novo.
- 7.7.2. In view of the separation distance between the site and the Limerick Foynes railway line to the south (1.5km) I would not anticipate that the proposal would have any impact on same as to preclude it's reopening.

7.7.3. The appellant considers that a financial bond should be required to cover a potential environmental incident should the proposed development result in a breach of the BRDA. I note that the matter of environmental liabilities is a condition of the IE licence.

#### 7.8. Environmental Impact Assessment

#### 7.8.1. Introduction

This application has been submitted after 16th May 2017, the date for transposition of Directive 2014/52/EU amending the 2011 EIA Directive. At the time of preparing my report the Directive has not been transposed into Irish legislation. Circular Letter 1/2017 issued by the Department of Housing, Planning, Community and Local Government (DHPCLG) sets out the transitional arrangements in advance of the commencement of the transposing legislation. In this regard, it is stated that Article 3 of Directive 2014/52/EU provides that where an application for planning permission or other development consent requiring Environmental Impact Assessment has been submitted on or after the 16th May 2017, the relevant provisions of Directive 2014/52/EU, which is deemed to have been applied since the 16th May 2017, is relevant. Accordingly, it is proposed to apply the requirements of Directive 2014/52/EU

The application for the proposed development is accompanied by an environmental impact assessment report. It:

- Describes the project and provides information on the site, design, size and particular features of the proposed development,
- Describes the likely significant effects of the project on the environment
- Describes the features of the project and/or measures envisaged to avoid, prevent, reduce, and if possible, remedy significant impacts,
- Provides a description of the main alternatives studied, and an indication of the main reasons for the choice of alternative put forward, taking into account environmental effects, and
- Includes a non-technical summary of the above information.

The requirements of Article 3(2) include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned. The EIAR does not directly address this issue. However, I do not consider that the proposed development, in itself, is particularly vulnerable to natural disaster (eg. the site is not vulnerable to flooding and is not situated in an earthquake zone etc.) triggering the requirement for additional information under Article 5(1)(f).

Section 1.6 of the EIAR sets out the competencies of experts who prepared the Report. Competencies are reasonable and consistent with the technical requirements of the EIAR.

I am satisfied that the information contained in the submitted EIAR complies with article 94 of the Planning and Development Regulations 2000, as amended, and the provisions of Article 5 of the EIA Directive 2014.

In accordance with the requirements under Article 3(1)(a) to (e) of the EIA Directive, my assessment of the environmental effects of the development is set out below. It is based on my examination of the information provided by the applicant, including the EIAR, the further information submitted to the planning authority and the submissions made in the course of the application and appeal. Summaries of the submissions made by the appellant, prescribed bodies and the reports of the planning authority have been set out in sections 3 and 6 of this report.

In assessing the impact of the proposed development regard must be had to the fact that the site is within a larger site for which an IE Licence pertains, and which may require to be amended as a consequence of the proposed development. Matters pertaining to ground and surface water, air noise and vibration would be regulated by the EPA under a review of the said licence. The Board may, in respect of any licensable activity decide to refuse to grant planning permission where it considers the activity to be unacceptable on environmental grounds.

#### 7.8.2. Reasonable Alternatives Studied

Chapter 4 of the EIAR refers. The existing stockpile of rock within the confines of the landholding is due to run out post 2017. The proposal would reduce the

dependence on rock sourced from commercial quarries. It is also stated that as result of Section 261 and Section 261A a large number of quarries in the country do not have the requisite permission and particulars in place.

Whilst reference is made to the alternatives within the landholding no details of same are provided. The fundamental alternative comprises the option of sourcing the necessary aggregate externally which could have material implications in terms of traffic in particular.

Notwithstanding the absence of details of the alternative locations and layouts I consider that the location of the site within the applicant's landholding is a reasonable proposal having regard to purpose of the material to be sourced.

#### 7.8.3. Population and Human Health

Chapter 5 of the EIAR refers. Issues arising in terms of air, noise and water are also relevant in terms of human health which are addressed in other chapters of the EIAR. I have considered the relevant sections and the written submissions made in relation to this matter.

The existing industrial operation at Aughinish Alumina employs in the region of 450 persons in additional to 180 maintenance and installation contractors with further indirect employment for local service industries. The proposed borrow pit will assist in ensuring the availability of the material required for the BRDA which is an integral part of the industrial operation. The applicant proposes to subcontract the operation of the borrow pit to an appropriately experienced operator for the blasting, crushing and stockpiling of materials and it is anticipated that it will provide for a further 5 persons employed part time.

Chapter 10 of the EIAR deals with the emissions to air and Chapter 11 with noise and vibration arising from the site activities including blasting. I note that the nearest dwelling is c. 1km from the site. As discussed in sections 7.4 and 7.5 above and having regard to the applicant's assessment of likely emissions arising from the proposed development, the predicted modest increases relative to the existing industrial operation, I have accepted that the proposed development is unlikely to give rise to any significant effects on air quality to the detriment of human health. Further, the proposal may require a review of the IE licence and consequent monitoring to ensure compliance,

With regard to the vulnerability of the project to risks of major accidents/disasters, I have stated that I do not consider that the proposed development, in itself, is particularly vulnerable to natural disaster. Consequently, I do not consider that the proposed development poses a substantial risk to population or human health in this regard.

The issue of the impact on blasting on the stability and integrity of the BRDA is addressed in section 7.6 above. I consider that sufficient detail has been provided by the applicant to support its assertion that the blasting required can be carried out without giving rise to concerns about the stability of the BRDA or negative impact on the gas transmission pipeline and consequent potential impacts on human health. Further, blasting will be controlled and monitored under the terms of a revised IE Licence.

Chapter 9 of the EIAR deals with impact on water. The development proposes the extraction above the water table to a depth of 8.5m OD. The site is roughly in the centre of the Aughinish Alumina site with no surface water features in the vicinity. The main potential polluting impacts associated with the development are the introduction of hydrocarbons to the underlying groundwater. No discharges to surface water are proposed. Under IE licence discharges to both surface and ground water are controlled and monitored. Having regard to these measures significant impact on water quality (surface or ground) and consequentially on human health are unlikely.

Having regard to the matters discussed above I am satisfied that impacts that are predicted to arise in respect of population and human health can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am satisfied, therefore, that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on population or human health.

#### 7.8.4. Biodiversity

I have considered the written submissions made in relation to biodiversity in addition to Chapter 7 of the EIAR. There is an overlap with the Appropriate Assessment Screening as set out in section 7.10 below.

The site is in the centre of the large industrial site, to the south of the main processing plant and to the south-east of the BRDA. It comprises an area of disturbed ground, the southern section comprising the original borrow pit and the northern section currently used as a compound for the landscaping contractor.

The botanical and habitat surveys undertaken did not identify any species protected under the Flora (Protection) Order (1999) as amended (2015), listed in Annex II of IV of the EU Habitats Directive (92/43/EEC) or listed in the Irish Red Data Book either in or in the vicinity of the site. Habitats within the site are considered to be of low to moderate ecological value overall. No fauna of conservation concern was recorded within the site and it is considered to be of low ecological value for mammal species in general. The minor disturbance and displacement effects anticipated for the local non-volant mammals are of minor importance in relation to the wider ecology on Aughinish Island.

In terms of cumulative impacts the nature and extent of the proposal is relatively minor in the context of the overall industrial operation. There will be no significant change to the potential sources of disturbance to local flora and fauna. I also have regard to the fact that a review of the IE Licence may be required which will set emission limits in respect of water, air and noise and the requirement to monitor emissions to ensure compliance with the limit values. I would therefore accept the conclusion that it is unlikely that there will be any significant cumulative impacts upon flora, habitats and fauna arising from the proposed development. The mitigation measures as set out in Section 7.5 are reflective of best practice measures and are acceptable.

I am satisfied that potential impacts that are predicted to arise in respect of biodiversity cane be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on biodiversity.

#### 7.8.5. Lands, Soil, Water, Air and Climate

I have considered the written submissions made in relation to land, soils, water, air and climate in addition to chapters 8, 9 10 and 11 of the EIAR

Extraction of limestone by blasting and excavators is a permanent and irreversible impact. However, the application site, in itself, is a relatively small area and this permanent loss is unlikely to be significant in terms of the overall reserve. In terms of cumulative impacts the quarrying operation within an overall industrial landholding of 330 hectares is considered to be small.

The top soil etc. to be removed is to be retained and used for landscaping.

Mitigation measures incorporate a number of best practice measures to ensure that surface water and groundwater does not become contaminated by pollutants. Potential impacts on surface and ground water have been considered under Population and Human Health above. For the reasons stated I have concluded that significant impacts on surface and groundwater are unlikely to arise.

Likely emissions to air have been considered in sections 7.4 and 7.5 above and again under human health. For the reasons stated I have concluded that significant emissions to air (by way of noise, vibration and dust) are unlikely to arise. Any permission granted by the Board will be subject to an IE Licence review which will control emissions to air for prescribed parameters.

In terms of climate the quarry activity the emissions of greenhouse gases to the atmosphere, primarily from the operation of plant and vehicles, would not be significant in the context of the emissions arising from the activities on the larger site.

Having regard to the above, I am satisfied that potential impacts that are predicted to arise in respect of land, soils, water, air and climate can be avoided, managed and mitigated by the measures which form part of the proposed development, the proposed mitigation measures and through suitable conditions. I am, therefore, satisfied that the proposed development would not have any unacceptable direct, indirect or cumulative impacts on land, soils, water, air and climate.

#### 7.8.6. Material Assets, cultural heritage and Landscape

I have considered the written submissions made in relation to material assets and landscape in addition to Chapters 13 & 15 of the EIAR which address traffic and transportation and waste management, chapter 13 which addresses landscape and chapter 14 which addresses cultural heritage.

The issue of the potential impact on utilities and specifically the gas transmission pipeline is considered in the EIAR. I have considered this matter in Section 7.6 above. The proposed development will take place within an existing serviced site, with no requirement for additional electrical or utility infrastructure, connection to the public water supply or foul drainage and no implications for ownership or access to the site.

As the site is within the applicant's landholding and the aggregate to be used for the ongoing construction works with the associated BRDA the proposal will have no material impact on the vehicular movements generated by the overall facility save for that generated by a small additional number of employees. The internal road network, only, is to be used. The proposal would offset the requirement to source the necessary aggregate from external sources.

The proposed borrow pit will not result in any changes from the current position with regard to waste management at the facility. The waste management system currently in place at the facility will continue to accommodate any residual waste that may arise.

Cultural Heritage - The site comprises an area of disturbed ground roughly in the centre of the overall landholding. There are no archaeological, architectural or cultural sites in the vicinity. The conclusion that the proposal would have no adverse impacts is accepted.

Landscape - The site is located roughly in the centre of the large industrial site dominated by the processing plant and BRDA. The proposed development will not be evident in views from outside of the site notably when travelling on the N69 towards Foynes. The proposal would not give rise to any perceptible visual impact and will not alter the landscape.

Having regard to the above, I am satisfied that the issues of material assets, cultural heritage and landscape have been appropriately address in terms of the application

and the information submitted by the applicant and that no significant adverse effects are likely to arise.

#### 7.9. Inter-relationship between Factors

I have considered all the written submissions made in relation to impacts on interrelationship between factors, in addition to those specifically identified in Chapter 16 of the EIAR.

In my assessment of each environmental topic I have considered the likelihood of significant effects arising as a consequence of interrelationships between factors. Most interactions e.g. noise on human health, are addressed under individual topic headings. Given the generally modest impacts which are predicted to occur, having regard to the nature of the proposed development I am satisfied that such effects can be avoided, managed and mitigated by measures which form part of the proposed development, mitigation measures and suitable conditions. I do not foresee any likelihood of any of these interrelationships giving rise to significant effects on the environment. There is, therefore, nothing to prevent the granting of permission on the grounds of interaction between factors.

## 7.10. Reasoned Conclusions of Significant Effects

Having regard to the examination of the environmental information contained above and in particular to the EIAR and information provided during the course of the assessment of the application and the appeal including submissions from prescribed bodies and the appellant it is considered that the main significant direct and indirect effects of the proposal development on the environment are as follows:

Emissions to Air – the proposed development would give rise to dust, noise and vibration arising from the extraction process. However significant impacts will be avoided by the incorporation of industry best practice measures into operational procedures. The applicant will also be required to seek a review of the Industrial Emissions Licence which will specify emission limits for all relevant parameters and to operate the proposed development in accordance with same. Monitoring of compliance with emission limit values will fall to the EPA.

I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect effects on the environment.

## 7.11. Appropriate Assessment

A Screening Report in support of the Appropriate Assessment Process accompanies the application.

Project Description and Site Characteristics

The site and proposed development are as described in sections 1 and 2 above.

Relevant Natura 2000 Sites, Qualifying Interests and Conservations objectives

The site is not located within any designated site.

There are 6 no. Natura 2000 sites within 15km of the site.

- 1. Lower River Shannon SAC c.120 metres to the east
- 2. River Shannon and River Fergus Estuaries SPA c. 180 metres to the east
- 3. Barrigone SAC c. 1.91km to the south east
- 4. Stacks to Mullaghareirk Mts. West Limerick Hills and Mt Eagle SPA c. 10km to the south-west
- 5. Askeaton Fen Complex SAC c. 9km to the south east
- 6. Curraghchase Woods SAC c.12km to the south east.

The qualifying interests for the sites are set out in Table 2.1 of the screening report. Detailed conservation objectives have been prepared for all but Barrigone SAC and Stacks to Mullaghareirk Mts. West Limerick Hills and Mt Eagle SPA details of which are available of <u>www.npws.ie</u>. The overall aim is to maintain or restore favourable conservations status of habitats and species of community interest.

#### Assessment of Likely Effects

As the site is not within a designated site no direct impacts will arise. I also note that there are no Annex 1 Habitats listed under the EU Habitats Directive present within the site.

In view of the qualifying interest of the Stacks to Stacks to Mullaghareirk Mts. West Limerick Hills and Mt Eagle SPA, namely Hen Harrier, the intervening distance, the

lack of suitable habitat and no potential direct or indirect hydrological link no impacts on this designated site are anticipated.

In view of the qualifying interests of Askeaton Fen Complex SAC, the separation distance and no potential direct or indirect hydrological link no impacts on this designated site are anticipated.

There are no habitats relating to the conservation objectives of Barrigone SAC present within the site and no suitable food plant for the Marsh Fritillary documented. In view of the qualifying interests, the separation distance and no potential direct or indirect hydrological link no impacts on this designated site are anticipated.

Curraghchase Woods SAC is designated for the protection of qualifying woodland habitats and Lesser Horseshoe Bat. There is limited foraging potential for the bat. In view of the qualifying interests, the separation distance and no potential direct or indirect hydrological link no impacts on this designated site are anticipated.

Indirect habitat loss or deterioration of the Lower Shannon SAC and River Shannon and River Fergus Estuaries SPA could occur from the effects of run off or discharge into the aquatic environment through impacts such as increased siltation, nutrient release and/or contamination.

There are no watercourses at or near the site connecting with/discharging to the designated sites therefore there is no hydrological link. Indirect loss of habitat through impacts such as increased siltation, nutrient release etc. can be ruled out. There will no requirement for a water supply or foul drainage. Site staff will use the existing facilities available at the Aughinish Alumina facility. There is an existing surface water and storm water runoff system within the overall Aughinish Alumina site. All waste/foul waste within the overall facility is treated prior to discharge to the Shannon Estuary. Both are monitored and controlled in compliance with the schedule and conditions of the IE licence.

There is a potential for an indirect hydrological link between the proposed development site groundwater discharge via springs to the Shannon estuary and Poularone Creek. Quarrying is to be maintained above the water table in addition to procedures which are considered to be an integral component of such a quarrying activity and which represent best practice in terms of groundwater protection no significant impact on groundwater is anticipated.

Activities associated with the proposed development have the potential to disturb and/or displace faunal species of the said designated sites through increased disturbance such as noise.

In terms of the Lower River Shannon SAC the only faunal qualifying interest is the Otter. There are no sightings or signs recorded of Otter within or adjacent to the proposed. The location within an existing industrial operation, away from the shoreline and absence of watercourses in this part of the site decreases the likelihood that the area is frequented by Otters. Therefore, it is not considered that he proposed development will have any significant impact on Otters in the wider area.

The River Shannon and River Fergus Estuaries SPA is designated for the protection of overwintering bird species. Given the site size, existing habitats and location within an industrial complex, the overall low level of wintering bird activity recorded at the site and availability of more expansive and suitable habitat locally there is no potential for adverse impacts on the faunal species of the designated site as a result of loss of habitats at the site.

Blasting has the potential to cause disturbance to the qualifying interests of the SPA. The restriction of extraction including blasting to the period between April and September is an integral component of the proposed development and is included in the nature and extent of the development as given in the public notices for which permission is being sought. Blasting will, therefore, occur outside the overwintering period for the qualifying interests. Blasting will be at low levels approx. every 15 days. In the context of the existing industrial operation on the site there is no predicted significant impacts anticipated as a result of noise.

Emissions to air including dust and noise are not anticipated to be significant. They are subject of the IE licence which will be reviewed as a consequence of the proposed development.

In terms of cumulative impacts I have regard to the industrial character of the area and the existing industrial operation. I am not aware of any other large planned or permitted development in the vicinity.

#### Screening Statement and Conclusions

In conclusion having regard to the foregoing, it is reasonable to conclude on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually and in combination with other plans or projects would not be likely to have a significant effect on any European Site and in particular site codes 002165 and 004077 in view of the sites' Conservation Objectives and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.

# 8.0 Recommendation

8.1. I recommend that permission for the above described development be granted for the following reasons and considerations subject to conditions.

# 9.0 Reasons and Considerations

In coming to its decision, the Board had regard to the following:

- (a) the planning history of the site
- (b) the established industrial operation on the larger landholding and the location of the site within the landholding.
- (c) the nature, purpose, scale and form of the proposed development and its location relative to nearby sensitive receptors.
- (d) the provisions of the Limerick County Development Plan 2010-2016, as extended, and the Strategic Integrated Framework Plan for the Shannon Estuary, 2013-2020.
- (e) the requirement to obtain an Industrial Emission Licence for the overall installation at the site which includes the application site from the Environmental Protection Agency,
- (f) the written submissions made in respect of the planning application and appeal, and
- (g) the report and recommendations of the Inspector

it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the amenities of the area or property in the vicinity and would not be prejudicial to public health. The proposed development would, therefore be in accordance with the proper planning and sustainable development of the area.

# **Appropriate Assessment**

The Board completed an Appropriate Assessment Screening exercise in relation to the potential effects of the proposed development on designated European Sites, taking into account the nature, scale and location of the proposed development and emissions arising from it, the Screening Report submitted with the application, the Inspector's report and submissions on file. The Board adopted the report of the Inspector and agreed with the screening assessment and conclusion carried out in the Inspector's report that by itself or in combination with other development in the vicinity, the proposed development would not be likely to have a significant effect on the Lower River Shannon SAC (site code 002165) and River Shannon and River Fergus Estuaries SPA (site code 004077) or any other European site in view of the sites' conservation objectives, and that a Stage 2 Appropriate Assessment is not, therefore, required.

## **Environmental Impact Assessment**

The Board completed an environmental impact assessment of the proposed development, taking into account:

(a) the nature, scale and extent of the proposed development;

(b) the environmental impact assessment report and associated documentation submitted in support of the application;

(c) the submissions from the Planning Authority, the appellant and prescribed bodies in the course of the application and appeal

(d) the Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the developer, adequately identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board 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 developer and submissions made in the course of the planning application.

The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated, as follows:

Emissions to air including dust, noise and vibration. Significant impacts will be avoided by the incorporation of best practice measures into operational procedures. The applicant will also be required to seek a review of the Industrial Emissions Licence which will specify emission limits for all relevant parameters and to operate the proposed development in accordance with same. Monitoring of compliance with emission limit values will fall to the EPA.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures referred to above, and other measures set out in the environmental impact assessment report (sections 5.7, 7.5, 8.6, 9.5, 10.5, 11.5, 12.6, 13.6 and 14.5 and 15.5) and, subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

# 10.0 Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application as amended by the further details and particulars submitted on the 29<sup>th</sup> day of November 2017 except as may otherwise be required in order to comply with the following conditions. 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:** In the interest of clarity.

2. All environmental mitigation measures outlined in the environmental impact assessment report (as set out in sections 5.7, 7.5, 8.6, 9.5, 10.5, 11.5, 12.6, 13.6 and 14.5 and 15.5) shall be implemented in full. Compliance with, and effectiveness of mitigation measures, shall be demonstrated in an annual report of compliance to the planning authority. The planning authority shall make the annual report available for public inspection.

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

 All proposed screening measures, including improvements to boundaries and the provision of any fencing and berms, shall be completed prior to commencement of extraction on site.

Reason: In the interest of visual amenity.

4. Construction and demolition waste shall be managed in accordance with a construction waste and demolition management plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall be prepared in accordance with the "Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects", published by the Department of the Environment, Heritage and Local Government in July 2006.

Reason: In the interest of sustainable waste management.

5. 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.

Pauline Fitzpatrick Senior Planning Inspector

August, 2018