



An
Bord
Pleanála

Inspector's Report

ABP-304462-19

Development	A recovery facility for soil and stone contaminated with Japanese Knotweed.
Location	Hazelhill/Drumbaun, Ballyhaunis, Co. Mayo
Planning Authority	Mayo County Council
Planning Authority Reg. Ref.	18369
Applicant(s)	Pollution and Construction Solutions Ltd.
Type of Application	Permission.
Planning Authority Decision	Refuse
Type of Appeal	First Party
Appellant(s)	Pollution and Construction Solutions Ltd.
Observer(s)	John O'Dwyer Patrick Murphy and others.
Date of Site Inspection	12 th August 2019.

Inspector

Sarah Lynch

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1.0 Site Location and Description

- 1.1. The site is located c. 2km south of Ballyhaunis town and is within a disused and worked out sand and gravel quarry. The appeal site extends to c. 8.08 hectares and the proposed development will occupy c. 5.82 hectares of land within which sand and gravel extraction was carried out. The entrance to the site is via an old iron quarry bridge over the Dalgan River from a local road (L25128) c. 0.5km from the N60 (Claremorris to Ballyhaunis).
- 1.2. The site is bound by the River Dalgan to the north and west and fields which back onto a number of dwellings to the south and east. A number of berm areas are present within the site and as a result of excavation, a steep quarry face is present to the east, to the rear of a number of existing dwellings, with high quarry walls to the south, north and north west.
- 1.3. The site is not operational and is currently used to graze a number of horses. Neighbouring properties are largely out of sight from the lands, given the stark change in land levels, and are predominantly present to the east, in a linear fashion along the public road.

2.0 Proposed Development

- 2.1. It is proposed to develop the following:
 - Development of a recovery facility for soil and stone waste (24,000 tonnes per annum), including soils containing Japanese Knotweed,
 - The subsequent infilling of quarry,
 - Construction of 2. no storage sheds, hardstand areas and car parking area,
 - Erection of welfare and office buildings,
 - Wheelwash,
 - Weighbridge and inspection gantry,
 - Drainage and the drilling of a water well and associated site works.

3.0 Planning Authority Decision

3.1. Decision

Mayo County Council determined to refuse permission for the following reasons:

- The applicant failed to demonstrate that the proposed development on its own or in combination with other plans and projects would not affect the integrity of Lough Corrib SAC and SPA.
- The Council is not satisfied based on the information submitted including the EIAR that the proposed development would not have an adverse impact on the residential amenities of the area and that the development would not have negative impacts on the environment and would not seriously injure the amenities or depreciate the value of property in the vicinity.

3.2. Planning Authority Reports

3.2.1. Planning Reports

The planner's final report is consistent with the decision of the planning authority.

However, further information was requested on the 12/07/18 in relation to the following items:

- Clarity in relation to annual tonnage to be received at the site.
- How annual tonnage is to be regulated.
- Details of the access ownership.
- Works are proposed outside the application site, clarity was requested as to whether the proposed works are within the application boundary.
- Scale is not correct.
- Revised layout plan required.
- Proposed bio security measures proposed within accompanying documents are different to those proposed in the NIS. Clarify and provide plans for each stage.
- Submit plans of traffic circulation routes.

- Details of traffic control into and out of site.
- Proposals to prevent cross contamination.
- Details of proposed 3m embankment and any associated fencing or boundary treatments.
- Clarity in relation to bunded area.
- Sections which detail the existing, working and final levels throughout the site.
- Archaeological Assessment.
- Site specific flood risk assessment requested.
- Submit details of existing facilities at Ballyhaunis.
- Demonstrate how proposed process can be certified to ensure no regrowth of knotweed.
- Details of any licence issued by NPWS for excavation and transportation of material infected by Japanese Knotweed. Specify the number of these licences issued.
- Details regarding the types of sites from which excavated material shall come from and the transportation of this material to the site, any restrictions on size of site in the context of accepting 24,000 tonnes a year to the application site.
- Catchment to be served by facility.
- Confirmation from Convanta that they will accept the waste and that their licence allows for the incineration of Japanese knotweed.
- Confirmation that NPWS will permit in principle the transport of material affected by Japanese Knotweed.
- Justification of existing site layout and revision to same in the context of proximity to noise sensitive development.
- Details in relation to the retention of fill area and prevention of collapse.
- Drainage details for entire site.
- Demonstrate that silt ponds are water tight.

- Submission of a waste management plan.
- Details of refuelling on site.
- Submission of a Noise management plan.
- Details of dust control measures.
- Proposals to prevent pollution from herbicides.
- Details of fertilizer to be used on grow out section.
- Justification of proposed type of wheel wash.
- Details of measures to prevent silt and run off from bridge.
- Justification for the proposal of an effluent storage tank rather than an effluent treatment plant.
- Details in relation to the adequacy of the proposed well to cater for the proposed development.
- Details of a proposal to abstract water from the river Dalgan.
- Submission of a NIS.
- Submission of an EIAR.

Further Clarification was then requested on the 21/02/18 as follows:

- Submit details in relation to the folios and landholdings.
- Specify the need for tarpaulin over trucks.
- Contingency plans in relation accident during transportation.
- Where does rejected load go to.
- Contingency plan for loose tarpaulin and possible contamination along route.
- Bridge is suitable for 70 tonnes, how will it be ensured that this weight will not be increased.
- What contingency plan will be applied to quarantine area.
- What will prevent birds and animals transporting materials.

- In the event that Japanese Knotweed occurs in vicinity how can it be demonstrated that it hasn't arose as a result of the facility.
- Biosecurity measures do not address staff cars entering site.
- Submit section 3 in accordance with detail on site layout plan.
- Fill area outside of landownership please clarify.
- Clarify if 3 metre stock proof fence has been included in SFRA.
- Clarify if any such facilities in UK or Europe.
- Examples of where soils are transported off site and rhizomes are mechanically and manually removed.
- Submit scientific research to support use of offsite treatment facilities and methodologies proposed.
- Clarify management of waste which may be mixed in with soils.
- Design details of effluent storage tank.
- Clarify whether organic material imported onto site will be removed in a controlled manner.
- Stockpile of material on site, clarify if any impacts will arise during construction.
- Will site ever be used for treatment of other invasive species.
- Clarify source material referred to in figure 1.3.
- Alternatives investigated were not considered adequate, outline what other counties were considered and why they were not considered appropriate.
- Update EIAR to consider lighting on avian and terrestrial fauna.
- Clarify that ammonia results are equivalent to total ammonia (mg/l as N)
- Clarify the orthophosphate limits.
- Clarification on water flow direction this is required as it is a possible long term imperceptible neutral impact.
- Show drainage to desilt and petrol interceptor.

- Clarify how CEMP and Environmental Management Plan will address dust concerns for the proposed development.
- Provide a revised noise and vibration chapter.
- Provide clarification for providing 130 metres when noise receptor is 100m.
- Indicate which part of table 10.7 were used in the calculations.
- Clarify if influence of topography was considered as part of the impact assessment.
- Clarify predicted noise impact during construction and operational stage.

3.2.2. Other Technical Reports

- Environment Section – Proposed development is first of its kind in Europe, based on information provided the applicant has failed to submit adequate scientific evidence and relevant examples to support such a facility.
- Parks Superintendent. – supports development.
- Archaeologist – requested additional information as above, response to FI was considered adequate.
- Road Design – requested additional information as above.
- District Engineer – requested application was referred to road design and environment.

3.3. Prescribed Bodies

- Inland Fisheries – The site is bounded by the Dargle River which is a wild brown trout and salmon spawning river, the geology of the site is porous and unless the entire site is bunded to form an impermeable layer there would be potential for the spread of the Japanese Knotweed rhizomes towards the Dargle River.
 - A more long-term option in relation to the silt fence along the bridge is required to prevent material entering the river.
 - Surface water is proposed to enter the river, this is not dealt with in the NIS.

- IFI have serious concerns in relation to the potential for impacts on the Lough Corrib SAC.
- Department of Culture, Heritage and the Gaeltacht – The proposed development will be regulated under the EC (Birds and Natural Habitats) Regulations 2011-2015 and will be regulated by the Department Licencing Unit NPWS. The department notes the green technology proposed and notes that biosecurity measures will adhere to best international practice.
 - The proposed facility would be an important resource in the west of Ireland.
 - The department notes the location of the site and does not consider the development site to be particularly sensitive from a nature conservation perspective.
 - Site is c. 8km hydrological distance upstream of the Lough Corrib SAC.
 - An Appropriate Assessment Screening shall be carried out and if required a Stage II Appropriate Assessment.

3.4. **Third Party Observations**

A number of third-party observations were received from residents of neighbouring properties. The concerns raised are similar to those raised within the observations to the appeal as detailed below.

4.0 **Planning History**

A number of applications were submitted in relation to this site, the following is of relevance to the assessment of this appeal.

- 00/3017 – Permission was granted for a sand and gravel quarry, an EIS accompanied this application.

5.0 Policy Context

5.1. Development Plan

Mayo County Development Plan 2014-2020

The following are of relevance in the assessment of this proposal

WL-01 – Compliance with Regional Waste Plan

NH-07 - To promote best practice in the control of invasive species.

NH-08 - It is an objective of the Council to assist in the control of native and non-native invasive or harmful species which represent a serious threat to our environment, fresh water systems and lakes.

5.2. Connacht Ulster Waste Management Plan 2015-2021

- Section 16.4.4- Recovery – Backfilling

5.3. National Planning Framework – Project Ireland 2040

- NSO - Sustainable Management of Water, Waste and other Environmental Resources.
- Section 9.1 - Environmental and Sustainability goals.

5.4. Draft Regional Spatial and Economic Strategy for the Northern and Western Region

- Section 8.5 Waste Infrastructure.
- Regional Policy Objective 194 & 195.

5.5. National Bio-diversity Action Plan 2017-2021

- Pressures on Ireland bio-diversity and Irelands eco-systems - invasive species are likely to increase if action is not taken now.

5.6. Natural Heritage Designations

Lough Corrib SAC is located c. 6.8km south of the appeal site.

River Moy SAC is located c. 3.8 north west of the appeal site.

Carrowbehy/caher bog SAC is located c. 8.6km north east of the site.

Errit Lough SAC is located c.7.5km north of the site.

Urlaur Lakes SAC is located c.10km north east of the site.

Coolcam Turlough is located c. 10.27km south east of the site.

Williamstown Turlough SAC is located 11.78km south east of the site.

Drumalough Bog SAC is located c. 10.8km northeast of the site.

Derrinea Bog SAC is located c. 11km north east of the site.

Cloonchambers Bog SAC is located c. 12km east of the site.

5.7. EIA Screening

An EIAR was submitted with the applicant and is examined within Section 8 below.

6.0 The Appeal

6.1. Grounds of Appeal

This is a first party appeal against the decision of Mayo County Council to refuse permission for the proposed Japanese Knotweed Waste facility. The grounds of appeal have been prepared by Planning Consultancy Services on behalf of the applicants. The issues raised within the grounds of appeal can be summarised as follows:

- Concerns were raised by the planner in relation to the expansion of mitigation measures during the process of the planning application, a NIS and EIAR were not stated as a requirement at pre-planning stage, these documents were submitted as part of the FI request.
- Bio-security measures were withheld due to commercial sensitivity.
- Transport of Japanese knotweed is governed by a wide range of regulatory permits and licenses. These are issued and monitored by NPWS, operators are also required to have waste permit licenses to remove and transport contaminated soils.

- The removal of soils effected by Japanese Knotweed has been successfully carried out by the applicant in the past, copies of licenses from NPWS have been submitted with the appeal.
- Accidental transfer by wild animals – all visible elements of Japanese Knotweed will be picked immediately when vehicle has off loaded.
- There is no scientific evidence to state that this plant is spread via interaction with wild life.
- The bird species identified at the site are not likely to act as vectors from the facility.
- Japanese knotweed canes and rhizomes can not be used for nesting.
- Owing to the distance of c.52km from the coast, the presence of seagulls will not occur.
- The insurance backed guarantee is does not accompany this application, the EIAR provides the surety in this regard.
- The site will be subject to a waste license.
- Proposed process has been agreed with NPWS.
- The absence of a comparable precedent can not be used as a reason for refusal.
- Effluent will be stored in a tank on site and emptied at specified intervals.
- Proposed well is located in an area inaccessible to vehicles and will adhere to ground water protection best practice.
- Contradictions in planners report in relation to potential impacts and reason for refusal.
- Lack of consensus in relation to internal reports.
- Waste Management Section was not consulted.
- The recovery road and site are effectively sealed from the river Dalgan.
- Impacts on Lough Corrib SAC have been discounted in the NIS.

- A quarry development was granted in 2001 after the habitat's directive of 1997, whereby the use of the bridge by lorries hauling sand and gravel was deemed to be acceptable the proposed development is stringently controlled and mitigated and should therefore be considered in this context.
- Refusal in relation to cumulative effects contradicts the assessment of the NIS.
- There is no hydrological link between the site and the Lough Corrib SAC, as such the proposal does not contravene objective NH-01 of the CDP.
- The proposed development is of strategic and national importance.

6.2. Planning Authority Response

- An EIA screening was carried out and determined that an EIAR was required.
- A screening for Appropriate Assessment was carried out and determined that a NIS was required.
- At pre-planning not all bio-security measures were required however during the assessment of the file it was determined that such details were essential to the assessment of the proposal.
- A fundamental change has occurred to the development as a consequence of the further information request. The proposed entrance to the site was moved to the public road and new bio-security measures were introduced at this point to address this change in circumstances.
- An issue was raised in relation to unexplained occurrences along transport routes that may result in the spread of invasive species. It is the opinion of Mayo County Council that these concerns have not been adequately addressed within the documentation submitted and it was for this reason that permission was refused.
- The requirement for insurance was not a reason for refusal.
- The applicants have not demonstrated that the proposed bio-security measures have been adequately tested and the introduction of additional measures during the process would suggest lack of scientific evidence.

- Reason to refuse reflect MCC concerns in relation to impacts on Natura 2000 site.
- EIAR and separate water and potential impact on Natura 2000 site.
- Due to hydrological link to river Dalgan, MCC have concerns that proposal will adversely affect the Natura 2000 site.
- MCC have concerns that based on the information submitted that the proposed development will further exasperate the spread of Japanese Knotweed.

6.3. Observations

- Two observations have been received in relation to the appeal, one was submitted by John O'Dwyer who is an adjacent landowner and the other was submitted by the Drumbane Residents Association. The issues raised can be summarised as follows:
 - Roadway is not a public road and is not taken in charge, it is not suitable for large volumes of traffic.
 - The description of development refers to the existence of conifers which provide screening, the owner of these conifers intends to cut these down as they have reached maturity.
 - The townland is incorrect.
 - The bridge runs across the river from the townland of Hazelhill to townland of Drimbane.
 - No reference within the application that this bridge will be utilised.
 - Safety and health of walkers and farmers using the Cloonbunning road has not been addressed.
 - Bridge across river Dalgan has no CE stamp to state correct weight.
 - No evidence to prove birds won't carry small rhizomes to contaminated adjoining lands.
 - The proposed hawk kite is not 100% guaranteed.

- It is not stated within the application who is responsible if Japanese knotweed spreads to adjacent lands.
- Concerns in relation to noise and dust pollution.

7.0 **Assessment**

7.1. This is a first party appeal against the decision of Mayo County Council to refuse permission for a Japanese Knotweed contaminated soil waste facility. The issues raised within the reasons for refusal primarily relate to the potential for impact upon the SAC and SPA and surrounding environment, in particular the adjacent residential dwellings.

7.2. The proposed appeal site is located within a disused quarry site in a rural area to the south of Ballyhaunis within lands identified as the South-East Mayo Plains within the Landscape Character Appraisal for County Mayo. The lands are not subject to any land use zoning objective. The issues raised within the reasons for refusal and the relevant matters for consideration before the Board can be summarised as follows:

- Spread of Japanese Knotweed.
- Residential Amenity – Noise & Dust
- Water Pollution
- Waste Water
- Flood Risk
- Roads & Traffic
- Visual Amenity
- Other Matters
- Appropriate Assessment
- EIAR

Spread of Japanese Knotweed.

7.3. Concerns have been raised within the observations received in relation to the risk of spreading Japanese Knotweed to surrounding lands arising from the development, Section 6.6.8 of the EIAR acknowledges this concern and states that adequate

mitigation measures are proposed to prevent the spread of Japanese Knotweed to lands outside of the site.

- 7.4. In order to properly assess the potential risks for spread of the plant, it is important to identify the disposal process proposed and the potential pathways within it. The applicants are proposing to dig out the soils contaminated with Japanese Knotweed and remove these soils under a NPWS licence to the appeal site. It is stated that large stands of the plant will be carefully bagged at source in double skin 1 tonne bags and transported by appointed permitted waste contractor to Covanta Waste-to-energy facility in Ringsend. All remaining waste will be dug out and the soil will be taken to the proposed facility where it will be screened. Any remaining plant fragments will be removed from the soil and similarly bagged for transport to Covanta Waste facility. Remaining soils will be moved to the bunded grow out area whereby growth of rhizomes will be encouraged through aeration of the soils. After 12 months this soil will be screened for any plant fragments and once cleared of these it will be placed within the fill area of the site.
- 7.5. Measures to prevent the spread of the plant include the installation of mesh within the surface water drainage system in order to intercept any plant fragments from entering the River Dalgan. It is proposed that all lorries moving contaminated soils will be covered with tarpaulin and will be sealed to prevent spillages of soils. It is of note that the excavation and transportation of soils containing Japanese Knotweed is subject to a NPWS Licence and as such is required to conform to the controls imposed by such a licence. All trucks entering the site will be required to conform to site bio-security measures and will leave via a wheel wash.
- 7.6. The existing bridge over the River Dalgan will be secured with steel sheets and silt fencing at each end to prevent material entering the river.
- 7.7. Whilst I acknowledge the controls and biosecurity measures proposed and recognise that the merit in the proposed process of seeking to eradicate this seriously invasive species without the use of herbicides, I have serious concerns in relation to the restricted period of time permitted within the grow out area of the site.
- 7.8. Japanese Knotweed rhizomes material can be as small as 0.7 grams and have been known to regenerate into new plants, these rhizomes can lay dormant for periods of up to 20 years. Thus, suggesting that all soils will be deemed free from Japanese

knotweed after one growing season and relying on all plant fragments within multiple tonnes of soil to be picked out, leaves significant room for error to occur. No testing of the proposed process has been carried out in order to ensure that the proposed treatment solution will be effective. I note that the applicant refers to the use of this method on sites within Mayo and has included a management plan for a specific site whereby Japanese Knotweed was removed, and the contaminated soils placed within a bunded area at a different location. However, it is stated within this document, (Japanese Knotweed management plan removal and bund security documents) which can be found in appendix A of the documentation submitted, that these soils were treated with herbicides for a period of 4 years and as such the treatment plan is not relevant to that proposed within the appeal site. Based on the information submitted therefore, I consider that the applicants have failed to adequately demonstrate that the proposed treatment process is effective and as such I would have serious concerns that the proposed development could result in the significant spread of Japanese Knotweed within the appeal site and the surrounding area.

- 7.9. In addition to the foregoing, the proposed development will accept up to 24,000 tonnes of soil per annum. Having reviewed the layout plans and cross-sectional drawings submitted it is apparent that the grow out area does not have the capacity to cater for the proposed annual quantum of soils to be accepted at the facility. I would have concerns therefore, that the site would reach capacity within the grow out area relatively quickly and would result in soils containing Japanese Knotweed being kept elsewhere within the site, no contingency plan or overflow area has been provided for within the site in order to prevent the storage of such soils in inappropriate locations.
- 7.10. Having regard to the foregoing I would have serious concerns in relation to the potential for the spread of Japanese Knotweed within this site and the potential to spread the plant to surrounding lands. Whilst I acknowledge the merits of the proposal, I do not consider the proposed process to be sufficiently robust to ensure with any significant degree of certainty, that the regrowth of Japanese Knotweed will not occur after one year given the scientific evidence to the contrary. Should the proposed process fail and Japanese Knotweed rhizomes regenerate within the fill area, the treatment options of this soil would be significantly limited given the

hydrological sensitivities of the site, due mainly to the porous nature of the subsoils and bedrock and the regionally important aquifer which lies beneath. It is important to note at this juncture that Inland Fisheries have also raised serious concerns in relation to the porous nature of the underlying geology of the site and consider that there is potential for adverse impacts on the River Dalgan arising from the proposed development, this will be examined within the water pollution section below.

- 7.11. Having regard to the foregoing, I consider the proposed development by virtue of the restricted area of the site and the limited grow out time period of one growing season to be unacceptable for the processing and eradication of Japanese Knotweed. I consider that based on the information submitted and the lack of empirical evidence to substantiate the process proposed the development would give rise to a facility which could significantly increase the spread of Japanese Knotweed, and as such would have a seriously negative impact upon the surrounding receiving environment.

Residential Amenity

- 7.12. It is of note that a number of rural dwellings are located proximate to the site along the southern boundary. One dwelling in particular is located c. 6 metres from the boundary of the site, directly abutting the fill area of the proposed development, an additional 2 no. dwellings are located c. 20 metres from the southern boundary of the proposed fill area. Concerns have been raised by local residents within the observations made to the appeal regarding the potential for noise impacts arising from the proposed facility. Additional concerns raised within the observations relate to dust pollution and the spread of Japanese Knotweed Rhizomes. Mayo County Council also raised a general concern within the reasons for refusal in relation to the potential for impacts on the residential amenity of neighbouring dwellings. Given that a number of issues have been raised I consider it prudent to assess each item under the sub headings of noise and dust.

Noise

- 7.13. A noise impact assessment was carried out for the purpose of the EIAR in order to assess and predict noise impacts on sensitive receptors such as neighbouring dwellings. A baseline noise assessment was carried out initially in order to identify current noise levels within the site and surrounding area. Sensitive receptors were identified and included three existing dwellings to the south of the site.

- 7.14. I note within Section 10.6 of the EIAR that noise generation activity which has been the subject of the assessment is identified as the screening area of the site and the processes which occur within it. A distance of 130 metres has been identified as the shortest distance between the nearest dwelling and where the noise activity takes place on site. It is important to note at this juncture that the proposed fill area is c. 6 metres from the nearest residential property, the activity which will comprise the movement and levelling of soils within this area does not appear to be referenced within either the noise impact assessment of the EIAR or any other documentation submitted with the application.
- 7.15. Table 10.7 within Section 10.6 of the EIAR outlines the machinery to be used within the development site and describes the associated sound power level to be expected for each machine from a distance of 10 metres. I note that a sound barrier is to be constructed at the southern end of the screening area along with concrete barriers constructed of Kelly Blocks. It is contended within the EIAR that these barriers will reduce noise emissions cumulatively by a further 15 dB from this screening area. The noise assessment concludes that based on the procedure recommended within BS5228 (British Standard Noise & Vibration control on Construction sites) the proposed development can operate at limits below 55dB(A).
- 7.16. Whilst I acknowledge that the significant noise generation will occur within the screening area, I have serious concerns in relation to the information and methodology used to assess the cumulative noise impact potential of the development. Table 10.7 identifies a number of machines to be utilised on site but does not list all and omits to include items such as the proposed generator and road sweeper.
- 7.17. In addition to the foregoing, Section 10.6 of the EIAR refers to low traffic movements at the site and estimates movements to consist of 4 deliveries per day. I note that this estimate is contrary to traffic movements detailed within Section 13 (traffic and transport) of the EIAR, in which traffic movements are detailed and predicted to consist of 5-8 deliveries per day Monday to Friday and 4 on a Saturday and 44 staff car or van movements per day.
- 7.18. Details of the number, frequency and types of machinery to be used and any resultant predictive modelling should have been provided in relation to the fill area of

the site. In the absence of these details and others mentioned above in relation to machinery and traffic, it is not possible to properly model the cumulative impacts of noise.

- 7.19. Whilst I acknowledge the history of the site as a working quarry and the benefit of reinstatement of these lands to agricultural use, noise impacts on residential dwellings must be afforded the appropriate assessment in order to ensure that appropriate mitigation measures are employed to protect the residential amenity of these properties.
- 7.20. Thus, having regard to the foregoing and based on the information submitted, I consider that the applicant has failed to adequately demonstrate whether the proposed development would give rise to noise impacts. However, if the board is of a mind to grant permission, I recommend that further information is requested in relation to the cumulative impact of noise generated from all operations and traffic movements within the site as a whole throughout the day. The applicant should be requested to submit details of any mitigation measures required as a result of this cumulative assessment in order to ensure that the existing residential amenity of the existing dwellings to the south is not significantly impacted upon.

Dust

- 7.21. As mentioned above concerns have been raised in relation to the generation of dust as a result of the proposed activity on site and the resultant impact that this may have on the neighbouring residential dwellings to the south of the site. The applicants have carried out an assessment of potential air pollution within Section 9 of the EIAR. Dust particles are more prevalent in times of dry and windy weather conditions and it is stated within Section 9.6 of the EIAR that dust may cause an impact to sensitive receptors up to a distance of 25 metres from the works. It is further stated within this section of the report that all such sensitive receptors (i.e dwellings) are located in excess of 25 metres from the works. It is important to note again at this juncture that the proposed fill area will be located c. 6 metres from the existing dwellings to the south with an additional 2 no. dwellings located within c. 20 metres of this element of the development.
- 7.22. The applicant states within Section 9.7 of the EIAR that dust emissions will be regulated through the conditions of a Waste Facility Permit and Dust Management

Plan. I acknowledge that these alternative methods of regulation are applicable to this development and note the proposed mitigation measures outlined within the construction management plan submitted in this regard. However, there nonetheless remains a deficit of information and proper assessment for potential impacts of dust arising from the fill area on the existing residential dwellings to the south.

7.23. In the absence of such information a proper assessment of potential dust impacts in relation to the existing established residential dwellings cannot be properly carried out. I therefore consider the proposed development to be unacceptable in this regard.

7.24. If the Board is of a mind to grant permission, I recommend that further information is sought in relation to the potential for impacts on the adjacent residential properties to the south with regard to dust. Appropriate mitigation measures should also be sought in this regard.

Water Pollution

7.25. A surface water drainage system will collect water from all hardstanding concrete areas and buildings. Water from such areas will be directed to a primary drainage system and will pass through a silt trap, a hydrocarbon interceptor and then onto silt ponds before out falling to the river Dalgan. The proposed surface water drainage system will also include wire mesh layers in order to trap any fragments of vegetation and thus prevent the hydrological spread of Japanese Knotweed within the River Dalgan and beyond.

7.26. I note that plans submitted, such as plan reference K2009-A030-D, indicate that surface water within the grow out area of the site will discharge to ground; however, it is stated within the documentation submitted that this area is to be bunded and run-off will be directed through the on-site drainage system. Notwithstanding these contradictions in relation to the surface water layout and process, I have serious concerns in relation to the potential for pollution of both ground water and surface water arising from the development.

7.27. The process outlined within the documentation submitted states that soils will be tested at source for chemical contaminants prior to excavation as such contaminated soils will not be accepted at the facility. The applicant does not specify for which chemicals they will be testing and how this testing is to be carried out. In addition, it

is stated within appendix H1 – ‘Soil waste acceptance procedures for the proposed facility’, that samples will also be taken from loads as they enter the site and will be tested for ionised chemicals by the use of a MiniRae device. If loads are found to contain such chemicals, they will either be refused entry to the site or deposited in the quarantine area. No details of the soil quarantine area have been provided and as such can not be assessed.

- 7.28. It is further stated within the documentation submitted that soils containing non persistent herbicides will be accepted and processed within the site. Whilst I acknowledge that non persistent herbicides break down and dissipate I have concerns in relation to the quantum of such contaminated soils to be accepted at this facility. As mentioned above, the site was previously a sand and gravel quarry in which a significant amount of material has been extracted leaving a layer of sand and gravel above the existing fractious carboniferous bedrock. This type of geology is significantly porous, and the rates of infiltration can be as high as 85%. The lands are underlain by a locally important aquifer and are directly connected to the River Dalgan. No details or calculations have been provided in relation to the risk of contamination from such potentially large volumes of non-persistent herbicides. Notwithstanding that these herbicides break down organically, it is widely known that these compounds can seriously affect fish life and other such organisms in rivers and remain in soils for extended periods.
- 7.29. The development is seeking to accept up to 24,000 tonnes of soils per annum, in the absence of any assessment of the potential for water pollution arising from the proposed development as a consequence of herbicides present in accepted soils, and, having regard to the inconsistencies within the submitted documentation in relation to the drainage of the grow out area, I am not satisfied that the applicant has adequately demonstrated that the proposed development will not give rise to pollution of ground water or further deteriorate the water quality of the River Dalgan from the potential discharge of contaminated surface water and as such I consider the proposal to be unacceptable in this regard.
- 7.30. If the Board is of a mind to grant permission, I recommend that further information is sought in relation to specific details in relation to soil residence times for non persistent herbicides and a worst-case scenario in relation to the potential of such

herbicides to pollute both ground water and surface water within the vicinity of the site.

Waste Water

- 7.31. A staff welfare building is proposed within the site which will accommodate toilet and wash facilities. All waste water arising from the proposed staff facilities will be directed to an underground storage tank which will be emptied as required on a regular basis. The use of such a storage system is indicative of the hydrological sensitivity of the appeal site. Thus, having regard to the site characteristics I consider the proposed storage system to be an acceptable solution which will prevent ground water pollution arising from such waste waters.

Flood Risk

- 7.32. A flood risk assessment has been submitted which has been prepared by FRAI consulting on behalf of the applicant, the primary potential of flood risk for the proposed development is flooding from the Dalgan River and the secondary potential is from pluvial flooding in the form of ponding of surface water within the depressions of the excavated quarry. According to CFRAMS there is a potential for fluvial flooding to the west of site and is identified as an area for further assessment under the CFRAMS study. No records of flooding were identified within the immediate vicinity.
- 7.33. Flood zone A was identified within the flood risk assessment report to the east of the site at either side of the access road between the bridge and the site boundary and the proposed developments access roadways have been deemed to be within flood zone B.
- 7.34. The flood risk assessment submitted predicts the 1:100-year flood levels in relation to fluvial flooding to be between 69.35m OD at the upstream point and 69.33m OD at the lower bridge. The 1:1000-year event is predicted to be between 69.74m OD at the upstream node point and 69.70m OD at the lower bridge node point.
- 7.35. It is stated within Section 5.1.2 of the flood risk assessment that the proposed upgraded access road is largely free from flooding but requires c. 0.25m of fill over a 24m section to give it a 500mm freeboard against flooding during a 1:100year event and a 100mm freeboard during a 1:1000-year event. It is proposed to raise all internal site levels and entrance road levels to a minimum of 69.85m OD in order to

maintain a 500mm freeboard against the 1:100-year flood event and 100mm freeboard against the 1:1000 year flood event.

- 7.36. Surrounding access roads are largely free from fluvial flooding. Climate change will increase flood levels of the 1:100-year event by 220mm resulting in a 300mm freeboard. The design of the access road upgrade therefore allows for climate change and the proposal will not be affected by increased flood levels nor exacerbate flooding downstream of the site.
- 7.37. In terms of pluvial flooding it is stated within the flood risk assessment that existing surface water levels arising from surface water drainage are recorded within the flood risk assessment as varying from 70.25m OD (+-) 0.25m. The minimum observed quarry level is 1m above the bank level at the river and 0.250m above the 1000-year flood. These depressions which are forming potential pluvial flood zones will be removed through the re-grading and provision of drainage within the proposed development.
- 7.38. Pluvial flood zones have also been indicated at the N60 and on the site access roadway (L25128). This potential for flooding has been alleviated through the installation of road gully and grading of lands.
- 7.39. The primary potential adverse impact of the proposed development is downstream flooding due to additional surface water runoff. It is of note that runoff from the hard stand areas of the site will be attenuated and limited to existing greenfield run-off rates. The site represents 0.0196% of the total upstream catchment area and 0.0029% of the total Dalgan River catchment area. Additional run off from the site is therefore negligible in the context of flooding and will not increase any water levels upstream. A Nonetheless a compensation area of 6m x 20m x 1m deep is proposed as part of the response to the clarification of further information, this area is more than twice the storage volume being removed from the catchment in the fill area. I also note that it is stated that the proposed berm and fencing area is being constructed on the fill area or outside the identified flood zone and is therefore not impacting on the natural storage area available.
- 7.40. Having regard to the foregoing, I consider that the potential risk of flood to this development is limited, similarly the potential for the proposed development to exacerbate flooding in the area is unlikely. As mentioned above the area of land from

which surface water runoff will be directed to the river is relatively small compared to the wider catchment area and I do not consider based on the information submitted and the historical use of the site, that the resultant volume of surface water runoff would be significant. I therefore consider that the proposed development adequately complies with the requirements of the 'The Planning System and Flood Risk Management – Guidelines for Planning Authorities, 2009' and adequate mitigation measures are proposed in order to protect both the appeal site and surrounding lands from increased flood risk.

Roads & Traffic

- 7.41. A traffic impact assessment has been prepared as part of the EIAR. Surveys of the surrounding road network and associated junctions were undertaken. Peak hour traffic volumes were established on the basis of on-site traffic counts and TII's automatic traffic counters located on the N60 south of Ballyhaunis and on the N83 north of Ballyhaunis.
- 7.42. Section 13.6 of the EIAR states that the proposed project would generate an AADT total of up to approximately 47 vehicles two way, including 12 heavy vehicles. These figures are proposed based on its proposed weekday and Saturday working for 50 weeks of the year. Approximately 80% of heavy vehicles generated by the proposed development would be via the N60 to the south west approximately 10% would be via the R332 and approximately 10% would be via Ballyhaunis town centre to the north. I note that the proposed development would increase weekday peak hour traffic volumes by less than 1% to the on the N60. No significant vehicle queues or delays are predicted at relevant junctions on all approach roads. Given the low levels of traffic generated from the development and having regard to the high quality of the surrounding road network I consider that there road network can adequately cater for the proposed development. It is of note that the traffic modelling considers the impacts of all traffic, and on this basis, I am satisfied that cumulative impacts would not arise.
- 7.43. The applicants proposed to access the site via an existing steel quarry bridge. It is proposed to shield the sides of this bridge with metal sheeting to prevent debris from entering the river. No structural modifications are proposed. This bridge served as the main access to the previous quarry and can cater for loads of up to 70 tonnes. It

is stated within the documentation submitted that the vehicles utilised in relation to the removal of soils will not exceed 32 tonnes and only one vehicle at a time can pass over the bridge.

7.44. Overall the adequacy of the proposed access and the level of traffic generation arising from the proposed development are acceptable and the potential for significant impacts on the surrounding roads infrastructure does not arise.

Visual Amenity

7.45. The site is located within the Landscape Protection Policy Area 4 – Drumlins and Inland Lowland. These areas possess undulating areas of pasture, woodland, and forest and have a capacity to absorb development. The site and environs are not designated as protected landscapes. The main uses surrounding the site comprise industrial (to the north), agricultural and residential in the form of rural housing to the south of the site. The topography of the site and surrounds are gently rolling in form.

7.46. It is proposed to construct a number of buildings within the site as follows:

- a) Rhizome storage shed of 120 sqm and 4.15 m in height.
- b) Single storey office of c. 21sqm
- c) Single storey Welfare office of 44.6sqm
- d) Single storey storage shed of 750 square metres.

7.47. A visual impact assessment was carried out for the purpose of the EIAR and assessed the potential for visual impacts arising from the proposed development from a total of 14 locations surrounding the site, some of these locations were located on higher lands surrounding the site such as the N60, residential property to the south and Ballyhaunis graveyard, as well as from within the site.

7.48. The visual assessment considered factors such as the absorption capacity of the landscape for the proposed project, the effect of the development on the character and features of the landscape and the proximity of sensitive receptors from the proposed project area.

7.49. It is stated within the visual impact assessment that the working area of the appeal site which covers an area of c.5.82 hectares is screened visually by an approximately 8-10-metre-high embankment on the western, southern and eastern flanks and a conifer plantation to the north across the River Dalgan.

7.50. As part of the development it is proposed to supplement the existing embankment on the northern and western boundaries by increasing the height by an additional 3 metres. Views of the site may be obtained from higher lands; however, these views would be relatively obscured given the topography of the surrounding area. I note that concerns were raised in relation to the commercial nature of the conifer plantation to the north and the inevitability of it being felled, whilst I acknowledge the observers concerns, these lands were once a working landscape and the ultimate purpose of this development is the reinstatement of these lands. The proposed facility will have a limited life span and therefore any visual impact from buildings would be significantly limited and transient.

Thus, having regard to the previous use of the site and the existing ground levels within the site, which are in some instances in excess of 10 metres less than the adjacent neighbouring lands, I consider that the potential for significant visual impacts to arise to be limited.

Other matters

7.51. Concerns have been raised within the observations received in relation to land ownership and the suitability of the existing bridge in terms of its CE marking to cater for the levels of traffic proposed. In relation to land ownership this is largely a legal matter and is not one that the Board can finally determine. Section 34 (13) of the Planning and Development Act, states that the granting of permission does not entitle a person to carry out development and covers the eventuality that the development cannot be implemented for legal reasons. The CE markings of the bridge are also not a matter that the Board can adjudicate on.

8.0 Appropriate Assessment

8.1. The application was accompanied by a NIS prepared by Kerry Ecological Services which described the proposed development, its receiving environment and relevant European Sites in the zone of influence of the development. The NIS did not contain a specific screening for appropriate assessment section, however, sufficient information has been provided on file and within the NIS to enable the Board to adequately carry out one. The NIS outlined the methodology used for assessing potential impacts of the development on the habitats and species within this SAC. It

predicted the potential impacts for this site and its conservation objectives, set out proposed mitigation measures, assessed in-combination effects with other plans and projects and identified any residual effects on the European site and its conservation objectives.

- 8.2. The NIS was informed by a desk top study and maps, ecological and water quality data from a range of sources (Section 3.1 of the NIS), field surveys were carried out in the form of a walkover habitat survey on the 23rd March 2018 and again on the 22nd September 2018. Habitats recorded on the site are categorised as per level 3 habitat mapping classification (Fossit, 2000). A search for signs of species protected under Annex II of the Habitats Directive was also undertaken.
- 8.3. The report concluded that, taking into account the project design and the implementation of mitigation measures identified in the NIS, the proposed development will not result in adverse effects on the integrity of any Natura 2000 site.
- 8.4. Having reviewed the NIS and the supporting documentation, I am generally satisfied that it provides adequate information in respect of the baseline conditions, identifies the potential impacts, uses best scientific information and knowledge and provides details of mitigation measures. Whilst I have concerns that the NIS underestimates the potential risk to the Lough Corrib SAC from water pollution and spread of invasive species, as a consequence of the development, I am satisfied, that the information provided is generally sufficient to allow for appropriate assessment of the development.

Screening

- 8.5. The proposed development site is connected to the Lough Corrib SAC via the River Dalgan. It is stated within the NIS that surface water drainage and ground water flows connect the appeal site to the River Dalgan which flows directly into Lough Corrib SAC c. 6.8km downstream of the appeal site and onward to the Lough Corrib SPA which is c. 47.7km downstream of the site.
- 8.6. The Lough Corrib SAC contains protected habitats and species as listed within table 1 below. Species such as salmon and lamprey are particularly sensitive to changes in water quality as are the habitats on which the birds protected within the SPA depend upon. Given there is a hydrological link from the appeal site to these

protected sites and the potential for water pollution arising from the appeal site, I consider that a stage 2 Appropriate Assessment is necessary in order to properly assess any potential for adverse effects to the SAC and SPA.

8.7. Impacts arising from the development are likely, arising from the construction phase of the development (i.e. risk of water pollution) and from its operation (i.e. risk of water pollution from discharge of surface water and contamination entering ground water).

8.8. The following table is a list of Natura 2000 sites located in the area of the appeal site and identifies any potential source-pathway receptor relationship with the appeal site and therefore any potential for impact to same:

Conservation Objective/s: To maintain or restore the favourable conservation condition of the Annex I habitat(s) and/or the Annex II species for which the SAC has been selected.

Table 1.

Site Code & Name & Conservation Objective	Distance	Qualifying Interest	Impacts
Lough Corrib SAC 000297	6.3km (south) downstream of the appeal site.	<ul style="list-style-type: none"> • Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] • Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140] • Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-</i> 	There is a potential source-pathway-receptor from the appeal site which is at risk of contaminated surface water runoff from construction and operational stages of the development and also has the potential to disturb otters.

		<p>Batrachion vegetation [3260]</p> <ul style="list-style-type: none"> • Semi-natural dry grasslands and scrubland facies on calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210] • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the Rhynchosporion [7150] • Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] • Petrifying springs with tufa formation (Cratoneurion) [7220] • Alkaline fens [7230] • Limestone pavements [8240] • Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] • Bog woodland [91D0] • Margaritifera margaritifera (Freshwater Pearl Mussel) [1029] • Austropotamobius pallipes (White-clawed Crayfish) [1092] • Petromyzon marinus (Sea Lamprey) [1095] • Lampetra planeri (Brook Lamprey) [1096] 	
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		<ul style="list-style-type: none"> • <i>Salmo salar</i> (Salmon) [1106] • <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] • <i>Lutra lutra</i> (Otter) [1355] • <i>Drepanocladus vernicosus</i> (Slender Green Feather-moss) [1393] • <i>Najas flexilis</i> (Slender Naiad) [1833] 	
Lough Corrib SPA 004042	47.7km (south) downstream of the appeal site.	<ul style="list-style-type: none"> • Gadwall (<i>Anas strepera</i>) [A051] • Shoveler (<i>Anas clypeata</i>) [A056] • Pochard (<i>Aythya ferina</i>) [A059] • Tufted Duck (<i>Aythya fuligula</i>) [A061] • Common Scoter (<i>Melanitta nigra</i>) [A065] • Hen Harrier (<i>Circus cyaneus</i>) [A082] • Coot (<i>Fulica atra</i>) [A125] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194] 	There will be no direct impacts on the European site. The European site is located over 47.7km downstream of the proposed development. Due to the dilution effect no impacts with regard to surface water pollution are anticipated. However, there is the potential for indirect impacts on supporting habitat for wetland and water birds in the form of emissions resulting in the spread of invasive species during the

		<ul style="list-style-type: none"> Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] Wetland and Waterbirds [A999] 	operational stage of the proposed development.
River Moy SAC 002298	3.8km north west	<ul style="list-style-type: none"> Active raised bogs [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] Alkaline fens [7230] Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Salmo salar</i> (Salmon) [1106] <i>Lutra lutra</i> (Otter) [1355] 	No source-pathway-receptor to this site. Impacts are unlikely.
Carrowbehy/caher bog SAC	c. 8.6km north east	<ul style="list-style-type: none"> Active raised bogs [7110] Degraded raised bogs still capable of 	No source-pathway-receptor to this site. No

000597		<p>natural regeneration [7120]</p> <ul style="list-style-type: none"> • Depressions on peat substrates of the Rhynchosporion [7150] 	<p>groundwater hydrological link. Impacts are unlikely.</p>
Errit Lough SAC 000607	7.5km north east	<ul style="list-style-type: none"> • Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] 	<p>No source-pathway-receptor to this site. Impacts are unlikely.</p>
Urlaur Lakes SAC 001571	c. 10km north east	<ul style="list-style-type: none"> • Hard oligo-mesotrophic waters with benthic vegetation of Chara spp. [3140] 	<p>No source-pathway-receptor to this site. Impacts are unlikely.</p>
Coolcam Turlough SAC 000218	c. 10.27km south east	<ul style="list-style-type: none"> • Turloughs [3180] 	<p>No source-pathway-receptor to this site. Impacts are unlikely.</p>
Williamstown Turlough SAC 002296	C. 11.78km south east	<ul style="list-style-type: none"> • Turloughs [3180] 	<p>No source-pathway-receptor to this site. Impacts are unlikely.</p>
Drumalough Bog SAC 002338	c. 10.8km northeast	<ul style="list-style-type: none"> • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the Rhynchosporion [7150] 	<p>No source-pathway-receptor to this site. Impacts are unlikely.</p>
Derrinea Bog SAC	C. 11km north east	<ul style="list-style-type: none"> • Active raised bogs [7110] 	<p>No source-pathway-receptor</p>

000604		<ul style="list-style-type: none"> Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] 	to this site. Impacts are unlikely.
Cloonchambers Bog SAC 000600	c. 12km east	<ul style="list-style-type: none"> Raised Bog (Active) [7110] Degraded raised bogs still capable of natural regeneration [7120] Depressions on peat substrates of the Rhynchosporion [7150] 	No source-pathway-receptor to this site. Impacts are unlikely.
Croaghill Turlough SAC 000255	c.12.1km south east	<ul style="list-style-type: none"> Turloughs [3180] 	No source-pathway-receptor to this site. Impacts are unlikely.

8.9. The NIS identifies a number of drainage channels which were associated with the old quarry and notes that these channels drain into the River Dalgan. No water was observed within these channels at the time of the walkover. It is of note that the Water Framework Directive results defines the water quality of the River Dalgan at the appeal site as poor quality and the EPA have assigned a Q value of 3 to the river at this location which indicates that the river is moderately polluted. This is attributed to a number of factors including emissions from a number of industries and the Ballyhaunis Waste Water Treatment plant which is upstream of the site.

8.10. The NIS screens out all Natura 2000 sites except the Lough Corrib SAC and SPA, on the grounds that they are removed from the development, and will not be affected by disturbance, and lack any hydrological linkages (i.e. they are located in a different groundwater body), precluding any impacts on water quality. This approach seems reasonable and I consider that AA is not required for these sites.

- 8.11. The assessment identifies that there is potential for impact on the Lough Corrib SAC and SPA due to the hydrological link from surface water to the River Dalgan which is directly upstream of Lough Corrib. It is stated within the NIS that impacts arising from vegetation particles containing Japanese Knotweed has the potential to spread the species downstream and throughout the European site.
- 8.12. A stage II assessment was therefore required in order to assess the potential for significant effects on the Lough Corrib SAC (c.6.8km) and SPA (c.47.7km).
- 8.13. Based on the information submitted, I am satisfied that all of these sites but the Lough Corrib SAC and SPA, can be screened out of any further assessment because of the distance of these sites from the proposed development and the lack of any source-pathway-receptor relationship from the appeal site to these Natura 2000 sites.
- 8.14. In conclusion, having regard to the nature and scale of the proposed development, to the separation distance of the application site from the European sites, to the nature of the qualifying interests and conservation objectives of the European sites and to the available information as presented in the application regarding ground and surface water pathways between the application site and the European sites and other information available, it is my opinion that the proposed development is unlikely to have any significant impacts upon the integrity of the following Natura 2000 sites; 000255, 000600, 000604, 002338, 002296, 000218, 001571, 000607, 000597, 002298.
- 8.15. However, based on my examination of the NIS report and supporting information, the scale of the proposed development, its likely effects by way of potential to spread invasive species throughout Lough Corrib SAC and SPA, and potential to contaminate the Natura 2000 site by way of water pollution from surface water run off of contaminated soils and impact the specific conservation objectives of the Lough Corrib SAC and SPA, I would conclude that a Stage 2 Appropriate Assessment is required for Lough Corrib SAC and SPA.

Stage II Appropriate Assessment

- 8.16. The proposed development is located c. 100 metres east of the River Dalgan which is directly upstream of the Lough Corrib SAC (c. 6.3km) and SPA (c.47.7km). The

Lough Corrib SAC is described by the NPWS within the site synopsis as the second largest lake in Ireland, with an area of approximately 18,240 ha (the entire site is 20,556 ha). The lake can be divided into two parts: a relatively shallow basin, underlain by Carboniferous limestone, in the south, and a larger, deeper basin, underlain by more acidic granite, schists, shales and sandstones to the north.

8.17. The Lough Corrib SPA is described by the NPWS within the site synopsis as an internationally important site that regularly supports in excess of 20,000 wintering waterbirds including an internationally important population of wintering Pochard (10,107).

8.18. Relevant details of the Lough Corrib SAC & SPA :

European Site	Qualifying Interest	Conservation Objectives	Attributes and targets
Lough Corrib SAC 000297	<ul style="list-style-type: none"> • Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] • Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140] • Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation [3260] • Semi-natural dry grasslands and scrubland facies on 	To maintain favourable conservation condition of these habitats as defined by the Attributes & Targets	Attributes and targets are the same for each QI as follows: Attribute - Habitat area, Target - Area stable or increasing, subject to natural processes

	<p>calcareous substrates (Festuco-Brometalia) (* important orchid sites) [6210]</p> <ul style="list-style-type: none"> • Molinia meadows on calcareous, peaty or clayey-silt-laden soils (Molinion caeruleae) [6410] • Active raised bogs [7110] • Degraded raised bogs still capable of natural regeneration [7120] • Depressions on peat substrates of the Rhynchosporion [7150] • Calcareous fens with Cladium mariscus and species of the Caricion davallianae [7210] • Petrifying springs with tufa formation (Cratoneurion) [7220] • Alkaline fens [7230] • Limestone pavements [8240] • Old sessile oak woods with Ilex and Blechnum in the British Isles [91A0] • Bog woodland [91D0] • Margaritifera margaritifera 		
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	<p>(Freshwater Pearl Mussel) [1029]</p> <ul style="list-style-type: none"> • Austropotamobius pallipes (White-clawed Crayfish) [1092] • Petromyzon marinus (Sea Lamprey) [1095] • Lampetra planeri (Brook Lamprey) [1096] • Salmo salar (Salmon) [1106] • Rhinolophus hipposideros (Lesser Horseshoe Bat) [1303] • Lutra lutra (Otter) [1355] • Drepanocladus vernicosus (Slender Green Feather-moss) [1393] • Najas flexilis (Slender Naiad) [1833] 		
Lough Corrib SPA 004042	<ul style="list-style-type: none"> • Gadwall (Anas strepera) [A051] • Shoveler (Anas clypeata) [A056] • Pochard (Aythya ferina) [A059] • Tufted Duck (Aythya fuligula) [A061] • Common Scoter (Melanitta nigra) [A065] 	To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this	

	<ul style="list-style-type: none"> • Hen Harrier (<i>Circus cyaneus</i>) [A082] • Coot (<i>Fulica atra</i>) [A125] • Golden Plover (<i>Pluvialis apricaria</i>) [A140] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Common Tern (<i>Sterna hirundo</i>) [A193] • Arctic Tern (<i>Sterna paradisaea</i>) [A194] • Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] • Wetland and Waterbirds [A999] 	<p>SPA.</p> <p>To maintain or restore the favourable conservation condition of the wetland habitat at Lough Corrib SPA as a resource for the regularly-occurring migratory waterbirds that utilise it.</p>	
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8.19. The conservation objectives for Lough Corrib SAC and SPA aim to restore the favourable conservation condition for the particular habitats or species at that site. The maintenance of habitats and species within the Natura 2000 sites at favourable condition will contribute to the overall maintenance of favourable conservation status of those species at a national level.

Potential Direct and indirect effects

8.20. The NIS submitted states that the proposed development will not be located within the boundary of any European site and as such there will be no direct effects on the qualifying interests of Lough Corrib SAC or SPA.

8.21. However it is important to acknowledge that water pollution from contaminated surface water from the appeal site has the potential to directly affect water sensitive habitats and species, and as such these potential effects will be considered in the context of the NIS.

8.22. Furthermore it is important to note at the outset that all of the qualifying interests of the Lough Corrib SAC and SPA are at risk of indirect impact through the spread of invasive species from Japanese Knotweed fragments being carried by the River Dalgan to these Natura 2000 sites. The spread of Japanese Knotweed has the potential to adversely impact habitats that species rely on for survival.

8.23. Potential Impacts in relation to Construction works

8.24. Indirect effects are identified within the NIS as a result of the surface water connection to the River Dalgan which flows into Lough Corrib SAC and SPA. Sediment run off, hydrocarbon pollution and disturbance to otter have been identified as potential impacts during the construction stage. This type of pollution would directly affect the habitat of protected species by reducing the water quality of the river. Pollution can affect food sources and be toxic to life in the river. Increases in siltation can directly affect fish life and aquatic invertebrates.

8.25. Potential impacts in relation to the operation of the development.

8.26. Sediment run off, hydrocarbon pollution, disturbance to otter and the spread of invasive species from Japanese Knotweed fragments have been identified as potential impacts during the operational stage of the development. The most likely source of pollution during the operational stage is from oil, hydrocarbons or contaminated water runoff. Mitigation measure are detailed below.

8.27. Potential in-combination effects.

8.28. In combination effects are likely to arise if the proposed development is constructed in conjunction with other developments, giving rise to greater levels of disturbance. An assessment of plans and projects in the area was carried out inclusive of planning applications in the last 5 years. Reference is made to the policies and objectives of the Mayo County Development Plan.

8.29. It was concluded that there would be no cumulative / in-combination effects arising from the proposed development.

8.30. Having regard to the foregoing, policies of the Mayo County Development Plan 2014-2020 and that any future development in the area will be screening for AA I do not consider there to be any potential for in combination effects upon the SAC.

8.31. Mitigation Measures

8.32. Key mitigation measures include the following (set out in the NIS)

Construction Mitigation

- Fuel, lubricants and hydraulic fluids should be carefully handled to avoid spillage.
- A covered bunded fuel storage area will be established on-site and located a minimum of 100m from any watercourse. All onsite refuelling will be carried out in this area.
- Waste oils and hydraulic fluid will be collected in leakproof containers and removed off site.
- Oil booms and oil soakage pads will be kept on site to deal with any accidental spillage.
- Plant machinery to be regularly serviced and checked for leaks.
- Machinery and plant passing over bridge to be checked for oil/diesel leaks to prevent any run off to river.
- Silt fence to be placed along the bridge and tapering along the bank edge extending from the bridge deck.
- A silt curtain will be erected immediately downstream of bridge during any resurfacing works of bridge.
- Excavation depths will be kept to a minimum.
- Excavated material will be kept on site in an area enclosed by a berm and reused on site.
- Existing vegetation will be retained particularly along existing vegetated drainage channels where the vegetation will be used to filter flows.
- Earth berm reseeded.
- A member of the project team will monitor the construction phase.

Operational Phase

- A silt removal system will be an integral component of the surface water drainage infrastructure on site. Comprising a silt removal sump and tanks to include vegetation filters incorporating 3mm mesh stainless steel, and a hydrocarbon interceptor.

- Secondary filtration in the form of a silt pond.
- Rain harvesting.
- 60 metre clear zone dedicated to management and enhancement of biodiversity between river Dalgan and mid & northwest Section of active works area.
- Sewage effluent will be dealt with on site by means of a Plastic Effluent Storage tank system (Tuff tank 3 or equivalent). A contractor will inspect and empty the tank as required.
- Refueling will take place in designated area which will be fully bunded, the storage area will be constructed with an impermeable bund.
- Drip tray will be placed under machinery when being refuelled.
- Spill kit will be available on site.
- The reception and subsequent treatment of soils will be undertaken in accordance with NPWS service requirements.
- Soils will be transported to site after undergoing a source site-risk assessment.
- Soil will be transported in sealed tipper body trucks.
- No contaminated soils or hazardous waste will be accepted at the site.
- No herbicides will be used for treatment on site.
- A programme of continuous environmental monitoring will be in place at the facility.

8.33. It is concluded within the NIS the design features and preventative measures outlined will ensure that the proposed development will not adversely affect the integrity of the European sites.

The integrity Test

8.34. I have considered the NIS along with the information submitted with the application and appeal and have had regard to the mitigation measures outlined above. Potential for impacts to arise in relation to the construction phase of the development relate to the movement of soils and carrying of materials across the existing access bridge and the deposition of debris into the River Dalgan from these vehicles or

leakage of oils and diesels or other such contaminates from these vehicles. It is proposed by the applicants to provide silt curtains and fences and install steel panels on the bridge to prevent any material from entering the site. Plant and machinery will be regularly checked for leaks and the bunded areas will be provided for refuelling. Trays will be placed under machinery and vehicles whilst refuelling to catch any leakage of contaminates. Having regard to the limited construction and excavation on site I consider that the construction phase of the proposed development would not adversely affect the integrity of Lough Corrib SAC and SPA in view of these sites Conservation Objectives.

- 8.35. However, in relation to the operational stage of the development, as mentioned previously, I have concerns in relation to the potential for the spread of Japanese Knotweed within the Lough Corrib SAC and SPA. Spread can occur during transportation, operation of the site and within the fill area.
- 8.36. The NIS addresses the potential for spread during transportation and proposes mitigation measures to prevent this from occurring. It is important to acknowledge at this juncture that the excavation and removal of Japanese Knotweed is subject to the controls of a NPWS licence. Nonetheless, the measures proposed to prevent the spread of this plant during transportation such as the use of skirts and tarpaulins on lorries, installation of silt fences and curtains at either ends and along the existing access bridge and the installation of steel panels along the bridge in order to prevent debris falling into the river will significantly prevent the spread of the plant to the river and surrounding area.
- 8.37. Having regard to the mitigation measures proposed both within the NIS and the application in relation to the transportation of Japanese Knotweed contaminated soils I am satisfied that the proposed development would not result in the spread of this invasive species to the Lough Corrib SAC or SPA whilst being transported to the site.
- 8.38. Further mitigation measures proposed include the use of silt traps and the installation of mesh within the surface water drainage system to intercept any plant fragments from entering the River Dalgan.
- 8.39. All trucks entering the site will be required to conform to site bio-security measures and will be cleaned once empty and leave via a wheel wash.

- 8.40. I consider these measures to be adequate to prevent the spread of the plant to the river and onto the Lough Corrib SAC and SPA.
- 8.41. I note that it is stated within the application that plant rhizomes are not suitable nesting material and birds will not be a factor in the spreading of the plant. Notwithstanding this, the applicants propose the use of a hawk kite to prevent foraging birds entering the grow out area.
- 8.42. Having regard to the foregoing I am satisfied that the proposed development would not result in the spread of this invasive species to the Lough Corrib SAC or SPA through the transportation and deposition of the material within the site, however as mentioned in previous sections of this report, I have serious concerns in relation to the limited period of time permitted within the proposed grow out area. I do not consider one growing season to be an adequate period to allow for all rhizomes to grow sufficiently and be removed effectively. Based on the information submitted it has not been shown that this process is scientifically robust and there is no certainty of success. Thus, the potential for rhizomes to regenerate is uncertain and as such has the potential to result in the spread of Japanese Knotweed both within the site and to the surrounding area.
- 8.43. It is for this reason that I consider that the applicant has not adequately demonstrated beyond reasonable doubt that the proposed development would not adversely affect the integrity of Lough Corrib SAC and SPA in view of these sites Conservation Objectives.
- 8.44. I also have serious concerns in relation to the potential for impacts arising from water pollution from both surface water sources and ground water infiltration.
- 8.45. It is proposed to accept soils which have been treated with non persistent herbicides at the proposed facility. Whilst I acknowledge that non persistent herbicides break down and dissipate I have concerns in relation to the quantum of such contaminated soils to be accepted at this facility. I note that the applicants are proposing to install a hydrocarbon interceptor within the surface water drainage system however, no mitigation measures are proposed in relation to contamination from non persistent herbicides or other such chemicals. Run off from hard stands, screening area etc could contain such chemicals and enter the river via the surface water drainage system.

- 8.46. In addition, as mentioned above, the site was previously a sand and gravel quarry in which a significant amount of material has been extracted leaving a layer of sand and gravel above the existing fractious carboniferous bedrock. This type of geology is significantly porous, and as mentioned previously the rates of infiltration can be as high as 85%. The lands are underlain by a locally important aquifer and are directly connected to the River Dalgan. No details or calculations have been provided in relation to the risk of contamination of ground water from such potentially large volumes of non-persistent herbicides. Notwithstanding that these herbicides break down organically, it is widely known that these compounds can seriously affect fish life and other such organisms in rivers and remain in soils for extended periods.
- 8.47. The development is seeking to accept up to 24,000 tonnes of soils per annum, in the absence of any assessment of the potential for water pollution arising from the proposed development as a consequence of herbicides present in accepted soils, I am not satisfied that the applicant has adequately demonstrated beyond reasonable doubt that the proposed development would not adversely affect the integrity of Lough Corrib SAC and SPA in view of these sites Conservation Objectives.
- 8.48. Finally, disturbance to Otter was noted as a potential impact as otters are one of the qualifying interests of the Lough Corrib SAC. The NIS states within Section 5.2 that no there are no otter signs or identifiable characteristics recorded in the area. It is further stated that were otters present they would have been used to past quarry activity.
- 8.49. On the basis of the information provided with the application and appeal, including the Natura Impact Statement, and in light of the assessment carried out above, I am not satisfied that the proposed development individually, or in combination with other plans or projects would not adversely affect the integrity of Lough Corrib SAC and SPA No.000297 and 004042 respectively, in view of the sites Conservation Objectives. In such circumstances the Board is precluded from granting approval/permission.'

9.0 **EIAR**

9.1. **Introduction**

- 9.2. The application is accompanied by an Environmental Impact Assessment Report (EIAR) which was prepared by Kelly Environmental Consulting Ltd. The proposed development relates to the use of a disused quarry facility for the recovery of soils including soils that contain Japanese Knotweed from the surrounding region. The proposal provides a waste recovery facility within a site of c 8.08 hectares.
- 9.3. The proposed development falls within Class 11 (b) of Part 2 but is sub-threshold for the purposes of EIA as the site area is below the 25,000-tonne threshold. A sub-threshold EIAR has been prepared and submitted for the proposed development.
- 9.4. A number of the environmental issues relevant to this EIA have already been addressed in the Planning Assessment at Section 7.0 of this report above. This EIA section of the report should therefore, where appropriate, be read in conjunction with the relevant parts of the Planning Assessment.
- 9.5. The application falls within the scope of the amending 2014 EIA Directive (Directive 2014/52/EU) on the basis that the application was lodged after the last date for transposition in May 2017. The application also falls within the scope of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, as the application was lodged after these regulations come into effect on 1st September 2018.
- 9.6. The impact of the proposed development is addressed under all relevant headings with respect to the environmental factors listed in Article 3(1) of the 2014 EIA Directive. The EIAR sets out a case regarding the background to and need for the project (Section 1.4). The EIAR provides detail with regard to the consideration of alternatives in Section 3. An overview of the main interactions is provided at Section 16. Tables 1.5 and 1.6 present a list of main contributors / authors and the qualifications of the EIAR manager, which meet the requirements of the EIA Directive in my view. Details of the consultation entered into by the applicant with Mayo County Council as part of the preparation of the project are also set out.
- 9.7. Article 3 (2) of the Directive requires the consideration of the effects deriving from the vulnerability of the project to risks of major accidents and / or disasters that are relevant to the project concerned. The potential for 'unplanned events' is addressed in Section 5 Population and Human Health and the potential for 'flooding' is considered in Section 8 Water, a site-specific flood risk assessment has also been

submitted with the application in this regard. I consider that the requirement to consider these factors under Article 3(2) is met.

9.8. In terms of the content and scope of the EIAR, the information contained in the EIAR generally complies with article 94 of the Planning and Development Regulations 2001, as amended. I am of the view that there are deficiencies in the data presented in Section 8 Water in relation to surface water runoff and discharge to ground waters, Section 9 Climate and air in relation to the assessment of dust impacts and Section 10 in relation to the assessment of noise impacts. This is discussed in further detail below.

9.9. **Consideration of Alternatives**

9.10. Section 3 of the submitted EIAR addresses the alternatives considered. The assessment covers alternative location and design. The need for the facility is addressed in Section 1.4.1. The EIAR states that, the proposed facility is based on 5 years of research activity looking at the best methodology for treatment of soils. The proposed site was considered by the applicants to be most suitable in terms of area and ecology. An alternative site was investigated in Claremorris which was previously used as a quarry but was discounted as a result of inappropriate road access and leasing issues, other sites in Mayo including a site in Belmullet and were also considered but discounted due to inaccessibility and alternative site in cork was also considered but agreement on the lease could not be reached.

9.11. Alternative processes have been used to eradicate Japanese Knotweed which include the use of herbicides. This method results in dormancy of the plant and requires the use of chemicals which are harmful to both the environment and humans. The proposed method does not require harmful chemicals and seeks to remove all fragments of the plant from the soil through a process of screening and cultivation.

9.12. Alternative layouts within the site in terms of building and process locations were investigated and it is stated that the proposed layout seeks to group ancillary operations together and reflects the limited scope for room within the site.

9.13. In my opinion reasonable alternatives have been explored and the information contained in the EIAR with regard to alternatives provides a justification in

environmental terms for the alternatives chosen and is in accordance with the requirements of the 2014 EIA Directive.

9.14. Environmental Factors

9.15. The sections below address each of the environmental factors. The headings used in the EIAR are as follows:

- Population and Human Health
- Biodiversity
- Land and Soil
- Water
- Climate & Air
- Noise & Vibration
- Landscape
- Material Assets
- Traffic & Transport
- Waste Management
- Interactions & Cumulative effects

9.16. The direct, indirect and cumulative effects of the project on the specified factors is identified, described and assessed in the following sections. In this regard I have examined the EIAR and any supplementary information and the contents of submissions received.

9.17. Section 2 of the EIAR discusses a scoping exercise that was carried out and states that this process was informal. The EIAR refers to a large volume of baseline monitoring data along the River Dalgan recorded by the EPA at a number of monitoring stations, this information was utilised in the assessment of potential impacts on the river.

9.18. Population and Human Health

9.19. Section 5 addresses population and human health. Effects are considered in the context of socio-economic and health and wellbeing considerations.

- 9.20. The existing environment includes the existing quarry, one off housing, and manufacturing and distribution facilities to the north of the site and the town of Ballyhaunis.
- 9.21. During the construction and operational phases, it is predicted that there will be positive impacts on the local economy due to direct and indirect job creation.
- 9.22. Impacts on health and wellbeing arising from effects of emissions, and soil movement specifically in relation to noise, dust and soil material recovery operations are considered and discussed under the respective headings of the EIAR. Section 5.9.2 states that safety fencing and edge protection is proposed in order to prevent unauthorised persons from inadvertently entering the site and thus avoiding risk to human health in this regard. It is also stated that soils will be treated without the use of herbicides or chemicals which will ensure that there will be no impact on nearby receptors. The EIAR contends that the operation of this facility will result in a wider reduction in the use of harmful herbicides and chemicals being used in the country.
- 9.23. Whilst I acknowledge the applicants assertions in relation to the overall reduction of herbicide use in the treatment of Japanese Knotweed and the acceptance of only herbicide free soils to the site, I have serious concerns as outlined in Section 7 above, given the hydrological sensitivities, of the site in relation to the effectiveness and adequacy of the proposed testing of these soils in order to determine whether herbicides are present, and the resultant rejection of these soils from the proposed facility. However, for the purpose of the EIAR these concerns will be more appropriate dealt with under subsequent headings of the EIAR document.
- 9.24. I also have serious concerns as detailed in the planning assessment Section of this report in relation to the potential for impacts on human health arising from noise and dust.
- 9.25. Noise and air assessments have been carried out by the applicants and are assessed in detail and in both Section 7.12 above and Sections 9.66 and 9.75 below. Having regard to the limitations of these reports I am not satisfied that adequate mitigation measures are proposed with regard to noise and dust within the EIAR. I am therefore not satisfied at this juncture that the potential for impacts on Human Health have been adequately addressed within the EIAR.

9.26. I have considered all of the written submissions made in relation to population and human health and the relevant contents of the file including the EIAR. I am not satisfied that the potential for impacts on population and human health can be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore not satisfied that the potential for direct or indirect impacts on population and human health can be ruled out. I am also not satisfied that cumulative effects, in the context of existing industrial development and the Ballyhaunis Waste Water Treatment Plant which are both located up stream, are not likely to arise.

9.27. **Biodiversity**

9.28. Section 6 of the submitted EIAR assesses and evaluates the potential for significant impacts on biodiversity. The impact of the proposed development on European sites is addressed in detail in Section 8 of this report. The site does not overlap with or directly adjoin any European or nationally designated sites. Lough Corrib SAC & SPA are the nearest European sites with a pathway to the appeal site.

9.29. Risk of water pollution is a concern in relation to the proposed development and cannot be excluded due to the potential for contaminants entering the River Dalgan from contaminated soils, as discussed above in Section 8 and the spread of Japanese Knotweed via both the River Dalgan and from vehicles refused entry to the site and from the fill area.

9.30. While the potential for effects on the qualifying interests of the SPA is remote due to the level of separation, it is necessary to dispel any reasonable scientific doubt that may exist. The NIS Report considers the potential for effects on the Lough Corrib SAC and SPA both individually or in combination with other plans or projects and considered that the risk of significant effects is unlikely. I am not satisfied, based on the information submitted with the file and discussed within the Appropriate Assessment section above, that the applicant has adequately demonstrated beyond reasonable doubt that the proposed development would not adversely affect the integrity of Lough Corrib SAC and SPA in view of these sites Conservation Objectives.

9.31. Potential impacts on biodiversity associated with the proposed development include loss of habitat and disturbance or displacement of species. The assessment of

impacts is supported by field surveys undertaken between March and September 2018. A number of bird species were noted around the site all of which are relatively common species within farmland habitats. A number sand martin nest holes were also observed in the exposed old quarry face along the eastern boundary but it is stated within Section 6.5.2 of the EIAR that no birds were present. No features within the proposed project footprint provided suitable bat roosting and no hedgerows or trees are present which would provide suitable commuting and foraging habitat for bats.

- 9.32. It is stated within Section 6.5.2 of the EIAR that no evidence of animals protected under the EU Habitats Directive or Wildlife Act 1976-2017, including otter and badger were recorded. It was stated however, that it is possible that an otter population of local importance utilises some section of the river corridor, however no signs of this occurring were recorded or noted within either the NIS or the EIAR.
- 9.33. Flora, observed within the site are common grasses and plants which are recolonising the disused quarry. No rare or significant plants were observed.
- 9.34. Following the desk top study and survey a number of Key Ecological Receptors were identified and include: habitats of local importance (Higher Value), watercourses and aquatic fauna, sand martin and otter.
- 9.35. It is acknowledged within Section 6.6.2 of the EIAR that during construction there will be some habitat loss, this will be mainly restricted to habitats of local importance (lower value) grass lands within the centre of the quarry. There will be no loss of tree line habitat and there will be no in-stream works. Temporary fencing is proposed to mitigate against any impacts to lands outside of the works area.
- 9.36. Indirect effects during the construction phase are identified within the EIAR in relation to sediment run off from soil, gravels, sand and concrete pouring. Fuels spills and leaks associated with machinery could also enter the watercourse. The point of vulnerability in this regard is at the bridge over the Dalgan river.
- 9.37. Mitigation measures are to be employed in order to reduce environmental impacts including the use of steel sheeting to seal the bridge and a robust silt fence extending from the bridge to the bank edge. A silt curtain will be erected in the river channel, immediately downstream of the bridge during any resurfacing of the bridge. The drainage outfall pipe to the River Dalgan will be completely land based and a silt

fence will be erected around the works area, the outfall headwall will be constructed using pre-cast concrete. A number of measures in relation to stockpiling of material and bunding of fuel areas are proposed and a site manager will be appointed as an Environmental Officer for the duration to ensure all mitigation measures are adhered to. Ecological enhancement measures are also proposed in relation to the reseeded of berms.

- 9.38. The operational phase of the development is expected to be between 5 -10 years. During this phase measures will be employed for the management of surface water run-off and accidental spillages. All surface water will be directed to a central drainage system which will pass through a primary silt and sediment collection system and then onto a hydrocarbon interceptor. The surface water drainage system will include filter mesh to intercept vegetation fragments.
- 9.39. Waste water will be dealt with on site by a means of Plastic Effluent Storage which will be emptied when required. This will avoid any potential pollution to ground water.
- 9.40. Long term potential negative impacts include the spread of Japanese Knotweed to the surrounding environment via fragments entering the River Dalgan. It is stated within Section 6.6.8 of the EIAR states that the surface water system mesh will catch all fragments, these fragments will be cleaned out regularly and placed within the soil treatment facility.
- 9.41. Environmental monitoring will occur at regular intervals which will ensure that all mitigation measures are effective. It is further stated that chemically contaminated soils will not be accepted at this site.
- 9.42. In terms of the cumulative effect on biodiversity, no residual significant effects were identified, no cumulative effects are anticipated as a result of the proposed project when considered in conjunction with other plans or projects in the area.
- 9.43. I consider that there are deficiencies in the data presented in Section 6 in relation to potential for spread of Japanese Knotweed and the environmental impact of same. The conclusion below excludes the potential for impacts on biodiversity from Water as this is addressed separately under the relevant environmental factor, in the consideration of interactions between environmental factors in Section 9.115 below and in Section 8 Appropriate Assessment.

9.44. I have considered all of the written submissions made in relation to biodiversity and the relevant contents of the file including the EIAR. I am not satisfied that impacts predicted to arise in relation to biodiversity during the construction and operational phases of a local scale and that these impacts can be avoided, managed and / or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures or with suitable conditions.

9.45. **Land and Soil**

9.46. Section 7 of the EIAR specifically assess and evaluates the potential for significant impacts on land and soil. It provides the following detail in relation to the baseline environment. The underlying geology in the area is made up of predominantly limestone and calcareous shale stone formations. The main soil type within the appeal site is defined as a fine loam over sandstone. The primary subsoils in the surrounding area consist of limestone tills which have been deposited in Drumlin like formations. The site is underlain by Visean Limestone which is prone to karstification.

9.47. Direct impacts to soils are specified within Section 7.5 of the EIAR and refer to the potential contamination of soils from machinery leaks. It is stated within this section that soils accepted into the site are uncontaminated and as such there is no risk from these. However, as discussed in planning assessment Section above it is intended to accept soils containing non-persistent herbicides. Such herbicides have been shown to negatively impact both plants and fish life in rivers. The lack of analysis and potential for hydrological impacts in this regard is a cause for concern.

9.48. A suitable restoration plan will be prepared once the soil recovery activities have substantially finished and any stripped topsoil will be temporarily stockpiled and used for final quarry restoration. It is concluded that no significant impact on the geological regime of the area will occur.

9.49. Mitigation measures are proposed within Section 7.6 of the EIAR with regard to the potential for contamination from leakages and spillages, and include the regular servicing of machinery, managed refuelling with the use of drip trays, bunded fuel container areas, appropriately trained staff and an emergency spill kit to be available at all times.

- 9.50. The mitigation measures in relation to machinery are standard practice and I consider these methods to be plausible and acceptable solutions which adequately address any concerns in relation to this source of potential pollution. Potential for impacts arising from surface water and flood events as a result of the changes in topography via the importation of soils to this site will be considered separately below. The impacts arising from the acceptance of chemically contaminated soils and soils containing large volumes of non persistent herbicides is of concern, and the lack of empirical testing, or predictive modelling in this regard results in a significant lacuna in information when assessing any potential impacts to either ground water or surface water quality. No mitigating measures have been proposed in order to prevent possible contamination of waters from such operations on site.
- 9.51. Therefore, having considered all of the written submissions made in relation to soils and land and the relevant contents of the file including the EIAR. On the basis of the information provided I am not satisfied that an adequate level of consideration has been given in relation to the potential for water pollution arising from the acceptance of contaminated soils as outlined above. Direct and indirect impacts in terms of soil and land contamination from this source cannot be excluded and the likelihood of impacts to arise cannot be ruled out.
- 9.52. **Water**
- 9.53. Section 8 of the submitted EIAR specifically assesses and evaluates the potential for significant impacts on water. It provides details of the baseline environment and examines how the development will interact with surface water and groundwater.
- 9.54. The appeal site is located within the north-eastern Section of the Corrib Catchment bounded by the River Dalgan, which discharges to the Sinking River approximately 15km to the south of the appeal site. The Sinking River in turn discharges into the Clare River and then discharges to Lough Corrib c. 40km downstream of the appeal site. (Lough Corrib SAC is located c. 6.3km south of the appeal site).
- 9.55. Water quality within the River Dalgan has a 'Poor' status from its first order streams and tributaries upstream of the development to 21 metres downstream of the bridge entrance to the site. Further down stream from this point to where the stream meets the River Clare the river is categorised as being 'Good' status after this point it

reverts back to 'Poor'. Upstream of the proposed development the River Dalgan is deemed to be at risk and not at risk downstream of the proposed development.

- 9.56. The aquifer beneath the site is classified as a locally important gravel aquifer and the ground water vulnerability is stated as moderate to high (GSI, 2018). A flood risk assessment has been submitted with the application which concludes that the proposed project will not contribute to any further flooding at this location or any other location downstream.
- 9.57. Surface water drainage channels which previously carried water from the quarry silting ponds are present within the site. Internally the excavated quarry area is relatively flat and free draining to the river and via run off.
- 9.58. During the construction phase, there is potential for direct and indirect impacts on ground and surface water arising from runoff and the release of sediments or other construction materials and chemicals. Stockpiles of materials for landscaping has the potential to be picked up by storm water runoff and transported and deposited into the River Dalgan.
- 9.59. During the operational phase it is stated within Section 8.10.2 of the EIAR that the development site and associated services will be comprised of a concrete hardstand, this will reduce direct recharge to underlying hydrogeology. It is stated that the site will have no negative impact on the surface hydrology or hydrogeology water quality in the area surrounding the site once operational. It is further stated that this is due to the lack of interaction between the proposed development site itself and the nearby waterbody which is the River Dalgan.
- 9.60. Mitigation in relation to the construction phase includes the restriction of workers and vehicles to the construction area and refuelling in pre-designated bunded areas. The storage of fuels and hydrocarbons will also be stored in appropriately bunded areas and a response plan to deal with leakages and spillages will be in place. A wheel wash is proposed to prevent the spread of material to surrounding roads. All stockpiled areas of soil will either be covered or reseeded to prevent runoff.
- 9.61. Section 8.11.2 of the EIAR states that surface water drainage system will be designed in such a manner so as to ensure that there will be as minimal an impact as possible on the existing surface water system and the current hydrological flow regime. The system will take water from office, toilet and welfare buildings, bunding

area , fill area, screening riddle area, weighbridge, silt pits, wheelwash, quarantine area, gantry and sheds, all hardstanding areas will drain via a primary silt and sediment collection system and after will connect to a Bypass Hydrocarbon interceptor and through silt ponds prior to entering the River Dalgan. It is concluded within the EIAR that by implementing adequate mitigation measures and controls such as the drainage system discussed above, the potential impact on surface water will be long term, slight, positive and minimal.

- 9.62. Whilst I acknowledge the mitigation measures proposed, and consider these to be acceptable, I have concerns in relation to the quantum of soils to be accepted at the site and the potential for cumulative impacts in relation to ground water and surface water contamination. No details have been given in relation to the expected quantum of non-persistent herbicides present in soils which are to be taken into the site and given the porous and fractious nature of the existing soils and underlying bedrock I consider that an approximate calculation in relation to the rates of transfer of such substances to both groundwater and the river should be provided. Such details would provide a greater sense of certainty in relation to the potential for ground water and surface water pollution. Whilst I acknowledge that non-persistent chemicals by their nature are not intended to remain in the soils for extensive periods, I consider it prudent to apply a precautionary approach to the assessment of same given that, as already mentioned, such chemicals when entering the river in large volumes can be fatal to fish life and vegetation. Thus, given the porous nature of the sands and gravels and bedrock of the site I consider that this issue warrants attention.
- 9.63. The risk of localised water pollution from the development in a flood event can be excluded, as discussed in the Planning Assessment section above. The flood extents within the site have been modelled. The risk of flooding and associated environmental pollution can therefore be excluded on the basis of the submitted information.
- 9.64. I have considered all of the written submissions made in relation to water and the relevant contents of the file including the EIAR. On the basis of the information provided and in the absence of any analysis of the potential impacts on water quality arising from non-persistent herbicides I am not satisfied that an adequate level of consideration has been given to the potential for ground water and surface water pollution in this regard. Unacceptable direct or indirect impacts in terms of water

quality and cumulative effects in relation to existing industrial uses and the Ballyhaunis Waste Water Treatment Plant upstream, cannot therefore be excluded.

9.65. Climate and Air

9.66. Section 9 of the submitted EIAR assesses the potential for impacts on climate and air quality. The likely significant effects on air quality have been described and assessed in the planning assessment Section of this report and are summarised in this section. It is stated that impacts on climate during the operational stage will be minimised by the use of electrical machinery.

9.67. During the construction phase there is potential for dust emissions from construction plant and activities. It is stated within Section 9.6.1 of the EIAR that the levels of dust arising is dependent on the composition of material in use, location of the material and weather conditions. Vehicular traffic to and from the site has the capacity to generate the dispersion of dust along construction routes. The EIAR identifies that potential Particulate Matter of 10 or less micrometres have the potential to cause harm to the respiratory system. There is therefore a risk that dust may cause an impact to sensitive receptors such as housing up to a distance of 25 metres from the proposed construction site. It is stated that all such receptors are in excess of 25 metres from the appeal site. For this reason, potential for impact are stated to be minimal.

9.68. The EIAR states that any potential impacts in relation to the operation of the site would be mitigated through the conditions of the Waste Facility Permit / Dust management plan so as to ensure that as little dust dispersion as possible arises.

9.69. Mitigation in relation to construction will include the regular monitoring and cleaning of roads as required, any road that has the potential to spread dust within the development site will be sprayed with water. Any vehicles using the site roads will be restricted to 20kmph speed limit. Vehicles delivering sand and gravel will be covered with tarpaulin.

9.70. It is important to note at this juncture that EIAR has failed to assess the potential for dust impacts on sensitive receptors from the fill area which is located c. 6 metres from the nearest dwelling.

- 9.71. In the absence of such information a proper assessment of potential dust impacts in relation to the existing established residential dwellings cannot be properly carried out.
- 9.72. I am therefore, not satisfied, that impacts can be avoided, managed and / or mitigated and that that proposed development will not have significant effects on the environment during the all phases.
- 9.73. I have considered all of the written submissions made in relation to air and climate and the relevant contents of the file including the EIAR. Having regard to the above, I am satisfied that impacts in relation to climate would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, however I am not satisfied that impacts in relation to air quality would be avoided, managed and/or mitigated by measures that form part of the proposed scheme and as such I am not satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of air quality and that significant cumulative impacts are not likely to arise. Such impacts therefore, cannot be ruled out.
- 9.74. **Noise and Vibration**
- 9.75. Section 10 of the submitted EIAR describes the potential noise and vibration impacts. It is of note that this section has been revised in response to a clarification of further information request. The likely significant effects of noise and vibration impacts have been described and assessed under the planning assessment Section of this report and are summarised below.
- 9.76. A baseline noise study has been carried out to determine the prevailing noise environment in the area and to advise the relevant operational noise criteria. Four measurement locations were selected at noise sensitive locations i.e dwellings. Noise measurement sample periods were 15 minutes during the day. A number of measurements were also taken in the evening and at night. Noise levels were in the range 48 to 51 dB LAeq and 43 to 45dB LA90, no significant source of vibration was noted during the survey period. The sources noted in the area was distant traffic and low-level noise from Western Proteins.
- 9.77. The noise emissions during the operation of the proposed facility will be from mobile plant and occasional trucks which is predicted as four lorries a day. A noise prediction assessment was undertaken and has concluded that the noise impact at

the assessment location is slight /moderate at 2 of the dwellings at the south-west of the site. At the other 2 locations the predicted impact is negligible.

- 9.78. During the construction phase there is potential for noise impacts arising from construction activities and associated traffic noise. The potential noise impacts during the construction phase would be mitigated by noise mitigation measures detailed in the EIAR. Specific mitigation measures are not deemed necessary as the proposed facility can operate at or below the noise emission limit values of 55 Db(A) recommended by the EPA (2006) Environmental Management Guidelines for Extractive Industry. Standard mitigation measures described in the DoEHLG Guidelines have been suggested to reduce any unforeseen impacts, further mitigation measures include limiting hours during which site activities are likely to create high levels of noise or vibration, retain natural barrier between site and houses, establish channels of communication between facility manager and residents, monitoring typical noise levels at sensitive locations and appointing a site representative for all matters relating to noise. Additional measures recommended are the erection of enclosures around noisy processes and items such as generators etc and the use of vibration isolated support structures where necessary. Noise monitoring will be conducted at quarterly intervals.
- 9.79. Similar to the assessment of dust above, the EIAR omits the potential for noise impacts from the fill area and only assesses noise generation from the proposed screening area of the site. Furthermore, as mentioned in the assessment above not all noise sources (i.e. all machinery to be used at all locations within the site) are included in the assessment of cumulative effects.
- 9.80. I have considered all of the written submissions made in relation to noise and the relevant contents of the file including the EIAR and having regard to the foregoing and based on the information submitted, I am not satisfied that impacts in relation to noise can be avoided, managed and /or mitigated. Direct or indirect impacts in relation to noise can not therefore be excluded.
- 9.81. **Landscape**
- 9.82. Section 11 of the submitted EIAR describes the landscape and visual effects of the proposed development. The likely significant landscape and visual impacts have

been described and assessed under the planning assessment in Section 7.2 of this report and are summarised below.

- 9.83. The site is located within Landscape Protection Policy Area 4 – Drumlins and Inland Lowland. These areas possess undulating areas of pasture, woodland, and forest and have a capacity to absorb development. The site and environs are not designated as protected landscapes. A visual impact assessment was carried out for the purpose of the EIAR and concluded that the development lands are largely out of sight from the surrounding landscape and the proposed development would not have any significant impact on the surrounding area.
- 9.84. The EIAR determines within Section 11.6.2 of the report that a slight negative impact during construction arising from machinery and equipment both on-site and to and from site is likely. However, the EIAR states that, as the site was previously a working quarry it is characterised as a working landscape and therefore construction activities will not have an impact on the surrounding area.
- 9.85. Impacts on landscape during the operational phase of the project are considered to be minimal due to the existing topography and abundance of mature conifer plantation that surrounds the development site. The erection of a soil mound barrier around the site will provide further mitigation to any views from the surrounding landscape.
- 9.86. Mitigation also includes the provision of a green area intended for the promotion and enhancement of biodiversity at the site.
- 9.87. Any residual landscape and visual impacts will be limited to localised changes with regard to appearance and will be consistent with the already established character of the area.
- 9.88. Having regard to the foregoing I consider that the extent of visual change outside of the immediate environment is not significant, and that potential impacts to the local environment are unlikely.
- 9.89. I have considered all of the written submissions made in relation to landscape and the relevant contents of the file including the EIAR. Having regard to the above, I am satisfied that impacts in relation to landscape would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed

mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of landscape and that significant cumulative impacts are not likely to arise.

9.90. Material Assets

9.91. Section 12 of the submitted EIAR describes the material assets relating to the development, many of which have been already considered within the EIAR. Electrical connections, telecommunications, soil and water and steel and concrete are to be brought to the development site. No potential impacts are considered likely from these material assets. As no significant effects are anticipated during either construction or operational phases of the project, no mitigation measures are proposed.

9.92. I have considered all of the written submissions made in relation to material assets and the relevant contents of the file including the EIAR. Having regard to the above, I am satisfied that impacts in relation to material assets would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of material assets and that significant cumulative impacts are not likely to arise.

9.93. Traffic

9.94. Section 13 of the submitted EIAR considers the likely traffic impacts of the development, these have been described and assessed within the main assessment section above. A Traffic Impact Assessment was prepared by Mosca McGillycuddy and associates which accompanied the application.

9.95. During construction stage traffic will enter the site from the N60 onto the L25128 which has a sealed surface between the N60 and the Western Proteins facility and a carriage width of 8 metres.

9.96. Operational traffic will arise from 12 to 16 staff 6 days a week and 5-8 heavy vehicles to and from the site on a daily basis. Staff will enter the site between 8am and 9am

and leave between 17.00 and 18.00. It is estimated that at least 7 of these vehicles would leave the site and return during the day. Accordingly, the estimated peak season daily traffic generated would be up to 16 heavy vehicle movements per day and up to 44 cars and light vehicle movements per day.

- 9.97. Potential impacts during the operational phase are considered unlikely, Section 13.7.2 of the EIAR states that the N60 would continue to operate well within its typical rural AADT link capacity with the predicted 2019, 2024, 2034 AADT volumes with the proposed project in place. The N60 suburban road, in the vicinity of its existing L25128 junction with the 60km/hour Ballyhaunis suburban speed limit zone would continue to operate well within its urban link capacity with the predicted 2019, 2024, 2034 peak hour traffic volumes with the proposed development. No significant que delays should arise from the development at the priority junction with the N60/ L-25128.
- 9.98. The traffic modelling considers the impacts of all traffic, and on this basis, I am satisfied that cumulative impacts would not arise.
- 9.99. There is an existing bridge which was the main access for the previous quarry works on site and is stated to be modified in order to prevent debris entering the river from vehicles crossing. The use of this bridge is acceptable and negative effects arising from this use are unlikely.
- 9.100. The site will be accessed via an existing local road which also serves the industrial facility to the north of the site. This road is lightly trafficked and facilitates access to surrounding farm land. There are no dwellings or other businesses utilising this access road. Additional traffic to the development will not be significant and I consider that the access road has adequate capacity to cater for the proposed development.
- 9.101. I have considered all of the submissions made in relation to transportation and the relevant contents of the file including the EIAR. I am satisfied that impacts in relation to transportation would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of transportation. I am also satisfied that significant cumulative impacts in relation existing industrial uses to the

north of the site are not likely to arise, and that approval should not be withheld on the grounds of such cumulative effects.

9.102. **Waste**

9.103. Section 14 of the submitted EIAR considers the potential for impacts arising from waste. It is stated within Section 14.2 that all wastes arising from the construction, operation and decommissioning of the development will be in accordance with EU, National and Regional waste management policy. The site will be subject to a Waste Facility Permit. A Waste Management Plan has been prepared to provide an outline for the management of waste from construction and demolition activities which will ensure that there are no significant impacts from waste generated throughout the project.

9.104. Waste generated from construction will be mainly from site clearance works, excavated material, road works, and construction material, quantities are expected to be low. Excavated material will be reused on site. All other construction waste will be stored appropriately within a bunded area if required and removed off site by a suitable licenced contractor and transferred to a licenced facility to cater for such waste.

9.105. During the operational stage the removal of Japanese Knotweed from soils generates a requirement for this waste to be treated off site. All removed Japanese Knotweed will be carefully bagged in double skin 1 tonne bags and transported by appointed permitted waste contractor to Covanta Waste-to-energy facility in Ringsend. All remaining waste will be appropriately stored on site in bunded areas if required and then removed off site to an appropriately licenced facility.

9.106. No details of these bunded areas has been provided and in the absence of such information the issue of potential contamination arises as discussed in numerous sections of this report above.

9.107. Mitigation measures are as outlined above, prevention principles will be applied to the development as will, minimisation of waste and the re-use where possible, disposal is a last resort.

9.108. I have concerns in relation to the waste to be accepted to the site and the potential for contamination as referenced in the water and soils sections of the EIAR

assessment above. No assessment has been carried out in relation to the potential effects arising from this waste stream. Reference is made to bunded storage areas to cater for such soils, but no details have been provided of same. I note from the plans submitted that a skip area is to be provided, however this is intended to be used for waste found in accepted soils.

9.109. I have considered all of the submissions made in relation to waste including the EIAR. Having regard to the above, I have concerns in relation to the potential for contamination arising from inappropriate soils accepted to the facility and the lack of information in relation to appropriate storage areas for contaminated soils within the site. I am therefore not satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of waste. Or that significant cumulative impacts are not likely to arise.

9.110. Cultural Heritage

9.111. Section 15 of the submitted EIAR considers the impacts of the proposed development in relation to cultural Heritage. The key consideration in relation to cultural heritage in my view relates to archaeology.

9.112. Section 15.7 of the EIAR states that there are no recorded monuments within the site, however, there are several within 2 km of the site. The area of the proposed project site has been quarried out previously and has had extensive disturbance of original ground levels there is no risk of any previously unknown archaeological sites being impacted.

9.113. I consider, having regard to the foregoing that significant impacts would not arise, either individually or cumulatively.

9.114. I have considered all of the submissions made in relation to cultural heritage including the EIAR. Having regard to the above, I am satisfied that impacts in relation to cultural heritage do not arise in this instance. I am therefore satisfied that the proposed development would not have any unacceptable direct or indirect impacts in terms of cultural heritage. I am also satisfied that significant cumulative impacts are not likely to arise.

9.115. Interactions between the Factors and Cumulative Impacts

9.116. I have considered the interrelationships between factors and whether these may as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. Section 16 of the EIAR provides a matrix of the impact interactions.

9.117. I consider that there is potential for population and human health to interact with all of the other factors (biodiversity, water, air and climate, noise, landscape and visual, cultural heritage and material assets – traffic and waste). I consider that the interaction between Population and Human Health and water, noise and dust is not adequately addressed within the submitted EIAR. There is also potential for Biodiversity to interact with water. The details of all other interrelationships are set out in Section 16 of the EIAR which I have considered.

9.118. I am satisfied that effects as a result of interactions, indirect and cumulative effects can be avoided, managed and / or mitigated for the most part by the measures which form part of the proposed development, the proposed mitigation measures detailed in the EIAR, and with suitable conditions. However, on the basis of the information provided in relation to water, noise, dust, biodiversity and waste I am not satisfied that impacts on the environment would be avoided, managed and/or mitigated by measures that form part of the proposed scheme, by the proposed mitigation measures and with suitable conditions. On the basis of the foregoing, I consider that unacceptable direct or indirect impacts in terms of Water, noise, dust, biodiversity and waste and cumulative effects, cannot be excluded and I consider that the interactions between the environmental factors of Biodiversity and Water cannot be excluded nor the interactions between Population and Human Health and water, noise and dust.

Reasoned Conclusion

9.119. Having regard to the examination of environmental information contained above, to the EIAR and supplementary information provided by the applicant and the submissions received, the contents of which I have noted, it is considered that the main significant direct and indirect effects of the proposed development on the environment are as follows.

- Negative impacts on **human health and population** include noise and dust disturbance to residents of neighbouring dwellings, the potential for spread of Japanese Knotweed to these properties and the potential to deteriorate ground water conditions.
- Benefits/positive impacts on the environment (**soils, traffic, water quality and climate**) the proposal will provide a facility for the treatment of soils contaminated with Japanese Knotweed without the need for chemicals which has a positive impact on soils from which the plant is removed and the water quality adjacent to these site whereby spraying of the plant would be used as an alterative to excavation. The spread of this plant will be mitigated through the use of sealed vehicles which will be cleaned before exit from the facility
- Negative impacts on **Water** could arise as a result of accidental spillages of chemicals, hydrocarbons or other contaminants such as herbicides entering the drainage system and discharging to the river thereafter during the construction and operational phases. Some impacts would be mitigated by measures outlined within the application such as the use of hydrocarbon interceptors. However in the absence of any analysis of the potential for chemically contaminated soils to infiltrate the water environment impacts cannot be ruled out.
- Negative **Noise and Dust** impacts arise during the construction phase from construction activities. These impacts will be mitigated through adherence to best practice construction measures. Impacts arising from noise and dust disturbance during the operational stage have not be adequately assessed or accounted for. In the absence of a detailed noise and dust analysis which includes impacts arising from the fill area, noise and dust impacts can not be ruled out.
- There is a potential for negative **Waste** impacts to arise during the operational phase of the development from the acceptance of chemically contaminated soils. In the absence of an appropriately bunded and sized area to store and cater for such soils waste impacts cannot be ruled out.

9.120. The EIAR has considered that the main significant direct and indirect effects of the proposed development on the environment would be primarily mitigated by environmental management measures, as appropriate. However, I am not satisfied

on the basis of the submitted information that impacts on the noise, air quality, biodiversity, land and soil, waste and water environments can be mitigated and that no residual significant negative impacts on the environment would remain as a result of the proposed scheme. Furthermore, having regard to the potential scale of impacts, I am not satisfied on the basis of the submitted information that the positive benefits of the scheme would outweigh the remaining negative impacts. I am, therefore, of the view that the potential for unacceptable direct or indirect effects on the environment cannot be excluded on the basis of the submitted information.

10.0 Recommendation

10.1. Having regard to the foregoing assessment, I consider that based on the information submitted, the proposed development by virtue of the limitations of the screening and removal process proposed has the potential to result in the spread of Japanese Knotweed within the site and to surrounding lands. In addition, I consider that the applicant has failed to adequately assess the potential impacts to neighbouring residential properties in relation to noise and dust disturbance. The applicant has also failed to adequately demonstrate that the proposed development would not give rise to groundwater and surface water pollution and as such based on the inadequacies of the information submitted, I consider the proposal to be unacceptable in this regard and recommend that permission is refused for the following reasons:

11.0 Reasons and Considerations

1. Having regard to the location of the proposed development in close proximity to residential dwellings, the Board is not satisfied on the basis of the information submitted with the application, EIAR and the appeal, that the proposed development would not seriously injure the amenities of properties in the vicinity by reason of noise, dust and general disturbance, and depreciate the value of properties in the area. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.
2. The Board is not satisfied on the basis of the information provided with the application and appeal that the proposed development would not result in

contamination of ground waters or pollution of surface waters within the vicinity of the site, the proposal would pose an unacceptable risk of environmental pollution and would therefore be contrary to the proper planning and sustainable development of the area.

3. The Board is not satisfied on the basis of the information provided with the application and appeal that the proposed development individually, or in combination with other plans or projects would adversely affect the integrity of European Site No. 000297 Lough Corrib SAC, in view of the site's Conservation Objectives. In such circumstances the Board is precluded from granting permission.

Sarah Lynch
Planning Inspector
October 2019