

Karen Byrne

From: Laura Crowe <laurac@tpa.ie>
Sent: Monday 10 August 2026 21:22
To: Appeals2
Subject: ACP Ref. 324014-25 - Response to Submissions
Attachments: 324015-25 - Response to Submissions (Incl. Appendices).pdf

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Dear Sir/Madam,

Please find attached a Response to Submissions in respect of Application ACP Reg. Ref. 324015-25.

The Applicant, Milford Quarries Limited, was invited by An Coimisiún Pleanála by letter dated 13th July 2026 to respond to Submissions lodged in respect of this Application.

I trust the above and attached are in order. Please do not hesitate to contact me should you have any queries.

I would be grateful if you could provide written acknowledgement that this Response has been received.

Le gach dea-ghuif

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An Coimisiún Pleanála
64 Marlborough Street
Dublin 1
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10th August 2026
[Sent via email: appeals@pleanala.ie]

Dear Sir/Madam,

RE: FIRST PARTY RESPONSE TO SUBMISSIONS RECEIVED IN RESPECT OF APPLICATION REG. REF. ACP-324015-25, A S.37L APPLICATION FOR FURTHER QUARRYING AT CLOGRENNANE, BILBOA, CO. CARLOW.

ACP REG. REF. 324015-25

1.0 INTRODUCTION

Tom Phillips + Associates¹ have been retained by Milford Quarries Limited² to respond to the letter issued by An Coimisiún Pleanála on 13th July 2026, inviting responses to Submissions lodged in respect of Application Reg. Ref. ACP-324015-25, a Section 37L Application for further quarrying at Clogrennane, Bilboa, Co. Carlow.

The Applicant has been asked to respond to 4 no. specific Submissions, from the following bodies:

- Development Applications Unit (dated 9th July 2026);
- Transport Infrastructure Ireland (dated 2nd June 2026);
- Laois County Council (dated 9th July 2026); and
- Health Service Executive (dated 30th June 2026 and received 1st July 2026).

We will respond to each of these Submissions in Section 2.0 below.

We highlight that this Application was lodged alongside a concurrent Application for Substitute Consent of historic quarrying at the same site under Section 177E (Application Reg. Ref. ACP-324014-25). A similar invitation to respond to Submissions was issued by An Coimisiún Pleanála in respect of the S177E Application, which will be dealt with under separate cover.

¹ 80 Harcourt Street, Dublin 2, D02 F449.

² Kilcarrig, Bagenalstown, Co. Carlow, R21 AP52.



2.0 RESPONSE TO SUBMISSIONS

The following Section will provide our response to each of the 4 no. Submissions.

2.1 Development Applications Unit

The Development Applications Unit of the Department of Housing, Local Government and Heritage made a Submission to the subject Application on 9th July 2026.

In their Submission, the Unit raises no objection to the proposed development. They recommend Conditions to be applied should the Application be granted, in respect of archaeology and built heritage. The Applicant welcomes the inclusion of these Conditions to a future Grant of Permission, should it be forthcoming.

2.2 Transport Infrastructure Ireland

Transport Infrastructure Ireland (TII) made a Submission to the subject Application on 2nd June 2026. In their Submission, they state the following:

"Having regard to the extent of the operations presented in the EIAR and the location of the subject quarry operations accessing the local road network, the Authority has no specific comment to make in relation to the subject development in terms of impacts relating to the safe and efficient operation of the existing or planned national road network in the area.

The Authority has no other specific comments to make in relation to the proposed development and trusts that the foregoing proves of assistance to the Board in dealing with this matter."

The Applicant welcomes this Submission from TII, which confirms that they do not have any specific concerns in relation to the proposed development.

2.3 Laois County Council

Laois County Council made a Submission to the subject Application on 9th July 2026. We note that the northern boundary of the subject site lies along the Carlow-Laois border but that the subject lands are entirely contained within the Carlow County Council administrative area.

The Roads Department notes that they have no objection to the development, subject to the introduction of specified Conditions to a Grant of Permission. The Applicant welcomes these Conditions.

The Planning Department provided the following commentary in their Submission:

*"The Council recognises that the **aggregate and concrete products industry contribute to the development of the national, regional and Local economies** by the proper use and management of natural resources for the **benefit of the community and the creation of employment opportunities**. These products are required as **essential building materials in the social and economic development process** including the provision of housing and infrastructure. Laois County Council will seek to safeguard*



these valuable resources for future extraction. The National Guidelines on Quarries and Ancillary Activities for Planning Authorities (DOEHLG, 2004) is the guiding document against which applications for quarries and ancillary activities will be considered.

Aggregate extraction can only take place where suitable aggregate resources exist; they are a 'tied' resource. It is considered, therefore, that planning policies should be carefully constructed to avoid adverse effects on aggregate resources and the related extractive industries and added value production that are essential for the built environment, infrastructure and future economic development. Like many forms of development, extractive industries have the potential to cause harm to the environment, heritage and the landscape if not appropriately designed and managed.

However, aggregates are a necessary resource and are of great importance to the economy and society. In addition, well managed and designed quarry sites minimise environmental effects. There is also the potential for habitat creation through the restoration of quarry sites following the cessation of operations." [Our Emphasis.]

The Applicant agrees with and welcomes this commentary from Laois County Council in respect of the importance of extractive industries for national, regional, and local economies, through employment creation and the production of materials necessary for construction. The Applicant is a significant employer in Co. Carlow, supplying large local projects including MSD Carlow, SETU Carlow, and Glenveagh. They also supply major contractors such as Sisk, BAM, Elliotts, Glenveagh, MMD, JJ Rhatigan and Company, alongside other large contractors throughout Ireland for infrastructure projects and both private and public-led residential developments. Further to this, the subject S37L Application seeks the continuation of an existing operation, with c. 20 years of reserves at 200,000 tonnes per annum, which will allow for greater job security for staff.

As outlined by Laois County Council, aggregate extraction can only take place at certain locations. We highlight that the subject site has previously been in use as a quarry and therefore the proposed development constitutes the further extraction of an existing quarry void.

We contend that the subject Application does not contradict any of the Policy Objectives, as quoted in the Submission made by Laois County Council, and would welcome the introduction of any relevant Conditions to a Grant of Permission, should it be forthcoming.

2.4 Health Service Executive

The Health Service Executive (HSE) made a Submission to the subject Application, dated 30th June 2026 and received 1st July 2026. This Submission will be responded to under each relevant heading, in the interest of clarity.

From the outset, we highlight that the HSE Submission includes a number of inconsistencies, which do not reflect the nature of the subject Application, including the following:

- Incorrectly identifying the subject quarry as a sand and gravel quarry;
- Incorrectly insinuating that the proposed S37L works would constitute an extension to the quarry area;

- Assumption that active quarry dewatering occurred;
- Assumption that the proposed development includes a soil and stone washing facility; and
- Reference to residual peat over the site, despite there being no peat mapped.

In respect of sand and gravel, the HSE Submission included the following text:

“During the operational stage, the potential impacts on air, noise, landscape and traffic would have included the following:

- *The generation of noise by the operation of machinery; Blasting,*
- *The generation of dust, particularly during period of dry weather, through the removal and storage of overburden and the extraction of **sand and gravel**;*
- *Ongoing changes to visual amenity as overburden is removed and stockpiled and **sand and gravel** is extracted and stockpiled;*
- *The generation of traffic by the export of **sand and gravel** from the site.” [Our Emphasis.]*

The subject Application relates to sandstone bedrock, not sand and gravel, therefore these comments relating to sand and gravel do not relate to the subject Application. We would ask the Commission to have regard to this when reviewing the submission from the HSE.

2.4.1 Baseline Surveys and Monitoring during Operation

The Submission from the HSE makes mention of the fact that there is a lack of baseline surveys and monitoring available for when the quarry was previously in operation.

“The EIAR relies on predictive methodology and no information regarding any EIA had been undertaken prior to/during operation.

If it is the case that i.e. there was no monitoring of dust, noise or surface and ground water during the quarrying activities, then the NEHS considers this a significant issue with regard to the protection of Public Health.

If the planning process had been complied with, then the results of the monitoring are relevant and pertinent to the EIA. If there are monitoring results from the operational period of this quarry, then their omission in the EIA is a significant omission for the validity of the process.

Authorised development is subject to public participation and mitigation based on stakeholder consultation. Potential nuisance aspects of development can be less significant if there is a fixed time span. Unauthorised development is not subject to this. Therefore, the environmental impacts are likely to be more significant, particularly around the public health areas of noise exposure and dust nuisance.

The EIAR has not demonstrated that Quarrying activities were within the predicted limits to protect health with regard to dust or noise or protection of ground and surface water and therefore has not demonstrated that the unauthorised development operated



within the health protection standards. The EIAR relies on predictive methodology that has not been validated through monitoring whilst the quarry was operational.”

“During the operational stage, the potential impacts on air, noise, landscape and traffic would have included the following:

- *The generation of noise by the operation of machinery; Blasting,*
- *The generation of dust, particularly during period of dry weather, through the removal and storage of overburden and the extraction of sand and gravel;*
- *Ongoing changes to visual amenity as overburden is removed and stockpiled and sand and gravel is extracted and stockpiled;*
- *The generation of traffic by the export of sand and gravel from the site”*

The Applicant acknowledges the HSE’s observations regarding the absence of historical baseline monitoring data for parameters such as noise, dust, groundwater and surface water during the operational period of the quarry.

We highlight that the subject Application relates to further quarrying under Section 37L. Substitute Consent for the historic quarrying undertaken at the subject site has been sought under a concurrent Section 177E Application. Matters relating to the historic quarrying activities, including historical environmental monitoring and the environmental assessment of those works, fall within the scope of the Section 177E Application and have been addressed under separate cover in response to the HSE Submission (ACP Reg. Ref. 324014-25).

Simply put, the Section 177E Application looks backwards, whereas the Section 37L Application looks forwards.

Accordingly, we respectfully submit that the HSE’s concerns regarding historical environmental monitoring are more appropriately directed to the Section 177E Application, where those matters properly fall to be considered, rather than to the prospective Section 37L Application.

We therefore respectfully request that the Commission have regard to the response to the HSE Submission prepared by Tom Phillips + Associates in respect of the Section 177E Application (ACP Reg. Ref. 324014-25), which comprehensively addresses the issues raised in relation to historical environmental monitoring for the subject site.

As detailed above, we note that the Applicant has continuously explored all avenues to try gain access to historical monitoring records. In this regard, we point to Appendix A of this Response, which reflects the Applicants attempts to gain all available records from the Environment Section in Carlow County Council.

Notwithstanding this, we note that historic data must have existed in the past, as this would have been required as part of the 261 process which was previously prepared for the site.



2.4.2 Population and Human Health

The HSE Submission states the following in respect of population and human health:

"Chapter 5 of the EIAR examines the potential impacts of the proposed further development of this quarry development on human beings. The scope of the work includes an evaluation of the potential and indirect effects on the human populations of the surrounding environs however is analysed as settlement general locations and census data.

However chapter 5 does not show exactly how near sensitive receptors are in relation to this development i.e. (500m etc.) There is a settlement statement in relation to census and new builds in the area however definitive locations of the closest sensitive receptors; and the possible effects on same were not explored in this chapter and require further analysis.

This data is only available in Nosie [sic.] chapter which does define locations however it should be fully evaluated within the population health chapter as part of the EIAR."

It is generally understood that the 'Population and Human Health' Chapter of an EIAR is not intended to be a standalone technical assessment in the same manner as disciplines such as Air Quality, Noise and Vibration, Traffic and Transport, Hydrology, Hydrogeology or Climate. Rather, it is an overarching assessment that draws together the findings of the relevant technical chapters to evaluate the potential implications of the project for population and human health.

Similarly, the 'Population and Human Health' Chapter does not ordinarily identify a separate set of sensitive receptors distinct from those assessed in the individual technical chapters. Rather, it relies upon the sensitive receptors identified by the relevant specialists in their respective Chapters. In this regard, we refer to the *EPA Guidelines on the Information to be Contained in Environmental Impact Assessment Reports (2022)*, which does not require the 'Population and Human Health' Chapter to include a separate list of sensitive receptors. The Advice Notes envisage the EIAR as an integrated document, with each specialist chapter informing the overall assessment. This guidance advises that this Chapter should be read in conjunction with the other relevant chapters of the EIAR.

Accordingly, it is respectfully submitted that the Population and Human Health chapter has been prepared in a manner that is appropriate, proportionate and consistent with established EIA practice. When read in conjunction with the supporting technical chapters, it provides a comprehensive assessment of the potential effects on population and human health, drawing upon the relevant receptor assessments and specialist conclusions contained elsewhere in the EIAR. The chapter should therefore be considered as part of the EIAR in its entirety, rather than in isolation, as it is through the collective findings of the specialist assessments that the likely significant effects on population and human health are appropriately identified and evaluated.



2.4.3 Noise

The HSE Submission states the following in respect of noise:

"In relation to short-term temporary activities such as construction of screening bunds, due to the reduced duration of these works and the direct and potentially long-term benefits arising, it would be deemed appropriate that noise from these works should be limited to the values derived from the ABC Method of BS 5228- 1 :2009+A:2014 Noise and Vibration Control on Construction and Open Sites – Noise as described in Sections 10.34 to 10.37.

It is stated in the EIAR that temporary screened may be used to mitigate noise levels during operation i.e. blasting. The NEHS recommends that the use of best available technology should be used to mitigate any potential affects regarding noise and vibration to sensitive receptors identified within the EIAR."

The Applicant has no objection to the suggestions in respect of noise and would welcome the inclusion of a suitably worded Condition in respect of noise levels for any future Grant of Permission, should it be forthcoming.

We highlight that the location of the proposed quarrying work within the subject site is to be located further away from the identified noise sensitive receptors, compared to the previous quarry operations on site.

2.4.4 Air Quality and Dust

The HSE Submission states the following in respect of air:

"It is understood that no boundary dust monitoring was taken at the Project lands during quarry operation.

There is variability in the deposition rates recorded across the monitoring months and locations within data provided in the preparation of this EIAR. Furthermore, all monitoring was completed after quarrying activities ceased. As such, the quarry's contribution of recorded deposited dust is not represented within the monitoring data. For this EIAR, the baseline environment is not therefore as per the original green field agricultural site but is the baseline environment after years of unauthorised activities.

The baseline air quality in 2000 is potentially different to that of the presented data from 2024. The baseline at the start of the unauthorised activities was the original air quality together with any contribution from the years of quarry activity, together with any cumulative activity from other quarries/industry within the area was not assessed prior to this development."

In response to the above, AWN Consulting has stated the following:

"Baseline concentrations of particulate matter (PM10 and PM2.5) were established with reference to long-term monitoring data from the Environmental Protection Agency (EPA) over the 2020 – 2024 period. This included a review of representative rural Zone



D monitoring sites to establish baseline concentrations of PM10 and PM2.5 in the region of the subject site.

The use of publicly available monitoring data for establishing baseline concentrations of pollutants is considered best practice and is an appropriate methodology. The use of long-term monitoring datasets is preferred over short-term monitoring data as it provides information on long-term trends in air quality. Additionally, reference to monitoring studies is also deemed appropriate for establishing background concentrations when historical monitoring data is unavailable. The approach used in Chapter 9 – Air Quality to establish the baseline environment is deemed appropriate and sufficient for the purposes of the assessment.

The HSE submission considers the baseline environment to not be as per the original green field agricultural site, but instead consider the baseline environment to be after years of historic quarrying activities. The operational phase assessment undertaken in Section 9.4.3.1 of Chapter 9 – Air Quality of the EIAR included modelling of emissions of dust deposition and PM10 and PM2.5 from the proposed quarrying activities and added these to the estimated background pollutant concentrations. The total site pollutant contribution plus background concentrations was then compared with the relevant ambient air quality limit value in order to assess the full impact to air quality. The baseline environment is established in the absence of the development to avoid a double counting of emissions. The quarrying activities are captured separately within the modelling.” [Our Emphasis.]

The HSE also states the following in their Submission in respect of dust limit values:

“The NEHS recommends the TA Luft limit value of 350 mg/m2/day to be adopted to evaluate potential dust deposition impacts from the operational phase of the quarry and extension if granted.”

In this regard, AWN Consulting have responded as follows:

“The HSE recommends that the TA Luft limit value of 350 mg/m2/day is adopted to establish the impact operational phase quarrying activities from the proposed development on the surrounding environment. This limit value has been used in Chapter 9 – Air Quality as set out in Section 9.2.1.3 and Section 9.4.3.1.1 of Chapter 9 in the EIAR. It is stated in Section 9.7 of Chapter 9 – Air Quality that monitoring at the site boundary should be undertaken, to evaluate whether compliance with the TA Luft limit value of 350 mg/m2/day is achieved, once the quarry is operational and to evaluate whether mitigation measures are working satisfactorily.

If planning is granted the Applicant will commit to a condition that compliance with the TA Luft limit value of 350 mg/m2/day (averaged over a year period) is required at the site boundary. Monitoring of dust deposition in accordance with the Bergerhoff methodology will be employed to assess compliance. This is industry standard for quarrying and is recommended by the EPA in Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals).

Predicted emissions of PM10 and PM2.5 have been compared with the ambient air quality limit values stipulated within the Ambient Air Quality Standards Regulations 2022 (S.I. 739 of 2022) and Table 2 of Annex I in Directive (EU) 2024/2881. These standards supersede the Ambient Air Quality Standards Regulations 2011 referred to by the HSE.” [Our Emphasis.]

In respect of the predicted impacts from the proposed future quarrying works, AWN states the following:

*“Should planning permission for future quarrying be granted, the air quality assessment undertaken has demonstrated that **emissions from the future site will be in compliance with the TA Luft limit value of 350 mg/m²/day for dust deposition and within the ambient air quality limits for PM10 and PM2.5.** As evidenced by the comparison in Table 1 below, the future quarrying activities will result in **lesser impacts to air quality than the historical activities.** The historical works have also been modelled applying a **conservative approach, similar to the future activities.**”*

Table 1. Comparison of Historic Quarrying Air Quality Impacts versus Future Proposed Operations

Metric	Historic operations — 177E (rEIAR, Substitute Consent Operations Scenario)	Proposed operations — 37L (EIAR, Proposed Operations Scenario)	Reduction in process contribution
Dust deposition at land ownership boundary (annual mean)	PC 189.0 mg/m ² /day PEC 228.0 — 65% of limit	PC 70.7 mg/m ² /day PEC 109.7 — 31% of limit	63%
PM10 annual mean at worst-case receptor	PC 26.96 µg/m ³ PEC 37.96 — 95% of limit	PC 3.18 µg/m ³ PEC 11.18 — 28% of limit	88%
PM10 24-hour mean (90.4th %ile), Method B	PC 79.16 µg/m ³ PEC 90.16 — 180% of limit	PC 9.55 µg/m ³ PEC 17.55 — 35% of limit	88%
PM2.5 annual mean at worst-case receptor	PC 10.71 µg/m ³ PEC 18.71 — 75% of limit	PC 1.14 µg/m ³ PEC 6.14 — 25% of limit	89%
Receptors exceeding the 24-hour PM10 limit	Up to 7 of 25 (2024); 5 of 25 in 2021	None, in any of the five modelled years	—

PC = process contribution (site alone). PEC = predicted environmental concentration (site plus background). Limit values: dust deposition 350 mg/m²/day (TA Luft); PM10 annual 40 µg/m³; PM10 24-hour 50 µg/m³ as a 90.4th percentile; PM2.5 annual 25 µg/m³.

The HSE has recommended a range of Conditions or mitigation measures in respect of air quality and dust. AWN have provided a response to each of these Conditions and mitigation measures in their Response (refer to Appendix A).

AWN concludes their response as follows:

*“The methodology employed in establishing the baseline conditions and demonstrating the operational phase impact of the proposed quarrying activities as set out in Chapter 9 – Air Quality of the EIAR are **appropriate and adequate** for the purposes of the air quality assessment. **Predicted dust deposition rates, and PM10 and PM2.5 concentrations from the quarrying operations are in compliance with the ambient air quality limit values** which are set for the protection of human health and the environment. **With proposed mitigation measures in place it is concluded that the proposed development will have a long-term, localised, direct, negative and not significant effect on air quality.**”*



*The Applicant accepts the recommended dust mitigation measures proposed by the HSE and has already undertaken to commit to these measures as set out in Chapter 9 – Air Quality. Furthermore, the Applicant will commit to a condition requiring compliance with the TA Luft limit value of 350 mg/m²/day (averaged over a year period) at the site boundary. **Monitoring of dust deposition in accordance with the Bergerhoff methodology will be employed to assess compliance.**" [Our Emphasis.]*

Whilst the HSE has raised concerns regarding the absence of historical dust monitoring, the methodology adopted in Chapter 9 provides an appropriate and robust basis for assessing both the historic and proposed quarrying activities. The use of long-term EPA monitoring data provides an appropriate basis for establishing background air quality, while the quarry-related emissions are assessed separately through conservative modelling and compared against the relevant ambient air quality standards and dust deposition limit.

The assessment and response from AWN Consulting demonstrates that the predicted impacts from the proposed future quarrying activities will comply with the applicable limits for dust deposition, PM₁₀ and PM_{2.5}. The Applicant welcomes the inclusion of suitably worded Conditions to any Grant of Permission in respect of air and dust.

Please refer to Appendix A for the full response prepared by AWN Consulting.

2.4.5 Hydrology and Hydrogeology

The HSE Submission raises a number of concerns relating to hydrology and hydrogeology, as follows:

"The groundwater quality should have been monitored whilst the quarry was in operation in the boreholes at the site to determine if there is a deterioration in quality as a result of construction related activities, if so and depending on the nature of the results then additional measures to protect groundwater quality will be implemented.

There is no details showing a full monitoring system historically while this quarry was in operation. The effectiveness of the additional mitigation should have been verified through a sampling programme."

"Any settlement lagoons should have been maintained and monitored carefully and should be constructed from the clayey subsoil that is present directly underneath the residual peat over much of the site and will operate as sealed lagoons. There is no detail on the construction or management of lagoons throughout the operational phase of this quarry. This mitigation measure prevents a loss of water through the base of the lagoons and will prevent any silt fines from the lagoon(s) going to groundwater.

There is no information on the rate of dewatering, the pump specification or the location of discharge at the Site. The course of the Raheendoran Stream has been altered by the historic quarrying activities the drainage affect and groundwater distribution regarding this activity which was done without an EIA at the time needs careful consideration."



Hydro-Environmental Services (HES) have reviewed the Submission made by the HSE in respect of hydrology and Hydrogeology and have prepared a full response to all queries and concerns raised, which is provided in full in Appendix B of this Response.

From the outset, HES states the following:

*“Other comments appear to arise from a **misunderstanding** of the nature of the historic quarry operation, including the **incorrect description of the site as a “gravel extraction facility”, an assumption that active quarry dewatering occurred, an assumption that the proposed development includes a soil and stone washing facility, and a reference to “residual peat over much of the site” at the site where no peat has been mapped.**”*

HES states the following in respect of the concerns raised by the HSE in respect of hydrology and hydrogeology:

“The Applicant welcomes the observations made by the HSE and considers that they are generally consistent with the environmental protection measures already incorporated within the Proposed Development.

The protection of groundwater, surface water and downstream water-dependent receptors formed a principal component of the EIAR and was supported by extensive site investigations, baseline monitoring, hydrogeological assessment, a Flood Risk Assessment and a Water Framework Directive Compliance Assessment.

The Applicant considers that:

- *the proposed water related mitigation measures provide a robust framework for the protection of groundwater and surface water;*
- *the proposed operational water management strategy reflects current best practice for quarry developments;*
- *the preparation of a site-specific Environmental Management Plan will provide an appropriate framework for implementing the water related mitigation measures identified within the EIAR; and*
- *a proportionate groundwater monitoring programme will provide additional environmental assurance during the operational life of the quarry.*

Accordingly, the Applicant considers that the observations made by the HSE are generally consistent with the water related environmental protection measures already incorporated into the Proposed Development.”

It is important to note that a number of the HSE's concerns are based on factual inaccuracies regarding the nature and operation of the historic quarry, including assumptions that active dewatering and soil and stone washing occurred and reference to “residual peat” over much of the site. These errors materially affect the relevance of certain of the concerns raised and should be taken into account when considering the HSE's submission.

As evidenced in this extract from the HES Response, the EIAR acknowledged the limitations of the data available, whilst utilising the best available data, alongside professional judgement,



to come to the conclusions outlined. Further to this, we consider the proposed mitigation measures to accord with the HSE's recommendations.

Please refer to Appendix B of this Submission for full details of the HES response to the concerns raised by the HSE in respect of hydrology and hydrogeology.

2.4.6 Restoration of the Proposed Quarry

The HSE provides the following commentary in respect of the proposed future restoration of the quarry:

"Potential for future health gain from the restoration of the proposed development should be included in the EIAR.

There is not in great detail on the restoration process or full detailed plans. The map provided is not comprehensive. The Environmental Management Plan should lay out how the retained habitats will be protected during extraction; how continued management is undertaken post restoration and how the results are monitored to allow management revisions as necessary. This monitoring should be undertaken for the first 5 years after restoration.

The National Environmental Health Service recommends that the Submission of a full Site Restoration Plan, which includes a timeframe for undertaking restoration works, is included as a condition of planning permission, if granted."

A 'Restoration Plan' was prepared by Macro Works and submitted as part of the subject Application, which provided a visual plan for the restoration, alongside detailed annotations for the proposed remediation of each area of the site and a planting plan. The Applicant would welcome the inclusion of a suitably worded Condition in respect of site restoration to any future Grant of Permission for the subject Application, should it be forthcoming.

The HSE Submission also recommends that fencing be erected around any proposed water-filled voids, formed as part of the restoration of the quarry. Whilst it is not proposed that the subject site would be publicly accessible following restoration, the Applicant would welcome the inclusion of a suitably worded Condition to any future Grant of Permission in this regard, should An Coimisiún Pleanála consider it necessary.

2.4.7 Cumulative Impacts

The HSE states the following in respect of Cumulative Assessment:

"The National Environmental Health Service notes the assessment of cumulative impacts throughout the EIAR and is not satisfied that the projects listed in the EIAR were assessed for the potential to give rise to cumulative impacts."

This extract above is the full extent of the commentary provided by the HSE in respect of Cumulative Assessment. The HSE provides no specific details of why they have come to the conclusion that they are *"not satisfied that the projects listed in the EIAR were assessed for the potential to give rise to cumulative impacts"*. They have not identified any specific deficits



in the Cumulative Assessment. We therefore submit that this statement is unsupported by specific evidence and should not outweigh the project-specific cumulative assessments contained within the EIA.

2.4.8 Health Gain / Current Recreational Use

The HSE provides the following commentary in respect of health gain and traffic:

"It is noted that the rural area is being used for cycling, pedestrians and awareness should be raised with HGV drivers on these small roads to take due care. It is also noted that these roads are quite [sic.] and used by walkers/ runners living in the area. Measures should be taken to reduce the volumes of through-traffic, speeds of traffic especially HGVs, and especially in the vicinity the quarry and housing.

The Introduction of traffic calming measures / enforce low traffic speeds for access and exit from the quarry making it safer for cyclists and other road users."

Details of proposed Operational Mitigation Measures are provided in Section 13.7.2 of the EIAR, as submitted as part of the Subject Application. The Applicant would welcome the inclusion of a suitably worded Condition in respect of quarry traffic calming measures to any future Grant of Permission for the subject Application, should it be forthcoming, in line with the mitigation measures proposed in the submitted EIAR. We would however highlight that it is not within the control of the Applicant to introduce traffic calming measures within the surrounding local road network outside of lands within the Applicant's control.

2.4.9 3rd Party Claims

The Submission states the following in respect of the 3rd Party Submission for the subject Application:

"The conclusion that Air, noise and water emissions did not cause a nuisance at sensitive receptors is not supported by any evidence and is contradicted by a 3rd Party Submission on the planning file."

Specific comments relating to air, noise, dust, and water have been dealt with under their respective headings above.

In respect of the claims that the information provided as part of the subject Application is contradicted by a 3rd Party Submission, we highlight that there was only one 3rd Party Observer for the subject Application. Having reviewed this 3rd Party Submission, we have not located any specific claims that this quarry produced noise, air, or water emissions which caused nuisance to any sensitive receptor. Therefore, it is unclear which specific information contained within the Observation the HSE considers to contradict the findings of the EIAR.

The Responses from AWN Consulting and Wave Dynamics confirm that there is no evidence of any historic nuisance complaints to the Local Authority or EPA.



In this regard, we further highlight that this 3rd Party Observer does not appear to live within close proximity to the subject site, and their property would therefore not be considered a sensitive receptor.

Irrespective of the above, as previously highlighted to ACP, it is the assertion of Milford Quarries Limited that this sole 3rd Party Observer is frivolous and vexatious, with a demonstrated history of attempting to frustrate the operation of their business. In this regard, we refer to the previous Submission made by the Applicant on 8th June 2026, as well as similar assertions made under Applications Reg. Ref. 324014-25 and Reg. Ref. 500902-26. We would request that ACP be mindful of this assertion when reviewing the HSE's claims.

2.4.10 Closing Comments

The Applicant welcomes this Submission from the HSE, noting the key role they play in the protection of human health in Ireland.

The HSE has recommended a number of Conditions which should be included, should a Grant of Permission be forthcoming. The Applicant welcomes the inclusion of these Conditions, as appropriate, such as the following:

- Introduction of fencing around water bodies (as part of the restoration plan);
- Provision of updated restoration plan with additional details;
- Noise limits;
- Ongoing monitoring (incl. air and dust) outside of daytime hours;
- Implementation of a complaints procedure; and
- Well sampling.

We also highlight that the HSE has similarly suggested Conditions for the concurrent S177E Application which relates to the subject site, which are responded to under separate cover.

The Applicant has comments on a small number of suggested Conditions, as follows:

Operating Hours

The HSE in their submission recommends that a Condition should be applied restricting the hours of operation as follows:

"Operations should be limited to 08.00 hours and 18.00 hours Monday to Friday and 08.00 hours and 14:00 hours on Saturday (with vehicles accessing the site from 7.00 hours. No operations are permitted on Sunday or public holidays)."

The 'Planning Report' submitted as part of the Subject Application outlined the following proposed hours of operation: 07:00 – 18:00 Monday to Friday and 07:00 – 13:00 on Saturdays. These hours are proposed to apply, except in emergency, and then on advice of the Planning Authority, working will not occur on Sundays and Bank Holidays.

The Applicant welcomes the inclusion of a suitably worded Condition in respect of the operating hours of the quarry, but would ask that these hours be those set out in the Planning Application documentation, as outlined above. These hours align with the existing operating hours of the Applicants other sites elsewhere, which are operating successfully.

Internal and Access Haul Roads

The HSE recommends the following Condition in respect of internal and access haul roads:

"Access / internal haul roads should be kept clean and maintained in a good state of repair, i.e., any potholes are filled, and large bumps removed, to avoid unwanted rattle and "body-slap" from heavy goods vehicles."

The Applicant would welcome a Condition in respect of access and internal haul roads, subject to reasonable wording.

3.0 CONCLUSION

This document seeks to respond to the Submissions made by the Development Applications Unit, Transport Infrastructure Ireland, Laois County Council, and the Health Service Executive in respect of Application ACP Reg. Ref. 324015-25.

As demonstrated throughout this document, the majority of the prescribed bodies consulted raise no objection to the proposed development and, where recommendations or Conditions have been suggested, the Applicant is generally supportive of their inclusion in any future Grant of Permission. In relation to matters raised by the Health Service Executive, this Response provides further clarifications and has demonstrated that the proposed development has been subject to a comprehensive Environmental Impact Assessment, supported by specialist technical input and appropriate mitigation measures.

The Applicant respectfully submits that the proposed development represents the appropriate continuation of an established quarrying operation at a location containing a proven aggregate resource, and that the likely significant effects of the development have been properly identified, assessed and addressed. It is therefore considered that the proposed development can proceed without giving rise to unacceptable impacts on the environment, human health, residential amenity, or the surrounding road network.

Having regard to the information submitted with the application, the Environmental Impact Assessment Report, the responses provided herein and the accompanying specialist appendices, the Applicant respectfully requests that An Coimisiún Pleanála Grant Permission for the proposed development under Section 37L. We would also implore the Commission to make the decisions for the S177E and S37L Applications in tandem, due to the interlinked nature of these two Applications.

We trust the above is in order and would appreciate written confirmation of receipt of this response.



Laura Crowe

Laura Crowe
Senior Planner
Tom Phillips + Associates

Appendix A – Correspondence with Carlow County Council
Appendix B – Response from AWN Consulting
Appendix C – Response from Wave Dynamics
Appendix D – Response from Hydro-Environmental Services



Appendix A Correspondence with Carlow County Council

From: Fergus Mulhane <fmulhane@carlowcc.ie>
Sent: Thursday, 05 August 2026 10:13:14
To: carlow@carlowcc.ie; carlow@carlowcc.ie
Cc: Leon Carroll <leocarroll@carlowcc.ie>
Subject: Redrock Quarry site

Hi Robert,

With regard to your query relating to historic environmental monitoring results for the Redrock Quarry site (Section 261 Register QY 14) at Clegrennane, Bilboa, Co. Carlow, I can confirm that the Environment section of Carlow Co Council does not hold any such monitoring results on file for that site.

Kind Regards,

Fergus Mulhane

Fergus Mulhane
Executive Director
Environment & Ecology
Carlow Co Council
48 Oulson Street
Carlow
0800 1 30379
fmulhane@carlowcc.ie

 SUSTAINABLE
DEVELOPMENT
GOALS



Appendix B

Response from AWN Consulting

10 August 2026

257501.0506AL02_rev1

RE: Redrock Quarry 37L Submission Response – Air Quality

To whom it may concern,

This letter includes a response to the air quality items raised by the National Environmental Health Service (HSE) in their submission regarding the 37L planning application for proposed quarrying activities at a site in Clongrennane, Bilboa, Co. Carlow, planning application reference number ACP-324015-25.

INTRODUCTION

AWN Consulting Ltd., a Trinity Consultants Company, prepared Chapter 9 – Air Quality of the EIAR for the proposed development planning application. Chapter 9 – Air Quality set out the relevant assessment criteria and methodology; included a description of the baseline environment; and assessed the potential impacts to air quality from the proposed quarrying activities. As stated in Chapter 9 – Air Quality of the EIAR, the primary impacts to air quality will occur due to operational activities such as extraction of materials; screening, crushing, and processing of materials; and movement of vehicles on site which have the potential to release dust and particulate matter (PM₁₀ and PM_{2.5}) emissions. Engine emissions from vehicles accessing the site have the potential to impact air quality through the release of nitrogen dioxide (NO₂) and particulate matter (as PM₁₀ and PM_{2.5}) emissions.

The baseline environment was prepared with reference to published air quality data from the Environmental Protection Agency (EPA) and Met Éireann. Impacts were assessed against the most recently published air quality guidance and policies.

SUBMISSION RESPONSE

The submission from the HSE includes a specific section with regards to air and air quality related matters.

Baseline Environment & Monitoring Data

The HSE state that the site and the surrounding area fall into air monitoring category Zone D, which is in line with the findings of Chapter 9 – Air Quality of the EIAR.

It is stated that there was no boundary dust monitoring undertaken at the project lands during quarry operation. There is also a contradictory reference to variability in the deposition rates recorded across the monitoring months and locations. The reference to deposition rates and variability in the data by the HSE is incorrect. Historical dust monitoring data from the period the quarry was operational is not available.

The baseline environment with regard to dust deposition within Chapter 9 – Air Quality of the EIAR was established by reference to a study undertaken by the UK ODPM (see Section 9.3.2 of Chapter 9 – Air Quality). As discussed in Section 9.3.2 of Chapter 9 – Air Quality, as the subject site is located in a predominantly rural area, a background dust deposition level of 39 mg/m²/day was considered appropriate for the region of the subject site at Clongrennan, Co. Carlow.

AWN Consulting Ltd. Registered in Ireland No. 319812 Directors: T Donnelly / D Larson / P Greywall

HEADQUARTERS

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Baseline concentrations of particulate matter (PM₁₀ and PM_{2.5}) were established with reference to long-term monitoring data from the Environmental Protection Agency (EPA) over the 2020 – 2024 period. This included a review of representative rural Zone D monitoring sites to establish baseline concentrations of PM₁₀ and PM_{2.5} in the region of the subject site.

The use of publicly available monitoring data for establishing baseline concentrations of pollutants is considered best practice and is an appropriate methodology. The use of long-term monitoring datasets is preferred over short-term monitoring data as it provides information on long-term trends in air quality. Additionally, reference to monitoring studies is also deemed appropriate for establishing background concentrations when historical monitoring data is unavailable. The approach used in Chapter 9 – Air Quality to establish the baseline environment is deemed appropriate and sufficient for the purposes of the assessment.

The HSE submission considers the baseline environment to not be as per the original green field agricultural site, but instead consider the baseline environment to be after years of historic quarrying activities. The operational phase assessment undertaken in Section 9.4.3.1 of Chapter 9 – Air Quality of the EIAR included modelling of emissions of dust deposition and PM₁₀ and PM_{2.5} from the proposed quarrying activities and added these to the estimated background pollutant concentrations. The total site pollutant contribution plus background concentrations was then compared with the relevant ambient air quality limit value in order to assess the full impact to air quality. The baseline environment is established in the absence of the development to avoid a double counting of emissions. The quarrying activities are captured separately within the modelling.

Dust Limit Values

The HSE recommends that the TA Luft limit value of 350 mg/m²/day is adopted to establish the impact operational phase quarrying activities from the proposed development on the surrounding environment. This limit value has been used in Chapter 9 – Air Quality as set out in Section 9.2.1.3 and Section 9.4.3.1.1 of Chapter 9 in the EIAR. It is stated in Section 9.7 of Chapter 9 – Air Quality that monitoring at the site boundary should be undertaken, to evaluate whether compliance with the TA Luft limit value of 350 mg/m²/day is achieved, once the quarry is operational and to evaluate whether mitigation measures are working satisfactorily.

If planning is granted the Applicant will commit to a condition that compliance with the TA Luft limit value of 350 mg/m²/day (averaged over a year period) is required at the site boundary. Monitoring of dust deposition in accordance with the Bergerhoff methodology will be employed to assess compliance. This is industry standard for quarrying and is recommended by the EPA in *Environmental Management Guidelines - Environmental Management in the Extractive Industry (Non-Scheduled Minerals)*.

Predicted emissions of PM₁₀ and PM_{2.5} have been compared with the ambient air quality limit values stipulated within the Ambient Air Quality Standards Regulations 2022 (S.I. 739 of 2022) and Table 2 of Annex I in Directive (EU) 2024/2881. These standards supersede the Ambient Air Quality Standards Regulations 2011 referred to by the HSE.

Impact Assessment Methodology

The HSE submission states that the EIAR did not demonstrate that the quarrying activities were within the predicted limits to protect health with regard to dust, and goes on to state that the EIAR relies on predictive methodology that has not been validated through monitoring whilst the quarry was operational.

The air dispersion modelling methodology employed within Chapter 9 – Air Quality of the EIAR is the appropriate methodology and follows guidance from the Irish Environmental Protection Agency - *Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)* (2020) and USEPA guidance. The modelling software requires data on the surrounding physical environment, site-specific emissions data and includes meteorological data from Met Eireann to account for varying weather conditions. The

modelling assessment predicted the dust deposition and PM₁₀/PM_{2.5} emissions from proposed quarrying activities. The results of the modelling assessment plus background concentrations were compared with the ambient air quality limit values set out in the most recent EU ambient air quality directive 2024/2881.

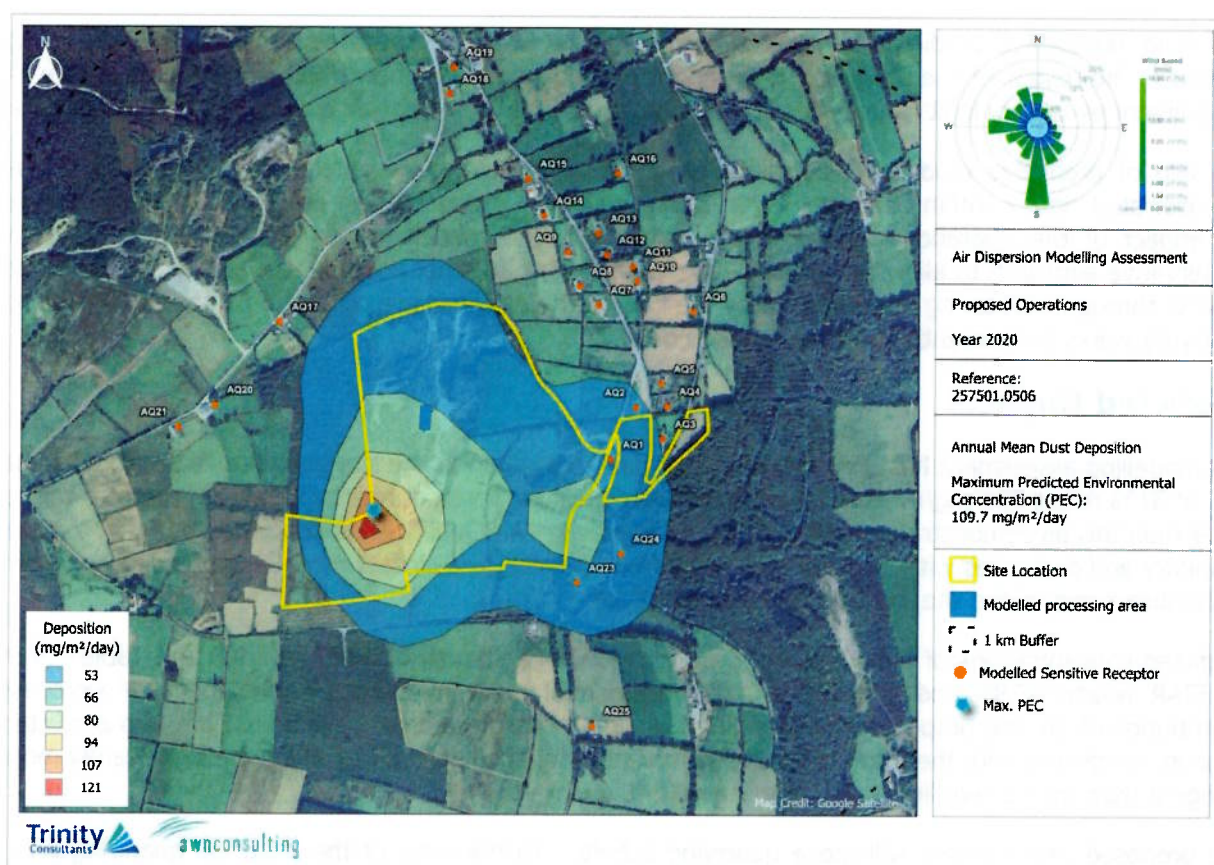
The use of predictive modelling is considered an appropriate and acceptable methodology and has demonstrated clearly within Chapter 9 – Air Quality that with proposed best practice mitigation in place the impact of the operational phase is not significant. The modelling assessment has employed a conservative approach to allow for a 'worst-case' assessment. It is not possible to 'validate' the modelled impacts through monitoring as suggested by the HSE as the activities are proposed for the future and no quarrying works are currently being undertaken on site.

Predicted Impacts

The modelling assessment has demonstrated that dust deposition at the site boundary is predicted to be low, at 31% of the 350 mg/m²/day limit value. Dust deposition levels at nearby sensitive receptors will be lower than this as demonstrated in Figure 9.3 of Chapter 9 – Air Quality, dust deposition peaks at the site boundary and decreases with increasing distance from the site. The closest receptor to the site is c.445m to the direct east of the site, opposite the site entrance.

Predicted concentrations of PM₁₀ and PM_{2.5} are also low as demonstrated in Table 9.8 and Table 9.9 of the EIAR, reaching 28% and 25% of their respective annual mean limit values. Annual mean PM₁₀ process contributions from the proposed site activities (excluding background concentrations) are also predicted to be in compliance with the future post-2030 ambient air quality limit values which are significantly more stringent than the current limits; 20 µg/m³ versus 40 µg/m³ for PM₁₀.

The proposed development will move quarrying activities to the west of the historical quarrying area, which is away from the sensitive receptors, thereby further reducing potential impacts. This is demonstrated by Figure 9.3 – Figure 9.5 in Chapter 9 – Air Quality, the peak concentration is located to the west of site area (demonstrated in red on figures).



Source: Figure 9.3 Annual Mean Dust Deposition Rate (mg/m²/day) – Proposed Operations Scenario, Chapter 9 Air Quality, EIA (December 2025).

Predicted Impacts From Future Quarrying versus Historic Impacts

The 37L planning application (reference ACP-324015-25) has been accompanied by a 177E planning application for substitute consent for historical quarrying activities at the site (planning reference ACP-324014-25). The 177E application was accompanied by an rEIA which included an assessment of the historical quarrying activities and the subsequent impact on air quality and human health in Chapter 9.

Should planning permission for future quarrying be granted, the air quality assessment undertaken has demonstrated that emissions from the future site will be in compliance with the TA Luft limit value of 350 mg/m²/day for dust deposition and within the ambient air quality limits for PM₁₀ and PM_{2.5}. As evidenced by the comparison in Table 1 below, the future quarrying activities will result in lesser impacts to air quality than the historical activities. The historical works have also been modelled applying a conservative approach, similar to the future activities.

Table 1 provides a comparison of the historical quarrying and the future quarrying activities and the percentage reduction in emissions. The future quarrying operations will apply a number of mitigation measures, as listed in Section 9.6 of the 37L EIA and discussed below, which aid in reducing emissions from future activities. There is predicted to be up to an 89% reduction in emissions in the future scenario as per Table 1. Therefore, any future quarrying activities will be actively mitigated and will not result in a significant impact to air quality within the area as demonstrated by the modelling.

Table 1. Comparison of Historic Quarrying Air Quality Impacts versus Future Proposed Operations

Metric	Historic operations — 177E (rEIAR, Substitute Consent Operations Scenario)	Proposed operations — 37L (EIAR, Proposed Operations Scenario)	Reduction in process contribution
Dust deposition at land ownership boundary (annual mean)	PC 189.0 mg/m ² /day PEC 228.0 — 65% of limit	PC 70.7 mg/m ² /day PEC 109.7 — 31% of limit	63%
PM10 annual mean at worst-case receptor	PC 26.96 µg/m ³ PEC 37.96 — 95% of limit	PC 3.18 µg/m ³ PEC 11.18 — 28% of limit	88%
PM10 24-hour mean (90.4th %ile), Method B	PC 79.16 µg/m ³ PEC 90.16 — 180% of limit	PC 9.55 µg/m ³ PEC 17.55 — 35% of limit	88%
PM2.5 annual mean at worst-case receptor	PC 10.71 µg/m ³ PEC 18.71 — 75% of limit	PC 1.14 µg/m ³ PEC 6.14 — 25% of limit	89%
Receptors exceeding the 24-hour PM10 limit	Up to 7 of 25 (2024); 5 of 25 in 2021	None, in any of the five modelled years	—

PC = process contribution (site alone). PEC = predicted environmental concentration (site plus background). Limit values: dust deposition 350 mg/m²/day (TA Luft); PM10 annual 40 µg/m³; PM10 24-hour 50 µg/m³ as a 90.4th percentile; PM2.5 annual 25 µg/m³.

Proposed Mitigation

The HSE submission includes a range of recommended mitigation measures to minimise dust nuisance. Section 9.6 of Chapter 9 – Air Quality sets out similar measures which were incorporated into the operational phase assessment. The below table provides a comparison of the proposed mitigation measures in Chapter 9 – Air Quality of the EIAR against the HSE recommended measures. All recommended measures from the HSE have already been committed to within the EIAR.

The below table also includes additional mitigation measures, not recommended by the HSE, which the Applicant will commit to in order to ensure dust emissions from site operations are reduced.

As can be seen through the committed measures in the below table the Applicant is committed to reducing dust emissions from any future quarrying activities to ensure no significant air quality impacts to the surrounding environment occur. As demonstrated by the air impact assessment within Chapter 9 of the EIAR, dust deposition and particulate matter emissions from operational phase activities will be low and significantly less than the relevant limit values.

HSE Recommended Mitigation Measure	Proposed Mitigation Measure in EIAR Chapter 9 - Air Quality
Minimise drop heights when handling dry or fine materials during windy weather materials.	Drop heights will be minimised when handling material.
Minimise drop heights when handling wet material during low wind speeds, protection from wind where possible.	Drop heights will be minimised when handling material.
Use of water sprays / tractor & bowser to moisten surfaces during dry weather.	Site roads will be dampened using wet methods during dry periods. All stockpiles will be kept damp using wet methods during dry periods.

HSE Recommended Mitigation Measure	Proposed Mitigation Measure in EIAR Chapter 9 - Air Quality
Minimise distances of onsite haul routes where possible.	Traffic management measures will be implemented.
Restrict vehicle speeds through signage / staff training.	Speeds restrictions will in place on site. Speeds will be reduced to a maximum of 20 kmph.
Locate of haul routes away from sensitive receptors.	Traffic management measures will be implemented.
Material stockpiling provided with adequate protection from the wind.	Where possible stockpiles will be sited to take advantage of shelter from wind. Stockpiles within the quarry void will be protected from significant dust blow due to the topography.
Use of road sweeper to reduce the amount of available material for resuspension.	Inspection, sweeping and cleaning of site roads and adjoining public roads will be undertaken on a regular basis, minimum every other day. A road sweeper will be utilised if required.
Existing site boundary hedgerows should be maintained and supplemented by additional operation landscaping to minimise the migration of dust beyond the overall site boundary.	The perimeter natural vegetation and screening mounds will be maintained to allow for natural screening of dust from nearby receptors.
N/A	The site contains an existing wheel wash which will be maintained. All trucks must pass through the wheel wash prior to exiting onto the private site access road.
N/A	All fine materials will be covered when leaving the site to prevent dust escaping.
N/A	Idle times will be reduced by providing an efficient material handling plan that minimizes vehicle wait time.
N/A	Regular maintenance of plant and equipment will be undertaken to ensure they will perform the most efficiently.
N/A	The bucket of the loading shovel will be kept low when tipping.
N/A	Speeds will be reduced on the ramps to the stockpile.
N/A	The destocking of a stockpile will be confined to a single discrete area.

HSE Recommended Mitigation Measure	Proposed Mitigation Measure in EIAR Chapter 9 - Air Quality
N/A	Regular toolbox talks will be held with the loading shovel drivers to ensure they employ best practice when working stockpiles.

Conclusion

The methodology employed in establishing the baseline conditions and demonstrating the operational phase impact of the proposed quarrying activities as set out in Chapter 9 – Air Quality of the EIAR are appropriate and adequate for the purposes of the air quality assessment. Predicted dust deposition rates, and PM₁₀ and PM_{2.5} concentrations from the quarrying operations are in compliance with the ambient air quality limit values which are set for the protection of human health and the environment. With proposed mitigation measures in place it is concluded that the proposed development will have a **long-term, localised, direct, negative** and **not significant** effect on air quality.

The Applicant accepts the recommended dust mitigation measures proposed by the HSE and has already undertaken to commit to these measures as set out in Chapter 9 – Air Quality. Furthermore, the Applicant will commit to a condition requiring compliance with the TA Luft limit value of 350 mg/m²/day (averaged over a year period) at the site boundary. Monitoring of dust deposition in accordance with the Bergerhoff methodology will be employed to assess compliance.

Sincerely,



AWN CONSULTING LTD

Ciara Nolan

Associate (Air Quality)



Appendix C

Response from Wave Dynamics

Date: 10/08/2026

Reference: WDA240919LT_C_01

Job Number: WDA240919

Project: Application for Substitute Consent (Ref: S177E) & Concurrent S37L Application Redrock Quarry.

Location: Clogrennane, Bilboa, Co. Carlow

Title: Technical Response to HSE National Environmental Health Service Submission Application for Substitute Consent (Ref: S177E) & Concurrent S37L Application

Re: Application for Substitute Consent (Ref: S177E) & Concurrent S37L Application Redrock Quarry.

Subject: Chapter 11 – Noise & Vibration

To Whom It May Concern,

Wave Dynamics have been engaged by Tom Phillips & Associates to provide formal technical acoustic input regarding the remedial Environmental Impact Assessment Report (rEIAR) for a Substitute Consent application under Section 177E, and the concurrent Section 37L application, at Redrock Quarry. The development consists of an existing sandstone quarry located in the townland of Clogrennane, Bilboa, Co. Carlow, comprising an historical extraction area of approximately 8.66 hectares and associated processing plant. This formal technical response directly addresses the submission made by the National Environmental Health Service (NEHS) of the Health Service Executive (HSE). Specifically, this response details the technical position regarding the absence of real-time baseline operational noise monitoring data during the historical Section 177E period, regarding public health risks, and validates the robust predictive methodologies used within Chapter 11 to assess historical acoustic impacts.

The HSE submission notes that the rEIAR relies on predictive methodology and lacks concurrent operational noise data. As the quarry had already ceased all extraction and processing operations at the time the rEIAR was commissioned and prepared, it was not possible to capture live, real-time noise logs of historical mechanical extraction or mobile crushing and screening activities. The baseline monitoring data presented in the rEIAR accurately and transparently captures the background ambient noise environment of the area without the facility in use. This approach complies fully with standard acoustic assessment methodologies for retrospective planning (Substitute Consent). It establishes a robust, conservative baseline that represents the true receiving environment, allowing for a precise calculation of the historical operational noise levels over the natural background conditions.

The submission asserts that the predictive methodology is unvalidated and fails to demonstrate health compliance. This conclusion is rejected based on standard regulatory practices. In the absence of historical logging, Chapter 11 utilised a noise model based on documented operational parameters in accordance with BS 5228, engineering layouts, and industry-standard runtime assumptions (e.g., 80% excavator on-time and 50% machinery on-time). To ensure a robust public health evaluation, day-time noise emissions were modelled at the nearest Noise Sensitive Locations (NSLs) using conservative parameters designed on a worst-case basis. The model assumed all pieces of heavy equipment operated simultaneously (which was unlikely) at the absolute closest point of the extraction boundary to each receptor. Under these, worst-case conditions, the model demonstrates that the key receptors remained within allowable tolerances when operational controls are considered.

We are not aware of any previous complaints with the Environmental Protection Agency or Carlow County Council in respect of noise generated by the quarry. The absence of any recorded, actionable, or ongoing environmental noise complaints throughout the historic operational lifespan of the quarry serves as a verifiable baseline metric.

Conclusion

As there is no measurement data available for the development during its operational period, best practice is to undertake a detailed predictive noise assessment using recognised industry-standard methodologies and conservative input assumptions. This approach is consistent with the requirements of EPA Guidance Note for Quarries and Ancillary Activities, ISO 9613-2, and established planning and environmental impact assessment practice where direct measurement data is unavailable. The predictive assessment presented within the rEIAR was based on documented operational information, plant inventories, site layout plans, receptor locations, and worst-case operating scenarios specifically designed to ensure that potential impacts were not underestimated. As such, the assessment in the absence of noise measurement data provides a robust and scientifically defensible evaluation of the historical acoustic environment and represents the most appropriate methodology available for consideration within a retrospective Substitute Consent application.

Should you have any queries or require any further information please do not hesitate to contact us directly.

Regards,



Shannon Doherty

Senior Consultant

BSc (Hons), IOA Diploma (Acoustics & Noise Control), MIOA

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Appendix D
Response from Hydro-Environmental Services

Date: 24th July 2026
Our Ref: P1687-0_0052

An Coimisiún Pleanála
64 Marlborough Street,
Dublin 1,
D01 V902.

To whom it may concern,

Re: Response to Hydrology and Hydrogeology related observations made by the HSE in relation to the Proposed Development Application at Red Rock Quarry at Clogrennane, Bilboa, Co. Carlow.

ACP Ref: 324015-25 (Proposed Development)

Hydro-Environmental Services (HES) were requested by Tom Phillips and Associates (TPA), to respond to observations made by the HSE in relation to the Proposed Development (37L application) at Red Rock Quarry, Clogrennane, Bilboa, Co. Carlow.

The letter response addresses the observations made by the HSE relating to geology, hydrology and hydrogeology. Responses to other observations not relating to geology/hydrology-hydrogeology are provided separately.

Much of the HSE letter is backward looking, however, the 37L application is forward looking. In this letter response we have only addressed the forwarding looking aspects of the HSE submission.

1 STATEMENT OF EXPERIENCE – QUARRY WATER MANAGEMENT

Hydro-Environmental Services has extensive experience in quarry drainage, hydrology and hydrogeology, having worked on more than 100 quarry projects in Ireland and Northern Ireland over the past 20 years. This experience includes EIAR and rEIAR assessment, flood risk assessment, quarry drainage design, groundwater assessment, water-quality monitoring and construction-stage environmental management.

This response has been prepared by Michael Gill and Conor McGettigan, who also prepared the submitted Hydrology and Hydrogeology Chapter. Their qualifications and experience are set out in Section 8.1.2 of the submitted EIAR/rEIAR.

2 RESPONSE TO HSE HYDRO RELATED OBSERVATIONS

2.1 Overview

The Applicant welcomes the observations made by the HSE. The majority of the comments relate to the implementation of operational environmental controls rather than the adequacy of the environmental assessment itself. These matters were considered in detail within Chapter 7 (Land, Soils and Geology), Chapter 8 (Hydrology and Hydrogeology), the Water Framework Directive Compliance Assessment and the Flood Risk Assessment, each of which assessed the potential effects on groundwater, surface water, water-dependent habitats and downstream receptors. These assessments were underpinned by extensive geological, hydrological and hydrogeological investigations, and appropriate baseline monitoring.

Accordingly, the proposed development has been designed to incorporate embedded mitigation measures for the protection of groundwater, surface water and downstream receptors. Many of the recommendations made by the HSE are therefore already reflected within the proposed mitigation strategy and can be incorporated into the operational Environmental Management Plan.

Other comments appear to arise from a misunderstanding of the nature of the historic quarry operation, including the incorrect description of the site as a "gravel extraction facility", an assumption that active quarry dewatering occurred, an assumption that the proposed development includes a soil and stone washing facility, and a reference to "residual peat over much of the site" at the site where no peat has been mapped.

As such, it is also important to distinguish between:

- the historic development assessed retrospectively in the rEIAR (Section 177E Application);
- the current inactive condition of the quarry;
- the proposed restoration of the historic quarry; and
- the separate Section 37L application for future quarry development.

This letter response only addresses the forward looking (Proposed Development) 37L application.

2.2 Operational Controls and Environmental Management Plan

A key concern of the HSE is the prescription and implementation of proposed mitigation for protection of surface water quality and habitats and groundwater quality and groundwater resources.

The HSE recommends that a comprehensive Environmental Management Plan (EMP) be prepared to ensure the protection of surface water, groundwater and nearby water supplies during the construction, operational and restoration phases of the Proposed Development.

The Applicant welcomes this recommendation. The protection of the water environment has been a primary consideration throughout the design and assessment of the Proposed Development and the mitigation measures presented within the EIAR have been developed on the basis of the extensive geological, hydrological and hydrogeological investigations undertaken for the site. Accordingly, it is proposed that these measures will be incorporated into a site-specific Environmental Management Plan (EMP) to be implemented throughout the life of the development.

The EMP will provide the implementation framework for the mitigation measures already committed to within the EIAR. It is not intended to introduce new mitigation, but rather to define the procedures, responsibilities, inspection regimes and reporting mechanisms necessary to ensure the effective implementation of the intended mitigation strategy.

The EMP will include the following:

- Identification of environmental management responsibilities;
- Procedures for enquiries and complaints;
- implementation and maintenance of the proposed drainage and settlement systems;
- pollution prevention procedures;
- groundwater and surface water monitoring programme;
- inspection, maintenance and reporting procedures;
- contingency procedures; and
- restoration-phase water management proposals.

The proposed EMP will therefore provide a practical mechanism for implementing the water related mitigation measures already identified within the EIAR and will ensure that water-related environmental protection measures are consistently applied throughout construction, operation and restoration. Other environmental controls relating to Air and noise will also be included in the EMP.

The Applicant therefore considers that the HSE recommendation complements, rather than modifies, the mitigation strategy already committed to within the EIAR.

2.3 Operational Water Management

The HSE has made a number of recommendations relating to the operational management of surface water, groundwater and potential sources of contamination during the operation of the proposed quarry.

The Applicant welcomes these recommendations, which are generally consistent with the mitigation measures and environmental management commitments already incorporated into the Proposed Development and described within Chapter 8 of the EIAR.

The operational water management system forms an integral part of the quarry design and has been developed on the principles of source control, attenuation, treatment and monitoring, thereby reducing the potential for impacts on both groundwater and surface water receptors.

The proposed operational water management strategy has been developed to minimise the potential for impacts on surface water and groundwater and includes, amongst other measures:

- collection and management of surface water through a purpose-designed drainage network, settlement ponds and attenuation features;
- regular inspection and maintenance of drainage infrastructure and settlement ponds to ensure their continued effectiveness;
- implementation of pollution prevention measures, including bunded storage of fuels and chemicals, designated refuelling and plant maintenance areas, and spill response procedures;
- implementation of groundwater and surface water monitoring in accordance with the monitoring programme outlined in the EIAR;
- ongoing inspection of water management infrastructure and implementation of corrective measures where required; and
- incorporation of these measures into the site Environmental Management Plan to ensure their implementation throughout the construction, operational and restoration phases of the development.

These measures have been assessed as part of the EIAR, Water Framework Directive Assessment and Flood Risk Assessment, all of which concluded that, following the implementation of the proposed mitigation measures, the Proposed Development would not give rise to significant adverse effects on surface water resources, groundwater resources or downstream water-dependent receptors.

Accordingly, the Applicant considers that the operational water management measures proposed for the development are robust, proportionate and consistent with current best practice for quarry developments, and that the HSE recommendations are either already incorporated into the Proposed Development or can be readily implemented through the proposed Environmental Management Plan.

2.4 Groundwater Monitoring Programme

The HSE recommends that private drinking water supplies in the vicinity of the Proposed Development be identified and monitored before, during and following quarry operations.

The potential for the Proposed Development to impact on local groundwater resources, including public and private water supplies, formed a key component of the Hydrology and Hydrogeology assessment presented within Chapter 8 of the EIAR.

Section 8.5.2.9 of the EIAR included an assessment of the potential effects of the Proposed Development on local private groundwater well supplies. Every private dwelling in the local

area was conservatively assumed to be supplied by a private groundwater well. The closest dwellings to the site were identified along local roads as follows: ~184m to the northeast of the existing quarry void, ~250m to the southeast, ~400m to the southwest and ~320m to the northwest of the proposed quarry extension area. All of these closest dwellings are beyond the 150 m recommendation made by the HSE.

The hydrogeological assessment included a detailed characterisation of the underlying geological and hydrogeological setting, groundwater levels, groundwater flow directions, groundwater vulnerability, aquifer characteristics and groundwater-dependent receptors. Existing groundwater abstractions within the study area were identified and assessed as part of the baseline assessment, together with the potential for changes in groundwater quantity and groundwater quality during the construction, operational and restoration phases of the Proposed Development.

The assessment concluded that the Proposed Development is located within a Poor Bedrock Aquifer comprising generally unproductive bedrock with limited groundwater flow and short groundwater flow paths. Furthermore, the proposed extraction methodology, together with the hydrogeological characteristics of the site, indicate that significant impacts on surrounding groundwater supplies are not anticipated. The EIAR therefore concluded that the residual effects on groundwater resources and water supplies would be imperceptible to slight and not significant following the implementation of the proposed mitigation measures.

Notwithstanding these conclusions, the Applicant acknowledges that a proportionate groundwater monitoring programme represents good environmental practice for a development of this nature.

Accordingly, where considered appropriate by the competent authority, the Environmental Management Plan will include a Groundwater Monitoring Programme to provide additional assurance during the operational phase of the quarry. Such a programme will include:

- Annual groundwater monitoring at MW01 and MW04;
- baseline sampling of these wells prior to commencement of the development;
- Continuous monitoring of groundwater levels and annual water quality monitoring during quarry operation;
- comparison of monitoring results with established baseline conditions and Groundwater Regulations (S.I. 9/2010);
- investigation of any significant or sustained changes identified through the monitoring programme;
- implementation of appropriate corrective measures where monitoring demonstrates that an impact attributable to the Proposed Development has occurred; and
- reporting of monitoring results to the Planning Authority as part of the overall environmental compliance programme.

The final scope, monitoring frequency and analytical parameters can be agreed with the Planning Authority, having regard to the hydrogeological conceptual model presented within the EIAR, the distribution of groundwater receptors and the level of environmental risk identified.

The Applicant considers that this represents a proportionate and risk-based approach. The extensive hydrogeological investigations completed for the EIAR indicate that significant impacts on local groundwater supplies are unlikely; however, the implementation of an appropriately designed local groundwater monitoring programme will provide an additional level of environmental assurance throughout the operational life of the Proposed Development.

3 RESPONSE SUMMARY

The Applicant welcomes the observations made by the HSE and considers that they are generally consistent with the environmental protection measures already incorporated within the Proposed Development.

The protection of groundwater, surface water and downstream water-dependent receptors formed a principal component of the EIAR and was supported by extensive site investigations, baseline monitoring, hydrogeological assessment, a Flood Risk Assessment and a Water Framework Directive Compliance Assessment.

The Applicant considers that:

- the proposed water related mitigation measures provide a robust framework for the protection of groundwater and surface water;
- the proposed operational water management strategy reflects current best practice for quarry developments;
- the preparation of a site-specific Environmental Management Plan will provide an appropriate framework for implementing the water related mitigation measures identified within the EIAR; and
- a proportionate groundwater monitoring programme will provide additional environmental assurance during the operational life of the quarry.

Accordingly, the Applicant considers that the observations made by the HSE are generally consistent with the water related environmental protection measures already incorporated into the Proposed Development.

4 CLOSURE

We trust the above response meets your requirements. Please contact the undersigned if you have any questions regarding the above.

Yours sincerely,



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