

From: Appeals2
Sent: Friday 18 November 2022 10:20
To: Rory Kelledy
Subject: FW: FAO Sorcha Skelly; Case Number: ABP-311893-21
Attachments: ABP Response Letter_Matk Phelan_17112022.pdf

From: Bord <bord@pleanala.ie>
Sent: Friday 18 November 2022 10:03
To: Appeals2 <appeals@pleanala.ie>
Subject: FW: FAO Sorcha Skelly; Case Number: ABP-311893-21

From: Janet O'Shea <JOShea@enviroguide.ie>
Sent: Thursday, November 17, 2022 4:42 PM
To: Bord <bord@pleanala.ie>
Subject: FAO Sorcha Skelly; Case Number: ABP-311893-21

FAO Sorcha Skelly
Case Number: ABP-311893-21
Applicant: Mark Phelan

Dear Ms. Skelly,

We are in receipt of your letter dated 7th October 2022 and received on 13th October 2022.

Please see attached the response letter addressing the items raised in the submissions. A hard copy of this letter will also be sent via post to your offices.

We trust that the above is in order. If you have any queries, please do not hesitate to contact me.

Yours sincerely,
Janet O'Shea

Janet O'Shea
Technical Director - EIA



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Directors: G. Free, J. Dowdall, C. Walsh and R. Walsh. Company Secretary: J. Dowdall.

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An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

16 November 2022

RE: Quarry Maplestown, Co. Carlow

Case Number ABP-311893-21

Reference: Mark Phelan

To Whom it concerns,

We are in receipt of your letter dated 28th October regarding Case Number ABP-311893-21, Reference Mark Phelan.

The quarry at Maplestown, Rathvilly, Co. Carlow was granted permission for a 95,000 tonnes per annum facility by An Bord Pleanála ref 221741 on 24th July 2007. It was understood by the then owner that this permission was a 12-year permission (10 year extraction and 2 year restoration) as this was what was applied for. In October 2019 Mick Smith Haulage and Sons Ltd applied for permission to remediate the quarry with imported greenfield soil and stone as the quarry was coming to the end of extraction. This application was refused on the basis that *inter alia* the permission had expired on 24th July 2012 and the operation of the quarry since then was unauthorised. Following representations to Carlow County Council by a Local Councillor it was determined that the Bord's permission was for a period of 5 years rather than the 12 years that was applied for and the advice of the Council was to apply for substitute consent to regularise the quarry and any future development at the site.

An Environment Impact Statement (EIS) carried out in 2005 assessed and predicted any potential environmental impacts of the quarrying activities. This EIS assessed the then Proposed Development over the originally proposed a 12 year period. As such, the original EIS has assessed the impact of the over a 12 year period.

The Applicant, Mark Phelan, has reviewed the submission from the HSE dated 18th February 2022 and has the following comments on the conclusions of their submission.

ENVIROGUIDE CONSULTING

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- 1. The EHS has considered the Remedial Environmental Impact Assessment Report (rEIAR) and is of the opinion that the assessment has not demonstrated that the unauthorised activities, subject to the assessment, operated within standards that protected public health with regard to dust and noise emissions from the site.**

The EIS prepared for the original application predicted the environmental impacts in relation to dust and noise emissions from the site. The rEIAR has retrospectively assessed the impact of the unauthorised activities as comprehensively as possible with all available information. Both the EIS and rEIAR predicted that dust and noise would not result in any significant adverse impact as a result of the operation of the development.

To the knowledge of the Applicant, no complaints in relation to dust or noise were submitted to Carlow County Council during the operation of the quarry.

- 2. The unauthorised activities subject to rEIA were, in essence, a continuation of activities that had been permitted for the previous 5 years. A requirement of the permission to operate for the previous 5 years was to demonstrate, and make publicly available, evidence that the health protection standards with regard to dust and noise emissions from the site were being met. There is no evidence in the rEIAR that this has been done.**

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (10th March 2019). The Applicant had no involvement with the quarry while the facility was operational. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation.

The original EIS predicted that there would be no significant noise impact at the nearby receptors. The rEIAR confirms that it is unlikely any significant noise or dust impacts were caused as a result of the quarry operations using noise calculations.

There are no residual or remaining impacts on-site relating to noise or dust. Therefore it can be concluded that there are no on-going impacts on the population and human health.

- 3. The condition in the Consent to demonstrate compliance is an important public health protection. It enables the Planning Authority to ensure the mitigation measures outlined in the EIS are working effectively in protecting public health. If there has been failure to comply with this condition it would not only demonstrate a disregard for the planning process, but also a disregard for the protection of public health.
The EHS would emphasise that the duty to comply with public health protection standards, and to demonstrate compliance, is the sole responsibility of the operator of the facility.**

According to the Applicant, no noise complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge.

No known non-compliances or enforcement notices relating to noise or dust or any other environmental impacts were issued to the Operator while the facility was operational.

The original EIS predicted that there would be no significant noise impact at the nearby receptors. The rEIAR confirms that it is unlikely any significant noise or dust impacts were caused as a result of the quarry operations using noise calculations.

There is no evidence to suggest that there was any failure in the implementation of any of the mitigation measures proposed in the EIS.

- 4. The rEIAR is not robust with regard to the likely significant impacts on public health from noise emissions, in that:**
- a) The Report states that no complaints were received with regard noise. This statement is not supported and is in contradiction to 3rd Part submissions on planning files.**
 - b) Reference is made to an EIS accompanying the previous planning application to support a conclusion that there are no significant impacts from noise, but the data is not reproduced or assessed in the context of the rEIA. Furthermore, table 9.5 and accompanying text that purports to predict noise levels at different distances does not accumulate noise sources for a total noise exposure. The conclusions in the noise section of the rEIAR are based on the predictive methods from another document that are not reproduced in the rEIAR.**
 - c) Consideration is not given to the significance of noise from an unauthorised development and the significance of the noise being for a period longer than that given permission for and longer than expected within the receiving environment.**

- a) The 3rd Party submission is a submission that has been made by a nearby resident in relation to the application for Substitute Consent. At no point in the letter does the neighbour state that they lodged a complaint with the Environment Section (or Planning Section) of Carlow County Council who are the governing body for such complaints. According to the Applicant, no noise complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge. Without a formal complaint being registered with Carlow County Council all references to other complaints are hearsay.
- b) This statement is factually incorrect in relation to noise predictions. The rEAIAR identified potential noise from traffic and from mobile machinery and fixed plant associated with the quarry operations.

A Traffic and Access Assessment was carried out as part of the original EIS and this assessment concluded that although the development would cause an increase in traffic movements, there would be no significant negative traffic impacts associated with the Development (*EssGee Consultants*, 2004).

The Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Part 7 (HD 213/11 – Revision 1) (The Highways Agency et al., 2011) states that “*changes in traffic volume on existing roads or new routes may cause either of the threshold values for noise to be exceeded. A change in noise level of 1dB LA10, 18h is equivalent to a 25% increase or a 20% decrease in traffic flow, assuming other factors remain unchanged and a change in noise level of 3dB LA10, 18h is equivalent to a 100% increase or a 50% decrease in traffic flow*”.

No traffic routes were predicted to experience increases of more than 25% in total traffic flows during the duration of the Historic Development and therefore no detailed

assessment is required as per the DMRB Guidelines. The impact of noise from operational traffic was retrospectively predicted to be unnoticeable and not considered to have a negative impact.

The rEAIR identified the mobile machinery and fixed plant associated with the Historical Development and retrospectively assess the associated dB(A) levels according to *BS 5228-1* recommendations, the inverse square law, and accounting for noise reduction associated with building materials where relevant. ***BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*** was used to identify the predicted dB for each of the machines and fixed plant items. This document is still in use and is a current suite of tools to predict noise emissions on sites of this type.

The conclusions of the rEIA are based on the assessment and prediction calculations presented in Table 9.5 of the eEIA. This table and the conclusions were prepared by Enviroguide Consulting. The rEIA presented noise calculations to retrospectively predict and assess the likely historical impact of equipment on noise sensitive receptors.

Table 9-5 outlined the noise emissions from the equipment used for the historical activities and details the predicted noise levels for the Historic and Unauthorised Development and the relevant LAeq values at the reference distances.

A qualitative noise assessment was carried out as part of the original Environmental Impact Statement (EIS) and was referred to in the rEIA. The original qualitative noise assessment predicted that there would be no adverse noise impacts (EssGee Consultants, 2004). No noise complaints were made throughout the duration of the operations undertaken at the Site to date.

In order to determine the resultant sound pressure level (SPL) of multiple sources the SPLs must be added logarithmically. This calculation assumes that the SPL of each source running in isolation is known at a given measurement point.

The total sound pressure level can be calculated using the following formula:

$$SPL_{Total} = 10 \cdot \log_{10}[10^{SPL1/10} + 10^{SPL2/10} + 10^{SPL3/10} \dots + 10^{SPLN/10}] \text{ (dB)}$$

Where SPL1 to SPLN are the separate sound pressure levels, and N is the total number of separate noise levels.

When all of the multiple sound sources detailed in Table 9.5 of the rEIA are added to give a resultant sound pressure level, the predicted dB level at 100m is 67.59dB. It is unlikely that all 7 items of plant and equipment were ever operational concurrently. Regardless, this is below the 70dB requirement for temporary work.

It is important to recognise that the sound intensity from a point source will obey the inverse square law if there are no reflections or reverberation. If there are barriers between the source and the point of measurement, you are likely to get less than what the inverse square law predicts.

The use of soil berms on the Site would have provided a further reduction in dB. Based on *BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*, a conservative estimate of a 5dB reduction in the sound level pressure has been applied. Therefore, the predicted dB level at 100m is 62.59dB. Machinery would have been used intermittently onsite and it is unlikely that all 7 items of plant and equipment were ever operational concurrently. Regardless, this is below the 70dB requirement for temporary works. Furthermore, due to the treelines and hedgerow on the intervening lands between the Site and the closest NSLs, the combined sound pressure level is likely to have been less than the predicted 62.59dB. The noise limit of 55dB (A) (60 mins L_{Aeq}). L_{Aeq} is the equivalent continuous sound level. As machinery would be used intermittently it is unlikely that noise levels exceed the 55dB over a 60min average period.

The rEIAR concluded that when taking account of local terrain, predicted noise levels at the closest NSLs are expected to have been lower than what is outlined in Table 9-5. It is not expected that actual noise levels did exceed the recommended criteria of 55dB.

- c) The EIS and rEIAR both determined that noise from the facility did not give rise to any significant environmental impact. Therefore, the continuation of on-site activities would also not have resulted in any significant environmental impact.

It is also worth noting that the quarry site is adjacent to a Local Road the L8097 with agricultural activities to the north, south and east. There is another quarry to the west but it is not accessed via this local road. The volume of traffic movements proposed in conjunction with low levels of machine activity for the purpose of soil placement are not predicted to have had any impact on the nearest sensitive receptors. This level of activity is consistent with the use of agricultural vehicles within the local area.

It should be noted that the machinery and equipment associated with the operation of the quarry has now been decommissioned and therefore there are no residual noise impacts remaining at the site.

- 5. The conclusion that dust emissions did not cause a nuisance at sensitive receptors is not supported by any evidence and is contradicted by 3rd Party submission on the planning file. The conclusion is based on predictive methodology in the EIS of 2004. There was a requirement to monitor dust emissions during the authorised operation, 2007 to 2012, which would have shown compliance, or not, with the health protection standards and informed the conclusions reached in the rEIAR. There is no evidence in the rEIAR that this requirement was met.**

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (circa. 2019). The Applicant had no involvement with the quarry while the facility was operational. The Quarry Operator has moved off-site. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation.

The original EIS predicted that there would be no significant dust impact at the nearby receptors. The rEIR confirms that it is unlikely any significant dust impacts were caused as a result of the quarry operations.

There are no residual or remaining impacts on-site relating to dust.

According to the Applicant, no dust complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge.

No known non-compliances or enforcement notices relating to dust or any other environmental impacts were issued to the Operator while the facility was operational.

The rEIR is only assessing the years of the unauthorised activities, commencing in 2012. It does not assess the period from 2007 -2012 and accordingly no information relating to these years was provided in the rEIR.

Department of Housing, Local Government and Heritage have prepared a submission dated 21 February 2022. The Applicant has the following comments to make on this submission:

The Remedial Natura Impact Assessment (rNIS) for Historic Extraction and Infilling Works at Maplestown, Co. Carlow dated November 2021 and prepared by Enviroguide Consulting states that appropriate mitigation measures implemented as part of the original EIS (EssGee Consultants, 2006) to address the potential risks posed by Historic works on the QI/SCIs of the River Barrow and River Nore SAC. It is further stated that these measures are described in section 6.3 of the rNIS and reduced these potential risks to negligible, thus maintaining the integrity of this European Site.

The Department notes that the rNIS does not provide any evidence of compliance with Condition 10, 20 or 21 of the original permission (PL01.221741) including any historic water quality sampling or any evidence of monitoring, inspection and maintenance of water quality mitigation measures which would indicate that they were in good working order during the period that the unauthorised quarry was in operation. The Department advises that effectiveness of water quality mitigation measures must be demonstrated, using evidence of compliance with the above planning conditions. This would be of particular interest after periods of high rainfall and flooding events and would indicate whether mitigation measures were intercepting pollutants and sediment coming from quarry production area.

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (circa. 2019). The Applicant had no involvement with the quarry while the facility was operational. Mark Phelan, the Applicant, is the new owner of the site. The Quarry Operator has moved off-site. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation. However, upon examination of the EPA River Q Values 1971-2020 dataset (<https://gis.epa.ie/EPAMaps/Water>), there does not appear to be a reduction in water quality of the receiving water bodies between the period before extraction had started, during extraction or after extraction had ceased. Below is the Q value data for the closest water quality monitoring station (RS14G070200) to the site located on the Graney (Lerr) stream approximately 2.8km downstream. From the table below it is evident that there was no significant reduction or fluctuation in water quality before, during or after extraction works. Therefore, it can be assumed that surface water mitigation implemented during the works were effective in protecting local water quality.

Monitoring station	Year	Q Value	Status	Notes
RS14G070200 (2.8km downstream)	1989	3	Poor	Pre-extraction
	1993	4	Good	
	1997	3-4	Moderate	
	2000	3	Poor	
	2003	3	Poor	
	2006	3-4	Moderate	Approximate dates of extraction
	2009	3	Poor	
	2011	4	Good	
	2016	4	Good	
	2017	3-4	Moderate	
	2020	3-4	Moderate	Post extraction

Restoration

While the application states that the long-term proposal for the Site includes restoration of the proposed quarry that will be subject to a separate planning application, the Department notes that considerable infilling and restoration has taken place within the site already and is the subject of this substitute consent application. Given the 'At Risk' water quality status of the nearby river water body and the lack of topsoil in the area, the Department advises that the rNIS should include an assessment of the impacts of restoration and afteruse for agriculture on water quality. Furthermore, Environmental Assessment should demonstrate that historical restoration has been in accordance with landscaping and ecological enhancement conditions of the original planning permission (PL01.221741).

Given the nature and location the infilling activities and the subsequent agricultural usage coupled with the above water quality monitoring data, there is no apparent impact of these activities on water quality in the area.

Infilling

The rNIS states that a total 41,700 m³ of overburden were removed and set aside for reuse in the restoration of the area and that upon completion of the extraction the area of 4.177 ha was restored to previous ground level using overburden removed from this area during quarrying and stockpiles of overburden that had been retained on site from the permitted development. Evidence that infill was solely site won and did not include material from outside the site should be provided.

The Applicant has confirmed that the infill was solely site won and did not include material from outside the site. Intrusive site investigations have not taken place on site.

Groundwater

Evidence should be provided of compliance with original planning permission conditions related to the protection of groundwater namely:

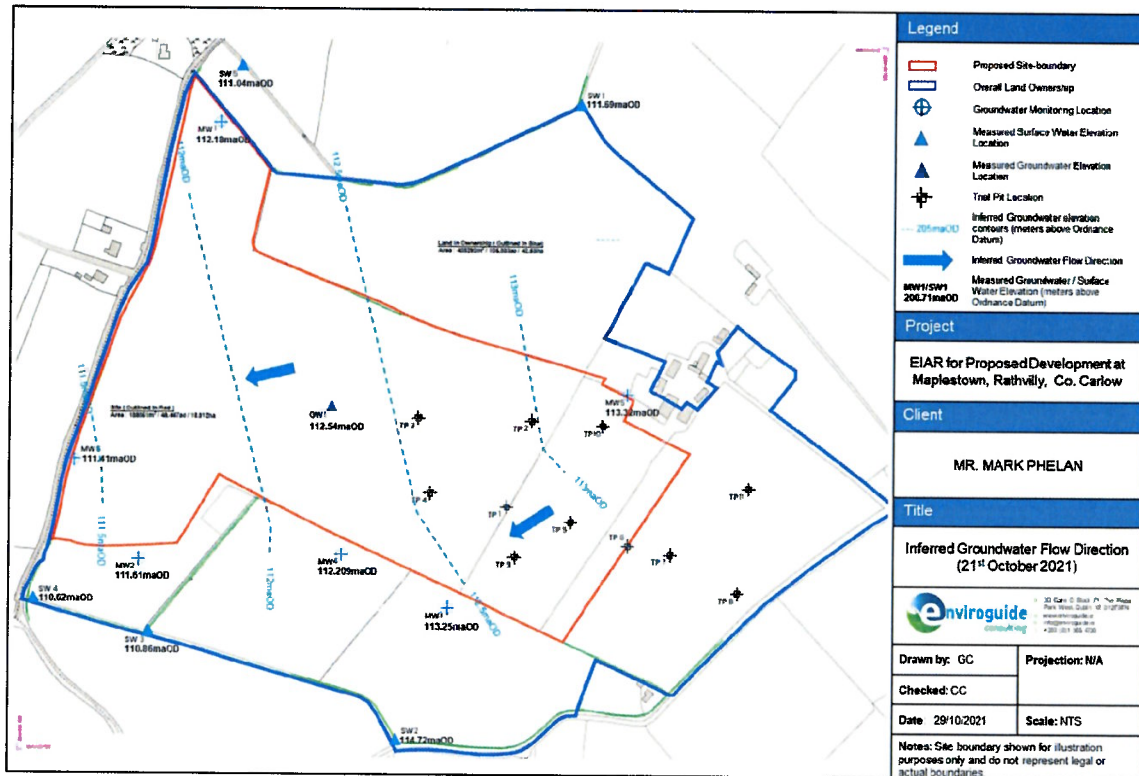
Condition 7. The final extraction depth shall, in no part of the site, be less than one metre above the level of the water table. Prior to commencement of development, detailed site investigations shall be undertaken on the site to determine the depth of the water table and the final extraction depth shall be agreed in writing with the planning authority. A monitoring scheme shall be submitted to and agreed with the planning authority to measure the groundwater levels at the lowest part of the site.

Reason: To prevent pollution of groundwater.

Condition 8. A Groundwater Monitoring Programme shall be implemented for the protection of groundwater. Groundwater monitoring wells shall be installed around the boundary of the site, the number and locations of which shall be agreed in writing with the planning authority prior to commencement of development. Water levels and quality shall be recorded every month and a log of the results shall be submitted to the planning authority for written agreement on a quarterly basis. Where activities on the subject site are found to adversely affect local water supplies, replacement water supplies shall be provided to the written satisfaction of the planning authority.

Reason: In the interest of proper planning and sustainable development and to monitor groundwater in the vicinity of the site.

The groundwater elevation beneath the existing quarry was measured between 111.5mOD and 112.5mOD on the 22nd October 2021. With the exception of the authorised sump used to supply water to the washing and screening plant, excavation works at the existing quarry did not extend below 115mOD. Therefore, all works were undertaken above the existing groundwater level with no requirement for dewatering and no impact on the local groundwater resource and groundwater flow regime.



We trust this answers your questions. If you have any queries in relation to the above, please do not hesitate to contact us.

Yours sincerely,

Janet O'Brien

Enviroguide Consulting for an on behalf of Mark Phelan



An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

M.H

AN BORD PLEANÁLA	
LDG- _____	
ABP- _____	
18 NOV 2022	
Fee: € _____	Type: _____
Time: _____	By: <i>reg post</i>

16 November 2022

RE: Quarry Maplestown, Co. Carlow

Case Number ABP-311893-21

Reference: Mark Phelan

To Whom it concerns,

We are in receipt of your letter dated 28th October regarding Case Number ABP-311893-21, Reference Mark Phelan.

The quarry at Maplestown, Rathvilly, Co. Carlow was granted permission for a 95,000 tonnes per annum facility by An Bord Pleanála ref 221741 on 24th July 2007. It was understood by the then owner that this permission was a 12-year permission (10 year extraction and 2 year restoration) as this was what was applied for. In October 2019 Mick Smith Haulage and Sons Ltd applied for permission to remediate the quarry with imported greenfield soil and stone as the quarry was coming to the end of extraction. This application was refused on the basis that *inter alia* the permission had expired on 24th July 2012 and the operation of the quarry since then was unauthorised. Following representations to Carlow County Council by a Local Councillor it was determined that the Bord's permission was for a period of 5 years rather than the 12 years that was applied for and the advice of the Council was to apply for substitute consent to regularise the quarry and any future development at the site.

An Environment Impact Statement (EIS) carried out in 2005 assessed and predicted any potential environmental impacts of the quarrying activities. This EIS assessed the then Proposed Development over the originally proposed a 12 year period. As such, the original EIS has assessed the impact of the over a 12 year period.

The Applicant, Mark Phelan, has reviewed the submission form the HSE dated 18th February 2022 and has the following comments on the conclusions of their submission.

ENVIROGUIDE CONSULTING

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Enviroguide Consulting is a registered business name of Synergy Environmental Ltd., a limited company registered in Ireland under number 485440. Directors: G. Free, J. Dowdall, C. Walsh and R. Walsh. Company Secretary: J. Dowdall.

- 1. The EHS has considered the Remedial Environmental Impact Assessment Report (rEIAR) and is of the opinion that the assessment has not demonstrated that the unauthorised activities, subject to the assessment, operated within standards that protected public health with regard to dust and noise emissions from the site.**

The EIS prepared for the original application predicted the environmental impacts in relation to dust and noise emissions from the site. The rEIAR has retrospectively assessed the impact of the unauthorised activities as comprehensively as possible with all available information. Both the EIS and rEIAR predicted that dust and noise would not result in any significant adverse impact as a result of the operation of the development.

To the knowledge of the Applicant, no complaints in relation to dust or noise were submitted to Carlow County Council during the operation of the quarry.

- 2. The unauthorised activities subject to rEIA were, in essence, a continuation of activities that had been permitted for the previous 5 years. A requirement of the permission to operate for the previous 5 years was to demonstrate, and make publicly available, evidence that the health protection standards with regard to dust and noise emissions from the site were being met. There is no evidence in the rEIAR that this has been done.**

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (10th March 2019). The Applicant had no involvement with the quarry while the facility was operational. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation.

The original EIS predicted that there would be no significant noise impact at the nearby receptors. The rEIAR confirms that it is unlikely any significant noise or dust impacts were caused as a result of the quarry operations using noise calculations.

There are no residual or remaining impacts on-site relating to noise or dust. Therefore it can be concluded that there are no on-going impacts on the population and human health.

- 3. The condition in the Consent to demonstrate compliance is an important public health protection. It enables the Planning Authority to ensure the mitigation measures outlined in the EIS are working effectively in protecting public health. If there has been failure to comply with this condition it would not only demonstrate a disregard for the planning process, but also a disregard for the protection of public health. The EHS would emphasise that the duty to comply with public health protection standards, and to demonstrate compliance, is the sole responsibility of the operator of the facility.**

According to the Applicant, no noise complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge.

No known non-compliances or enforcement notices relating to noise or dust or any other environmental impacts were issued to the Operator while the facility was operational.

The original EIS predicted that there would be no significant noise impact at the nearby receptors. The rEIAR confirms that it is unlikely any significant noise or dust impacts were caused as a result of the quarry operations using noise calculations.

There is no evidence to suggest that there was any failure in the implementation of any of the mitigation measures proposed in the EIS.

4. The rEIAR is not robust with regard to the likely significant impacts on public health from noise emissions, in that:

- a) The Report states that no complaints were received with regard noise. This statement is not supported and is in contradiction to 3rd Part submissions on planning files.**
- b) Reference is made to an EIS accompanying the previous planning application to support a conclusion that there are no significant impacts from noise, but the data is not reproduced or assessed in the context of the rEIA. Furthermore, table 9.5 and accompanying text that purports to predict noise levels at different distances does not accumulate noise sources for a total noise exposure. The conclusions in the noise section of the rEIAR are based on the predictive methods from another document that are not reproduced in the rEIAR.**
- c) Consideration is not given to the significance of noise from an unauthorised development and the significance of the noise being for a period longer than that given permission for and longer than expected within the receiving environment.**

- a) The 3rd Party submission is a submission that has been made by a nearby resident in relation to the application for Substitute Consent. At no point in the letter does the neighbour state that they lodged a complaint with the Environment Section (or Planning Section) of Carlow County Council who are the governing body for such complaints. According to the Applicant, no noise complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge. Without a formal complaint being registered with Carlow County Council all references to other complaints are hearsay.
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A Traffic and Access Assessment was carried out as part of the original EIS and this assessment concluded that although the development would cause an increase in traffic movements, there would be no significant negative traffic impacts associated with the Development (*EssGee Consultants*, 2004).

The Design Manual for Roads and Bridges (DMRB) Volume 11 Section 3 Part 7 (HD 213/11 – Revision 1) (The Highways Agency et al., 2011) states that "*changes in traffic volume on existing roads or new routes may cause either of the threshold values for noise to be exceeded. A change in noise level of 1dB LA10, 18h is equivalent to a 25% increase or a 20% decrease in traffic flow, assuming other factors remain unchanged and a change in noise level of 3dB LA10, 18h is equivalent to a 100% increase or a 50% decrease in traffic flow*".

No traffic routes were predicted to experience increases of more than 25% in total traffic flows during the duration of the Historic Development and therefore no detailed

assessment is required as per the DMRB Guidelines. The impact of noise from operational traffic was retrospectively predicted to be unnoticeable and not considered to have a negative impact.

The rEAIR identified the mobile machinery and fixed plant associated with the Historical Development and retrospectively assess the associated dB(A) levels according to *BS 5228-1* recommendations, the inverse square law, and accounting for noise reduction associated with building materials where relevant. ***BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*** was used to identify the predicted dB for each of the machines and fixed plant items. This document is still in use and is a current suite of tools to predict noise emissions on sites of this type.

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Table 9-5 outlined the noise emissions from the equipment used for the historical activities and details the predicted noise levels for the Historic and Unauthorised Development and the relevant LAeq values at the reference distances.

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In order to determine the resultant sound pressure level (SPL) of multiple sources the SPLs must be added logarithmically. This calculation assumes that the SPL of each source running in isolation is known at a given measurement point.

The total sound pressure level can be calculated using the following formula:

$$SPL_{Total} = 10 \cdot \log_{10}[10^{SPL1/10} + 10^{SPL2/10} + 10^{SPL3/10} \dots + 10^{SPLN/10}] \text{ (dB)}$$

Where SPL1 to SPLN are the separate sound pressure levels, and N is the total number of separate noise levels.

When all of the multiple sound sources detailed in Table 9.5 of the rEIAR are added to give a resultant sound pressure level, the predicted dB level at 100m is 67.59dB. It is unlikely that all 7 items of plant and equipment were ever operational concurrently. Regardless, this is below the 70dB requirement for temporary work.

It is important to recognise that the sound intensity from a point source will obey the inverse square law if there are no reflections or reverberation. If there are barriers between the source and the point of measurement, you are likely to get less than what the inverse square law predicts.

The use of soil berms on the Site would have provided a further reduction in dB. Based on *BS 5228-1:2009+A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise*, a conservative estimate of a 5dB reduction in the sound level pressure has been applied. Therefore, the predicted dB level at 100m is 62.59dB. Machinery would have been used intermittently onsite and it is unlikely that all 7 items of plant and equipment were ever operational concurrently. Regardless, this is below the 70dB requirement for temporary works. Furthermore, due to the treelines and hedgerow on the intervening lands between the Site and the closest NSLs, the combined sound pressure level is likely to have been less than the predicted 62.59dB. The noise limit of 55dB (A) (60 mins L_{Aeq}). L_{Aeq} is the equivalent continuous sound level. As machinery would be used intermittently it is unlikely that noise levels exceed the 55dB over a 60min average period.

The rEIAR concluded that when taking account of local terrain, predicted noise levels at the closest NSLs are expected to have been lower than what is outlined in Table 9-5. It is not expected that actual noise levels did exceed the recommended criteria of 55dB.

- c) The EIS and rEIAR both determined that noise from the facility did not give rise to any significant environmental impact. Therefore, the continuation of on-site activities would also not have resulted in any significant environmental impact.

It is also worth noting that the quarry site is adjacent to a Local Road the L8097 with agricultural activities to the north, south and east. There is another quarry to the west but it is not accessed via this local road. The volume of traffic movements proposed in conjunction with low levels of machine activity for the purpose of soil placement are not predicted to have had any impact on the nearest sensitive receptors. This level of activity is consistent with the use of agricultural vehicles within the local area.

It should be noted that the machinery and equipment associated with the operation of the quarry has now been decommissioned and therefore there are no residual noise impacts remaining at the site.

- 5. The conclusion that dust emissions did not cause a nuisance at sensitive receptors is not supported by any evidence and is contradicted by 3rd Party submission on the planning file. The conclusion is based on predictive methodology in the EIS of 2004. There was a requirement to monitor dust emissions during the authorised operation, 2007 to 2012, which would have shown compliance, or not, with the health protection standards and informed the conclusions reached in the rEIAR. There is no evidence in the rEIAR that this requirement was met.**

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (circa. 2019). The Applicant had no involvement with the quarry while the facility was operational. The Quarry Operator has moved off-site. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation.

The original EIS predicted that there would be no significant dust impact at the nearby receptors. The rEIAR confirms that it is unlikely any significant dust impacts were caused as a result of the quarry operations.

There are no residual or remaining impacts on-site relating to dust.

According to the Applicant, no dust complaints were made to Carlow County Council regarding the site activities during the period of operation, to the best of his knowledge.

No known non-compliances or enforcement notices relating to dust or any other environmental impacts were issued to the Operator while the facility was operational.

The rEIAR is only assessing the years of the unauthorised activities, commencing in 2012. It does not assess the period from 2007 -2012 and accordingly no information relating to these years was provided in the rEIAR.

Department of Housing, Local Government and Heritage have prepared a submission dated 21 February 2022. The Applicant has the following comments to make on this submission:

The Remedial Natura Impact Assessment (rNIS) for Historic Extraction and Infilling Works at Maplestown, Co. Carlow dated November 2021 and prepared by Enviroguide Consulting states that appropriate mitigation measures implemented as part of the original EIS (EssGee Consultants, 2006) to address the potential risks posed by Historic works on the QI/SCIs of the River Barrow and River Nore SAC. It is further stated that these measures are described in section 6.3 of the rNIS and reduced these potential risks to negligible, thus maintaining the integrity of this European Site.

The Department notes that the rNIS does not provide any evidence of compliance with Condition 10, 20 or 21 of the original permission (PL01.221741) including any historic water quality sampling or any evidence of monitoring, inspection and maintenance of water quality mitigation measures which would indicate that they were in good working order during the period that the unauthorised quarry was in operation. The Department advises that effectiveness of water quality mitigation measures must be demonstrated, using evidence of compliance with the above planning conditions. This would be of particular interest after periods of high rainfall and flooding events and would indicate whether mitigation measures were intercepting pollutants and sediment coming from quarry production area.

The Applicant, Mark Phelan, has only recently acquired the lands at Maplestown Quarry (circa. 2019). The Applicant had no involvement with the quarry while the facility was operational. Mark Phelan, the Applicant, is the new owner of the site. The Quarry Operator has moved off-site. The Applicant does not have any access to any monitoring that may have been carried out at the quarry during its time of operation. However, upon examination of the EPA River Q Values 1971-2020 dataset (<https://gis.epa.ie/EPAMaps/Water>), there does not appear to be a reduction in water quality of the receiving water bodies between the period before extraction had started, during extraction or after extraction had ceased. Below is the Q value data for the closest water quality monitoring station (RS14G070200) to the site located on the Graney (Lerr) stream approximately 2.8km downstream. From the table below it is evident that there was no significant reduction or fluctuation in water quality before, during or after extraction works. Therefore, it can be assumed that surface water mitigation implemented during the works were effective in protecting local water quality.

Monitoring station	Year	Q Value	Status	Notes
RS14G070200 (2.8km downstream)	1989	3	Poor	Pre-extraction
	1993	4	Good	
	1997	3-4	Moderate	
	2000	3	Poor	
	2003	3	Poor	
	2006	3-4	Moderate	Approximate dates of extraction
	2009	3	Poor	
	2011	4	Good	
	2016	4	Good	
	2017	3-4	Moderate	Post extraction
	2020	3-4	Moderate	

Restoration

While the application states that the long-term proposal for the Site includes restoration of the proposed quarry that will be subject to a separate planning application, the Department notes that considerable infilling and restoration has taken place within the site already and is the subject of this substitute consent application. Given the 'At Risk' water quality status of the nearby river water body and the lack of topsoil in the area, the Department advises that the rNIS should include an assessment of the impacts of restoration and afteruse for agriculture on water quality. Furthermore, Environmental Assessment should demonstrate that historical restoration has been in accordance with landscaping and ecological enhancement conditions of the original planning permission (PL01.221741).

Given the nature and location the infilling activities and the subsequent agricultural usage coupled with the above water quality monitoring data, there is no apparent impact of these activities on water quality in the area.

Infilling

The rNIS states that a total 41,700 m³ of overburden were removed and set aside for reuse in the restoration of the area and that upon completion of the extraction the area of 4.177 ha was restored to previous ground level using overburden removed from this area during quarrying and stockpiles of overburden that had been retained on site from the permitted development. Evidence that infill was solely site won and did not include material from outside the site should be provided.

The Applicant has confirmed that the infill was solely site won and did not include material from outside the site. Intrusive site investigations have not taken place on site.

Groundwater

Evidence should be provided of compliance with original planning permission conditions related to the protection of groundwater namely:

Condition 7. The final extraction depth shall, in no part of the site, be less than one metre above the level of the water table. Prior to commencement of development, detailed site investigations shall be undertaken on the site to determine the depth of the water table and the final extraction depth shall be agreed in writing with the planning authority. A monitoring scheme shall be submitted to and agreed with the planning authority to measure the groundwater levels at the lowest part of the site.

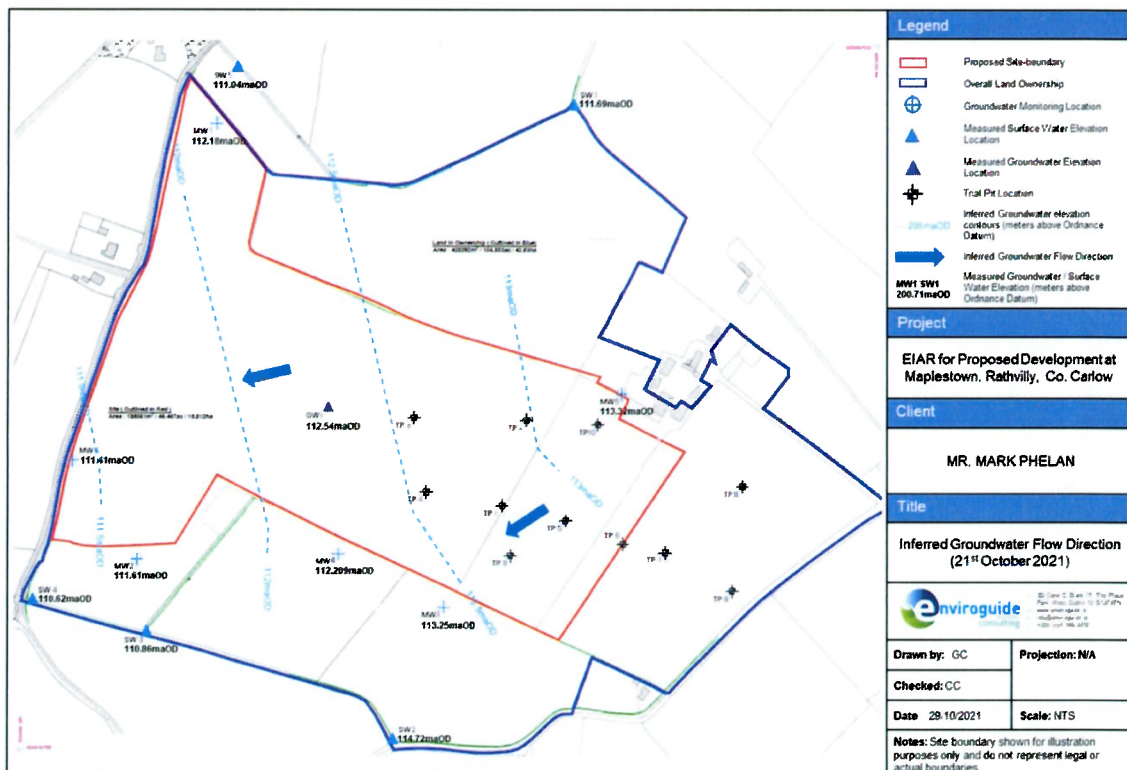
Reason: To prevent pollution of groundwater.

Condition 8. A Groundwater Monitoring Programme shall be implemented for the protection of groundwater. Groundwater monitoring wells shall be installed around the boundary of the site, the number and locations of which shall be agreed in writing with the planning authority prior to commencement of development. Water levels and quality shall be recorded every month and a log of the results shall be submitted to the planning authority for written agreement on a quarterly basis. Where activities on the subject site are found to adversely affect local water supplies, replacement water supplies shall be provided to the written satisfaction of the planning authority.

Reason: In the interest of proper planning and sustainable development and to monitor groundwater in the vicinity of the site.

The groundwater elevation beneath the existing quarry was measured between 111.5mOD and 112.5mOD on the 22nd October 2021. With the exception of the authorised sump used to supply water to the washing and screening plant, excavation works at the existing quarry did not extend below 115mOD. Therefore, all works were undertaken above the existing groundwater level with no requirement for dewatering and no impact on the local groundwater resource and groundwater flow regime.





We trust this answers your questions. If you have any queries in relation to the above, please do not hesitate to contact us.

Yours sincerely,

Janet O'Flaherty

Enviroguide Consulting for an on behalf of Mark Phelan



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