
Substitute Consent Application SU17.322589 JJ Flood and Sons Manufacturing Ltd Oldcastle Co Meath

From CarmelA Lynch <CarmelA.Lynch@hse.ie>

Date Fri 15/08/2025 3:11 PM

To Appeals2 <appeals@pleanala.ie>

Cc Eve Smith <Eve.Smith@hse.ie>

 1 attachment (235 KB)

NEHS Submission ABP 322589 25 JJ Flood and Sons Manufacturing Ltd .pdf;

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To whom it may concern,

Please find attached NEHS Submission Report regarding the above application.

Can you please confirm receipt of this email.

Kind regards

Carmel Lynch

Carmel Lynch
Environmental Health Officer
Environment/Climate Change NSU

HSE, An tSeirbhís Sláinte Comhshaoil, Aonad Cúraim Sláinte, Oifig Contae, An Uaimh, Co.na Mí
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National Environmental Health Service
County Clinic
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15 August 2025

An Coimisiún Pleanála
64 Marlborough Street
Dublin 1

National Environmental Health Service Submission Report
(as a Statutory Consultee under the Planning and Development Acts 2000 (as amended) & Regulations made thereunder)

Type of consultation: EIAR - Substitute Consent Application

Application Reference Number: ABP REF - QD17.322589

EHIS Reference number: 5054

Applicant: JJ Flood & Son Manufacturing Ltd.

Proposed Development: *Substitute Consent Application under section 37L of the Planning and Development Act 2000-2021. The development consists of existing stockpiles from across the Site (ca. 40.12 ha), the extraction and processing of gravel and soft rock by mechanical means.*

Dear Sir/Madam

Please find below the HSE submission report in relation to the above proposal. The following HSE departments were made aware of the consultation request for the proposed development:

- National Environmental Health Service
- HSE Emergency Management
- National Capital Estates Office – Regional AND
- Director of National Health Protection
- REO Dublin & South East

Introduction

The National Environmental Health Service submission report is based on an assessment of documentation submitted to this office on 2 July 2025.

All commitments to future actions including mitigation and further testing have been taken as read and all data results have been accepted as accurate.

- No additional investigations/measurements were undertaken.



- This report refers only to those sections of the application documents that are relevant to the HSE which have an Environmental Health Impact.

Proposed development:

The Site has a total area of 40.12ha, and there is a long history of quarrying associated with the Site. The Site has been in possession of the Applicant since the commencement of works and continues to be in regular use.

The entrance gate to the Site is off the R195 regional road on the east boundary.

The Site has been primarily involved in the extraction of sands, gravels and soft rock by mechanical means. Activities at the Site involve the extraction of stone, its processing, grading, washing, and short-term storage. The Site covers the majority of the land holding. The Site is primarily comprised of exposed gravel deposits and exposed bedrock, with the main processing area located centrally, along with the settlement canal.

The Site is comprised of the following infrastructure:

The Site office and welfare facilities, storage shed, maintenance shed, fuel tanks and vehicle parking are located in the northern portion of the Site.

• Extraction area; • Dry mobile screening plant; • Aggregate washing plant; • Semi-mobile crushing plant; • Settlement canal system; • Associated settlement ponds; • Stockpiles of aggregate; • Site access road; • On-site haulage routes; • Site office and toilets; • Wastewater treatment and percolation; • Storage shed; • Maintenance Shed; • Two fuel tanks • Vehicle parking; • Weighbridge; and, • Aggregate additives for making 'arena footing'. The extraction area comprises most of the Site.

Stockpiles are present throughout the quarry floor, and the settlement canal system is located in the centre of the Site. The Site generally comprises an extensive quarry floor with haul routes extending to the aforementioned screening plant and equipment.

In 2005, the quarry was registered under Section 261 of the Planning and Development Act ('PDA') 2000, and Meath County Council ('MCC') imposed conditions to its future operations pursuant to Section 261(6) of the PDA 2000.

Substitute Consent is being sought under Section 177E of the Planning and Development Act, 2000, as amended, to regularise a Circa 39ha area of land within the Applicant's landholding which has been subjected to gravel and soft rock extraction and processing. The application for substitute consent was submitted to An Bord Pleanála ('ABP') now (An Coimisiún Pleanála) on the 31st March 2025, case number ABP-322189-25.

It is stated in Page 11 of The Non- technical summary that:

"Work at the Site has been restricted until the application for substitute consent, case reference number ABP-322189-25, is determined and further authorised for prospective development, through the submission of this EIAR, with existing open areas of partial development being worked above the water table only, as well as substantial historical stockpiles. The current active sand and gravel pit is currently being processed, but at a reduced scale compared to historic production levels. Currently, aggregates are being sourced from extensive onsite stockpiles until



substitute consent is brought into compliance and the Site is further authorised for prospective development, pending this application”.

Following the submission of the substitute consent application, the EIAR has been submitted within the substitute application and the planning application development and restoration of the same quarry. Future development of the quarry has stated that it will involve continuation of quarrying activities, site preparation works and extension of extraction activities into a green field site and restoration works over the full Site.

The Proposed Development

An application was lodged with An Coimisiún Pleanála on 12/05/2025 Case reference: SU17.322589.

Substitute Consent pursuant to Section 177E of the Planning and Development Act 2000, as amended for development consisting of the extraction and processing of gravel and stone over 39ha area and associated infrastructure. A remedial EIAR was submitted with this application.

The development consists of the removal of existing stockpiles from across the Site (ca. 40.12ha), the extraction and processing of gravel and soft rock by mechanical means over an area of ca. 6.35ha within the Site, including a new extraction area in a greenfield area of the Site (ca. 1.02ha), all to a pit floor of ca., 119mOD, the continuation of use of the Site and all infrastructure for 20 years along with a modified restoration plan.

Assessment of the principle and description of the project

The National Environmental Health Service (EHS) is satisfied that the EIAR provides an adequate description of the proposed project.

Assessment of Public Consultation and the Non-Technical Summary

The National Environmental Health Service found the local newspaper advertisement as part of public consultation. The NEHS emphasises the need for early and meaningful public consultation in the development process even in the case of extension of an existing site.

Assessment of Consideration of Alternatives

‘Description of Alternatives’ in chapter 3 of the EIAR provides a description of the alternatives considered which included

- Alternative locations
- Alternative designs
- Alternative layouts
- Alternative processes
- Do Nothing option

The selection of the site location, layout and project design is detailed in Chapter 2 of the EIAR. As the application is for a gravel extraction facility consideration of an alternative location is restricted to the availability of an aggregate resource.



For the foreseeable future there are no real alternatives to primary land-won aggregates. At present, the use of secondary (recycled) aggregates in Ireland is at an early stage in development. The volume of C&D waste suitable for recycling into secondary aggregates is low in comparison to the overall demand for aggregates. The demographic spread of the population results in only the large urban centres generating sufficient volumes of construction and demolition (C&D) waste to justify a commercial operation producing secondary aggregates.

Assessment of Description of the Physical Environment

The Site is situated ca. 5.5km south of the town centre of Oldcastle and ca. 7.3km northeast of the town centre of Castlepollard, which are connected by the regional road R195, which passes along the eastern boundary of the Site.

The R195 runs in a north-to-south direction and connects to the R194 west of Virginia town, ca. 14.5km to the north of the Site. The R195 immediately to the east of the Site provides the primary transport route for Heavy Goods Vehicles ('HGVs') accessing and egressing the Site.

The lands around the Site are primarily agricultural, with scattered single-dwelling developments along the regional road and the access road to the Site. The western boundary of the Site is shared with an adjoining quarry development, with an embankment of untouched ground separating the two developments. To the south is a forested area.

Population and Human Health

The specific legislation relevant to human health protection is set out within the technical EIA chapters relevant to each pathway (noise, air, soil, water, etc.).

Ultimately, all of the effects of a development on the environment impinge upon human beings. Direct effects relate to matters such as land, water and air quality, noise, and changes to landscape character. Indirect effects relate to such matters as flora and fauna.

As outlined in each of Chapters 6, 7, 8 and 10 of this EIAR, a number of mitigation measures are proposed to control and minimise these effects and to ensure that the residual effects of the proposed development on human health during the operational phases are acceptable and not significant.

The initial phase of extension operations, which requires construction work and soil stripping, has the potential to generate dust and noise, which could potentially cause nuisance. During the operational stage, the potential impacts on air, noise, landscape and traffic include the following:

- The generation of noise by the operation of machinery; 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

As outlined in Chapters 8, 10 and 13 of this EIAR, a number of mitigation measures are proposed and need to be adhered -should this application receive consent.



Noise and Vibration

The proposed development is similar to the current operations being carried out on site that include a number of activities and processes that have the potential to generate noise impacts, these include:

- Ground clearance of the proposed extraction area with heavy machinery will have the potential to give rise to noise impacts offsite;
- upon operation, the extraction process will require use of heavy machinery for removal and handling of material.

In addition to ongoing material extraction and processing, the proposed development will also include the restoration of the site to agricultural land.

There are residences in the immediate vicinity of the site, with the residential pattern comprising isolated farm dwellings and one-off housing developments along the local roads. The closest property is located c. 235 m south of the application site, with six further properties within 500 m of the application site, all in the south/southeast direction.

In total there are c. 29 residential properties within a 1km radius of the application site. These are shown within EIAR, Chapter 10, Figure 10-1. The closest receptors have been identified and assessed based on their distance to key working areas proposed as part of the application. The receptors considered as part of the noise impact assessment have been summarised in the EIAR- Table 10-1.

Operational hours for the Proposed Development will be maintained as currently authorised at the quarry: Monday to Friday 07:00 to 18:00; Saturday 07:00 to 14:00; and, Sunday & Public Holidays closed.

Site Specific Emission Limit Values

The National Environmental Health Service notes the proposed mitigation measures outlined in Chapter 11 and recommends that these measures should be included as conditions of planning permission, if granted. In addition it is recommended that:

- Monitoring is also undertaken outside of 'daytime' hours.
- Noise monitoring will continue to be undertaken around the application site. Noise monitoring locations will be reviewed and revised where and as/when necessary.
- All mobile plant used at the development will have noise emission levels that comply with the limiting levels defined in EC Directive 86/662/EEC and any subsequent amendments.
- 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.
- Corrective action should be included in the Environmental Management Plan if exceedances of permitted limits are recorded



- Operations should be limited to 08.00hours 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).

Air

The application site and surrounding area falls into Air Quality Zone D, categorised as rural Ireland. The air quality in each zone is assessed and classified with respect to upper and lower assessment thresholds based on measurements over the previous five years. Upper and lower assessment thresholds are prescribed in legislation for each pollutant. The number of monitoring locations required is dependent on population size and whether ambient air quality concentrations exceed the upper assessment threshold, are between the upper and lower assessment thresholds, or are below the lower assessment threshold.

The Government's policy on air quality within Ireland is set out in the Air Quality Standards (AQS) Regulations 2011. The CAFE (Clean Air for Europe) Directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011). It replaces the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004) and the EPA Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (S.I. No. 33 of 1999). The 4th Daughter Directive was transposed by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I.no. 58 of 2009).

An assessment of fugitive dust emissions from the overall site (including the planning application area) has been undertaken. The assessment takes into consideration the potential sources, surrounding receptors, and the pathway between source and receptor in order to assess the magnitude of risk of impact without mitigation measures in place. The main focus of the assessment is the potential impact on sensitive receptors from fugitive dust emissions from the following activities: transport - access road and internal haulage routes; soil and overburden handling; excavation of sand & gravel. The sensitive receptors within c. 250 metres of the extraction area were identified based on the land-use. These receptors were assessed in greater detail, as they were considered to have a potential for a greater risk of dust impact.

In the absence of any mitigation measures, the risk of impact from dust emissions was determined to be 'acceptable' to 'Slight adverse' at the receptors located within 250 meters. With mitigation measures in place, the risk of dust impacts is reduced to 'insignificant / acceptable' at all receptors. A number of mitigation measures have been and are in place to minimise the generation / migration of fugitive dust and to ensure that the extraction, processing and restoration operations comply with the relevant threshold values. These mitigation measures are in accordance with the best practice measures for the sector, and include: Scheme design, maximising the natural topographic screening and retaining the woodland area. All machinery will be regularly maintained.

Dust suppression (e.g. water bowser) will be utilised to suppress dust on internal haul road surfaces, in dry weather. The provision of a wheel-wash for HGV traffic existing the site. Existing site boundary hedgerows will be maintained and supplemented by additional operation landscaping to minimise the migration of dust beyond the overall site boundary. Vehicle speeds will be controlled on all internal haul roads. It is stated in the EIAR that the environmental monitoring programme will include dust deposition monitoring at the site boundaries.



The most important climatological parameters governing the atmospheric dispersion of particles are as follows:

- wind direction: determines the broad transport of the emission and the sector of the compass into which the emission is dispersed; and
- wind speed will affect ground level emissions by increasing the initial dilution of particles in the emission. It will also affect the potential for dust entrainment.

With respect to the Lands, Soils & Geology Impacts, the assessment completed concluded as follows:

Direct Impacts: Given the backfilling is proposed to occur within an existing void contained within an operational quarry site, no significant enabling works are required.

All required access routes, buildings, and services are already in place and there will be no construction phase of any significance.

A detailed assessment of impacts was carried out; Indirect Impacts: Dust generation and changes in land use are identified as potential indirect impacts. These will be brief & imperceptible beyond the application boundary; Cumulative Impacts: No significant cumulative impacts are expected from the proposed development with respect to land, soil, and geology.

With this best practice and mitigation tables with the EIAR the NEHS recommends that additional dust reduction measures are implemented on site.

Examples of routine operational measures are as follows to minimise nuisance:

- Minimise drop heights when handling dry or fine materials during windy weather materials.
- Minimise drop heights when handling wet material during low wind speeds, protection from wind where possible.
- Use of water sprays / tractor & bowser to moisten surfaces during dry weather.
- Minimise distances of onsite haul routes where possible.
- Restrict vehicle speeds through signage / staff training.
- Locate of haul routes away from sensitive receptors.
- Material stockpiling provided with adequate protection from the wind.
- Use of road sweeper to reduce the amount of available material for resuspension.

Hydrology and Hydrogeology

The potential impact of a sand and gravel extraction at the site on surface water and groundwater has been assessed and where necessary, recommendations for mitigation measures to reduce or eliminate any potential impacts have been made.



The potential direct and indirect impacts to surface water and groundwater associated with the proposed development are assessed. Appropriate mitigation measures for the identified potential impacts are discussed, and the residual impacts reassessed with mitigation measures in place. With mitigation measures in place, the potential impacts are considered not to be significant. The EIAR states that the environmental monitoring programme for the development will include groundwater level monitoring and groundwater quality monitoring.

Proposed measures are designed to prevent any reduction in the quality of the local surface water and groundwater environment and should be carried out in full and monitored to ensure compliance throughout the life time of this quarry. The sand and gravel material will be extracted above the groundwater table. Therefore, no surface water drainage infrastructure is required within the extension area. Rain falling across the site will percolate naturally to the ground as it does in the existing pit.

Published mapping provided by the GSI, reproduced as Figure 7-1, confirms that the application site is underlain by a 'Locally Important Aquifer – Karstified' relating to the Derravaragh formation. This aquifer has an approximate area of 146,85 km² and is bounded to the north and east by extensional fault features. The Lucan formation is also recognised as a 'Locally Important Aquifer – Bedrock which is moderately productive only in local zones'.

The groundwater in the sand and gravel subsoils at the proposed development site are not classified by the GSI as a discrete Sand & Gravel aquifer. To be classified as a Sand & Gravel aquifer the highly permeable subsoils need to be at least 10m thick, or has a saturated thickness of at least 5m and having a continuous area of at least 1km²

There are no watercourses observable within the extension boundary nor in the immediate surrounds. The Lough Lene-Adeel Stream, a tributary of the River Deel, flows approximately 700m south of the site. A small unnamed stream, a tributary of the River Inny is observed c. 1.1km to the north of the application site.

Located 700m to the southwest of the site is the White Lough, Ben Loughs and Lough Doo SAC. The Lough Bane and Lough Glass SAC (Site Code 002120) is located c. 1.9km further to the southeast.

In addition to the above desk study, Monitoring data gathering has been undertaken at the site.

The works carried out for assessing hydrology and hydrogeology in the application area is outlined as follows: • Installation of two new (2025) groundwater monitoring boreholes across the proposed development area, to monitor both the sand and gravel superficial deposits and underlying sandstone aquifer; and • Manual dipping of groundwater wells from four groundwater monitoring boreholes which includes two existing boreholes, details of groundwater monitoring boreholes on-site are presented within the EIAR.

The measures are in accordance with the best practice / possible remedial measures set out in **Chapter 3.4 of the DoEHLG (2004) Quarries and Ancillary Activities: Guidelines for Planning Authorities.**

The following are recommended further examples of good practice operational measures are as follows:

- The groundwater quality should be monitored 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



- Mobile plant and machinery is not serviced / maintained within the quarry void to minimise the risk of uncontrolled release of polluting liquids to groundwater, Fuel is stored in bunded tanks.
- A spill kit is kept on-site to stop the migration of any accidental spillages, should they occur;
- The effectiveness of the additional mitigation should be verified through a sampling programme. Any wells identified as a drinking water supply and located within 150m of the gravel extraction facility are sampled prior to the commencement of extension works. Sampling parameters should be agreed with the Local Authority.
- All wastewater generated on site is collected and fed via a sewerage pipe to the on-site septic holding tank. The tank is regularly inspected and maintained and is emptied as required by a licenced contractor.
- A site-specific Environmental Management System should be implemented at the site by the applicant during this stage.
- Any settlement lagoons should be 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. 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.

Restoration of the Proposed Quarry

Although the planning application includes for the 'restoration of the site to a mixture of agriculture wildlife vegetation on completion of extraction no finite details or landscaping and restoration plans are included in the EIAR. In the case *Fowler V Keegan* it was deemed that the large water bodies left behind were a health and safety water hazard.

There are drawing maps provided which are not in great detail on the restoration process or full detailed time-framed plans. 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.

Cumulative impacts

The National Environmental Health Service notes the assessment of cumulative impacts throughout the EIAR and is satisfied that the projects listed in the EIAR were assessed for the potential to give rise to cumulative impacts.



Climate

Impacts associated with the quarry will be from the day-to-day activities being undertaken at the site which will include the extraction and processing of rock, and transport of material internally and off site to market. Vehicles and plant associated with these activities will give rise to CO₂ and N₂O emissions. Emissions associated with the development are assessed as having an impact over a long-term period. Recycling use of water, energy audits and the use of best available technology should be considered during the life time of this quarry.

Energy audits in order to assess energy requirements and areas where energy usage can be reduced which will lead to a reduction in greenhouse gas emissions. This idea is encouraged to be taken and put in place for this development where reasonable practicable.

It is encouraged to keep abreast of any further Government /Meath County Council guidance and Government guidance in relation to Climate change/sustainable working in relation to Quarry activities.

Health Gain/ current recreational use

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 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 and the surrounding village. 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.

Conclusions

Should substitute consent be granted for the proposed development, the National Environmental Health Service makes the following recommendations:

- That the local community is informed of the proposed development and that any issues of concern expressed by them are taken into consideration in the operation of the proposed quarry extension. A system should be put in place for dealing with enquiries and/or complaints from members of the public during the operational phase of the quarry.
- Water monitoring results should be reviewed and where there is indication of contamination or significant dewatering of drinking water supplies additional mitigation should be agreed with the Planning Authority. The effectiveness of the additional mitigation should be verified through a sampling programme. Any wells identified as a drinking water supply and located within 150m of the gravel extraction facility are sampled prior to the commencement of extension works. Sampling parameters should be agreed with the Local Authority. These wells should also be sampled at least biannually during the extraction period and once within the first year following cessation of operations on site to establish if there are any changes in water quality.
- Mitigation measures proposed for the protection of surface and groundwater are implemented in full and are monitored on an on-going basis (as part of an



Environmental Management Plan) in order to mitigate any potentially significant effects .

- Dust mitigation measures and air quality measures outlined in Chapter 8 are included as conditions of planning permission (if granted); are implemented in full and are monitored to ensure the effectiveness of the mitigation.
- The proposed noise mitigation measures outlined in Chapter 10 are included as conditions of planning permission, if granted.
- Noise monitoring is also undertaken outside of 'daytime' hours.
- Corrective action should be included in the Environmental Management Plan if exceedances of permitted noise limits are recorded
- The condition of the haul roads should be checked weekly for damage/potholes. An agreement must be put in place between the local roads authority and the applicant for the on-going maintenance of haul roads during the construction and operation of the proposed development. Any damage/potholes identified should be repaired within 24 hours of identification.
- The submission of a full Site Restoration Plan, which includes a timeframe for undertaking restoration works, and actual works detail is included as a condition of planning permission, if granted. To minimise the risk of future water safety issues, consideration be given to a restoration plan for the quarry void involving filling the void and restoring it to agricultural use or as a public amenity.

If you have any queries regarding any of this report, the initial contact is Elish O'Reilly, Principal Environmental Health Officer who will refer your query to the appropriate person.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Elish O'Reilly'.

*Environmental Health Officer
Environment & Climate Change
Network Support Unit*

A handwritten signature in black ink, appearing to read 'Elish O'Reilly'.

Principal Environmental Health Officer