



**OFFICE OF CLIMATE,
LICENSING &
RESOURCE USE**

INSPECTOR'S REPORT ON A LICENCE APPLICATION

TO:	Director	
FROM:	Dr. Magnus Amajirionwu	- Licensing Unit
DATE:	21 st December 2015	
RE:	Application for a waste Licence from Kiernan Sand and Gravel Ltd. in relation to a facility at Foxtown, Summerhill, County Meath. Licence Register W0262-01.	

1 Application Details

Licence application received:	13 February 2009
EIA Required:	Yes
Classes of activity under the Waste Management Act 1996 as amended. (P = principal activity)	Class R 5 (P). Class R 13.
Third party submissions:	Three

2 Applicant and facility

Applicant:	Kiernan Sand and Gravel Ltd
Type of facility:	Recovery of waste soil and stone
Existing or new development:	Existing site, former quarry.
Main class of waste:	Waste natural soil/stone for backfilling of former quarry.
Quantity of waste to be managed:	<ul style="list-style-type: none"> • 1,105,500 tonnes soil and stone over lifetime of the activity or 167,400 tonnes per annum for recovery. • 150,000 tonnes of C&D waste over lifetime of the activity or 20,000 tonnes per annum for

	recovery.
Waste activities:	<ul style="list-style-type: none"> – Importation and stockpiling of soil/stone. – Use of soil/stone to backfill quarry void. – Importation of C&D waste and track ballast. – Separation of inert waste from C&D waste. – Use of inert C&D waste (e.g. bricks/tiles) and track ballast to produce secondary aggregate (which will be used to construct haul roads at the soil fill area and/or dispatched offsite).

3 Site Description

Kiernan Sand and Gravel Ltd are the owners of an exhausted quarry at Foxtown, Summerhill, County Meath. The quarry is situated within the Townland of Foxtown, approximately 6km southeast of Trim, and approximately 4.5km north northeast of Summerhill, and approximately 1.75km west of Kiltale, on the west side of an unnamed local road (see Figure 1). The application boundary covers an area of approximately 5.2 hectares and includes the quarry void, surrounding land and site infrastructure (e.g. weighbridge, site office, canteen, fuel storage etc.). The facility lies within the company landholding. Concrete production is carried out by the company in an area adjacent to the facility.



Figure 1 Location of facility

The licence application relates to the importation and use of 1,105,500 tonnes of waste soil and stone to backfill the worked-out quarry void. Backfilling of the quarry void will facilitate the restoration of the site and its return to agricultural use. According to the applicant most of this material is likely to be sourced from approved

contractors who are aware of the need for and who undertake strict segregation and sorting of waste prior to transporting it to the application site. Some C&D waste and track ballast (approx. 20,000 tonnes per annum) will also be accepted at the site. The applicant is proposing to use inert C&D waste (e.g. bricks and tiles) to produce secondary aggregate which will be used to construct site haul roads. Any non-inert C&D waste will be separated out and removed off-site. The applicant is forecasting that approximately 167,400 tonnes of waste soil/stone will be imported to the site per annum. No peat, unsuitable soil or hazardous waste will be used for backfill.

4 Planning Permission, EIS and EIA Requirements

4.1 EIA Screening

In accordance with Section 40(2A) of the Waste Management Act 1996, as amended, the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 40(2A)(b) and 40(2A)(c).

In accordance with the EIA Screening Determination, the Agency has determined that the activities are likely to have a significant effect on the environment, and accordingly requested an EIS and is carrying out an assessment for the purposes of EIA. An EIS was requested by the Agency on 26 September 2014 and submitted by the applicant. The EIS was considered by the Agency for the purposes of EIA.

4.2 Planning Status

On 20th April 2007, Meath County Council granted a quarry registration (QY/48) under Section 261 of the Planning and Development Act, 2000 as amended. The decision of Meath County Council to grant quarry registration and impose certain conditions was appealed to An Bord Pleanála. Details of the Section 261 registration including conditions imposed have been provided in the application form.

Having specific regard to EIA, this inspector's report is intended to identify, describe and assess for the Agency the direct and indirect effects of the activity on the environment, as respects the matters that come within the functions of the Agency, including any interaction between those effects and the related development forming part of the wider project, and to propose conclusions to the Agency in relation to such effects.

The EIS submitted, the licence application, the submissions and observations received from third parties, consultations with the planning authority, the relevant registration decisions and any additional information submitted by the applicant have been examined and assessed and are considered below for that purpose.

4.3 Content of the EIS and the licence application

I have considered and examined the content of the licence application, the EIS and other relevant material submitted with it.

It was considered that the EIS and the licence application did not adequately address the following areas and this information was requested under Article 14(2)(b)(ii) and Article 16(1) of the Waste Management (Licensing) Regulations 2004:

1. Types of waste activity.
2. Quantities of waste in relation to each waste activity applied for.
3. Annual quantities and nature of waste.

4. Construction and demolition waste infrastructure.
5. Management of surface water run-off.
6. Additional information on groundwater conditions at the site.
7. Unit operations in relation to waste acceptance.
8. Application of waste hierarchy.
9. Screening for appropriate assessment.

On receipt of further information under Article 14(2)(b) of the Waste Management (Licensing) Regulations 2004, as amended, all of the documentation received was examined and I consider that the information as submitted contains a satisfactory description of the project, the alternatives studied by the applicant, the aspects of the environment likely to be significantly affected by the activity, the likely effects of the activity on the environment, the modelling methods used, the prevention and mitigation measures envisaged, the lack of difficulties and deficiencies encountered and a non-technical summary. There was no response from the applicant to the Agency's notification under Article 16(1) of the Waste Management (Licensing) Regulations 2004, as amended dated 18th July 2013.

I consider that the EIS, when considered in conjunction with the additional material submitted with the application, also complies with the requirements of the *Waste Management (Licensing) Regulations 2004*.

I have considered and examined the documents furnished by Meath County Council in relation to the impacts assessed by it, in particular the planner's report and the decision dated 20th April 2007 (file number QY/48).

In Section 14 of this report I have addressed the issues that interact with the matters that were considered by the above authority and which relate to the activity.

Having considered the application and EIS, the submissions by members of the public, the submissions of state and public authorities, and the matters resulting from the planning authority decision, I consider that the likely significant effects of the activity on the environment are as set out in Section 14 below.

4.4 Consultation with Competent Authorities

Consultation was carried out between Meath County Council and the Agency as follows:

Table 1: Correspondence with the planning authority

Notice	Description
Notice under Section 42(1)(e)(i) of the Waste Management Act 1996, as amended. Issued: 10 October 2014	Notice to the Environment and Planning Departments of Meath County Council that an EIS and a waste licence application have been received and inviting submissions on same.
Response to notice under Section 42(1)(e)(i) of the Waste Management Act 1996, as amended. Received: 13 October 2015	Response from Planning Authority where it provided comments to the Agency on the EIS and licence application.

Meath County Council provided positive comments to the Agency on the licence application and EIS in the response received on 13th October 2015. The comments in respect of the EIS are summarised following:

Alternatives Considered

The Planning Authority concurred with the applicant that the examination of alternative sites was not particularly meritorious since it is the existence of the quarry void that constitutes the principal qualification of the application site.

Human Beings

The Planning Authority stated that the impact of the restoration works to date has had a positive impact on the environment in returning these lands to beneficial use.

Flora & Fauna

The Planning Authority was of the view that the overall site is relatively barren with no species of interest in the fauna.

Soils & Geology

The Planning Authority is satisfied that the proposal will have no direct impact on the local or regional geology.

Water

The Planning Authority stated that backfilling will reinstate protection for the bedrock aquifer, and reduce the actual groundwater vulnerability to possible contamination by limiting infiltration to lower levels.

Climate

The Planning Authority is of the view that the activity is not of sufficient scale to have any direct or indirect impacts on the regional or local climatic conditions.

Air Quality

The Planning Authority had no objection to the proposal from an air quality perspective subject to the appropriate implementation of the mitigation measures as outlined in the EIS.

Noise

The Planning Authority noted the mitigation measures intended and believes the implementation of same would be beneficial.

Landscape

The Planning Authority was of the view that the proposed activity will have a slight positive impact on the landscape by virtue of its reinstatement of previously disturbed quarrying lands.

Cultural Heritage

The Planning Authority stated that there will be no direct or indirect construction impact on the archaeological, architectural or cultural heritage resource.

Traffic

The Planning Authority considered that given the scale of the proposed development and the nature and condition of the road serving the site, and the proposed mitigation measures that the development will not lead to a greater risk to public safety by reason of traffic hazard.

The EIS assessment outlined in Section 14 of this report takes into consideration the comments provided by Meath County Council.

5 Submissions

Three submissions were received in relation to this waste licence application, from the Meath County Council and Health Service Executive (two submissions from Environmental Health officers in Navan and Trim).

These submissions were taken into consideration during the preparation of the RD.

5.1 Meath County Council

The following issues were highlighted in the submission:

- Meath County Council forwarded to the Agency a copy of a non-compliance letter dated 27 May 2015 sent to the permit holder James Kiernan (Kiernan Sand and Gravel) listing eight breaches of their waste facility permit number WMP 2007/22.
- It also requested an update on the status of the licence application W0262-01.

Response

The submission stated that the applicant was in breach of the following conditions of their permit in relation to phased filling of the quarry void; use of good clean quality hardcore material on haul road; soil and stone (Waste Code 17 05 04, 17 01 01); erection of markers indicating the finished levels in line with the topographical drawings submitted to the Council; deposition of material on public roadway by vehicles exiting from the site; having a road sweeper on site to care for the public road; and the use of the wheel wash.

The conditions in the RD in relation to site infrastructure and operations adequately address the contents of the submission.

5.2 Health Service Executive, Trim

The submission made by the HSE office in Trim stated that they have no objections to the issuing of a waste license subject to a list of conditions which were outlined in the submission, and included such matters as waste types to be accepted, hours of waste acceptance, control of nuisance including noise and dust, environmental measures and record keeping.

Response

The submission is noted.

Only uncontaminated soil and stone and inert construction and demolition waste shall be accepted at the site (see Section 8). Waste acceptance hours as stated in the submission were considered restrictive and no reason was given for this restriction. Condition 1.7.1 of the RD stipulates the waste acceptance hours. On nuisance, Condition 5.5 of the RD ensures that nuisance associated with vermin, mud, dust and litter is not generated. Limit values for noise emissions during the day, evening and night times are outlined in *Schedule B.3* of the RD. Section 14.1.1 of this report deals with the provision and operation of a wheel-wash facility of suitable design for the purpose preventing mud on public roadways. Condition 3.12

of the RD deals with tank, container and drum storage areas, while Condition 11.9 requires a full record to be kept on matters relating to the waste management operations.

5.3 Health Service Executive, Navan

The submission made by the HSE office in Navan stated that having considered the documentation submitted, it has no comments to make on the waste licence application.

Response

The submission is noted. No response is required.

6 Best Available Techniques (BAT)

Even though the facility is not a landfill (i.e. it is not a waste disposal activity) BAT for the activity is taken to be best represented by the guidance given in the Agency's Guidance Note on Best Available Techniques for the Waste Sector: Landfill Activities (2011), insofar as it relates to the backfill activities at this facility. The Reference Document on the Best Available Techniques for the Waste Treatments Industries (IPPC Bureau 2006) is also relevant as a reference for BAT for the recycling of C&D waste.

I have examined and assessed the application documentation and I am satisfied that the technologies and techniques, as specified in the application, and as confirmed, modified or specified in the RD will ensure that the relevant requirements of BAT as stipulated in the above documents will be applied at the facility. These include the development of an Environmental Management System, waste acceptance procedures, waste characterisation, emissions control and monitoring, management of storm water, environmental liabilities and CRAMP. In addition, I consider that the proposed activities, as described in the application, in this report, and in the RD, to be the most effective in achieving a high general level of protection of the environment having regard - as may be relevant - to the location of the installation and to the way in which it is designed, built, managed, maintained, operated and decommissioned.

7 Waste Acceptance

Wastes that are imported to the facility will be managed as follows:

Waste	Use
Imported soil/stone	Recovery - Backfill of quarry void where they meet the relevant Waste Acceptance Criteria (See below for more detail).
Mixed C&D waste	Separation by mechanical treatment of inert and non-inert fractions.
Inert waste stream separated from C&D waste (e.g. concrete, bricks, tiles)	Used on-site to produce secondary aggregate. Where the secondary aggregate achieves end-of-waste status it can be used for the construction of haul

	roads at the facility (See below for more detail).
Non-inert waste streams separated from imported C&D waste (e.g. metal, wood, plastic, contaminated soil)	Off-site recovery or disposal.

Schedule A.1 *Waste Acceptance* of the RD specifies the types and amounts of waste that can be accepted at the facility.

8 Waste Acceptance Criteria

The RD permits only two waste streams to be used for backfill, these being:

- (i) greenfield soil/stone, and
- (ii) non-greenfield soil/stone.

Both of these terms are defined in the RD.

Schedule A.2 *Waste Acceptance Criteria for Backfill Material* of the RD specifies Waste Acceptance Criteria for these two waste streams.

For greenfield soil and stone it is proposed that greenfield soil and stone should be declared suitable for backfill by a suitably qualified person (such as a chartered engineer) following which the material can be imported without the need for testing/characterisation. Therefore the waste acceptance criterion for greenfield soil and stone is a 'letter of suitability' from a 'qualified person' which will state (prior to its use as backfill) the nature and suitability of the material for backfill. All relevant terms are defined in the RD and this matter is addressed in Condition 8.4 and Schedule A of the RD. Overall it is considered that this provision reflects the low level of risk associated with accepting greenfield soil and stone at licensed facilities and will facilitate the ease of its movement to sites where it is needed for backfill. It should be noted that Condition 8.4.3 of the RD allows the Agency to direct that testing of greenfield soil and stone is carried out. In addition, Condition 11.10(x) of the RD requires that original copies of letters of suitability are held on-site.

For non-greenfield soil/stone more stringent waste acceptance criteria are recommended as there is potential for this particular stream to be contaminated. The relevant waste acceptance criteria are set out in Schedule A.2 of the RD. Initially it must be ensured that the material contains less than 2% non-natural materials (e.g. concrete, tar etc.). The material must then be tested and characterised in accordance with Schedule A.3 *Waste Characterisation for non-greenfield soil and stone* of the RD. Before it can be used as backfill the non-greenfield soil/stone must meet maximum contaminant concentration levels which must be agreed in advance with the Agency under Condition 8.5.1 of the RD.

The following is a summary of the range of provisions recommended in the RD which will ensure that backfill activities at the facility do not cause environmental pollution:

Provision in RD	Description
Glossary	A range of terms are used in the RD and defined for clarity
Condition 8.4	Greenfield soil and stone: Requirements in relation to the 'letter of suitability' to confirm the nature and suitability of greenfield soil and stone

Condition 8.5	Non-greenfield soil and stone: Requirements in relation to non-greenfield soil and stone including the development of maximum contaminant concentration levels and testing protocols
Condition 8.6	Specifies materials that can and cannot be used for backfill
Condition 8.13	Requirements in relation to the development of waste acceptance and characterisation procedures
Condition 11.10	Requirements in relation to records for each waste delivery including a letter of suitability for greenfield soil and stone
Schedule C.4	Requires monitoring of deposited waste
Schedule C.5	Requires monitoring of groundwater on a quarterly basis (aside from coliforms)

Should contamination of soil or groundwater be revealed by monitoring of deposited waste (Schedule C.4) the Agency will be in a position to require or carry out an intrusive investigation at the facility to verify and determine the extent of inappropriate use of contaminated backfill.

8.1 Secondary Aggregate

The applicant is proposing to accept C&D waste for treatment from which will be recovered inert materials for the production of secondary aggregate. The applicant is further proposing to use this secondary aggregate to construct haul roads at the facility. In order to ensure that the secondary aggregate is produced to a suitable quality standard and will not cause environmental pollution when used, Condition 8.12 of the RD requires that (unless otherwise agreed with the Agency) only secondary aggregate that has achieved end-of-waste status can be used at the facility. It should be noted that this particular waste stream will represent a very small percentage of the overall waste import as Schedule A.1 *Waste Acceptance* of the RD sets an import limit of 20,000 tonnes per annum on C&D waste. Condition 3.9 of the RD includes controls related to the construction and operation of the C&D waste recovery area.

As highlighted above, given the risk of contamination, Condition 8.6.2 prohibits the use of fines derived from C&D waste as backfill material.

9 Emissions

9.1 Emissions to Air

There will be no point source emissions to air. Activities at the facility may lead to fugitive dust emissions. Condition 6.11 requires that measures are implemented to control emissions of dust. Schedule B.4 *Dust Deposition Limits* of the RD sets a limit on ambient dust deposition while Schedule C.3 *Ambient Monitoring* of the RD requires bi-annual monitoring of ambient dust deposition.

9.2 Emissions to Sewer

There are no emissions to sewer. The facility uses a waste water treatment system comprising septic tanks and percolation areas to treat sanitary effluent. Condition 3.19 of the RD requires the onsite waste water treatment systems to meet the criteria set out in Agency guidance.

9.3 Emissions to ground/groundwater

There are no emissions to groundwater. Groundwater monitoring data showed no evidence of contamination with hydrocarbons or metals. The sand and gravel deposits have been worked dry with no extraction below the water table. The sand and gravel have in recent times been dry screened only, with no washing of aggregates. There are 3 wells within the Foxtown site (i.e., GW1 to GW3), and these will be used to monitor groundwater levels, and sample for chemical analysis. While groundwater samples were taken from the GW1 well in January 2009 and July 2014, none was taken from GW2 and GW3. No reason was adduced as to the sampling of only GW1. The results of the hydrochemical analysis show that the groundwater sample is compliant with national standards, except for total coliform, chlorides and nitrates concentrations. These were attributed to agricultural activity on adjacent lands as the GW1 well lies down (hydraulic) gradient from intensively farmed lands, which lie within 10m of GW1. Microbiological analysis of the GW1 samples showed zero faecal coliforms levels, and suggests there is no contamination from organic wastes including sanitary sewage. The slightly elevated total coliform were attributed to exposure to air during sampling, coliforms from soils, or poor sampling practices.

The RD includes a range of requirements which will ensure that groundwater is not contaminated while licensed activities are being carried out. Only soil and stone that meets the appropriate waste acceptance criteria will be used for backfill (see Section 7 for more detail). Re-fuelling and maintenance of site vehicles will take place within designated areas protected against spillage and run-off. No re-fuelling of waste delivery vehicles will take place at the facility. All fuels and lubrication oils must be stored in bunded areas. All wastes that are generated at the facility must also be stored within designated areas. These measures address a number of key provisions of the Groundwater Directive (2006/118/EC), namely that hazardous substances should not be allowed to enter groundwater, and will ensure compliance with the European Communities Environmental Objectives (Groundwater) Regulations 2010.

Schedule C.5 *Groundwater Monitoring* of the RD requires quarterly monitoring of groundwater, which will reveal any significant contamination of groundwater should it occur.

9.4 Emissions to Surface Waters

There is no discharge to surface water. The wash-water from the existing wheel-wash is recycled within a self-contained holding tank with overflow to a settlement tank. The settlement tank is periodically emptied by a licenced waste disposal contractor.

9.5 Storm Water Runoff

There is a natural drainage pattern existing on the site. This means that rain water falling on the site percolates through the existing soil strata (sand and gravel) to the underlying bedrock. The existing drainage pattern is expected to remain unaltered following cessation of the reclamation operations.

There are no surface water courses adjoining the site. Surface water run-off within the site percolates to ground through the floor of the sand and gravel pit into the underlying limestone bedrock.

9.6 Noise

Activities at the facility have the potential to generate noise. Condition 6.11.1 requires that measures are taken at the facility to control noise emissions. In addition, the RD sets noise limits and Condition 6.12 requires noise survey to be carried out in accordance with Agency guidance.

9.7 Nuisance

Given the nature of the activities at the facility, there is potential for nuisance other than noise. Condition 5.5 of the RD includes requirements to ensure that nuisance associated with vermin, mud, dust and litter is not generated. In addition, the facility is required to operate a wheel wash for vehicles leaving the facility (Condition 3.7 of the RD).

10 Use of Resources

There is no water mains connection. The potable water supply for the proposed temporary site office will be met by bottled water. Water used for dust suppression, where possible, will be sourced from collection of surface water run-off and/or from an existing borehole on site.

Other materials used on site are diesel, hydraulic oil and engine oil which are used to operate diesel powered plant on site. The overall fuel use amounts to about 18,000 litres/annum).

All lighting and heating required at the facility will be provided by the existing mains power connection. Condition 7 of the RD sets out the requirements with regard to resource use and energy efficiency.

11 Closure, Restoration and Aftercare

The applicant submitted a Closure, Restoration and Aftercare Management Plan (CRAMP) as part of the licence application (see Section 16 'Fit and Proper Person Assessment' below for more detail). Condition 10.2.1 of the RD requires the licensee to submit a revised CRAMP prior to commencement of waste acceptance at the facility.

12 Waste Management Plan and National Policy

The Eastern Midlands Waste Management Plan states that soil and stone comprised the majority (about 68%) of all construction and demolition waste arising in the Region in 2012. The Plan recognises there are signs of recovery in construction and this will lead to a greater demand for outlets for soil and stone. The Plan quantifies the amount of capacity as "pending" (i.e. awaiting authorisation) at 1,230,000 tonnes.

Activities will also conform with national policy for the following reasons:

- It maximises waste recovery and minimises waste disposal.
- The activities will conform to the principles of proximity and self-sufficiency.

13 Compliance with Directives/Regulations

The RD as drafted takes account of the requirements of the following relevant Directives/Regulations:

Directive/Regulation	Comment
Water Framework Directive	See Sections 9.3 and 9.4 above for detail.
Environmental Liabilities Directive	<p>The applicant submitted an Environmental Liabilities Risk Assessment (ELRA) as part of the application. Condition 12.2.2 requires that the ELRA is revised and agreed by the Agency.</p> <p>Condition 12.2.3 of the RD will require the licensee to make adequate financial provision to cover any liabilities associated with the activity prior to commencement of activities.</p> <p>See Section 16 below for more detail.</p>
Waste Framework Directive	Activities at the site will adhere to the waste hierarchy as well as to the provisions in the Directive related to reuse, recovery, recycling, self-sufficiency and proximity.

14 Environmental Impact Assessment Directive (85/337/EEC)

The following section identifies, describes and assesses the likely significant direct and indirect effects of the proposed activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following factors: human beings, flora, fauna, soil, water, air, climate, the landscape, material assets and cultural heritage.

The main mitigation measures proposed to address the range of predicted significant impacts arising from the activity have also been outlined. The cumulative impacts with other developments in the vicinity of the activity have also been considered, as regards the impacts of emissions from the activities. This section must be read in conjunction with the analysis carried out in all sections of this report.

Assessment of effects

14.1 Human Beings

Likely significant effect	Description of effect	Assessment addressed
---------------------------	-----------------------	----------------------

		in section:
Traffic	Traffic and its associated emissions, risks and disamenity effects.	14.1.1
Impact on air quality	Emissions of dust.	14.5.1
Noise	Disamenity from noise emissions due to licensed activities.	14.1.2
Accidents	Emissions to the local atmosphere, ground and water bodies.	14.1.3

Assessment of Effects on Human Beings

14.1.1 Traffic

Waste will be transported to the facility by road. This is likely to create noise and possible dust nuisance and potentially escape of waste onto roadways on the approaches to the facility. The impact of traffic as it moves outside of the facility boundary is a matter for the planning authority and permission was granted for this activity in 2007.

There is a risk of dirty vehicles tracking dirt from the facility onto the public road.

Mitigation Measures

The RD requires use of a wheel wash (Condition 3.7.2) and sets hours of waste acceptance (Condition 1.7.1) which will limit the potential traffic impact to those hours. The licence also requires that the licensee keep clean the environs of the facility (Condition 6.13).

Conclusion

Based on the above assessment, the site design and the mitigation measures in place, I am satisfied that there will not be significant effects on the environment from traffic resulting from on-site activities.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.1.2 Noise

There will be vehicles, machines and other equipment in operation at the facility, all with the potential for noise emissions. The nearest sensitive receptor is close to the existing site entrance. The noise impact assessment completed by the applicant predicted that noise levels from the proposed activity will not exceed 55dB(A).

Mitigation Measures

The RD requires the licensee to carry out a noise survey if so directed by the Agency. **Schedule B.3 Noise Emissions** of the RD includes limit values for emissions during day, evening and night time hours. The noise emission limit value during daytime hours is 55dB L_{Ar,T, 30 min}.

Conclusion

Based on the above assessment, the site design and the mitigation measures in place, I am satisfied that the likelihood of a negative impact from noise will be negligible.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.1.3 Major Accidents

Due to the non-hazardous and inert nature of the waste to be accepted at the facility (with the exception of relatively small quantities of construction and demolition waste which might contain small amounts of non-inert waste), the risk of adverse effects on human beings and the environment as a result of an accident is low.

The risk of groundwater pollution is low due to the absence of hazardous substances at the facility.

The risk of fire is low due to the absence of flammable waste at the facility.

Mitigation measures

The RD requires the licensee to:

- implement waste acceptance procedures to prevent the acceptance of unauthorised (including contaminated) wastes at the facility (Condition 8.13);
- employ a suitably qualified and experienced facility manager (Condition 2.1.1);
- put in place a documented Accident Prevention Procedure which addresses all hazards on-site (Condition 9.1);
- put in place an Emergency Response Procedure which will ensure any effects of an emergency on-site are minimised (Condition 9.2);
- implement a preventative maintenance programme (Condition 2.2.2.8); and
- implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled (Condition 2.2.2.5).

Conclusion

I am satisfied that based on the above assessment, the mitigation measures proposed will prevent an occurrence of a major accident that would have significant adverse environmental effects.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.2 Flora and Fauna

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on local habitat and flora and fauna in the area.	Removal and filling over any existing plants and habitats at the facility.	14.2.1
Accidents	Emissions to the local atmosphere, ground and water bodies.	14.1.3

Assessment of Effects on Flora and Fauna

14.2.1 Flora and fauna.

Waste activities at the facility have been ongoing since 2007 and are in fact nearing completion. There is no significant habitat remaining to be removed and filled over.

Whilst the construction of any facility can displace existing flora and fauna, an ecological assessment of the potential impacts on flora and fauna on and near the site concluded that the activity will not negatively impact on flora and fauna because the site and the local area is not designated as of ecological interest.

The potential impact on European sites is addressed in Section 15 of this report.

Mitigation Measures

Re-vegetation will be carried out on completed sections of the site on an on-going basis. No further mitigation measures are necessary due to the absence of existing habitat at the facility.

Conclusion

I am satisfied that based on the above assessment, the mitigation measures proposed will prevent an occurrence of a significant adverse effect on flora and fauna.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.3 Soil

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on soil.	Accidental spillage or discharge to ground due to the deposition of contaminated soil. Overall a positive effect is predicted as the backfill of the quarry will	14.3.1

	restore the natural protective soil layer over the bedrock.	
Accidents.	Emissions to the local atmosphere, ground and water bodies.	14.1.3

Assessment of Effects on Soil

14.3.1 Soil

Operations at the facility could have an impact on soil due to the potential for spillage of fuel and oil.

The acceptance of contaminated soil and stone could result in contamination of soil already deposited at the facility and the soil and geology beneath the facility.

Mitigation Measures

The RD includes requirements for safe storage and handling of fuels and other materials.

The RD requires an accident prevention policy and emergency response procedure.

The RD requires that the sanitary wastewater treatment system meets the criteria set out in EPA guidance.

Waste acceptance procedures, if implemented in accordance with the RD, will prevent the deposit of contaminated soil and other unauthorised waste.

Conclusion

I am satisfied that there will not be significant effects on soil from the licensed activity at the installation.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.4 Water

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on surface water.	Discharge of rain water run-off through seepage to ground.	14.4.1
Impact on groundwater.	Contamination of groundwater due to accidental spillage or discharge to ground. Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the bedrock and the	14.4.1

	groundwater.	
Accidents	Emissions to the local atmosphere, ground and water bodies.	14.1.3

Assessment of Effects on Water

14.4.1 Surface water and groundwater

There are no process emissions to surface water or groundwater.

Surface water run-off is allowed to migrate to the quarry floor where it will percolate to the underlying water table. As the groundwater beneath the site is extremely vulnerable, it is possible that surface run-off with elevated suspended solids will percolate to the underlying water table. There are no active settlement lagoons or ponds, and no surface water discharge from the site.

Mitigation Measures

Adequate containment of on-site fuels and oils to prevent any accidental spillages which may migrate to the sand and gravel subsoils and underlying groundwater.

The RD requires impermeable concrete surfaces to be maintained in the construction and demolition waste treatment and storage area. The RD requires the capture of all run-off from hardstanding areas.

The RD requires all tanks to be rendered impervious to their contents and to be bunded.

The RD prohibits any direct emission to ground or groundwater.

See also Section 14.3, Soil.

Conclusion

I am satisfied that based on the above assessment, the mitigation measures proposed will prevent an occurrence of a significant adverse effect on surface and groundwater quality.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.5 Air

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on air	Emissions of dust.	14.5.1
Accidents	Emissions to the local atmosphere, ground and water bodies.	14.1.3

14.5.1 Impact on Air Quality

Dust is the main potential emission to air that could affect air quality. There will be no odorous wastes accepted so there is no potential for odour emissions.

Mitigation Measures

The RD requires:

- that dust control measures are employed to minimise the emission of dust during dry periods (Condition 6.11); and
- Schedule C.3 of the RD requires periodic monitoring of dust deposition rates at the facility boundary.

Conclusion

I am satisfied that there will not be significant effects on air quality from the licensed activity at the installation.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.6 Climate

Likely significant effect	Description of effect	Assessment addressed in section:
Release of climate altering substances.	Emission of greenhouse gases.	14.6.1

Assessment of Effects on Climate

14.6.1 Release of climate altering gases

Operation of vehicles and machines at the facility will generate exhaust gases with greenhouse gas potential.

Mitigation Measures

Condition 7.1 of the RD requires that the licensee undertake periodic energy efficiency audits.

The operation of the facility as a soil recovery facility is a finite undertaking. At the waste deposition rates proposed to be authorised in the RD (167,400 tonnes per annum, see Schedule A of the RD), the facility will be full in approximately 18 to 24 months subject to demand. Vehicles and machines used in the soil deposition activity will cease operation.

Conclusion

I am satisfied that there will not be a significant adverse effect on climate caused by emissions from the licensed activity at the installation.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.7 Landscape, Material Assets and Cultural Heritage

Likely significant effect	Description of effect	Assessment addressed in section:
Visual impact on nature of landscape.	No significant effect is predicted. No new structures are proposed. Activities will lead to eventual restoration of the site to agricultural land which will improve the overall visual aspect of the site.	14.7.1
Impact on material assets and cultural heritage.	Potential for impact on local material assets (e.g. roads, road signage, power supply, housing) and archaeological artefacts. Potential for nuisance impact.	14.7.2

Assessment of Effects on Landscape, Material Assets and Cultural Heritage.

14.7.1 Visual impact on nature of landscape.

A landscape and visual impact assessment was carried out and it was concluded that the proposed development will not create a significant landscape and visual impact on the existing environment. Backfilling work to partly reinstate the topographic profile of the quarry may temporarily increase the visibility of the operation, until such time as the land is restored and returned to agricultural use.

Mitigation Measures

The grant of planning permission by Meath County Council specifies the landscaping requirements for the facility. Imported soil and stone will be used to carry out restoration of existing quarry workings in accordance with conditions imposed (under P.A. Reg. Ref QY48, QC 17.QC2113) by Meath County Council. Topsoil will be seeded and the area returned to useable improved land, suitable for use as agricultural grassland, livestock grazing and/or forestry.

Conclusion

I am satisfied that there will not be significant adverse impact on visual amenity from the licensed activity at the installation.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.7.2 Impact on material assets and cultural heritage, including archaeology and architecture.

An assessment of material assets which includes land, local settlement, electricity supply, road network and water supply concluded that the proposed development will not result in any significant environmental impacts.

Due to the nature of the facility (excavated quarry), there is minimal potential for previously unrecorded archaeological features or deposits arising.

Mitigation Measures

The RD requires nuisance monitoring. This requirement should ensure residential quality in the area is maintained.

Conclusion

I am satisfied that the licensed activity at the installation will not impact on material assets and cultural heritage.

Accordingly, the operation of the activity in accordance with the RD will not cause environmental pollution, while any accidental emission is not likely to have a significant effect on the environment.

14.8 Interaction of effects

I have considered the interaction between the factors referred to in parts 14.1 to 14.7 above and the interaction of the likely effects identified.

The interaction between factors as a results of the operation of the facility are summarised below:

Section	3.1 Human Beings	3.2 Flora & Fauna	3.3 Soils & Geology	3.4 Water	3.5 Climate	3.6 Air Quality	3.7 Noise	3.8 Landscape	3.9 Cultural Heritage	3.10 Material Assets	3.11 Traffic
3.1 Human Beings											
3.2 Flora & Fauna											
3.3 Soils & Geology											
3.4 Water	•	•	•								
3.5 Climate											
3.6 Air Quality	•	•			•						
3.7 Noise	•	•									
3.8 Landscape	•	•				•					
3.9 Cultural Heritage								•			
3.10 Material Assets	•			•		•	•	•	•		
3.11 Traffic	•	•				•	•			•	

Figure 2 Interaction of effects.

Based on the assessment in parts 14.1 to 14.7 above, and the mitigation measures proposed (including the relevant conditions in the licence), I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity.

14.9 Reasoned Conclusion on Environmental Impact Assessment

Having regard to the impacts (and interactions) identified, described and assessed above, I consider that the mitigation measures proposed will enable the activity to operate without causing environmental pollution. I also consider that the potential impacts on the environment identified above, even if they occur, are unlikely to damage the environment as a whole, and the risk of them occurring is not unacceptable.

15 Appropriate Assessment

The facility itself is not within a designated area and it does not have any direct discharges into a Natura 2000 site. As shown in the table below, there is one Natura 2000 site assessed. The nearest designated site is about 3km northwest of the activity.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the proposed activity (during both the construction and operational phases), individually or in combination with other plans or projects, is likely to have a significant effect on a European Site. In this context, particular attention was paid to the following European site in the table below.

European Site assessed:	River Boyne and River Blackwater SAC [Site Code 002299]
--------------------------------	---

The Agency considered, for the reasons set out below, that the activity is not directly connected with or necessary to the management of the site as a European site and that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects will not have a significant effect on a European site, and accordingly the Agency determined that an Appropriate Assessment of the activity is not required, and for this reason determined not to require the applicant to submit a Natura Impact Statement.

The following reasons contributed to the determination that the Appropriate Assessment of the proposed activity is not required:

- The activity is not located within a European Site.
- The activity will not result in damage to, or loss of, habitat in a European Site.
- There will be no process discharge from the activity to the European Sites.

16 Fit & Proper Person Assessment

The 'fit and proper person' assessment requires three areas of examination:

i. Technical Ability

The application is concerned with an existing authorised waste facility. It is considered that the applicant's management team, nominated staff and environmental advisors are appropriately qualified and experienced with regard to their technical ability to oversee and manage activities at the site.

ii. Legal Standing

The applicant, Kiernan Sand and Gravel Ltd, has never been convicted of any relevant offence.

iii. Financial Standing

A lodgement of an approved insurance company bond in the sum of €50,000 with the planning authority was required under Section 261 Consent to secure the satisfactory completion and restoration of the site. Conditions 10.2.1 and 12.2.2 of the RD require the submission of a revised CRAMP and ELRA respectively. The RD also requires that these are revised in accordance with the latest Agency guidance on assessing and costing of environmental liabilities which was published in 2014. In addition, Condition 12.2.3 of the RD requires the licensee to make financial provision in a manner that is to the satisfaction of the Agency.

Overall, having regard to the provision of Section 40(4)(d) of the Waste Management Acts 1996, as amended, the applicant can be deemed a Fit and Proper Person for the purpose of this licence application.

17 Cross Office Liaison

In preparing this report and Recommended Decision the following technical and sectoral advisors were consulted:

Inspector	Assistance provided
Pamela McDonnell (OCLRR)	Matters related to Environmental Impact Assessment
Deirdre French (OCLR)	Matters related to Appropriate Assessment

18 Recommended Decision

The RD if granted will authorise the acceptance of suitable soil and stone for backfill of an exhausted quarry. Backfilling of the quarry void will facilitate the restoration of the site and its return to agricultural use. The RD also authorises the acceptance for treatment of small amounts of C&D waste. The RD includes a wide range of conditions that will ensure proper handling of wastes, the control and monitoring of dust and noise emissions, the treatment of storm water runoff and the prevention of nuisance. Overall, I am satisfied that the conditions set out in the RD will adequately address all emissions from the facility and will ensure that the carrying on of activities in accordance with the conditions of the RD will not cause environmental pollution.

19 Charges

An annual charge of €6,306 is specified in the RD which is based on the enforcement effort predicted for the facility.

20 Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed



Dr. Magnus Amajirionwu

Inspector

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Act 1996, as amended as soon as may be after the expiration of the appropriate period.