


Signed: *Brian Meaney*

Date: 15/02/2017

 <p>epa Environmental Protection Agency <i>An Ghníomhaireacht um Chaomhnú Comhshaoil</i></p>	OFFICE OF ENVIRONMENTAL SUSTAINABILITY
INSPECTOR'S REPORT ON A LICENCE APPLICATION	
TO:	Director
FROM:	Ewa Babiarczyk Environmental Licensing Programme
DATE:	15 February 2017
RE:	Application for a Waste Licence from Roadstone Limited in relation to Mullaghcrone Quarry located at Platin and Cruicerath Townlands, Donore, County Meath, Licence Register Number W0278-01

1 Application Details

Licence application received:	13 th June 2011.
EIA Required:	Yes.
Classes of activity under the Waste Management Act 1996 as amended. (P = principal activity)	Class R 4, R 5, R10 (P), R13.
Third party submissions:	None received.

2 Applicant and facility

Applicant:	Roadstone Limited. Company Register Number: 11035.
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 the quarry.

Quantity of waste to be managed:	<ul style="list-style-type: none"> • 1,800,000 tonnes soil and stone over the remaining lifetime of the activity. Maximum annual intake 100,000 tonnes of soil and stones.
Waste activities:	<ul style="list-style-type: none"> – Importation and stockpiling of soil/stone. – Use of soil/stone to backfill the quarry void.

3 Site Description

Roadstone Limited are the owners of the site and the site surroundings. The facility forms part of the footprint of an active quarry and is situated in a semi-rural to industrial area in the townlands of Cruicerath and Platin, approximately 600 m to the southeast of Donore Village as shown on Figure 1. The application boundary covers an area of 15.3 hectares. The main infrastructure within the facility boundary comprises of a weighbridge, wheelwash, site office, garage, quarantine area and fuel storage.

The licence application relates to the importation and use of 100,000 tonnes per annum of waste soil and stone to backfill the part of the quarry void that is finished. The fill area is shown in Figure 2. The backfilling of the quarry void will facilitate the restoration of the site and its return to agricultural use. Quarrying and associated activities will continue on the remainder of the site in the applicant's ownership.

The applicant also sought authorisation to accept construction and demolition (C&D) waste to produce secondary aggregate that will be used for construction of haul roads at the facility or sale off-site. There is no planning permission for this activity and it is consequently proposed for refusal in the RD.

Figure 1: Location of facility showing the facility boundary in red

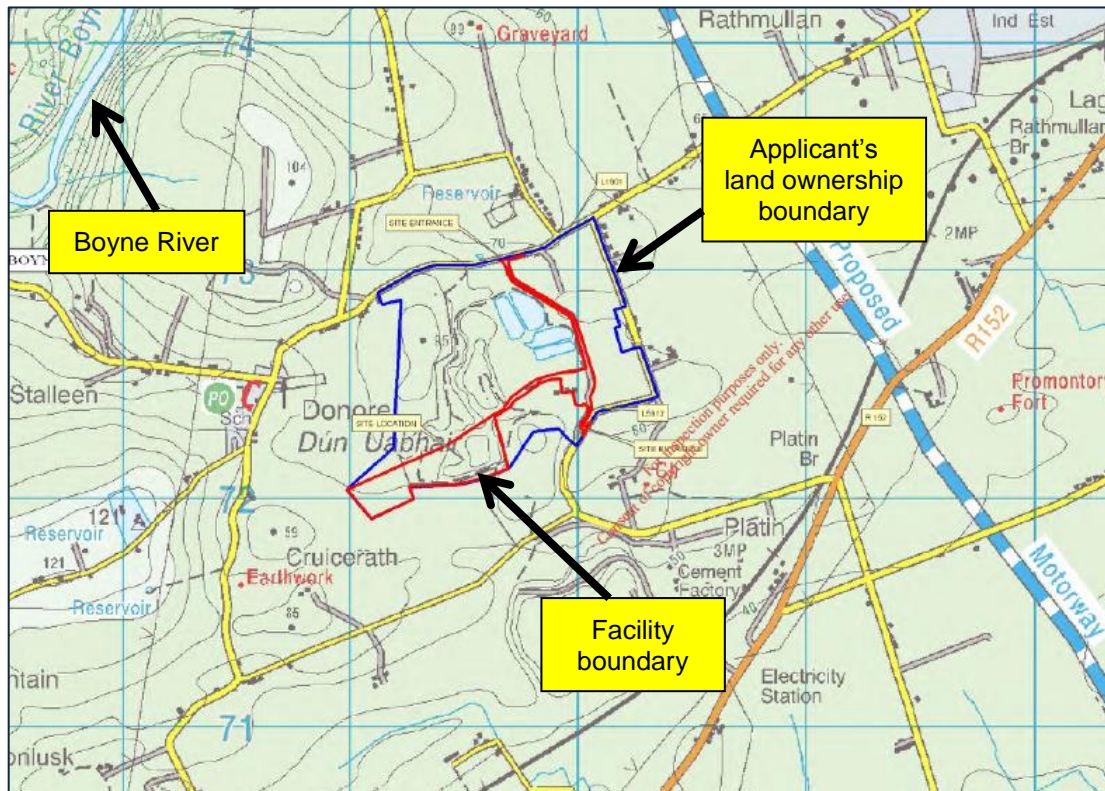
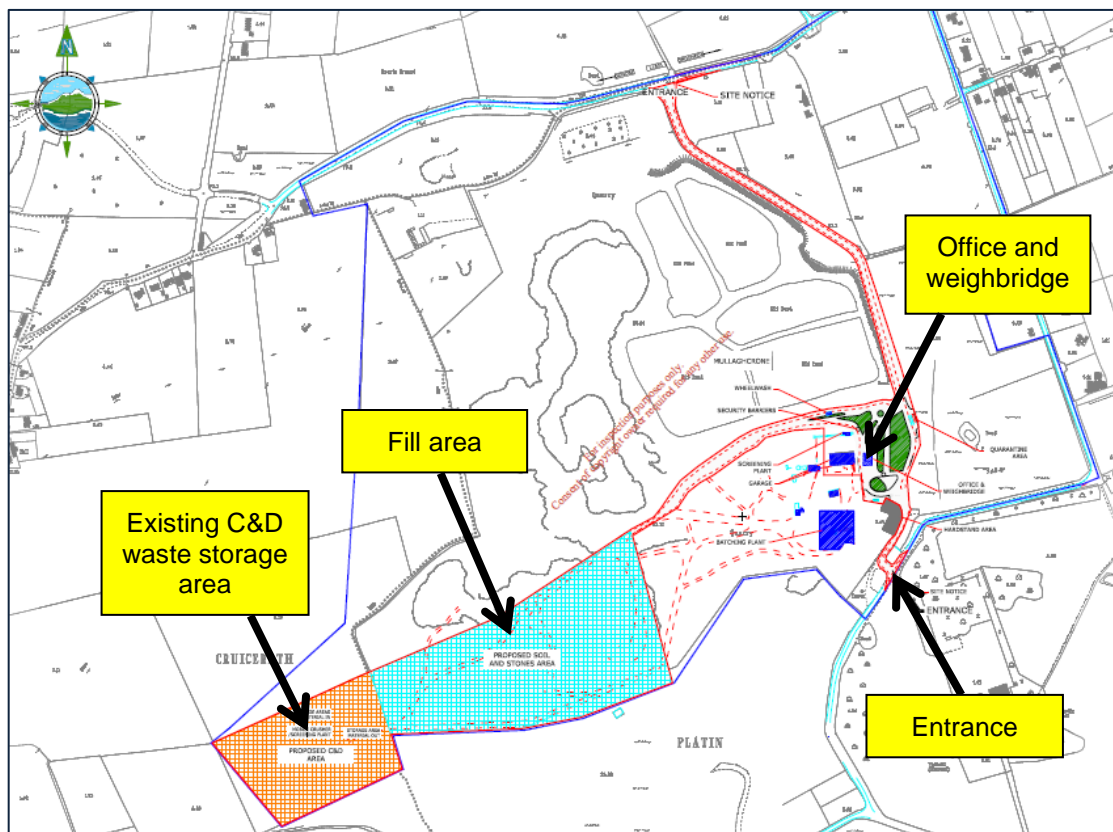


Figure 2: Site plan



A site visit was undertaken on 9th December 2016 and the following issues were noted: stockpiles of C&D waste in the active fill area as shown on Figure 3 below and lack of clearly delineated site boundary.

Figure 3: Stockpiles of C&D waste in the fill area



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 is carrying out an EIA.

Two EISs were submitted in support of this waste licence application. The first EIS was received on 13th June 2011 and the second on 17th June 2014. I compared the two EISs. The contents of the two documents are mostly the same with the exception of minor differences such as for example:

- EIS 2011 refers to a mammal assessment conducted in 2010 while EIS 2014 refers to two mammal assessments, the one conducted in 2010 and a second one conducted in 2014.
- EIS 2011 does not refer to controls against invasive species while EIS 2014 does.
- EIS 2011 refers to dust deposition monitoring from 2010, while EIS 2014 refers to dust deposition monitoring conducted in 2013.

Both EISs have been used in carrying out the EIA contained in this report.

4.2 Planning Status

A Section 261 Registration decision by the Planning Authority was issued under the Planning & Development Act 2000 for the activity (file ref. number QY/10) on 5th March 2007. The decision of Meath County Council was appealed to An Bord Pleanála. Details of the planning authority's decision and the subsequent determination by An Bord Pleanála on the appeal have been provided in the application form.

The appeal related to conditions on noise levels associated with quarrying, vibration levels from blasting and a requirement to carry out a hydrogeological assessment. An Bord Pleanála issued an order determining the appeal on 22nd August 2008 (file ref. number 17.QC.2019). The order rewords the Section 261 Registration conditions in relation to the noise and vibration levels and retains the requirement for the hydrological assessment. The decision also requires, among others, a landscaping and restoration programme for the site.

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 proposed 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 EISs submitted, the licence application, consultations with the planning authority, the relevant planning 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 EISs and the licence application

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

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

1. Waste types and their quantities.
2. Classes of activity.
3. Waste hierarchy.
4. Screening for appropriate assessment.
5. Planning status.
6. Applicability of Industrial Emissions Directive.

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 forecasting methods used, the prevention and mitigation measures envisaged, the lack of difficulties and deficiencies encountered and a non-technical summary.

I consider that the EISs, when considered in conjunction with the additional material submitted with the application, also comply with the requirements of the Waste Management (Licensing) Regulations 2004, as amended.

In Section 13 of this report I have addressed the issues which relate to the activity.

Having considered the application and EISs, and the matters resulting from the planning decisions by Meath County Council and An Bord Pleanála, I consider that the likely significant effects of the activity on the environment are as set out in Section 13 below.

4.4 Consultation with Competent Authorities

Consultation was carried out between Meath County Council, An Bord Pleanála and the Agency as follows:

Table 1: Correspondence with Meath County Council and An Bord Pleanála

Notice	Description
Notice under Section 42(1I)(e)(i) of the Waste Management Act 1996 as amended. Issued: 23 rd June 2014	Notice to Meath County Council, Planning Section. The notice informed of the receipt of EIS 2014 and requested observations in relation to the licence application and the EIS.
Notice under Section 42(1I)(e)(i) of the Waste Management Act 1996 as amended. Issued: 20 th October 2014	Notice to An Bord Pleanála. The notice informed of the receipt of EIS 2014 and requested observations in relation to the licence application and the EIS.
Response to the notice under Section 42(1I)(e)(i) Received: 19 th September 2014	Response from Meath County Council, Planning Section.
Response to the notice under Section 42(1I)(e)(i) Received: 26 th November 2014	Response from An Bord Pleanála.

An Bord Pleanála advised that the Agency's request under Section 42(1I)(e)(i) does not apply to activities registered under Section 261 of the Planning Development Act 2000, as amended.

Two pieces of information regarding the requirement for planning permission for the activity were submitted to the Agency. These are detailed below.

- i. First, the response from the Planning Authority of the 19th September 2014 stated that planning permission is required for the activity due to its scale and associated impacts.

- ii. Second, information was submitted by the applicant on 19th January 2016. This information included correspondence from Meath County Council to the applicant dated 15th January 2016 stating that the importation of inert stones and soil at the quarry is not considered to require “any further grant of planning permission subject to compliance with the particulars as set out under the Landscaping and Restoration Scheme submitted to the Planning Authority” in compliance with Condition 17 of Section 261 Registration decision (QY10).

In respect of recovery of C&D waste, the Agency has clarified with the Planning Authority that there has been no planning granted for the treatment of C&D waste. Accordingly, it is recommended that the C&D recovery activity is refused as per *Part II Schedule of Activities Refused* of the RD. Hence, Condition 8.12 of the RD prohibits acceptance, processing, treatment, recycling or recovery of C&D waste within the facility. Consequently, from this point onward this Inspector’s Report deals only with the recovery of soil and stone and the recommendation to authorise this activity.

5 Submissions

No submissions were received in respect of the licence application.

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.

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).

Schedule A.1 *Waste Acceptance* of the RD specifies the types and amounts of waste that can be accepted at the facility. Condition 6.15 requires an annual topographical survey that includes measurement of the total void space that has been backfilled and the remaining available void space.

Waste Acceptance Criteria

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

- (i) greenfield soil and stone, and
- (ii) non-greenfield soil and 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 the material is 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 very low level of risk associated with accepting greenfield soil and stone 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 and 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, brick 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 and stone must be below 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 8.14	Requirements in relation to the development of waste acceptance and characterisation procedures
Condition 11.11	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 Emissions

8.1 Emissions to Air

There will be no point source emissions to air. Activities at the facility may lead to fugitive dust emissions. Condition 6.10 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.

8.2 Emissions to Sewer

There are no emissions to sewer. The facility uses a waste water treatment system comprising a septic tank, mechanical aeration system and percolation area. This system treats sanitary effluent from the canteen and toilets. There are 25-30 employees of which 5 are full time employees, and this includes employees who work in the adjacent quarry. Condition 3.17 of the RD requires the onsite waste water treatment systems to meet the criteria set out in Agency guidance.

8.3 Emissions to ground/groundwater

There will be no process emissions to ground or groundwater at the site and the applicant does not propose any water management system.

The site is dominated by limestone deposits. Accordingly the rain water falling on the facility freely infiltrates into ground until it reaches the underlying aquifer. The groundwater table is approximately 30m below ground level. The source protection rating of the aquifer beneath the site is Regionally Important fissured aquifer with an extreme vulnerability. The subsoil thickness in the surrounding area is ranging from 0m to 3m. Groundwater flow direction is towards Platin Quarry (licensed with the cement works P0030-04) to the south east of the facility where there is a

groundwater abstraction. All water abstracted at Platin Quarry is ultimately discharged to the River Nanny.

Groundwater monitoring was conducted by the applicant in January 2011 at borehole BH18 located to the northeast of the site. The applicant also obtained groundwater monitoring results for June and December 2010 from the pumping well GW1 at Platin Quarry which is located downgradient of the Mullaghcrone Quarry. The analysis show that, with exception of BH18 where faecal coliforms were recorded at 4 CfU/100 ml, groundwater at both locations was within limits set out in European Union (Drinking Water) Regulations (S.I. 122 of 2014). However, having regard to the groundwater flow, it is evident that borehole BH18 is not located upgradient of the facility therefore the associated sampling results are not representative of actual groundwater quality upgradient of the facility. Schedule C.5 *Groundwater monitoring* requires groundwater monitoring for a range of parameters at one upgradient location and two downgradient locations, the location of which must be satisfactory to the Agency (Condition 6.17.1). The groundwater monitoring required in Schedule C.5 of the RD will identify any contamination of groundwater. Condition 6.17.4 sets out the necessary actions in the event of failure to demonstrate compliance with the Environmental Objectives Groundwater Regulations.

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. Condition 8.10 requires that all vehicle and machinery refuelling and maintenance is carried out in designated areas protected against spillage and run-off. All fuels and liquid chemicals 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.

Waste was previously deposited at the facility under waste facility permits granted by Meath County Council. There is very little data available on what exactly was deposited and when and how much. However, Schedule C.5 *Groundwater Monitoring* of the RD requires quarterly monitoring of groundwater and this will reveal any significant contamination of groundwater should it occur as a result of any inappropriate waste having been previously deposited.

Groundwater abstractions

The site does not lie within the source protection zone for the Kiltrough public water supply located 5.3 km east of the facility. There are no private wells located between the site and the groundwater abstraction point at Platin Quarry (Licence Register No. P0030-04).

8.4 Emissions to Surface Waters

There will be no emissions to surface waters from the facility.

The wheelwash is operated in a closed loop system. Wastewater arising from the wheelwash is directed for removal of suspended solids in a settlement tank. Following the settlement of suspended solids, the water is then directed to a water tank and reused in the wheelwash.

8.5 Storm Water Runoff

There are no surface water courses in close proximity to the site except for quarry settlement ponds located in the adjacent Roadstone quarry. Storm water arising at the facility percolates into ground beneath the site.

8.6 Noise

Activities at the facility have the potential to generate noise. Condition 6.10 requires that measures are taken at the facility to control noise emissions. In addition, the RD sets noise limits and Condition 6.11 requires a noise survey to be carried out as required by the Agency and in accordance with Agency guidance.

8.7 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 wheelwash for vehicles leaving the facility (Condition 3.7 of the RD).

9 Use of Resources

Electricity is used to power the site office, weighbridge, lighting and heating. Diesel is used for on-site plant such as excavators and bulldozers. Approximately 500 litres of diesel is used per week. The fuel storage area is located in a bunded area within a hardstand area. Fuel is stored in a single 18,600 litre aboveground storage tank . Water consumption is low. For a maximum of 10 persons on site per day, the potable water consumption is 0.6 m³/day. The mains water source is supplied from the Boyne River as part of the East Meath Water Supply Scheme. To minimise usage of water, the wheelwash is operated in a closed loop system. Condition 7 of the RD sets out the requirements with regard to resource use and energy efficiency.

10 Closure, Restoration and Aftercare

Condition 10.2.1 of the RD requires the licensee to submit a Closure, Restoration and Aftercare Management Plan (CRAMP) within six months of grant of the licence. The Plan will set out the manner in which the site will be restored in accordance with the original design for the facility as well as its subsequent aftercare.

11 Waste Management Plan and National Policy

The Eastern and Midlands Regional Waste Management Plan states that soil and stone comprised the majority (more than two-thirds) 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.

Activities will 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.

12 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 8.3 and 8.4 above for detail.
Environmental Liabilities Directive	See Section 15 below for detail.
Waste Framework Directive	<p>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.</p> <p>The RD as drafted takes into account the requirements of articles 13 and 23.</p>

13 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

13.1 Human Beings

Likely significant effect	Description of effect	Assessment addressed in section:
Traffic	Traffic and its associated emissions, risks and disamenity effects.	13.1.1
Impact on air quality	Emissions of dust.	13.5.1
Noise	Disamenity from noise emissions	13.1.2

	due to licensed activities.	
Accidents	Emissions to the local atmosphere and ground.	13.1.3

Assessment of Effects on Human Beings

13.1.1 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 movement outside of the facility boundary is a matter for the planning authority.

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

Mitigation Measures

The RD requires use of a wheelwash (Condition 3.7) and sets hours of waste acceptance (Condition 1.7) 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 5.5).

Conclusion

Based on the above assessment and the mitigation measures in place and as regards matters that come within the functions of the Agency, I am satisfied that the likelihood of a negative impact as a result of traffic connected with the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.1.2 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 located 320m from the facility boundary. 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 $L_{Ar,T, 30 \text{ min}}$.

Conclusion

Based on the assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact as a result of noise emissions connected with the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.1.3 Accidents

Due to the non-hazardous and inert nature of the waste to be accepted at the facility, 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 8.14);
- 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 2.2.2.7); and
- implement procedures to ensure corrective and preventative action is taken should the specified requirements of the licence not be fulfilled (Condition 2.2.2.4).

Conclusion

Based on the mitigation measures in place, I am satisfied that the likelihood of an accident connected with the facility is low.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.2 Flora and Fauna

Likely significant effect	Description of effect	Assessment addressed in section:

Impact on flora and fauna	Removal and filling over any existing plants and habitats at the facility.	13.2.1
Accidents	Emissions to the local atmosphere, ground and water bodies.	13.1.3

Assessment of Effects on Flora and Fauna

13.2.1 Flora and fauna

Quarrying and waste activities (backfilling) at the facility have been ongoing for several years, therefore there is no significant habitat remaining to be removed and filled over. The on-site activities have led to the disappearance of flora with its dependent fauna species, however, the restored areas of the quarry will be turned into agricultural lands which support fauna such as birds and mammals.

There is no sensitive ecological receptor within the site. Habitats on the site consist predominantly of disturbed ground. Partly surrounding the site are semi-natural habitats including scrub and hedgerows and some woodland. These will be avoided by the development. During the site visit on the 9th December 2016 visit deer were observed outside the site boundary. The EIS states that fox prints were noted. Also, the site provides suitable conditions for small rodents, pygmy shrew and wood mouse, and birds, frogs, smooth newt and viviparous lizard. The site is however unsuitable for any of species listed under the Irish Flora protection order. The retention of boundary scrub and woodland areas will limit disturbance and habitat loss for bird species.

Mitigation Measures

- Retaining hedgerows and scrub on the site boundary.
- No materials such as soil and stones will be stored within 5 m of any trees or shrubs.
- Avoidance of outdoor lighting.
- The RD requires good housekeeping.

Conclusion

Based on the ecological assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on flora and fauna is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.3 Soil

Likely significant effect	Description of effect	Assessment addressed
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		in section:
Impact on soil	Accidental spillage or discharge to ground due to the deposition of contaminated soil.	13.3.1
Accidents	Emissions to the local atmosphere, ground and water bodies.	13.1.3

Assessment of Effects on Soil

13.3.1 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

Based on the assessment carried out and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on soil is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.4 Water

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on surface water	Discharge of rain water run-off to surface water courses.	13.4.1
Impact on groundwater	Contamination of groundwater due to accidental spillage or discharge to	13.4.1

	ground. Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the groundwater.	
Accidents	Emissions to the local atmosphere, ground and water bodies.	13.1.3

Assessment of Effects on Water

13.4.1 Surface water and groundwater

There are no process emissions to surface water or groundwater from the site.

The site is located within the catchment of the Nanny River. However, there are no surface water courses adjacent to the site with the exception of quarry settlement ponds which are located to the north of the facility. Storm water arising within the facility percolates into the ground.

Contaminated storm water run-off, spillages or deposit of contaminated soil could result in contaminated water percolating to ground causing groundwater pollution.

The RD includes a wide range of measures to prevent the contamination in the discharge from the site.

Mitigation Measures

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 13.3, Soil.

Conclusion

Based on the nature of the discharge and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on surface water and groundwater is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.5 Air

Likely significant effect	Description of effect	Assessment addressed in section:
Impact on air	Emissions of dust.	13.5.1

Accidents	Emissions to the local atmosphere, ground and water bodies.	13.1.3
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13.5.1 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 (5.5 and 6.11); and
- Schedule C.3 of the RD requires periodic monitoring of dust deposition rates at the facility boundary.

Conclusion

Based on the nature of the activity and the mitigation measures required by the RD, I am satisfied that the likelihood of a negative impact as a result of emissions to air from the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.6 Climate

Likely significant effect	Description of effect	Assessment addressed in section:
Release of climate altering substances	Emission of greenhouse gases.	13.6.1

Assessment of Effects on Climate

13.6.1 Release of climate altering substances

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 (100,000 tonnes per annum, see Schedule A of the RD), the facility will be full in

approximately 18 years. Vehicles and machines used in the soil deposition activity will cease operation at that time.

Conclusion

Based on the nature of the activity and the mitigation measures in place, I am satisfied that the likelihood of a negative impact on climate as a result of emissions from the facility is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.7 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.	13.7.1
Impact on material assets and cultural heritage	Potential for impact on local material assets (e.g. roads, power supply, housing) and archaeological artefacts. Potential for nuisance impact.	13.7.2

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

13.7.1 Visual impact on nature of landscape.

The site itself is visually unremarkable being part of a much larger site used for quarrying. The visual character is typical of a quarry with the primary visual feature being the screening berms colonised by vegetation, access tracks for machinery and the quarried areas. The surrounding landscape consists of agricultural paddocks with hedgerows. To the south of the site there is a portion of land that has been used as an extractive waste facility by Irish Cement Limited. Views towards the site are obstructed by the existing topography and hedgerows of the surrounding agricultural land. There is agricultural land to the west of the site and Platin Cement Plant to the south-east of the site.

Mitigation Measures

- Insertion of hedgerows planting along the site boundary using similar tree species to the existing hedgerows in the area;

- progressive restoration of the quarry with returning of the restored areas to agricultural grassland for livestock grazing. A landscaping and restoration programme for the site is to be agreed with Meath County Council under the Section 261 Registration.

Conclusion

Based on the proposed mitigation measures, I am satisfied that the likelihood of a negative visual impact as a result of the facility's presence is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.7.2 Material assets and cultural heritage.

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.

The activity will have no direct impact on any known items of cultural, archaeological sites, monuments or artefacts or designated or undesignated structures.

Mitigation Measures

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

Conclusion

Based on the proposed mitigation measures in place, I am satisfied that the likelihood of a negative impact on material assets and cultural heritage is not significant.

Accordingly, if the activities are carried out in accordance with the RD and the conditions attached, the operation of the activities will not cause environmental pollution. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

13.8 Interaction of effects

I have considered the interaction between the factors referred to in Tables 13.1 to 13.7 above and the interaction of the likely effects identified.

The interaction between factors as a results of the operation of the facility are summarised in Figure 1.

Figure 1 Interaction of effects.

	Human beings	Flora and fauna	Soil	Water	Air	Climate	Material assets, landscape, visual impact and cultural heritage
Human beings		✓	✓	✓	✓	✓	✓
Flora and fauna	✓		✓	✓			✓
Soil	✓	✓		✓			✓
Water		✓	✓				✓
Air		✓				✓	✓
Climate	✓	✓					

Based on the assessment in parts 13.1 to 13.7 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.

13.9 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.

14 Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)

Appropriate Assessment

As shown in Table 2 below, there are five Natura 2000 sites in the vicinity of the facility.

Table 2: Proximity of local designated sites.

Natura 2000 Site	Direction from Facility	Approximate Distance from the Facility (Km)
Boyne Coast and Estuary SAC (Site Code: 001957)	North-east	7
River Boyne and River Blackwater SAC (Site Code: 002299)	North-west and north	2
Boyne Estuary SPA (Site Code: 004080)	North-east	7
River Nanny Estuary and Shore SPA (Site Code: 004158)	East-south	9
River Boyne and River Blackwater SPA (Site Code: 004232)	North-west and north	2

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites at Boyne Coast and Estuary SAC (Site Code: 001957), River Boyne and River Blackwater SAC (Site Code: 002299), Boyne Estuary SPA (Site Code: 004080), River Nanny Estuary and Shore SPA (Site Code: 004158) and River Boyne and River Blackwater SPA (Site Code: 004232).

The activity is not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activity, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activity was not required.

The reasons for which the Agency determined that an Appropriate Assessment of the activity is not required are as follows:

- The facility is not located within the above European Sites.
- There will be no emissions to surface water from the activity.
- The activity will not result in damage to, or loss of, species and habitats of these European Sites.

15 Fit & Proper Person Assessment

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

i. Technical Ability

The applicant's management team and nominated staff are appropriately qualified and experienced with regard to their technical ability to oversee and manage activities at the site.

ii. Legal Standing

The applicant, Roadstone Ltd., has never been convicted of any relevant offence.

iii. Financial Standing

Condition 10.2 of the RD requires the preparation of a Closure, Restoration and Aftercare Management Plan (CRAMP) within six months of the grant of the licence. In accordance with EPA policy, there is no apparent need to require the preparation of an Environmental Liabilities Risk Assessment or the making of financial provision. This is based on the fact that only non-hazardous, inert wastes will be deposited at the facility, the environmental risk posed is low and restoration activities will cease, aftercare excepted, within 18 years.

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.

16 Cross Office Liaison

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

Inspector	Assistance provided
Pamela McDonnell (OES)	Matters related to Environmental Impact Assessment

17 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 includes conditions that will ensure proper handling of wastes, the control and monitoring of dust and noise emissions 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.

18 Charges

An annual charge of €6,516 is specified in the RD which is based on the enforcement effort predicted for the facility.

19 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



Ewa Babiarczyk
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.