



This report was approved to go to the Director
by Frank Clinton, Programme Manager
Signed *Patrick Doyle* Date: 22.12.2014

**OFI
LICENSING &
RESOURCE USE**

INSPECTORS REPORT ON A LICENCE APPLICATION

To:	Director	
From:	Patrick Geoghegan	- LICENSING UNIT
Date:	22/12/2014	
RE:	Application for a Waste Licence from Roadstone Limited , in relation to a facility at Milverton , Skerries, Co Dublin W0272-01.	

Application Details	
Applicant:	Roadstone Ltd
Type of Activity:	Recovery of waste soil/stone
Classes of Activity (P = principal activity):	4 th Schedule: R5 (P), R3 and R13 of Waste Management Act 1996, as amended
Classes of Waste:	Waste natural soil and stones for backfilling of former quarry
Quantity of waste managed per annum:	400,000 tonnes (maximum)
Quantity of waste to be in-filled over lifetime of the site:	2,470,000 tonnes
Licence application received:	17 th September 2009
Notices under Article 14(2)(b)(ii) issued:	22 nd October 2010; 10 th August 2011; 26 th May 2014
Information under Article 14(2)(b)(ii) received:	11 th February 2011; 21 st September 2011; 20 th June 2014
Supplementary material submitted by applicant	26 th August 2010
EIS required	Yes, submitted by applicant as part of waste licence application
Notice issued under Section 42(1I)(b) of the WM Act 1996 as amended requesting EIS, issued:	23 rd May 2014
EIS received	20 th June 2014
Submissions received:	Fingal County Council, Planning, Water Services and Transportation Departments, 18 th December 2009. Fingal County Council, Pollution Control

Site visit:	Section, 14 th March 2011 Mr. Noel Donnelly, Principal EHO, HSE, Blanchardstown Corporate Park, Dublin 15, 31 st July 2014 O'Leary Arnold Solicitors, Skerries Co. Dublin 18 th November 2014 9 th June 2010 and 7 th August 2014
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1. Company/Facility

The site is owned and will be operated by Roadstone Ltd (formerly Roadstone Wood Ltd). A Cement Roadstone Holdings (CRH) Group company acquired the quarry in 1986 and it has been operated by Roadstone since the early 1990's.

The site is situated 1.5 km south west of Skerries and 6.5 km north east of Lusk, off the R127 Regional road, in a rural area in the townland of Milverton Co. Dublin and comprises a worked out limestone quarry and surrounding land covering an area of approximately 7.9 hectares. There are approximately 70 houses within 500 metres of the site. Skerries Golf club is located approximately 60m beyond the southern site and the Dublin-Belfast rail lines are also within a 500 metres radius of the site. The nearest residential property is a rented house owned by Roadstone, within its landholding, to the north of the quarry.

Rock extraction activities and concrete production were ceased at the site in the summer of 2008. This proposal is to restore the quarry by importing inert soil and stone to backfill the existing quarry to its original ground level, and is classified as recovery of waste, through deposition on land.

It is envisaged that the operational life of the facility will be in the region of 10 years, based on an average waste material importation rate of 250,000 tonnes per annum.

The site will operate from 07:00 to 18:00hrs Monday to Saturday.

2. Planning:

Milverton quarry was in operation prior to 1964 and it was registered with the planning authority under Section 261 of the Planning and Development Act 2000, in 2007. Following an appeal to An Bord Pleanala, consent was granted with 13 Conditions (Planning reference: Q/O5/003).

The applicant states that Fingal Co Council carried out a review of the planning status in 2012 in accordance with the requirements of Section 261A. That review determined that Roadstone should apply for Subsequent Consent. However An Bord Pleanala subsequently determined that Substitute Consent was not required on the basis that the quarrying operation was a pre-1964 operation and therefore decided to set aside the Council's determination. Therefore the planning authority considered that the planning status reverts back to the S261 consent with 13 Conditions. The majority of these conditions related to the operation of the quarry itself, which has now ceased. However Condition 12 phasing of Development and Condition 13 Landscaping and Restoration/Afteruse remain. The planning authority have confirmed that the developer submitted compliance

details in relation to these conditions and were deemed to be compliant by the planning authority. The application contains documentation submitted by the planning authority in August 2014, supporting this.

3. Waste acceptance:

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

Waste	Use
Imported clean soil/stone	Recovery - Backfill of quarry void where they meet the relevant Waste Acceptance Criteria (See below for more detail).
Secondary aggregate (non-waste)	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)

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

3.1 Waste Acceptance Criteria:

The emergence of the by-product provisions under Article 27 of the European Communities (Waste Directive) Regulations (SI No. 126 of 2011) has led to notifications to the Agency stating that clean soil and stone is a by-product. Many of these notifications have been accepted by the Agency where adequate assurances have been provided regarding the lawfulness and environmental impact of the proposed use (as backfill) of the notified soil and stone.

Essentially, before accepting a by-product notification, the Agency must be assured that the material is required for the intended use, that it is suitable, that the use is legal and that it will not cause an environmental impact. It should be noted that the Agency generally accepts by-product notifications for natural, clean soil and stone only. In 2012, the Agency issued a consultation paper on a proposed approach to the notification as by-product of soil and stone. Submissions were made and in 2013, the Agency published a report on the consultation, setting out the approach to be adopted in the assessment and management of article 27 notifications. It is proposed that a similar approach is adopted regarding the acceptance of equivalent (clean, uncontaminated, greenfield soil and stone) material at this facility.

Firstly, the RD allows only two waste streams to be used for backfill, as follows:

- (i) Greenfield soil/stone
- (ii) Non-greenfield soil/stone

Both of these terms are defined in the RD. In addition, Schedule A.2 *Waste Acceptance Criteria for Backfill Material* of the RD specifies Waste Acceptance Criteria for these two waste streams. For greenfield soil/stone it is proposed that the approach should be analogous to that taken for by-product notifications

(discussed above). Applying similar thinking as that applied to by-product notifications, it is known that further use of the soil/stone will be certain and lawful at the licensed facility (if a licence is granted) and the environmental impact has been assessed (by way of this report and the Environmental Impact Assessment herein) as minimal subject to compliance with the conditions of the RD. The outstanding matter, not specific to the facility itself, relates to the suitability of the material for backfill (i.e. confirmation that the material is greenfield soil and stone and suitable for use as backfill). It is proposed therefore that greenfield soil and stone should be declared as such 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 criteria for greenfield soil/stone is a 'letter of suitability' from a 'qualified person' which will state (prior 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/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 new provisions recommended in the RD which will address the challenges discussed above but which will also ensure that backfill activities at the facility do not cause environmental pollution:

Provision in RD	Description
Glossary	A range of new 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 11.9	Requirements in relation to records for each waste delivery including a letter of suitability for greenfield soil and stone
Schedule	Requires monitoring of deposited waste

C.2	
Schedule C.5	Requires monitoring of groundwater on a quarterly to annual basis

Should contamination of soil or groundwater be revealed by monitoring of deposited waste (Schedule C.2) 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.

Secondary Aggregate

The applicant is proposing to use non-waste (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 stream will represent a very small percentage of the overall materials import to the facility.

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.

4. Emissions

4.1 Emissions to Air

The principal air quality impact from the proposed activities relates to fugitive dust emissions as a result of HGV movements over unpaved surfaces, stockpiling of materials and end-tipping and compaction of soils, stone and rock. Dust mitigation measures proposed by the applicant and specified in the RD include; spraying haul roads with water to minimise dust blow during dry weather, use of the wheel wash for out-going vehicles, and seeding of restored areas as soon as practicable after backfilling. These techniques are considered to represent BAT (Best Available Techniques) for this type of activity. Condition 6.11 sets out the requirements regarding dust control at the facility. The applicant proposes to construct on-site haul roads from concrete and brick derived materials.

Schedule C.4 *Dust Monitoring* of the RD requires dust deposition monitoring at three locations. Schedule B.5 *Dust Deposition Limits* of the RD sets out a dust deposition limit of 350mg/m³/day at each of the three dust monitoring locations.

The risk of odour nuisance from the site is considered insignificant as the facility will not be accepting malodorous/biodegradable wastes.

4.2 Emissions to Sewer

There will be no emissions to sewer. There is a septic tank on-site, serving the site office within which there are existing welfare facilities for staff. Condition 3.20 of the RD requires the septic tank to be maintained and to comply with the

Agency's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e ≤ 10).

4.3 Emissions to Waters

The nearest watercourse to the site is a stream adjacent to the quarry entrance. This stream is a tributary of the Mill Stream that discharges to the Irish Sea at Skerries approximately 1.4 km downstream. The Mill Stream is located within the Eastern River Basin District. *The Water Framework Directive Characterisation Report for the Eastern River Basin District* (2004) rates the Mill Stream as "1a, at risk of not achieving good status". However, according to the Eastern River Basin Management Plan 2009-2015 – Programme of Measures Summary Report, the status of this stream is "good". There are no monitoring stations on this surface water under the Agency's river biological monitoring programme. The stream is not designated as a salmonid river under the European Communities (Quality of Salmonid Waters) Regulations 1988, S.I. No. 293 of 1988.

Emissions to surface water will consist of on-site rainwater (surface-water) that has been directed to settlement ponds and a hydrocarbon interceptor prior to discharge. These emissions are discussed under "Storm Water Run-off" below.

4.4 Storm Water Run-off

Currently rainfall on-site either percolates through the unsealed ground to the base of the quarry or can be collected by existing drainage infrastructure and discharged via a buried pipe to a tributary of the Mill Stream to the northern boundary of the site. The discharge to the tributary of the Mill Stream largely comprises surface water run-off from the quarry void. The applicant states there is relatively little groundwater ingress through the limestone quarry faces.

It is proposed that, during backfilling of the quarry, surface water collected at the quarry sump will be directed through two settlement ponds (operated in series) and a hydrocarbon interceptor and underground pipe, prior to discharge to the Mill Stream tributary. Pumping of water out of the quarry void will be controlled by automated level controlled pumps placed in sumps in local low points. The outfall from the second pond will discharge off site to the Mill Stream tributary via the hydrocarbon interceptor and underground pipe. The discharge of waters to the Mill stream is currently authorised under a trade effluent discharge licence from Fingal County Council.

Results of chemical analysis of one upstream and one downstream sample of the tributary of the Mill Stream and one sample of the quarry surface water indicated that the stream water quality is generally good, with slightly elevated concentrations of ammonia which could be attributed to human activities in the catchment. The result for ammonia and BOD in the quarry sample was below the figure specified in the European Communities Environmental Objectives (Surface Waters) Regulations 2009, S. I. 272 of 2009 for good status rivers at 95%ile flow.

Schedule B.2 *Emissions to Water* of the RD sets out the recommended ELV's for the discharge. ELV's have been set for the relevant parameters in the receiving water in accordance with European Communities Environmental Objectives (Surface Waters) Regulations 2009.

Should there be a major storm event, there is sufficient capacity within the void space of the quarry to retain the storm water run-off. Condition 3.15 requires

discharges to surface waters to be managed to ensure that the quantities of storm water discharged do not compromise the receiving water during periods of high rainfall in terms of volumetric flow.

In the longer term, after the backfilling works are completed, ground contours and/or drainage channels will be modified to ensure that surface water run-off across the restored site is directed to boundary ditches, existing site drainage infrastructure or to the proposed closed depression to be created in front of the eastern quarry face. The provision of this depression is necessary in order to preserve the nesting site for the peregrine falcon in the existing rock face (see Section 5 of this report). Condition 3.10.2 of the RD requires this landform to be permanently drained by installing a buried pipeline which will provide for gravity drainage (via interceptor/settlement ponds) to the existing buried pipeline at the north eastern corner of the site. Thereafter, surface water will be discharged via the existing pipeline to the stream which runs immediately north of the site.

4.5 Emissions to ground/ groundwater

The quarry excavation has intersected the groundwater table. The entire site and surrounding area are underlain by bedrock of the Lower Carboniferous Holmpatrick Formation, which is classified by the GSI as locally important karstified bedrock. Groundwater vulnerability maps indicate that the site is located in an area of high to extreme groundwater vulnerability.

Three (3) groundwater wells were installed on-site in December 2008. Monitoring of these wells indicate that overall groundwater quality is good when compared to the EU Drinking Water Standard.

The backfill and restoration of the quarry void will ensure the protective layers of soil are replaced above the groundwater table. The quarry void will be dewatered to facilitate backfill.

The RD specifies a range of requirements that will ensure that groundwater is not contaminated while licensed activities are being carried out. Only clean uncontaminated soil and stone will be used for backfill. Condition 3.12 of the RD requires that fuel storage facilities be appropriately bunded and secured. Condition 8.10 requires all vehicle and machinery refuelling and maintenance operations to be carried in designated areas on a sealed concrete surface adequately protected against spillage and run-off. Groundwater monitoring requirements set in *Schedule C.5* of the RD will enable detection of changes in groundwater elevations or deterioration of water quality should such occur. The RD requires water level, visual inspection, pH and conductivity to be monitored quarterly. Ammonia, Orthophosphate and Total Dissolved Solids are required to be monitored biannually. Dissolved metals, total petroleum hydrocarbons, diesel and petrol range organics, and coliforms are required to be monitored annually by the RD. Condition 6.5 allows for the frequency and scope (and method) of monitoring to be amended following evaluation of test results.

Restoration of the quarry with inert soil and stones will provide greater protection of the aquifer than that which exists presently and will contribute a level of protection similar to that which was present prior to the excavation of the quarry.

4.6 Noise

There are approximately 70 houses within 500 metres of the site. Skerries Golf club is beyond the southern boundary of the site and the Dublin-Belfast rail lines are also within a 500 metres radius of the site..

The applicant carried out baseline measurements in November 2008, January 2009, at three boundary locations, to determine current noise levels within the vicinity of the site. Noise levels recorded ranged from 42.2 – 55.2 dB(A) LAeq, 30mins. The survey results (LA10) indicates that noise levels at all locations were predominantly influenced by the nearby Dublin to Belfast railway line.

During restoration and backfilling works additional noise is likely to be generated on-site from end-tipping of inert waste, placement of and compaction of imported inert soils, excavation, placement and compaction of in-situ stockpiled soil and operation of plant and equipment.

Schedule B.3 Noise Emissions of the RD sets noise limits and requires noise surveys to be undertaken as requested, in accordance with the Agency's guidance document NG4.

4.7 Nuisance

As the principal activity at the proposed facility is the backfill of an exhausted quarry void using imported soil and stone, it is not expected to give rise to odour, scavenging birds, vermin or windblown litter. Condition 6.11 and 5.5 of the RD includes requirements to control emissions of noise and dust and to keep the local road network free of debris. The facility is required to operate a wheel wash for all vehicles leaving the site.

4.8 Use of Resources

Water to the site is provided by a local authority water main. Energy requirements for the site office for lighting heating etc will be provided by an existing connection to the electricity supply network. The raw materials to be consumed on-site consist of diesel to fuel earthworks equipment and HGV trucks, oil and lubricants. Condition 7 of the RD deals with energy efficiency at the facility and requires the use of captured run-off water to the extent possible in on-site operations.

5.0 Cultural Heritage, Habitats and Protected Species

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, individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s).

In this context, particular attention was paid to the European sites at Skerries Islands (SPA 004122), Rockabill to Dalkey Island (SAC 003000), Rockabill (SPA 004014), Rogerstown Estuary (SAC 000208), Rogerstown Estuary (SPA 000401), Lambay Island (SPA 004069), Malahide Estuary (SAC 000205), Malahide Estuary (SPA 004025), River Nanny Estuary and Shore (SPA 004158) and the Agency considered, for the reasons set out below, that the proposed activity is not directly connected with or necessary to the management of those sites as European Sites and that it can be excluded on the basis of objective scientific information, that the activity, individually or in combination with other plans or projects, will have a significant effect on a European site, and accordingly the Agency determined that an Appropriate Assessment of the activity is not required.

It has been determined that this facility is not likely to have significant effects on any European site due to the nature and scale of this inert waste recovery facility. In particular the only potential source-pathway-receptor link between the proposed facility and any of the European sites is via the hydraulic pathway created through a discharge of dewatered groundwater and surface water run-off from the quarry site to the Mill stream that outflows into the Irish Sea at Skerries. Based on monitoring results, it is not anticipated that the activity will have any significant adverse effect on any qualifying features of the European sites.

Peregrine Falcon

According to the baseline survey carried out as part of the E.I.S. only moderate flora and fauna diversity was recorded. However, a peregrine falcon (*falco peregrines*) was found to be nesting on a residual quarry face. The Peregrine Falcon is afforded statutory protection by the Wildlife Act of 1976, S.I. 39 of 1976, the Wildlife (Amendment) Act 2000, S.I. 38 of 2000 and Annex 1 of the Birds Directive (2009/147/EC). This protection extends to its nest and eggs. Anecdotal evidence from quarry personal in May 2008 was that a falcon had successfully nested in this habitat for a number of years. The experience of the ecological consultants employed by Roadstone Ltd is that the use of abandoned quarry faces for nesting purposes by peregrine falcons is not unusual, even within quarries which continue in operation. The applicant's ecological consultants considered that the disturbance associated with backfilling and restoration of the quarry was unlikely to have a significant impact on the peregrine falcon's continued use of the quarry face for nesting purposes. Given the peregrine falcon's protected status under National and European legislation and its ecological interest value, the ecological consultants recommended a high cliff face, suitable for roosting and nesting by the peregrine falcon, should be retained on-site. A height of 8 to 10 meters was considered sufficient in order to provide protection to the nest against human predators. Following discussions between the applicant and the National Parks and Wildlife in December 2010, a number of additional mitigation measures were submitted to the Agency as part of the licence application. Such protective measures are included in Condition 3.22 of the RD.

6.0 Waste Management Plan

The Dublin Waste Management Plan 2005-2010 recognises that significant volumes of material originating from the Dublin region are sent to neighbouring counties. The Plan sets out a number of objectives regarding construction and demolition (C&D) waste infrastructure requirements in County Dublin, which include (i) additional facilities in the Greater Dublin Region to cater for C&D waste, at existing quarries and other suitable locations – these should include front end removal and recycling of recoverable waste, and limited to disposal of non-recoverable waste (soil) only and (ii) use of soil material for beneficial use where possible, in preference to disposal, examples include quarry reinstatement.

Section 16.4.4 of the Eastern & Midlands Waste Region's Draft Waste Management Plan 2015-2021 acknowledges that the demand for capacity for backfilling activities will improve over the plan period as economic recovery continues to build.

The proposed use of the Milverton quarry for backfilling and restoration purposes is in accordance with the stated objectives of the both Waste Management Plans

referred to above. The establishment of this facility within the county of Dublin should help reduce the quantity of material being sent to neighbouring counties, thereby also reducing transportation of waste.

7.0 Compliance with EU Directives and National Regulations

Water Framework Directive [2000/60/EC]

The RD as drafted transposes the requirements of the Water Framework Directive. *Condition 3* provides conditions requiring the installation of infrastructure to manage water emissions on-site. *Schedule B: Emission Limits* specifies emission limit value for suspended solids within the storm water discharge. The limit specified in the RD is determined with the aim of contributing to the objective of maintaining good water quality in the receiving water, the Mill Stream.

European Communities Environmental Objectives (Surface Water) Regulations, S.I. No. 272 of 2009

The only discharge to surface waters is associated with storm water collected within the facility. Storm water collected will be discharged off-site to a tributary of the Mill Stream following settlement and passing through an oil interceptor.

Groundwater Directive (2006/118/EC)

The Groundwater Directive provides for the control of releases of List I and List II substances to groundwater. The *European Communities Environmental Objectives (Groundwater) Regulations, 2010* (S.I. 9 of 2010) give effect to the requirements of this Directive. There will be no direct discharge to groundwater from the activity; therefore there will be no impact on groundwater or soil. Condition 3.18 of the RD requires that the on-site waste water treatment system complies with the Agency's relevant Code of Practice.

Schedule C.5 *Groundwater Monitoring* of the RD sets out the monitoring requirements for groundwater at the site which will serve as a tool to reveal any contamination of groundwater should it occur.

8. Cross Office Liaison

I have consulted with the Environment Department, Fingal Co Council, the Agency's Office of Environmental Assessment, OCLR and OEE.

9. Best Available Techniques (BAT)

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 will be applied at the facility. These include the development of an Environmental Management System, waste acceptance procedures, waste characterisation, emission 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.

10. Environmental Impact Assessment Directive (85/337/EEC)

An Environmental Impact Statement (EIS) was not submitted with the application. The Agency has considered the application and has determined that the licence application should be made subject to an EIA as respects the matters that come within the functions of the Agency. The applicant was requested to submit an EIS to the Agency accordingly and this EIS was received on the 20th June 2014.

Content of EIS

I have considered and examined the content of the EIS and other material (information submitted in the licence application, correspondence between the Agency and the planning authority and submissions made by third parties in relation to the EIS. I consider that having examined the relevant documents and with the addition of this Inspector’s Report that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as requested in Article 3 and in accordance with Articles 4 – 11 of the EIA Directive as respects the matters that come within the functions of the Agency. I consider that the EIS also complies with the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004).

Environmental Impact Assessment (EIA)

As assessment, as respects the matters that come within the functions of the Agency has been carried out as detailed below

Consultation was carried out between Fingal County Council and the Agency in accordance with Section 42 (II)(e)(i) of the Waste Management Act 1996, as amended. Observations submitted confirm that the landscaping and restoration proposal outlined in the EIS are broadly in line with Condition 13 of the planning consent. Additionally the planning authority requests that the restoration of the quarry take full account of the habitat of the Peregrine Falcon and other protected species in the area and also advise that any new infrastructure required to facilitate the proposed activity may require planning permission.

The assessment outlined in this report considers the submissions and observations exchanged between Fingal County Council and the Agency. All third party submissions/observations received which are relevant to impacts on the environment have also been considered and taken into account.

Likely significant effects

The following section identifies, describes and assesses the main 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.

1. Human Beings

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report

Traffic	Traffic and its associated emissions, risks and dis-amenity effects	Maintenance of adequate signage and visibility at site entrance. RD requires wheel-wash facility for HGV's leaving the site. Condition 5.5 requires road network in the vicinity of the site to be kept free of debris.
Air quality and dust	No significant impact predicted	RD sets limit values for ambient dust deposition and requires hardcore site roads to be water-sprayed during dry weather.
Noise	Disamenity from noise nuisance	Noise limit values. RD requires measures to control noise.

2. Flora and Fauna

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Impact on local habitats	Loss of habitat and disturbance of wildlife	RD requires area of abandoned quarry to be exposed to provide nesting for Peregrine Falcon. RD requires methodology for backfilling of quarry to be developed with NPWS RD requires annual survey of birds of conservation concern.

3. Soil & Geology

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Pollution of groundwater	No significant impact predicted	RD requires development of waste acceptance and characterisation procedures to ensure unsuitable waste are not used for the quarry backfill. Groundwater monitoring required as well as bunded tank and drum storage areas. No direct emissions to groundwater.
Impact on soil	Positive effect predicted	RD requires development of

	as the backfill of the quarry will restore protective soil layer over the groundwater.	waste acceptance and characterisation procedures to ensure unsuitable waste are not used for the quarry backfill.
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4. Water

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Reduction in surface water quality	Emission to Mill Stream via surface water drains	Installation of settlement ponds and hydrocarbon oil-interceptor required on drainage channels. RD sets emission limit values for the discharge and requires regular monitoring of surface water and inspection of ponds.

5. Air

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
Reduction in air quality	Dust emissions from unloading of soil and stones and from movement /spreading of inert material. Dust emissions from stockpiled material. Exhaust emissions from HGV's transporting inert waste.	Schedule C of the RD requires ambient dust monitoring and Condition 6.13 requires dust control measures.

6. Climate

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence application and/or as outlined in this report
No significant effects predicted	-	-

7. Landscape, Material Assets and Cultural Heritage

Likely significant effect	Description or effect	Mitigation measures proposed by applicant in EIS or waste licence

		application and/or as outlined in this report
Visual impact on the character of the landscape.	Lands are marginal agricultural and backfilling of quarry will have a positive impact for agriculture purposes.	Visual impact is reduced by hedgerows.
No significant effects predicted for material assets or cultural heritage.	-	-

Assessment of Parts 1-7 of Table 1 and the interaction of effects and factors

The detailed assessment set out in the preceding sections of this Inspector's Report fully considers the range of likely significant effects of the activity on human beings, flora, fauna, soil, water, air, climate, landscape, material assets and cultural heritage, as respects the matters that come within the functions of the Agency, (as identified in parts 1-7 above), with due regard given to the mitigation measures proposed to be applied. The assessment also has regard to all observations and submissions made on the licence application and EIS. The RD includes conditions as considered appropriate to address the likely significant effects of the activity.

The potential for significant interactions was addressed in the EIS. I have considered the interaction between the factors referred to in parts 1-7 above and the interaction of the likely effects identified (as well as cumulative impacts with other developments in the vicinity of the activity). The mitigation measures identified above to address individual factors will also address any potential significant interactions.

I am satisfied that the proposed mitigation measures are adequate. I do not consider that the interactions identified are likely to cause or exacerbate any potentially significant environmental effects of the activity if the activity is operated in accordance with the conditions of the RD.

Overall Conclusion on Environmental Impact Assessment

I consider that having examined the relevant documents and on foot of the assessment carried out throughout this Inspector's Report that the likely significant direct and indirect effects of the activity have been identified, described and assessed in an appropriate manner as required in Article 3 and in accordance with Articles 4 to 11 of the EIA Directive as respects the matters that come within the functions of the Agency.

It is considered that the mitigation measures as proposed and the licence conditions included in the RD will adequately control any likely significant environmental effects from the activity.

It is also considered that the proposed activity, if managed, operated and controlled in accordance with the licence conditions included in the RD will not result in a significant detrimental impact on the environment.

11. Fit & Proper Person Assessment

The Fit & Proper Person test requires three elements of examination:

(i) Legal Standing

The applicant identified in the application that Roadstone Wood Limited (now Roadstone Limited) has one conviction under the Local Government (Water Pollution) Acts 1977 and 1991, for a water discharge in breach of its permitted limits at its quarry at Hill of Allen. This prosecution was taken by Kildare County Council in 1999-2000.

(ii) Technical Ability

The proposed facility manager holds a FETAC Certificate in Waste Management. He was previously responsible for the remediation of three landfill sites on Roadstone Limited's land in Co. Wicklow. Should the need arise for specialist technical or environmental assistance; he will be assisted by appropriately qualified external consultants/advisors.

(iii) Financial Standing

Roadstone Limited is a 100% subsidiary of Cement Roadstone Holdings (CRH), an international building materials group. It is my view, on the basis of the information submitted that the applicant can be deemed a Fit & Proper Person for the purpose of this licence. I am satisfied that the applicant has the technical ability to satisfactorily carry out the site restoration works in accordance with the RD.

12. SUBMISSIONS

There were four submissions made in relation to this application.

1. 18th December 2011, Mr. Peter Byrne, Senior Planner, Fingal County Council on behalf of the Planning, Water Services and Transportation Departments.

Planning Department

The submission states that the remediation of the site, including the importation of large quantities of material, will require planning under Section 32 of the Planning and Development Act 2000.

Response:

An Bord Pleanála have advised the planning authority on the Subsequent consent issue. This is addressed in Section 2 of this report.

Water Services Department

The Water Service Department state they have no objection to the proposed works on condition that suitable precautions are taken to ensure complete protection of rivers, streams etc. against pollution, silting and erosion. The submission includes 18 points in relation to water pollution for consideration.

Response:

There are several conditions in the licence relating to the protection of surface waters, including the provision of a hydrocarbon separator and settlement ponds, storage and bunding requirements, an emission limit value for emissions to surface water, and surface water discharge monitoring. When granting a waste licence, the Agency must be satisfied that a facility will not cause pollution once the Conditions of the licence are adhered to. The protection of surface waters is considered to be adequately addressed by the Conditions of the RD.

Transportation Department

The Transportation Department states they have no objection to the proposed development providing five conditions included in their submission are considered.

Response:

Four of the five conditions included in the submission relate to planning considerations and are not within the remit of the Agency. The remaining condition states that no storm water shall be discharged onto the public road. The RD requires water collected in the quarry to be passed through a settlement ponds and an oil separator prior to discharge into the Mill Stream.

2. 14th March 2011, Mr. Fergus Finch, A. /S.E.E., Pollution Control Section, Fingal County Council.

Fingal County Council made a number of comments in relation to the additional information submitted by the applicant in response to the Article 14 (2) (b) (ii) notice issued by the Agency. The majority of these comments relate to discharges to surface water, surface water quality or the proposed location of ground and surface water monitoring points. Three comments relate to the provision of infrastructure on-site and one relates to the removal of dust and mud deposits from site roads and approaches to river crossings.

(a) The Council comment that there is no mention of the Water Framework Directive (WFD) and the Eastern River Basin Management Plan and Programme of Measures in the applicant's Article14(2)(b)(ii) response. The Mill stream has been designated as having Good Status. Under the WFD all waters must be good status by 2015 unless agreed otherwise and no waters may deteriorate below their existing status.

Response:

The status of the Mill Stream is "good" under the Water Framework Directive, according to the *Eastern River Basin Management Plan 2009-2015 – Programme of Measures Summary Report*. The RD imposes conditions with a view to ensuring its status remains "good", as per the requirements of the Water Framework Directive.

(b) Fingal County Council made a number of comments to the applicant's Article14(2)(b)(ii) response in relation to surface water flow:

- (i) Referring to the EIS Section 6 Revision A, Subsection 6.2.3, paragraphs headed *Surface Water Flows and Discharges*: the figures taken from the flow report are based on the full catchment, whereas the discharge is to a tributary only. The figures used in Table E 1(i) are different. There appears to be no reason given for the different figures.
- (ii) Referring to the same paragraph, the rate timing and volume of discharge from the sump in the quarry floor is controlled by the pump and not the precipitation patterns over the quarry floor.
- (iii) Referring to Table E1. (i) "Flow rate in receiving waters": these figures are different from those in EIS Section 6 Revision A, Subsection 6.2.3; paragraphs headed *Surface Water Flows and Discharge*. The reason for the difference is not mentioned in the additional information.

Response:

A 95%ile flow figure obtained from the Hydrometrics Unit of the Office of Environmental Assessment was used by the Agency in the assessment of the licence application when considering flow conditions in the river. This figure is considered a conservative estimate. The figure used in the calculations was four times smaller than that included in the text of the applicant's response to the Article 14(2)(b)(ii) notice and corresponded to that included in Table E1(i). The discharge to surface water will be controlled by pumps on-site; the pumps will operate based on the level of surface water accumulation in the base of the quarry, thereby affording control of discharges to the receiving water.

- (c) Referring to Table E1. (i), the submission seeks clarification on whether figures included under Emission Details are based on rainfall or pump rates. The submission also seeks clarification in relation to the reference made to waste assimilative capacity in Table E1. (i).

Response:

Based on the figures included in the Article 14 response for rainfall, the figures in Table E1. (i) Emission Details are also based on rainfall. The assimilative capacity of the receiving water was determined by the Inspector as part of the licence application assessment.

- (d) In the absence of definite assimilative capacity figures in the tributary, lack of SUDS proposals, and the requirements under the Surface Water Regulations and the WFD, it is felt the proposed discharge levels are too high and it is recommended that a limit of 10 mg/l for both BOD and SS be applied in the interim. Limits for total ammonia and MRP should also be applied to ensure that the quality of the receiving waters is not adversely affected.

Response:

Monitoring undertaken by the applicant as part of the licence application indicated that ammonia and BOD in a quarry sample were

below the quality standards in the *European Communities Environmental Objectives (Surface Waters) Regulations, 2009*, for good status rivers at 95%ile flow. The total phosphorous and suspended solids results were below the laboratory level of detection, < 20µg/l and < 2mg/l respectively. The activity on-site may increase concentrations of BOD, total ammonia or phosphorous but the settlement ponds and oil interceptor will assist in minimising any discharges. The RD requires monitoring of these parameters weekly. An emission limit value of 5 mg/l and 10 mg/l is set for BOD and suspended solids, respectively. Even at the 95%ile flow figure of 0.007m³/s in the receiving water, this emission limit value is sufficient to ensure no deleterious effect on the stream in terms of BOD and suspended solids.

- (e) The submission states that there must be no discharge of suspended solids or any deleterious matter to watercourses and that the applicant should be asked for his proposals to ensure that there is not a wash out from the settlement ponds during periods of heavy rainfall.

Response:

An emission limit value of 10 mg/l for suspended solids has been set in the RD. The RD requires that there are no direct emissions of polluting matter to groundwater or surface water and requires the licensee to manage discharges to surface waters to ensure that the quantities of water discharged do not compromise the receiving water during periods of high rainfall in terms of volumetric flow. It will be possible to control the discharge rate from the facility via the settlement ponds by setting the operational parameters on the pumps used to evacuate the quarry void.

- (f) The monitoring point SW1 appears to be in private property. Evidence of permission to sample at this point over a prolonged period should be submitted. This comment may also apply to groundwater monitoring wells; however the location of the existing groundwater wells is not included in the additional information.

Response:

The surface water discharge point is located off-site. However the RD requires the applicant to provide safe and permanent access to all off-site points as required by the Agency, which is subject to the prior agreement of the landowner concerned. The RD requires the applicant to provide a sampling point on-site within the boundary of the facility. All groundwater monitoring points are located within the boundary of the facility.

- (g) The monitoring Point SW2 Appears to be at the discharge point. Should it be a distance downstream to allow for a mixing zone?

Response:

Prior to discharge to the Mill Stream tributary, storm water collected on-site will be directed through settlement ponds and a hydrocarbon interceptor. An emission limit value of 10 mg/l 15 mg/l is set for

discharges to surface water for suspended solids in the RD. This emission limit value relates to the discharge from the site rather than the resulting concentration in the receiving water. Based on the assimilative capacity of the receiving water it is considered that such a discharge should not have an adverse impact on the receiving water.

- (h) There is no mention of foul sewage or the disposal of same in the additional information submitted. What are the proposals for disposal of foul sewage and should the affects of same be considered in the Groundwater Protection section.

Response:

There is an existing septic tank on-site. The RD requires a wastewater treatment system be provided and maintained in accordance with the Agency's appropriate Code of Practice in relation to Wastewater Treatment and Disposal Systems.

- (i) The submission recommends additional mitigation measures:
- All paved and car parking areas to drain to an oil interceptor,
 - All 'site compound' areas to have impermeable surfaces and drain to an oil interceptor.
 - All plant when not in use to be parked in 'site compound' areas.
 - Oil interceptor to be maintained in accordance with manufacturers recommendations
 - Settlement ponds to be maintained in a fit - for - purpose state.

The proposals for surface water discharge from the site during operation of the site should include a storm water management system following the principles of Sustainable Urban Drainage and in compliance with the principles outlined in the "Greater Dublin Strategic Drainage Study Regional Drainage Policies Volume 2 New Development, Aug 2005".

Suitably sized oil and petrol interceptors are required for all discharges from large car parks, access roads and hard surfaced areas.

Response:

The RD requires various infrastructure to be maintained on-site and procedures to be implemented in order to prevent pollution and nuisance off-site. The principles of sustainable urban drainage have been taken into account in the RD, e.g. the licensee is required to provide and maintain a Class I full retention separator and settlement ponds for the removal of hydrocarbons and suspended solids respectively.

- (j) Discharges to streams, watercourses or soakaways must receive permission from Water Services.

Response:

Any waste licence granted by the Agency supersedes any permission granted from the Water Services.

- (k) Site roads and approaches to river crossings must be regularly brushed or scraped and kept free from dust and mud deposits.

Response:

There are no approaches to river crossings within the facility site. The RD includes conditions in relation to the control of mud and dust on and off-site.

3. 31st July 2014, Mr. Noel Donnelly, Principal EHO, HSE, Blanchardstown Corporate Park, Dublin 15.

The HSE have made comments on 3 aspects of the EIS i.e (i) hydrology & hydrogeology; (ii) climate & air quality and (iii) noise & vibration. This follows their review of the licence application and EIS, as well as a site visit on 1st August 2014.

Their comments relate to the following:

- the need for a surface water monitoring regime to remain in place for the duration of quarry backfilling and restoration works and for a short period thereafter
- the need for dust monitoring at three locations
- the need for adequate noise monitoring in line with what is proposed in the EIS.

All of the above concerns have been adequately dealt with in the RD.

4. 18th November 2014, O' Leary Arnold Solicitors, Skerries, Co Dublin

The solicitors, on behalf of Liam & Evelyn Derham object to Roadstone's request for a licence. The concerns raised are outlined under the headings below:

(a) *Traffic*

They have concerns with increased "lorry" traffic entering and exiting the site, the safety of road users, overloading of lorries and debris falling onto the road. They also enquire about when these heavy vehicles will be accessing the site, when during off-peak traffic times or unsociable hours.

Response:

The RD stipulates that waste material can only be accepted at the facility between the hours 07:00 and 18:00 Monday to Friday. Condition 5.5 sets out controls for clearing debris off roads in the vicinity of the site, which has fallen from vehicles entering or exiting the site

(b) *Controls on type of waste:*

They express a view about the implications of the site becoming a "dump" and enquire about the monitoring arrangements that will be put in place in relation to type of waste accepted at the site.

Response:

The RD contains conditions and schedules detailing allowable waste types and quantities, waste acceptance criteria and a waste testing/certification regime in order to strictly control and monitor all waste imported onto the site. This will ensure that only soil and stone will be used in the backfill of the quarry void.

(c) *Vermin:*

Concern is raised that nuisance such as vermin could be attracted to the area.

Response:

While nuisance is not considered a significant issue given the nature of the waste material to be used to backfill the quarry void, condition 5.5 in the RD address the control of nuisance. Additionally, the site is a nesting site for the Peregrine Falcon, which is a predator for vermin.

(d) *Recycling:*

Concern is raised about the possibility of a future recycling plant being installed at the site and the associated noise and dust levels from such plant

Response:

The applicant has not sought nor does the RD allow the installation of any recycling plant onsite.

(e) *Water Pollution:*

The submission outlines concerns around the process for removal of water from the quarry void prior to backfilling, its monitoring and associated timeline.

Response:

Conditions 3.10 and 3.15 of the RD address the above issues.

(f) *Duration:*

The submission refers to the facility as a "landfill" and enquires about the timeline for waste operations at the site.

Response:

The waste licence application for this facility is for a Waste Soils Recovery facility, not a landfill. Section 1 of this report addresses the expected operational lifetime of 10 years for the facility.

(g) *Property devaluation:*

The submitters refers again to a "landfill" when, in light of the above concerns, they express concern for the value of local property given the location and proximity of the facility.

Response:

There is no evidence presented to suggest that local property will be devalued due to the presence of this waste soil recovery facility. In any event this is not a matter that is within the remit of the Agency.

The submission also contains hand-written headings i.e. "restructure of natural habitat; peregrine falcon nesting; water amphibians; grass and vegetation but without any detail on the intention of these headings.

13. Charges

A charge of **€6,306.00** is proposed in the RD, based on the enforcement effort predicted for the facility.

14. Recommendation

I have considered all the documentation submitted in relation to this application and recommend that a Proposed Determination be issued subject to the conditions set out and for the reasons as drafted in the RD.

Signed



Patrick Geoghegan

Procedural Note

In the event that no objections are received to the Proposed Determination of the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Act 1996, as amended.