A	0	This memo was approved to go to the Director by Brian Meaney, Senior Inspector. Signed <u>Dglesby</u> Date: 07/11/20
	nvironmental Protection Agency a ChritemAsiresch: um Cheománul (eministradi	RESOURCE USE
	SPECTOR'S REPORT ON A L	ICENCE APPLICATION
то:	Director	
FROM:	Michael Owens	- Licensing Unit
DATE:	7 th November 2014	
RE:		ce from Roadstone Ltd. in relation od, Enniscorty, County Wexford.

1 Application Details

Licence application received:	11 August 2011
EIA Required:	Yes.
Classes of activity under the Waste Management Act 1996 as amended.	Class R 3. Class R 5 (P). Class R 13.
(P = principal activity)	Class D 15

2 Applicant and facility

Applicant:	Roadstone Ltd	
Type of facility:	Recovery of waste soil/stone	
Existing or new development:	Existing site. Former quarry.	
Main class of waste:	Waste natural soil/stone for backfilling of former quarry.	
Quantity of waste to be managed:	 1,330,000 tonnes soil and stone over lifetime of the activity 1,000 tonnes per annum C&D waste for recovery 	
Waste activities:	 Importation and stockpiling of soil/stone. Use of soil/stone to backfill quarry void. Importation of C&D waste (small amounts). 	

Separation of inert waste from C&D waste.					
produce	inert C&D secondary construct	aggrega	ate (which	n will	be
area).		nau ruc		2 3011	1111

3 Site Description

Roadstone Ltd are the owners of an exhausted quarry at Brownswood, Enniscorthy, County Wexford. The quarry is situated on the N11 national primary route approximately 2.5 km south of Enniscorthy (see Figure 1 at the back of this report). The application boundary covers an area of approximately 8.3 Ha and includes the quarry void, surrounding land and site infrastructure (e.g. weighbridge, site office, canteen, fuel storage etc.). The facility lies within a greater company landholding. Concrete production is carried out by the company in an area adjacent to the facility.

In April 2005, established activities at the quarry were registered with Wexford County Council as required under Section 261 of the Planning and Development Act 2000. As a result the County Council imposed conditions on activities at the old quarry which included a requirement to restore the quarry.

The licence application relates to the importation and use of 1,330,000 tonnes of waste soil and stone to back fill the worked-out quarry void. Backfilling of the quarry void will facilitate the restoration of the site and its return to agricultural use. According to the applicant most of this material is likely to be sourced from the planned extension of the M11 motorway in County Wexford (Gorey to Oilgate). Some of the material will also be sourced from other projects as opportunities arise (e.g. excavation and development). Some C&D waste (approx. 1,000 tonnes per annum) will also be accepted at the site. The applicant is proposing to use inert C&D waste (e.g. bricks and tiles) to produce secondary aggregate which will be used to construct site haul roads. Any non-inert C&D waste will be separated out and removed off-site (see Section 5.6 below). The applicant is forecasting that approximately 400,000 tonnes of waste soil/stone will be used for backfill.

4 Planning Permission and EIS

The following planning permissions have been granted for the site by Wexford County Council:

Planning Reference Number	Date of Planning Decision	Brief description	EIS with Planning Application
2002.3756 - (Wexford County Council);	2003	Extension to quarry (planning permission was appealed to ABP)	N/A
PL26.202259 -			
(An Bord Pleanala)			

2007.3977 - (Wexford County Council); PL26.231927 - (An Bord Pleanala)	June 2009	Permission for installation of: (i) a new asphalt/tar mixing plant; and, (ii) a new concrete batching plant in place of existing plant. These plant are outside the licence boundary. (planning permission was appealed to ABP)	N/A
20110746	01/08/2012	Planning Permission for the backfill activity	Yes

The EIS pertaining to the planning application (Ref: 20110746) was submitted to the Agency with the licence application. Please refer to the EIA section of this report for further information.

5 Emissions

5.1 Emissions to Air

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

5.2 Emissions to Sewer

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

5.3 Emissions to ground/groundwater

Ouarrying was carried out to a level beneath the groundwater table and groundwater was continuously pumped from the quarry to facilitate extraction. Since cessation of extraction, groundwater has re-flooded the bottom of the guarry void back to its former natural water-table level. Local basal groundwater flow (including that from the quarry void) is to the nearby River Slaney which is located across the N11 road from the facility. Groundwater quality is generally good with no evidence of contamination with hydrocarbons or metals. Samples taken from the guarry void indicate that there is low level contamination with faecal coliforms and nitrate which indicate pollution from upstream human (e.g. septic tanks) and/or agricultural sources. Aside from upstream pollution sources the groundwater in the quarry void is also vulnerable to contamination at the site given its current exposed state. The backfill and restoration of the quarry void will ensure that the protective layers of soil are replaced above the groundwater table. The guarry void will first be dewatered to facilitate backfill. As the backfill progresses to the depth of the water table groundwater pumping will cease and groundwater will flow back to its natural level. Backfill will then proceed to completion.

The RD includes a range of requirements which will ensure that groundwater is not contaminated while licensed activities are being carried out. Only soil and stone that meets the appropriate waste acceptance criteria will be used for backfill (see Section 5.6 below for more detail). Re-fuelling and maintenance of site vehicles will take place within designated areas protected against spillage and run-off. No re-fuelling of waste delivery vehicles will take place at the facility. All fuels and 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.

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

5.4 Emissions to Surface Waters

There is a discharge of treated water to the River Slaney which is currently authorised under a trade effluent discharge licence from Wexford County Council. This discharge is made up of water from the quarry void (which comprises groundwater and rainwater), wheel wash water and storm water from paved areas at the site. The discharge is treated in an oil interceptor and a series of settlement ponds prior to discharge to the Slaney. When the licensed waste activity commences the quarry will be dewatered. While being dewatered the discharge to the Slaney will comprise mostly pumped quarry water. When the backfill at the quarry reaches a level above the water table the pumping of quarry water will cease. From that point forward the discharge to the Slaney will comprise treated storm water and wheel wash water only.

The River Slaney lies within the South-Eastern River Basin District. The stretch of the River Slaney in the vicinity of the facility is characterised as being of 'moderate status'. Water quality is generally compliant with the Surface Water Regulations EQS values with some exceedences for ortho-phosphate upstream of the facility. The river has a biological quality rating (Q value) of 3-4. Overall the river is classified as being at risk.

Schedule B.2 *Emissions to Water* of the RD sets out the recommended ELVs for the discharge (designated in the licence as SW1). ELVs have been set for the relevant parameters in the receiving water using assimilative capacity calculations in accordance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and will ensure that the discharge itself will not cause an exceedence of a quality standard in the receiving water. The ELVs will protect the quality of the receiving waters and will also contribute to the achievement of "good status" for the River Slaney pursuant to the requirements of the Water Framework Directive (2000/60/EC).

5.5 Storm Water Runoff

Rain that falls on the site either runs to the quarry void, percolates to ground or is intercepted by site drainage and combines with other sources of water at the facility before finally discharging post treatment to the River Slaney (discussed above in Section 5.4).

5.6 Waste Acceptance

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

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

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

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

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

Both of these terms are defined in the RD. Secondly, 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 gualified 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/stone is a 'letter of suitability' from a 'gualified 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 11.11	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 of 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.

Secondary Aggregate

The applicant is proposing to accept C&D waste for treatment from which will be recovered inert materials for the production of secondary aggregate. The applicant is further proposing to use this secondary aggregate to construct haul roads at the facility. In order to ensure that the secondary aggregate is produced to a suitable quality standard and will not cause environmental pollution when used, Condition 8.12 of the RD requires that (unless otherwise agreed with the Agency) only secondary aggregate that has achieved end-of-waste status can be used at the facility. It should be noted that this particular stream will represent a very small percentage of the overall waste import as Schedule A.1 *Waste Acceptance* of the RD sets an import limit of 1000 tonnes per annum on C&D waste. Condition 3.9 of the RD includes controls related to the construction and operation of the C&D waste recovery area.

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

5.7 Noise

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

5.8 Nuisance

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

6 Use of Resources

There is a water mains connection which supplies potable water to the office and welfare facilities. All lighting and heating required at the facility will be provided by the existing mains power connection. Site vehicles will use diesel as fuel

(approximately 490 litres/week). Condition 7 of the RD sets out the requirements with regard to resource use and energy efficiency.

7 Closure, Restoration and Aftercare

The applicant submitted a Closure, Restoration and Aftercare Management Plan (CRAMP) as part of the licence application (see Section 12 'Fit and Proper Person Assessment' below for more detail). Condition 10.2.1 of the RD requires the licensee to submit a revised CRAMP prior to commencement of waste acceptance at the facility.

8 Waste Management Plan and National Policy

Activities at the facility will in general support the policies in the current waste management plan for the South East Region (2006 - 2011). These policies include the provision of adequate facilities and infrastructure for recycling and recovery of waste. The current plan will remain in place until it is replaced by a new Regional Waste Management Plan which is being prepared at present.

Activities will also be in line 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 as it is intended that the facility will largely accept soil/stone generated by the extension of the M11 motorway in County Wexford.

9 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 section 5.4 above for detail.
European Communities Environmental Objectives (Ground Water) Regulations, S.I. No. 9 of 2010	See section 5.3 above for detail.
Environmental Liabilities Directive	The applicant submitted an Environmental Liabilities Risk Assessment (ELRA) as part of the application. Condition 12.2.2 requires that the ELRA is revised and agreed by the Agency prior to the commencement of activities at the facility.
	Condition 12.2.3 of the RD will require the licensee to make adequate financial provision to cover any liabilities associated with the activity prior to commencement of activities.

	See Section 12 below for more detail.
Waste Framework Directive	Activities at the site will adhere to the waste hierarchy as well as to the provisions in the Directive related to reuse, recovery, recycling, self-´ sufficiency and proximity.

10 Environmental Impact Assessment

The applicant submitted an Environmental Impact Statement (EIS) which was prepared in support of a planning application to Wexford County Council (Ref: 20110746). Planning permission was granted for the development by Wexford County Council on the 1 August 2012.

I have considered and examined the content of the EIS and other material (information submitted in the licence application, the planning documentation, correspondence between the Agency and the planning authority as a result of EIA consultation 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 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. I consider that the EIS also complies with the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004).

An EIA, as respects the matters that come within the functions of the Agency, has been carried out as detailed below.

An EIA as regards the functions of the planning authority was carried out by the planning authority when granting planning permission for the development (Planning File Ref. 20110746). That EIA addressed the likely significant effects of the construction and operational phases of the development. The planning authority's EIA was considered as part of the Agency's assessment.

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

Notice	Description
Notice under Article 18(1) and 18(3) of the Waste Management (Licensing) Regulations 2004 (S.I. No. 395 of 2004). Issued: 12 August 2011	Notice to Planning Department that an EIS and a waste licence application have been received and seeking submissions on same.
Response to notices made under Article 18(1) and 18(3). Received: 05 September 2011	Response from Planning Department.
EIA consultation Issued: 4 October 2013	EIA consultation with Planning Department.

Response to EIA consultation	Response from Planning
Received: 21 October 2013	Department on EIA consultation.
Notice under Article 18(3) of the Waste	Notice to Planning Department that
Management (Licensing) Regulations 2004	additional information relevant to
(S.I. No. 395 of 2004), as amended.	the EIS has been received and
Issued: 12 November 2013	seeking submissions on same.
Notice under Article 18(3) of the Waste	Notice to Planning Department that
Management (Licensing) Regulations 2004	additional information relevant to
(S.I. No. 395 of 2004).	the EIS has been received and
Issued: 20 February 2014	seeking submissions on same.

The assessment outlined in this report considers the submission received by the Agency from Wexford County Council. The one third party submission received has also been considered and taken into account.

The submitted EIS and the assessment as described in this Inspectors Report address the likely significant direct and indirect effects arising from the activity, as respects the matters that come within the functions of the Agency.

Likely significant effects

This 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.

Likely significant effects and ass	ociated mitigation measures
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1. Human Beings		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Traffic	Traffic and its associated emissions, risks and dis- amenity effects.	EIS outlines measures to manage traffic and mitigate potential impacts.
		RD requires use of wheel wash.
		RD sets hours of waste and materials acceptance.
Socio-Economic	No significant negative impact predicted. Overall, a positive effect is	prevent nuisance due to

	predicted (e.g. in terms of provision of employment).	noise. RD requires a public awareness and communications programme.
Impact on air quality	Emissions of dust.	RD specifies measures to control and limit dust emissions. RD requires monitoring of ambient dust deposition.
		Dust suppression sprayers will be used.
Noise	Dis-amenity from noise emissions due to licensed	Activities will be temporary.
	activities.	RD sets noise limit values and requires a bi-annual noise survey.
		RD requires measures to control noise.

2. Flora & fauna		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Impact on Local habitat and nearby designated sites	No significant effect is predicted.	The licensed activities will not adversely affect the nearby designated sites. See Section 11 below for more detail on Appropriate Assessment and on the proposed mitigation measures.
		In addition, the controls as set out in the RD will ensure that there is no significant impact on nearby (undesignated) flora or fauna.

3. Soil		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Impact on soil	Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the groundwater. During operations, there is a risk of accidental spillage or discharge to ground.	development of waste acceptance and characterisation

4. Water		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Impact on surface water	Surface water (River Slaney) is at risk due to discharge of water from the facility	
	No significant effect is predicted due to the nature of activity.	

		proposed mitigation measures.
Impact on groundwater	Overall a positive effect is predicted as the backfill of the quarry will restore the natural protective soil layer over the groundwater.	outlined above for prevention of impact on
	During operations, there is a risk of spillage and contamination of groundwater at the facility.	

5. Air		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Impact on air quality	Emissions of dust.	See mitigation measures outlined above for prevention of impact on Humans – impact on air quality.

6. Climate		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
Increase in greenhouse emissions	Impact on climate. No significant increase in greenhouse gases is predicted.	Emissions due to traffic and operating machinery will be temporary. Emissions of greenhouse gases are predicted to be insignificant.

7. Landscape, Material Assets & Cultural Heritage		
Likely significant effect	Description of effect	Mitigation measures proposed by applicant in EIS or licence application and/or as outlined in this report
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.	Visual impact is reduced by existing hedgerows.
Impact on material assets and cultural heritage.	Potential for impact on local material assets (e.g. roads, road signage, power supply, housing etc.) No impact is predicted on cultural heritage due to licensed activities.	The activity itself will not lead to any impact (e.g. removal or damage) of a local material asset. In addition the RD and EIS set out various controls to prevent any significant impact on the local area.

Assessment of Parts 1 to 7 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 the EIA carried out by the planning authority and all relevant 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 interaction of impacts was assessed in the EIS. The following are the main interactions which were addressed:

Factor	Potential Interaction
Human beings	Effects due to dust, traffic and noise
Groundwater	Effects due to contamination of surface water and contaminated backfill

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Surface water	Effects due to contamination of surface water discharge and contaminated groundwater basal flow
Noise	Effects due to site traffic and road traffic

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. The RD includes conditions as considered appropriate to address key interactions associated with the licensable activity.

Overall Conclusion on Environmental Impact Assessment

All matters to do with emissions to the environment from the proposed activity, the licence application documentation and EIS have been considered and assessed by the Agency. The assessments carried out by the planning authority and the submission exchanged between the planning authority and the Agency have been considered as part of this assessment. The one third party submission has also been taken into account.

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 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 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 Appropriate Assessment

The facility itself is not within a designated area but is adjacent to the River Slaney Special Area of Conservation (SAC – site code 000781) and the Wexford Harbour and Slobs Special Protection Area (SPA – site code 004076).

The River Slaney was selected as a candidate SAC for alluvial wet woodlands, floating river vegetation, estuaries and old oak woodlands. The SAC comprises the freshwater stretches of the River Slaney as far as the Wicklow Mountains and flows through the counties of Wicklow, Carlow and Wexford. The river is 100m wide in places and is tidal at the southern end at Edermine Bridge below Enniscorthy. The River is also a designated salmonid river and is a nationally important watercourse for salmon and sea trout. The SAC includes a number of tributary rivers. The SAC supports populations of several other designated species including three Lamprey species and otter.

The Wexford Harbour and Slobs Special Protection Area includes the section of the river Slaney stretching from just south of Enniscorthy to Wexford town and out into Wexford harbour. The SPA is considered to be of national and international importance and supports populations of 25 species of wintering water birds. In particular it supports internationally important populations of Greenland White-fronted Goose, Mute Swan and Black-tailed Godwit.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the sites, if the proposed activity, individually or in combination with other plans or projects, is likely to have a significant effect on a European Site. In this context, particular attention was paid to the European sites at the River Slaney Special Area of Conservation (SAC – site code 000781) and the Wexford Harbour and Slobs Special Protection Area (SPA – site code 004076). 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 *cannot* be excluded on the basis of objective information, that the proposed 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 proposed activity is required and for this reason determined to require the applicant to submit a Natura Impact Statement.

- There is potential for effects on the qualifying interests (i.e. the habitats and species) in the designated areas which are dependent on water quality.
- There is the potential for effects due to disturbance from noise and dust.
- The introduction and spread of invasive species are possible.

An Appropriate Assessment has been completed and has determined based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 and 2013, pursuant to Article 6(3) of the Habitats Directive, that the proposed activity, individually or in combination with other plans or projects, will not adversely affect the integrity of European Sites in particular the River Slaney Special Area of Conservation (SAC site code 000781) and the Wexford Harbour and Slobs Special Protection Area (SPA site code 004076), having regard to their conservation objectives and will not affect the preservation of these sites at favourable conservation status if carried out in accordance with the licence and the conditions attached thereto for the following reasons:

- The discharge to water will receive treatment before entering the River Slaney.
- The licence sets Emission Limit Values for the discharge to water in order to ensure that the discharge will not cause a water quality standard to be exceeded in the river.
- The licence requires the implementation of an 'Invasive Species Management Plan' to remove invasive species from within the facility boundary.
- The licence requires the establishment of waste characterisation and acceptance procedures which will ensure that all wastes arriving at the facility are handled in such a manner so as to prevent any impact on the designated sites.
- The licence sets limits on noise levels and dust deposition and requires biannual monitoring of both parameters. These measures will prevent any

significant disturbance of the designated sites.

In light of the foregoing reasons, no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of the River Slaney Special Area of Conservation (SAC site code 000781) and the Wexford Harbour and Slobs Special Protection Area (SPA site code 004076).

12 Best Available Techniques (BAT)

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

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

13 Fit & Proper Person Assessment

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

i. <u>Technical Ability</u>

Roadstone Ltd hold two waste licences and have submitted four additional waste licence applications to the Agency (including this application). It is considered that the applicant's management team, nominated staff and environmental advisors are appropriately qualified and experienced with regard to their technical ability to oversee and manage activities at the site.

ii. Legal Standing

The applicant, Roadstone Ltd (and its legal/commercial predecessors), has never been convicted of any relevant offence.

iii. Financial Standing

The applicant submitted information regarding the following:

- Arrangements (including costings) for closure, restoration and aftercare of the facility.
- Environmental Liabilities Risk Assessment (ELRA) with costings.
- Annual Report and Financial Statements for 2009.

The Agency's *Guidance on Environmental Liability Risk Assessment, Residuals Management Plans and Financial Provision*, EPA 2006, was followed in the preparation of the reports.

In relation to the costings for the implementation of the CRAMP there is no provision for security and costs have not been adjusted for inflation. The ELRA address those costs not identified in the CRAMP which could potentially arise due to an accident or incident. It is considered that the total amount calculated to cover the 'Most Likely Scenario Cost' at approximately €18,000 is low. This amount is of itself not sufficient to address the occurrence of even one of the risks identified should it occur. Therefore Conditions 10.2.1 and 12.2.2 respectively of the RD require the submission of revised CRAMP and ELRA prior to commencement of waste acceptance. The RD also requires that these are revised in accordance with the latest Agency guidance on assessing and costing of environmental liabilities which was published in 2014. In addition, Condition 12.2.3 of the RD requires the licensee to make financial provision prior to the commencement of waste activities in a manner that is to the satisfaction of the Agency.

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

14 Cross Office Liaison

Inspector	Assistance provided
Pamela McDonald (OCLR)	Matters related to Environmental Impact Assessment
Donal Grant (OCLR)	Matters related to Appropriate Assessment
Stephen McCarthy (OEE)	Matters related to waste acceptance criteria and characterisation

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

15 Recommended Decision

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

16 Submissions

One submission was received in October 2011 from the Health Service Executive (HSE), Wexford Local Health Office. The HSE states that it has no objection in principle to the proposed waste recovery facility, however, it raises a number of matters in the submission and these are dealt with in turn below.

(i) Environmental health was not included at the Screening/Scoping stage of the application

Response

Screening/Scoping are stages of EIS preparation. Scoping of an EIS is used to determine the aspects that should be included in the EIA process (i.e. addressed in the EIS). The potential for the activity to impact on 'human beings' was examined in the EIS and addressed likely socio-economic effects. The potential for other direct and interactive effects on humans and their health (e.g. due to noise, dust, nuisance, landscape change etc.) were also examined in the EIS. These aspects have been addressed in this report and the EIA contained herein. Where necessary, mitigation measures have been developed for implementation to prevent any significant impact (see Section 11 above for more detail).

(ii) The licence should require a comprehensive system to manage wastes and ensure that unsuitable waste materials are not used for backfill.

Response

The RD contains a range of measures to ensure that only suitable wastes will be used for backfill.

(iii) Restoration work and final completion of same should be adequately controlled and monitored to ensure that groundwater is protected.

Response

The RD contains a range of measures to ensure that the backfill activity will be adequately controlled so as to prevent contamination of soil or groundwater.

(iv) The facility should have adequate security to prevent illegal activity (such as fly-tipping).

Response

Condition 3.3 of the RD sets out the measures regarding facility security. These are considered adequate to prevent unauthorised access and illegal waste activities.

(v) A preference is expressed for a shorter operational life span for the facility in order to reduce the time that the aquifer will remain vulnerable.

Response

The applicant provided estimates as to how long it will take to complete the fill. The time periods range from 6.5 to 20 years. It is not considered appropriate to set a time limit in the licence on the operational life span of the facility as this will depend on the amount of backfill material that will be available from third parties from year to year. The more material that is available in the short term the shorter will be the operational life span of the facility.

(vi) It is considered that the groundwater monitoring regime is inadequate and that insufficient microbiological monitoring has been carried out. Groundwater monitoring should include total and faecal coliforms.

Response

The applicant provided quality data for water in the quarry void (which is essentially equivalent to groundwater as groundwater flows into the quarry void). This included data for coliforms and results indicate that there is low level contamination with faecal coliforms (and nitrate) from upstream human (e.g. septic tanks) and/or agricultural sources. Additional groundwater quality data from the monitoring boreholes was provided by the applicant but this data did not include coliforms. Overall, groundwater quality is generally good with no evidence of contamination with hydrocarbons or metals. It should be noted that the coliform contamination is already present in groundwater before the activity has commenced. As the facility utilises two septic tanks for treatment of sanitary waste it is considered appropriate to require monitoring of coliforms in groundwater and Schedule C.4 of the RD reflects this requirement.

(vii) Private wells within 250 metres of the facility should be included in the groundwater monitoring programme.

Response

There is no evidence of any private wells within 250m of the facility. According to the licence application there is one well at distance of 900m to the south of the facility. Groundwater flow from the facility is in a westerly direction to the River Slaney and cannot interact with the private well to the south. Therefore it is not proposed to include this well on the groundwater monitoring programme.

(viii) The proposed arrangements for surface water management post completion of restoration will pose a hazard to groundwater quality.

Response

The applicant proposes that when backfill and closure/restoration of the site are complete the final landform will be modified to ensure that rain water falling on the backfilled area is directed to a pond in a closed depression in the south eastern corner of the site from where it will percolate to ground as rain water normally does. It is not considered that this arrangement will pose a hazard to groundwater quality. In any case all arrangements with regard to closure and restoration of the site will be agreed by the Agency under the CRAMP.

(ix) The on-site septic tanks should comply with EPA standards.

Response

Condition 3.13 of the RD requires the waste water treatment systems to comply with the Agency Code of Practice for such systems.

(x) The discharge to the River Slaney should be sufficiently treated and monitored to ensure that it does not impact negatively on fish and aquaculture downstream of the discharge points.

Response

As discussed above in Sections 5.4, 10 and 11, the water discharge will be treated prior to discharge. The RD applies ELVs to the discharge in order to protect water quality. The RD also requires regular monitoring of the discharge.

(xi) There is a disused asphalt and tar plant in the vicinity of the facility. That and all other potential locations of contaminated land should be assessed.

Response

These plants are not related to the proposed waste activity and are outside the licence boundary. According to the applicant operations at the plants have been suspended and, depending on economic circumstances, may recommence in the future. There is no evidence that these plants have caused any contamination of land in the area. The RD contains a range of measures to prevent contamination of soil or groundwater within the licensed site boundary. Any contamination that is caused (or that becomes apparent) as a result of licensed activities or within the licence boundary will be the subject of investigation and enforcement action by the Agency.

(xii) There should be sufficient control of noise and inclusion of appropriate noise limits in the licence particular in relation to the 'night-time' period between the hours of 06.00 and 08.00 in the early morning.

Response

Condition 1.7 of the RD prohibits the acceptance of material at the facility before 07.00 in the morning which is day-time as defined in the RD. The RD sets limits for noise levels at day and night time and also requires a bi-annual noise survey. Condition 6.11.1 requires the licensee to implement adequate measures to control noise emissions. Noise complaints will be subject to investigation and, where necessary, enforcement action by the Agency.

(xiii) There should be adequate provision for dust suppression. In addition, consideration should be given to the requirement for additional dust monitoring stations.

Response

Condition 6.11 of the RD requires the licensee to implement adequate measures to control dust emissions at the facility including, where necessary, the use of a water spray. Schedule C.3 *Ambient Monitoring* of the RD requires bi-annual dust monitoring at the dust monitoring stations listed in the EIS as well as at additional locations as may be required by the Agency.

(xiv) There should be a comprehensive rodent control programme and activities at the facility could disturb rodent nesting sites.

Response

Condition 5.5 of the RD requires the licensee to control vermin although, given the profile of waste acceptance, there is little potential for their attraction to the facility.

(xv) There should be regular checks to ensure no nuisance impact due to litter, vermin or odour.

Response

The RD contains measures to prevent any impact due to litter or vermin. It is not expected that odour will be an issue at the facility given the nature of the proposed activities; nonetheless, Condition 5.2 of the RD will ensure that odour does not cause an impact on the surrounding area.

(xvi) It is essential that there is a comprehensive monitoring programme in relation to all of the potential effects referred to in the submission and that adequate records are maintained for inspection.

Response

The RD contains a range of measures in relation to monitoring of emissions and potential impacts. It also requires records to be maintained and to be available for inspection by the Agency.

17 Charges

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

18 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

Michael Owens

Inspector

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Procedural Note

In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with Section 87(4) of the Environmental Protection Agency Acts 1992 and 2013 as soon as may be after the expiration of the appropriate period.



Figure 1 – Boundary of licence application at Roadstone Ltd (Brownswood)