Noeleen Keavey

Subject:	FW: W0277-02 Huntstown Soil WRF : Licensee Response to Objection to Proposed
Attachments:	Decision Huntstown Soil WRF Roadstone Response to Huntstown PD Objection W0277-02 FINAL.pdf

From: Derek Luby [mailto:dluby@slrconsulting.com] Sent: 26 July 2017 18:11 To: Licensing Staff Subject: W0277-02 Huntstown Soil WRF : Licensee Response to Objection to Proposed Decision

Dear Sir / Madam

Please find attached a copy of the Licensee Response in respect of the objection to the Proposed Decision in respect of its waste licence review application (Ref. W0277-02) for increased soil waste intake to its Inert Soil Waste Recovery Facility at Huntstown, Dublin 11.

Consent for inspection purposes only any other use I would appreciate if you acknowledge receipt of this submission by return email.

Regards

Derek Luby

Technical Director - Geotechnical Engineering

+353 1 296 4667

dluby@slrconsulting.com

SLR Consulting Ireland 7 Dundrum Business Park, Windy Arbour, Dublin, D14 N2Y7

The real District



WINNERS : International Business WINNERS: RoSPA Gold Excellence Award, 2016 Award, 2017

Confidentiality Notice and Limitation

This communication, and any attachment(s) contains information which is confidential and may also be legally privileged. It is intended for the exclusive use of the recipient(s) to whom it is addressed. If you are not the intended recipient, any disclosure, copying, distribution or action taken or not taken in reliance on it is prohibited and may be unlawful. If you have received this communication in error, please advise SLR by e-mail and then delete the e-mail from your system. As e-mails and any information sent with them may be intercepted, corrupted and/or delayed, SLR does not accept any liability for any errors or omissions in the message or any attachment howsoever caused after transmission.

Any advice or opinion is provided on the basis that it has been prepared by SLR with reasonable skill, care and diligence, taking account of the manpower, timescales and resources devoted to it by agreement with its Client. It is subject to the terms and conditions of any appointment to which it relates. Parties with whom SLR is not in a contractual relationship in relation to the subject of the message should not use or place reliance on any information, advice, recommendations and opinions in this message and any attachment(s) for any purpose.

© 2017 SLR Consulting Limited. All Rights Reserved.

This email has been scanned by the Symantec Email Security.cloud service. For more information please visit <u>http://www.symanteccloud.com</u>

Consent of conviction purposes only any other use.



BY E-MAIL

26th July 2017

Licensing Unit Office of Climate Change, Licensing and Resource Use Environmental Protection Agency Headquarters, P.O. Box 3000, Johnstown Castle Estate County Wexford

Our Ref: 501.00180.00152 Your Ref: W0277-02

Dear Sir / Madam

RE: ROADSTONE LIMITED, HUNTSTOWN INERT SOIL WASTE RECOVERY FACILITY PROPOSED DECISION IN RESPECT OF WASTE LICENCE REVIEW APPLICATION RESPONSE TO THIRD PARTY OBJECTION BY INTEGRATED MATERIAL SOLUTIONS

Con

Further to your letter dated 28th June 2017 notifying Roadstone Limited of an objection lodged in respect of the Agency's Proposed Decision to issue an amended waste licence providing for an enhanced rate of backfilling and restoration of the North and West Quarries at the Huntstown Quarry Complex near Finglas, Dublin 11 (Ref W0277-02), we have provided herein a response to the issues raised in the objection. Note that we have generally endeavoured to respond to the issues raised in the same order and sequence as raised in the objection letter.

Observation

Roadstone notes at the outset that the submission to the proposed decision has been submitted by the operator of a competitor facility at Hollywood Great, The Naul, Co. Dublin (Licence Ref. No W0129-02) which, like it, is also licenced to accept inert soil and stone conforming to Code 17 05 04 on the EPA List of Waste (LoW)¹ as well as additional waste codes, albeit for disposal rather than for recovery purposes.

Background

At the present time, Roadstone is importing significant volumes of inert soil, stone and rock from construction and development sites to backfill and restore the North Quarry at its Huntstown Quarry Complex in North Dublin. The backfilling activity is part of the overall restoration scheme which ultimately provides for the restoration of all existing and/or planned quarries at Huntstown to former ground level using inert, naturally occurring soil and stone waste material.

Roadstone secured planning permission to restore the quarries in August 2014 as part of a broader permission which provided for the continuation of quarrying and related activities at the Huntstown Complex until 2034 (Fingal County Council Ref. No FW12A-0022 and An Bord Pleanala Ref. No.

¹ List of Waste and Determining if Waste is Hazardous or Non-hazardous (2015), EPA, Wexford





06F.241693). The entire quarry development at Huntstown and its long-term restoration was subject to Environmental Impact Assessment (EIA) at that time.

As was noted in the Environmental Impact Statement (EIS) supporting the waste licence review application, the backfilling of the constituent quarries at Huntstown Quarry is necessary in order to prevent the formation of large open water bodies once groundwater pumping / dewatering stops on cessation of quarrying activity. Were such water bodies to develop, they would inevitably attract birdlife and could lead to a significant increase in bird numbers and activity in the local area. As the quarries at Huntstown all lie immediately beneath the main flight path in and out of Dublin Airport. this in turn could create a potentially significant and unacceptable bird hazard for low flying aircraft overhead, on their approach to, or take-off from, the airport.

Backfilling the quarries to their original ground level, above surrounding long-term groundwater level, is considered to be the most appropriate, sustainable, lowest risk and demonstrably effective long-term option to inhibit the development of surface water bodies at Huntstown and to safeguard future operations at Dublin Airport.

The requirement to backfill the Huntstown quarries was confirmed by the Dublin Airport Authority (DAA) in the observation it submitted to Fingal County Council at the time the planning application for continuation of quarrying activities was under review (Ref. No FW12A-0022). A copy of the DAA observation accompanies this submission as Attachment A. A clear benefit and rationale therefore exists for backfilling the quarries at Huntstown to original ground, level.

In August 2016, in light of strong market demand for soil and stone waste recovery capacity in North Dublin City and County and the surrounding hinterland Boadstone applied for planning permission to increase the rate of inert soil and stone wasteen take to the licensed soil recovery facility at Huntstown from a maximum of 750,000 tonnes set annum (previously provided for under the 2014 planning permission) to 1,500,000 tonnes per annum. That planning application was subject to environmental impact assessment and final planning approval was granted by Fingal County Council in November 2016 (Ref. No FW16A-0120). The waste licence review application under consideration at the present time principally provides for a similar increase in the intake of inert soil and stone permitted by the waste licence. Consent

Grounds for Objection

1 Type of Waste Facility

The first ground of objection asserts that there should be a clear distinction between the operational and engineering controls between an inert soil waste recovery facility and those for an inert landfill facility, and specifically in respect of any inert soil waste sourced from non-greenfield sites.

Category of Waste Activity / Facility

The only available material which can be used to backfill the quarries at Huntstown to original ground level is inert, uncontaminated, naturally occurring soil and stone waste generated by construction and development activity across North Dublin City and County and the surrounding hinterland. The use of soil and stone waste for this purpose clearly complies with the definition of waste recovery set out in the European Waste Directive (2008/98/EC) and the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126/2011) which is as follows

'any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function (or waste being prepared to fulfil that function), in the plant or in the wider economy'.

oblast environmental and advisory splatsons

SLR Consulting Ireland @ sirconsulting.com



It is emphasised that the soil and stone materials imported for recovery at Huntstown are naturally occurring and inert (as defined by the Waste Management (Licensing) Regulations 2004 (S.I. 395 of 2004) and the existing waste licence) in that that they

- do not undergo any significant physical, chemical or biological transformations,
- do not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health and
- will not endanger the quality of surface water or groundwater.

Looked at in another way, the materials handled at the Huntstown recovery facility comprise inert, naturally occurring soil and stone which itself formed an integral part of the natural environment at the source sites from whence it originated and the licensed waste activities facilitate the transfer of inert geological materials from one natural environment to another.

By restricting the waste intake to inert soil and stone and establishing appropriate yet robust intake control and environmental management systems to ensure the imported waste is inert and uncontaminated, Roadstone eliminates the potential for the licensed recovery activities at Huntstown to give rise to any environmentally adverse or nuisance impacts which would conventionally be associated with landfill facilities – it will not attract vermin or scavenging birds, nor has it the potential to generate potentially odourous landfill gas emissions or leachate with the potential to contaminate surface waters and/or underlying groups water aquifers.

Waste Acceptance Procedures

As previously noted, the existing recovery facility at Huntstown, and the proposed extension and increased intake thereto is, and will only every be, licensed to accept and handle inert (uncontaminated) soil and stone waste and oregiging spoil from construction and development projects.

5

At the present time, waste intake is limited to just two categories from the EPA List of Waste (LoW)

- 17 05 04 Soil and stone (uncontaminated)
- 20 02 02 Inert soil and stones from municipal gardens and parks.

Since the licensed facility at Huntstown commenced operations in October 2015, all waste material imported to the facility and accepted for recovery has comprised inert soil and stones.

Note that it is proposed, as part of the waste licence review application, to add one other category of waste intake, specifically

• 17 05 06 Dredging spoil (uncontaminated)

At present, the waste acceptance plan for Huntstown provides for intake and acceptance of inert soil and stone waste in line with the particular and very detailed requirements of Conditions 8.3, 8.4 and 8.13 of the existing waste licence (Ref. W0277-01) and further criteria set out in Schedules A2 and A3. The waste acceptance plan provides for acceptance of inert, uncontaminated soil and stone as follows:

- (i) from greenfield sites, subject to certification / verification from an appropriately qualified or experienced professional and
- (ii) from non-greenfield sites subject to compliance with criteria for inert waste set by Section 2.1.2 of the Annex to Council Decision 2003/33/EC²

obai environmental and advisory solutions.

² Council Decision 2003/33/EC of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills



The inert waste acceptance criteria set by Council Decision 2003/33/EC were adopted for soil and stone from non-greenfield sites in the absence of any other recognised limit values which could be used to objectively and quantitatively establish whether the soil waste is inert or not. Furthermore, the test procedures set out in Council Decision 2003/33/EC are proven, consistent and repeatable and are also firmly established and widely implemented across the construction and development industry.

In the absence of any formally prescribed Irish inert limit value(s) for polyaromatic hydrocarbons (PAHs) for inert waste, the limit value of 100mg/kg prescribed by the UK Environment Agency was adopted in the waste acceptance plan previously submitted by Roadstone to the EPA (and accepted / referenced in Condition 8.13.9 of the Proposed Decision). In adopting this limit value, the view was taken that there is no spectrum or continuum of material 'inertness' and that material, by definition, should either be inert or not. It was also considered that the adopted value was sufficiently conservative as PAHs are organic compounds and not particularly mobile, particularly if they are embedded within a large body of natural soil and stone with a relatively low permeability clay matrix.

Waste intake procedures established by Council Decision 2003/33/EC EXEMPTS soil and stone wastes conforming to LoW Code 17 05 04 from any requirement for characterisation testing when they are forwarded to an engineered, inert landfill. As the soil recovery facility at Huntstown is not an engineered landfill, this exemption DOES NOT APPLY and the waste acceptance procedures developed for the facility therefore make due provision for the collection and recording of soil waste characterisation information prior to acceptance, in order to verify that all imported waste is / will be inert and that it will present no risk to the surrounding ground and/or groundwater.

This is therefore one crucial and critical distinction between waste acceptance procedures for the Huntstown inert soil recovery facility and those which would otherwise apply in the case of an inert landfill. This differentiator between waste intake and acceptance procedures for the two types of facility appears to have been overlooked in the objection to the Proposed Decision.

2 Environmental Setting

The second ground of objection to the Proposed Decision merely presents or restates facts which have been presented in the EIS submitted in support of the original waste licence application, specifically that the underlying bedrock aquifer at Huntstown is classified as locally important (deemed moderately productive only in local zones) and is classified as being of high to extreme vulnerability to contamination from surface activities. The vulnerability rating is based primarily on the limited protective soil cover to the bedrock aquifer in the Huntstown area (it is non-existent within the quarry footprint) and the proximity of the groundwater table to the ground surface (both within and beyond the quarry footprint).

The objection also notes that in the long-term, following cessation of quarrying activities and dewatering at Huntstown, the groundwater table which is currently depressed by pumping activities, will rebound over time and rise through the backfilled soil and stone, close to surrounding, undisturbed ground level.

In response, Roadstone notes that the restoration activities at Huntstown will, in the long-term, ultimately reduce the vulnerability of the locally important limestone aquifer beneath the quarry footprint, as the depth and relatively low permeability of the inert clay backfill placed above it will afford it greater protection than it has at present. Given its relatively low permeability, any rainfall occurring over the restored ground will most likely present as surface water run-off to local watercourses rather than recharge to the underlying locally important bedrock aquifer lying 25m to 45m below.

In the long-term, following the cessation of quarry dewatering, groundwater flow through the limestone aquifer will continue to be concentrated along existing bedrock discontinuities (joints,



fractures etc). In view of the relatively low permeability of the backfilled soil, the bulk of any groundwater flow upgradient of the licensed site will be locally displaced and follow a preferential flow path around it, through the surrounding, more permeable in-situ limestone, and only a relatively insignificant proportion of groundwater flow will occur through the backfilled soil.

It should also be noted that the licensed site at Huntstown is located just inside, and at the back (top) of the surface water catchment for the Ward River. Were the local groundwater catchment to follow the surface water catchment (as is assumed in the absence of contradictory evidence), it is reasonable to assume that the volume of long-term groundwater flow which will arise up-gradient of the backfilled quarry and flow towards it will, in any event, be relatively low.

When addressing the concerns about the environmental setting of the existing recovery facility at Huntstown, it is also necessary to recognise

- (i) all materials accepted at this facility are inert soil and stone;
- (ii) that the planning process has determined that the backfilling of the constituent quarries at Huntstown Quarry is necessary and appropriate to prevent the formation of open water bodies once quarrying activity ceases, which could present an unacceptable hazard from local bird activity for overhead aircraft on its approach to, or take-off from, Dublin Airport;
- (iii) other long-term alternatives to backfilling the quarries at Huntstown are not without their own risks and challenges for the surrounding environment. All alternatives would require active and permanent long-term management which may ultimately be less sustainable and effective than the approved backfilling strategy.

3 Pollution Control Measures

The third ground of objection is that the pollution control measures included in the Proposed Decision in respect of the soil recovery facility at Huntstown are not the same as those which would be applied to an inert landfill / disposal facility. It notes that the soil recovery facility at Huntstown is not required to have the same engineering controls required for a landfill facility and asserts that the placing of soil waste at the facility affords no protection to the surrounding environment or to the underlying groundwater and that there are no restrictions on the placement of waste below the groundwater table.

Roadstone emphasises that this objection is based on the fundamental misconception that the licensed facility should be managed as a landfill facility as opposed to a recovery facility. The appropriateness of the status and designation of the Huntstown facility as a recovery facility has previously been addressed in our response to the first ground of objection.

The objection to the Proposed Decision appears to imply that there should be equivalence between the environmental protection measures required for a soil recovery facility and those required at an inert landfill /disposal facility. To hold to this view is to overlook a number of key factors

- (i) soil recovery facilities have a much more limited range of waste intake they are restricted to inert, uncontaminated soils and cannot accept the wider range of wastes which are typically imported to inert landfill / disposal facilities;
- (ii) although there may be a different emphasis placed on operational and engineering measures between soil recovery and inert landfill / disposal facilities, it is possible to provide the required degree of environmental protection at soil recovery facilities by way of robust waste management and control procedures and it is not essential to install engineering control measures;
- (iii) the natural clay materials used to construct mineral soil liners at the base and sides of engineered landfills are similar to those which are being imported and placed around the base and sides of the soil recovery facility at Huntstown.



These points are discussed in some further brief detail below.

Range of Waste Intake

Taking the nearby licensed inert landfill / disposal facility at Hollywood Great (Ref. W0129-02) as an example, it is noted that apart from soil and stone (corresponding to LoW 17 05 04), that particular waste licence also provides for the importation and disposal of the following waste streams,

Waste Resulting from Quarrying and Physical Treatment of Minerals

- 01 01 02 Wastes from mineral non-metalliferous excavation
- 01 04 12 Tailings and other wastes from washing and cleaning of minerals other than those mentioned in 01 04 07 and 01 04 11
- 01 04 09 Waste sand and clays
- 01 04 99 Wastes not otherwise specified

Construction and Demolition Wastes

- 17 01 01 Concrete
- 17 01 02 Bricks
- 17 01 03 Tiles and ceramics
- 17 01 07 Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
- 17 02 02 Glass
- 17 03 02 Bituminous mixtures other than those mentioned in 17 03 01
- 17 05 06 Dredging spoil other than those mentioned in 17 05 05
- 17 06 04 Insulation materials other than those mentioned in 17 06 01 and 17 06 03
- 17 09 04 Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

Other Inert Wastes

- 10 10 06 Casting cores and moulds which have not undergone pouring.
- 19 09 02 Sludges from water clarification
- 19 09 04 Spent activated carbon

The above list compares to the following list in Schedule A1 of the Proposed Decision in respect of the soil recovery facility at Huntstown :

- 17 05 04 Soil and stone
- 17 05 06 Dredging spoil
- 20 02 02 Inert soil and stones from municipal gardens and parks.

It is also important to note that applying the inert waste acceptance criteria set out in Council Decision 2003/33/EC to intake for inert landfill / disposal facilities permits many construction and demolition wastes (LoW 17 Series Code), including soil and stones, to be accepted at the Hollywood Great facility WITHOUT prior characterisation testing. This contrasts with the acceptance requirements for the soil recovery facility at Huntstown where it is currently necessary to undertake characterisation testing for all soil and stone intake from previously developed, non-greenfield sites prior to its acceptance for recovery.

In addition to this, the current waste acceptance plan for the soil recovery facility at Huntstown prohibits consideration of the following soil wastes :

- (i) soils containing peat;
- (ii) soils which could *potentially* contain asbestos, chemicals or any hazardous materials;
- (iii) soils from re-development sites having a *potentially* high risk of contamination (eg. garage forecourts or former industrial sites);

global environmental and advisory solutions.



(iv) soil and stones from mechanical waste treatment facilities (principally at off-site waste transfer facilities);

The waste acceptance plan further stipulates that all inert soil waste accepted at the facility must have minimal quantities (<2%) of construction and demolition wastes intermixed with it (eg. metals, plastic, wood, rubber etc.), otherwise it will be rejected.

Clearly, in view of the less onerous waste intake restrictions, the considerably wider and more varied range of permitted waste intake and the higher degree of environmental risk attaching to an inert landfill / disposal facility, an engineered liner is much more appropriate for such a facility.

Although both licensed facilities at Huntstown and Hollywood Great may be licensed to accept inert soil and stone from non-greenfield sites, in reality there is a significant difference in the degree of environmental risk presented by the overall permitted waste intake and waste activities at each facility and in such circumstances, it is appropriate that there should be a distinction between the environmental control and risk management measures deployed at each.

Environmental Controls

Roadstone rejects any assertion that the operation of its recovery facility at Huntstown affords no protection to the surrounding environment or to groundwater. Although the current (or proposed) waste licence for the recovery facility at Huntstown does not include a requirement for engineered liners and cells or for an engineered capping layer, there are many other environmental controls and protection measures in place which are nonetheless appropriate to, and reflective of, the restricted nature of waste intake to the soil recovery activity at Huntstown and the lower level of environmental risk attaching thereto (relative to that of an inert landfill).

The environmental control and protection measures corrently in place at Huntstown include, but are not limited to

- significant restrictions on waste intake (referred to above);
- implementation of comprehensive and robust procedures for the acceptance, handling and placement of inert soil and stone waste;
- requirement for advance characterisation testing of inert soil and stone intake and subsequent compliance testing and continuous verification testing of all inert waste intake;
- maintenance and checking of detailed records in respect of all consignments of inert soil and stone forwarded to the facility;
- implementation of quarantine and inspection measures in response to the suspected importation of contaminated soil and stone, including separation and temporary storage;
- establishment and implementation of detailed accident prevention and emergency response measures to address accidental spill or leakage of hazardous substances;
- regular ongoing monitoring of groundwater quality beneath and around the quarry void and of off-site discharges to local surface watercourses;
- implementation of an approved environmental management system, including standard operating procedures, subject to ongoing audit (and implementation of corrective and preventative measures in the event of any non-compliance therewith);
- providing security at the facility to prevent any potential unauthorised waste activity and/or access.



Liner Requirements

The EPA landfill site design manual³ notes in Section 6.3 that natural clays of low hydraulic conductivity (permeability) including clays, silty clays and/or clayey silts, have the potential to make good liners for engineered landfills. The glacial till soils which are ubiquitous around Dublin have previously been used to construct engineered liners for municipal waste landfills, including that previously operated by South County Dublin at Kill in County Kildare⁴. Although the EPA manual specifies that liner materials must have certain physical and geomechanical characteristics and be subjected to a certain degree of compaction on placement, it does not specify any geochemical requirements for the clay liners, other than they are 'natural soils'.

It is highly likely that any mineral soils used to construct the basal and side liners and capping layer at inert landfill facilities in Ireland are similar to those which are routinely imported to and placed at the Huntstown recovery facility and that they are subject to the same testing and screening criteria (to Council Decision 2003/33/EC) as are used at Huntstown to confirm that they are inert and uncontaminated.

Although the base and sides of the soil recovery facility may not technically comprise a minimum 1m thick engineered layer of low permeability inert clay, the reality is that when backfilled, the base and sides of the former quarry will comprise many metres of inert, relatively low permeability clay soils subject to vertical and lateral compressive stresses generated by up to 25m to 45m of soil cover. The resultant vertical stresses on clay soils above the quarry floor will be equivalent to between 45 and 80 tonnes per square metre (450 to 800KN/m²), a significantly greater compressive stress than could Lon purposes ever be generated by earthworks compaction plant which is routinely used to construct engineering liners.

Placement of Waste below the Water Table

As outlined in the EIS which accompanied the waste licence review application, all inert soil and stone waste accepted and placed at Huntstown is placed in the dry, above the groundwater table. No soil and stone is placed directly into any surface water bodies or in contact with the existing groundwater table. δ

Over the longer term, following restation of quarrying activities and dewatering operations, the groundwater table will rebound over time close to surrounding undisturbed ground level. The long term implications of this have previously been addressed in our response to the second ground for objection.

4 Waste Acceptance Criteria

The final ground of objection is that the current waste acceptance plan for the recovery facility at Huntstown adopts the inert waste criteria set out in Council Decision 2003/33/EC as maximum concentrations for potential contaminants in soil wastes imported from non-greenfield sites; that the maximum concentrations for two organic contaminants in particular (polyaromatic hydrocarbons (PAHs) and mineral oil) are too high and that these criteria or intake limits are no different for the soil recovery facility at Huntstown than for an inert landfill / disposal facility licensed to accept inert soil (amongst other inert waste streams from a range of industry sectors, including construction).

In addressing this issue, it is worth having regard to the manner in which the regulation and control of soil and stone waste has evolved in Ireland since the enactment of the Waste Management Act in

SLR Consulting Ireland @ sirconsulting.com

³ EPA Landfill Manuals : Landfill Site Design (2000), Environmental Protection Agency, Wexford,

⁴ O'Sullivan, D., and Quigley, P. (2002), Geotechnical Engineering and Environmental Aspects of Clay Liners for Landfill Projects, Presentation to Institution of Engineers of Ireland



1996. Under the 1998 waste permit regulations⁵, there was essentially no restriction on the volume of soil waste which could be imported to a recovery facility operating under a waste permit issued by a Local Authority. In most of these facilities, there was little, if any, requirement for testing of soil waste intake or for acceptance procedures to be agreed with the Local Authority. At the time the first applications for inert disposal (landfill) waste licences were applied for and awarded (around 1999-2002), the bulk of soil generated from construction activity was either forwarded to Local Authority permit facilities or was used for daily cover at EPA licenced landfill facilities. Licensed inert landfill facilities were established at that time to actively target other inert waste streams and to provide a waste treatment or disposal option where none was otherwise available.

Table 20 of the EPA National Waste Report for 2006⁶ is instructive in this regard. It indicates that of 13.9 million tonnes of soil and stone waste collected in 2006, approximately 2.2 million tonnes was recovered as landscaping or cover material at EPA licenced landfill facilities, 10.1 million tonnes was recovered at Local Authority permit sites and just 0.4 million (or 3.3%) of excavated soil was disposed of at licensed inert landfill / disposal sites.

Following the enactment and implementation of the Waste Management (Permit Facility and Registration) Regulations in 2007 (S.I. 821 of 2007), an upper limit of 100,000 tonnes on the lifetime intake was introduced for intake to soil recovery facilities and any recovery facility with an intake capacity in excess of this was required to apply for and obtain a waste licence from the EPA. The licencing process introduced more rigorous requirements for testing of inert waste intake to soil recovery facilities than had previously applied for permitted facilities and facility operators were required to notify and agree inert waste acceptance procedures with the Agency.

Although many people qualitatively understand what inert material is, significant difficulty arises in defining it quantitatively, and in assigning a set of conservative limit values for potential contaminants when classifying material as inertained.

As previously indicated, in the absence of any other recognised limit values which could be used to objectively and quantitatively establish whether the soil waste is inert or not, at most licenced soil recovery facilities, the published inert waste criteria in Council Decision 2003/33/EC have been adopted from the outset in fixing maximum concentrations for potential contaminants in soil wastes imported from non-greenfield sites. The same limit values are increasingly also being used at Local Authority permitted facilities in recent years. The test procedures set out in Council Decision 2003/33/EC are proven, consistent and repeatable and the threshold criteria for inert waste also bring the benefit of being widely established and adopted across the construction sector.

The most recent data in respect of soil and stone waste managed within the Eastern Midlands Waste Region was published in a recent report prepared by RPS Consultants on behalf of the Regional Waste Management Offices⁷. It identified that in 2015, of a total of 1.765 million tonnes of recorded soil and stone intake at waste facilities in the Eastern Midlands Region, approximately 1.2 million tonnes was accepted at licensed soil recovery facilities, 0.35 million tonnes was accepted at licenced EPA landfills, 0.15 million tonnes was accepted at Local Authority permit facilities and just 0.065 million tonnes (3.6%) was accepted at licenced inert landfill / disposal facilities.

The conclusion that can be drawn from the above is that, from the time they were first licensed, inert disposal facilities have never established themselves as the primary outlet for inert soil and stone waste generated by construction activity, be it from greenfield or non-greenfield sites. This would have been recognised by most stakeholders in the construction and development industry. This is

⁵ Waste Management (Permit) Regulations (1998), S.I. No. 165 of 1998, Government Publications Office, Dublin

⁶ National Waste Report 2006, Environmental Protection Agency, Wexford

⁷ Construction & Demolition Waste : Soil and Stone Recovery / Disposal Capacity (2017), RPS Consulting Engineers, Dublin



not altogether surprising, given that both the National and European policy priority from the turn of the century has been to divert construction and demolition wastes from disposal outlets and to encourage high levels of re-use and recovery^{8 9}.

Should they wish to do so, operators of inert landfill / disposal facilities have the option to apply to the Agency for a waste licence review to have their licence amended to only accept inert soil and stone for recovery purposes within a defined area of their licensed facility. Soil waste accepted for recovery purposes could then be subject to the same intake restrictions and controls which apply at licenced soil recovery facilities.

Although the objection asserts that other 'soil restoration' facilities have been restricted to accepting material from greenfield sites only, or materials with very low concentrations of anthropogenic materials (specifically PAH's or mineral oils with lower leaching limits on metals), it is noted that no supporting evidence is provided, so it is not possible to establish if, and by whom, these restrictions were applied. It is possible that they could have been applied at locations or facilities where some legacy issues have arisen in respect of historical land-use or unauthorised waste activities and, as such, may not therefore be relevant to the matter under review.

The objection also highlights and takes issue with an inconsistency between Condition 8.5.1 and Condition 8.13.9 of the Proposed Decision, one requires the Licensee to propose maximum concentrations and trigger levels for potential contaminants in soil sourced from non-greenfield sites (as was required by the original licence W0277-01), while the other references the waste acceptance plan submitted by the Licensee in accordance with the original licence condition in June 2016 and implemented by it since that time. The waste licence review application envisaged that the same acceptance procedures would continue to apply for any approved increase in waste intake. Roadstone considers that this matter can be readily addressed by removing Condition 8.5.1 in the final decision and referencing the existing waste acceptance plan, as per Condition 8.13.9.

Other Relevant Aspects : Article 27 Notifications

At the present time, significant quantities of inert soil and stone from construction and development projects on both greenfield and non-greenfield sites are currently subject to notification as a by-product by a range of economic operators (principally Contractors) under Article 27 of the European Communities (Waste Directive) Regulations 2011 (S.I. No. 126/2011) and as such is managed as non-waste and soil intake at receptor sites is subject to no acceptance testing, regulatory control or oversight at all. The level of control and management applied to soil and stone managed as by-product contrasts markedly with that applied to the same materials managed as waste at inert soil recovery facilities such as that operated by Roadstone at Huntstown.

Roadstone is strongly of the view that the degree of environmental control and risk management measures applied by the Proposed Decision in respect of its waste licence review application strikes an appropriate balance and provides for the effective and efficient management of environmental risks associated with the intake, handling and placement of inert soil and stone from non-greenfield construction sites for backfilling and/or land restoration purposes.

Oral Hearing

In its objection, IMS requests that the Agency convene an oral hearing to address the issues and concerns raised by it. Roadstone considers that an oral hearing is unwarranted, that the associated policy and licensing issues at issue are clearly set out in written correspondence, in sufficient detail as

⁸ Changing our Ways 1998

⁹ Taking Stock and Moving Forward 2004

to enable the Agency to make a final determination on the objection and the licence review application and/or any conditions attaching thereto.

Roadstone considers that as there was only a single objection to the Proposed Decision in respect of its licence review application, which is of a largely restricted, technical nature, and given that there were no objections to the recent planning application to increase the annual rate of importation of inert soil and stone to the recovery facility at Huntstown (Fingal County Council Planning Ref. FW16A/0120), there is no public interest or benefit in convening an oral hearing in respect of the Proposed Decision.

Close

We trust that the response provided above significantly addresses the issues and concerns raised in the objection to the Proposed Decision to the amended waste licence in respect of the North and West Quarries at the Huntstown Quarry Complex and that you will shortly be in a position to issue a final decision in respect of the waste licence review application.

Yours sincerely **SLR Consulting Ireland**

Derek Luby **Technical Director**

Shane Geraghty (Roadstone Ltd.) John Glynn (Roadstone Ltd.) Conserver construction of construc CC

olocal environmental and advisory scherolics



ATTACHMENT A DAA Letter in Respect of Huntstown Quarry Restoration (Planning Ref. FW12A/0022)

SLR Consulting Ireland 🛛 🐵 sirconsulting.com

Udares Aerfort Bhale Aths Clieth opt Promhoring Aerfort Alte Clieth Eire

Dublin Airport Authority pic Head Office Dublin Airport Ireland

T 353-1-814 1111 F 353-1-814 4120 www.dag.ia

The Secretary Fingal County Council **Planning Department County Hall** Swords Co Dublin

FINGAL COUNTY COUNCIL **REPORT REC'D** 25 APR 2012 BLANCHARDSTOWN DEVELOPMENT CONTROL



Date 24th April 2012

Ref No GP11-1007-024

Dear Sır/Madam.

Re: Observation to FW12A/0022

only. any other use. Dublin Airport Authority, Head Office, Dublin Airport, in its capacity as statutory consultee under Article 28 \$ (i) of the Planning and Development Regulations 2001 (SI No 600 of 2001), makes the following comments with regard to the above proposed development

The applicant, Roadstone Dublin Limited, previously consulted Aer Rianta in relation to the planning application for quarry use granted under F03A/1430 The concerns regarding bird hazard at Dublin Airport were outlined These specifically relate to the long-term impacts of the site when quarrying ceases in the future

The following condition was attached to the grant of permission for planning application F03A/1430

Condition

The applicant shall submit details for the written approval of the Planning Department, a scheme of restoration of each extraction area, three years prior to the cessation of quarrying operations in that particular extraction area The scheme shall include the detailed restoration of the land for the purposes of agriculture, recreation or other such appropriate purposes, the making safe of the worked out extraction area and the removal of all plant and structures from it, together with a programme for implementation This restoration scheme shall be prepared in consultation with the Parks Division, Aer Rianta, Dublin Airport Bird Hazard Committee and the Insh Aviation Authority REASON In the interest of proper planning and sustainable development of the area

An Bord Skuthovill Board of Deckers: Pilorag & Rordsin: Celtres feator/Charmen: Gels & Cohes: Thomas Guillayle: Victure: Lenses: John Lynce: May McGabe: Calm McCarthy Bany News Gany Welen: Char Custon: Promiting Annotationacy Charl Executive

It is noted that the accompanying EIS outlines the mitigation measures to be implemented during the restoration phase. These include

- Infilling of the quarry voids to previous ground levels with inert material This will avoid the creation of a large water body which would have a negative effect on nearby Dublin Airport
- Restoration of the infilled quarry voids to a beneficial agricultural afteruse,

It is requested that a suitable condition such as attached to F03A/1430 (PL06F/206789), but referring to Dublin Airport Authority in place of Aer Rianta, should be included in any future grant of permission and that the mitigation measures as outlined in the EIS be implemented in order to minimise bird hazard in the interest of the continued safe operation of Dublin Airport

Please do not hesitate to contact us if you have any queries Consent of copyright owner required for any other use.

Yours sincerely,

۰.

1 3

Yvonne Dalton Head of Planning