Mr Brian Meaney,
Inspector,
Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use
Environmental Protection Agency
Headquarters, PO Box 3000
Johnstown Castle Estate
Co. Wexford

JSPE
J Sheils Planning & Environmental Ltd
31 Athlumney Castle. Navan. Co Meath
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Date: 7th October, 2011
Our Ref: JSPE 173_L05
Your Ref: W0265-01

Re: Notice under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations 2004, as amended.

Waste Licence Application by Clashford Recovery Facility Ltd for the continued operation of its existing Waste Recovery Facility on lands at Naul townland, Naul, Co. Meath (National Grid Reference 285633E 253005N).

Dear Mr Meaney,

On behalf of Clashford Recovery Facility Ltd, we have prepared the following response to items (1) and (2) of a notice issued on 29th August 2001 under Article 14(2)(b)(ii) of the Waste Management (Licensing) Regulations 2004, as amended.

We have also included a revised non-technical summary which reflects the information supplied in compliance with the notice (Refer to Attachment A).

The information is supplied in the form of one (1) original plus one (1) copy in hardcopy format. In addition 2 copies of the requested information to the Agency are in electronic searchable PDF format on CD-ROM.

1. **With reference to article 12(1)(f) of the Waste Management (Licensing) Regulations, provide a revised Table B.7.1 and Table H.1(A) identifying the relevant classes of activity according to the Third and Fourth Schedules to the amended Waste Management Acts 1996 to 2011.**

Please find attached (Refer to Attachment B) a revised Table B.7.1 and Table H.1(A).

2. **Provide information to address the requirements of article 12(1)(v) of the Waste Management (Licensing) Regulations, 2004, as amended, in relation to a description of how the waste hierarchy in section 21A of the amended Waste Management Acts 1996 to 2011 is applied.**

Section 21A. (1) of the amended Waste Management Acts 1996 to 2011 states that:-

The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

(a) prevention;

(b) preparing for re-use;

(c) recycling;

(d) other recovery (including energy recovery); and

(e) disposal.

Measures at the top of the hierarchy have the inherent potential to be more environmentally attractive and resource efficient. It implies that higher order strategies should be considered first and used where practicable.

Waste prevention is the top priority and when this has been exercised to its full potential then one should attempt to get the maximum benefit from the remaining waste at minimum environmental cost. This is the basis of the **'3 Rs'** which take account of the next steps in the hierarchy i.e.

Reduction (minimisation) is top of the list since it is the only complete way to reduce environmental impacts.

Reuse is generally better than recycling since there is no processing stage which would use energy and create its own waste.

Recycling is generally better than recovery of secondary materials or energy since it achieves a greater reduction in the demand for primary resources.

To increase the likelihood of applying the Reuse, Recycling, Recovery and Treatment strategies to the best potential it is usually important that the various components in the waste stream are segregated as much as possible so as to minimise contamination. This usually involves segregation at source and systems to prevent the mixing of different waste streams.

The Facility at Naul involves the recovery/reuse of inert "soils and stones" and inert construction and demolition waste and as such the recovery operations are towards the top of the waste hierarchy in that the wastes are prepared for re-use. Further details of measures with respect to recovery of these materials are included in Attachment H.3 of the Waste Licence application.

Furthermore, as stated in the Waste Licence application the applicant has included measures to ensure segregation at source. i.e.

Attachment D.1.s – Construction and Demolition waste infrastructure

"No sorting of materials other than separation of rebar from concrete will be undertaken on site as all material will be sorted and segregated at source before being brought to the application site".

Attachment D.2.(a) – Unit Operations

"Materials to be recovered will only be accepted from approved Contractors who are aware of the need for and who undertake strict segregation and sorting of waste prior to transporting it to the application site;

The applicant will endeavour to visit the construction sites to ensure materials are being properly sorted and segregated at source".

We trust that the above responses will be of assistance to you with respect to consideration of the Waste Licence application.

Yours Sincerely,
For J Sheils Planning & Environmental Ltd,

John Sheils

John Sheils ASCS MRICS

ATTACHMENT A

Revised Non-Technical Summary

(Separate Document – Attachment A.1 - Revision 01)

ATTACHMENT B

Waste Licence Application Form

Revised Table B.7.1 and Table H.1(A)

B.7 Type of Waste Activity, Tonnages & Fees

B.7.1 Specify the class or classes of activity in Table B.7.1, in accordance with the Third Schedule or Fourth Schedule to the Waste Management Acts 1996 to 20010, as amended by the European Communities (Waste Directive) Regulations, 2011, to which the application relates (check the relevant box(es) and mark the principal activity with a 'P').

Attachment B.7 should identify the principle activity and include a brief technical description of each of the other activities specified. **There can only be one principal activity.**

TABLE B.7.1 THIRD AND FOURTH SCHEDULES OF THE WASTE MANAGEMENT ACTS 1996 TO 2010

Waste Management Acts 1996 to 2010					
Third Schedule Waste Disposal Operations		**Y/N**	**Fourth Schedule Waste Recovery Operations**		**Y/N**
D 1	Deposit into or on to land (e.g. including landfill, etc.).	N	R 1	Use principally as a fuel or other means to generate energy: This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above: - 0.60 for installations in operation and permitted in accordance with applicable Community acts before 1 January 2009, - 0.65 for installations permitted after 31 December 2008, using the following formula, applied in accordance with the reference document on Best Available Techniques for Waste Incineration: Energy efficiency = (Ep - (Ef + Ei)/ (0.97x(Ew+Ef) where— 'Ep' means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1(GJ/year), 'Ef' means annual energy input to the system from fuels contributing to the production of steam (GJ/year), 'Ew' means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year), 'Ei' means annual energy imported excluding Ew and Bf(GJ/year), '0.97' is a factor accounting for energy losses due to bottom ash and radiation.	N
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).	N	R 2	Solvent reclamation/regeneration.	N
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).	N	R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation	N

				processes), which includes gasification and pyrolisis using the components as chemicals.	
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).	N	R 4	Recycling/reclamation of metals and metal compounds.	N
D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).	N	R 5	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.	P
D 6	Release into a water body except seas/oceans.	N	R 6	Regeneration of acids or bases.	N
D 7	Release to seas/oceans including sea-bed insertion.	N	R 7	Recovery of components used for pollution abatement.	N
D 8	Biological treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.	N	R 8	Recovery of components from catalysts.	N
D 9	Physico-chemical treatment not specified elsewhere in this Schedule which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).	N	R 9	Oil re-refining or other reuses of oil.	N
D 10	Incineration on land.	N	R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	N
D 11	Incineration at sea (this operation is prohibited by EU legislation and international conventions).	N	R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	N
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	N	R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, amongst others, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11).	N
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12 (if there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, amongst others, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12).	N	R 13	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	Y
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	N			
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).	N			

SECTION H MATERIALS HANDLING

H.1 Waste Types and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste likely to be handled in relation to each class of activity applied for. This information should be included in Table H.1(a).

TABLE H.1(A). QUANTITIES OF WASTE IN RELATION TO EACH CLASS OF ACTIVITY APPLIED FOR

Waste Management Acts 1996 to 2010 3rd Schedule (Disposal) Operations			Waste Management Acts 1996 to 2010 4th Schedule (Recovery) Operations		
Class of Activity Applied For		Quantity (tpa)	Class of Activity Applied For		Quantity (tpa)
Class D 1			Class R 1		
Class D 2			Class R 2		
Class D 3			Class R 3		
Class D 4			Class R 4		
Class D 5			Class R 5		180,000
Class D 6			Class R 6		
Class D 7			Class R 7		
Class D 8			Class R 8		
Class D 9			Class R 9		
Class D 10			Class R 10		
Class D 11			Class R 11		
Class D 12			Class R 12		
Class D 13			Class R 13		20,000
Class D 14					
Class D 15					

In Table H. 1 (B) provide the annual amount of waste handled/to be handled at the facility. Additional information should be included in **Attachment H.1.** The tonnage per annum should be given of that expected for the life of the licence, with at least the next five years tonnages provided. For Landfill Review applications provide an estimate of the quantity of waste already deposited in (i) lined cells; (ii) unlined cells.

TABLE H.1(B) ANNUAL QUANTITIES AND NATURE OF WASTE

Year	Non-hazardous waste (tonnes per annum)	Hazardous waste (tonnes per annum)	Total annual quantity of waste (tonnes per annum)
2009	180,000		180,000
2010	180,000		180,000
2011	180,000		180,000
2012	180,000		180,000
2013	180,000		180,000

Attachment A.1.

Non-Technical Summary

A1 Introduction

The following Non-Technical summary has been provided in accordance with the requirements of Article 12 (1) (u) of the Waste Management (Licensing) Regulations, S.I. 395 of 2004.

All figures referred to within the Non-Technical Summary are included in Attachment N of the Waste Management Licence Application Document.

Clashford Recovery Facility Ltd., Ring Commons, Balbriggan, County Dublin intend to apply to the Environmental Protection Agency for a waste licence for the continued operation of its existing waste recovery facility on lands at Naul, Naul Townland, Co. Meath (National Grid Reference 313399E 261545N) (Refer to Figure A.1).

The nature of the development is the continued phased restoration of a sand and gravel pit using imported inert soils, stone, and recovery of inert construction and demolition waste. It is proposed that circa 90,000 cubic metres per annum of inert materials will be accepted to site.

The principal activity is Class R 5 (recycling or reclamation of inorganic materials) of the Fourth Schedule of the Waste Management Act, 1996 to 2010. Other activities include Class R 13 of the Fourth Schedule (temporary storage pending recycling or reclamation).

In Compliance with Article 12 (1) (u) of the Waste Management (Licensing) Regulations, S.I. 395 of 2004 we have presented below a non-technical summary of the information provided in accordance with paragraphs (a) to (t) of sub-article 12(1) of the said regulations.

A.1 (a) give the name, address and, where applicable, any telephone number and telefax number of the applicant (and, if different, the operator of the facility concerned), the address to which correspondence relating to the application should be sent and, if the applicant or operator is a body corporate, the address of its registered office or principal office,

Applicant's Details

Name*:	CLASHFORD RECOVERY FACILITY LTD.
Address:	NAUL TOWNLAND,
	NAUL,
	CO. MEATH
Tel:	01/ 841 1826
Fax:	01/ 841 2491
e-mail:	kiernanplanthire@online.ie

Name and Address for Correspondence

Name:	J SHEILS PLANNING & ENVIRONMENTAL LTD
Address:	31 ATHLUMNEY CASTLE,
	NAVAN,
	Co. MEATH
Tel:	046/ 9073997
Fax:	046/ 9020618
e-mail:	johnsheils@jspe.ie

Address of registered or principal office of Body Corporate

Address:	CLASHFORD RECOVERY FACILITY LTD
	RING COMMONS,
	BALBRIGGAN,
	CO. DUBLIN
Tel:	01/ 841 1826
Fax:	01/ 841 2491
e-mail:	Not Applicable

[redacted]

Name:	MEATH COUNTY COUNCIL
Address:	PLANNING DEPARTMENT,
	ABBEY MALL, ABBEY ROAD
	NAVAN
	Co. MEATH
Tel:	046/ 909 7000
Fax:	046/ 909 7001

[redacted]

Not Applicable (Surface water run-off only)

[redacted]

Name:	CLASHFORD RECOVERY FACILITY LTD.
Address*:	NAUL TOWNLAND,
	NAUL,
	CO. MEATH
Tel:	01/ 841 1826
Fax:	01/ 841 2491
e-mail:	kiernanplanthire@online.ie

National Grid Reference (8 digit 4E,4N)	**313399E, 261545N**

[redacted]

The nature of the development is the continued phased restoration of a sand and gravel pit using imported inert soils, stone, and recovery of inert construction and demolition waste. It is proposed that circa 90,000 cubic metres per annum of inert materials will be accepted to site.

The lands have been progressively restored subject to successive WMP's dating back to 2001. The phased scheme for final restoration of the area is shown by Figure B.2.4.

Volume of Void Space Remaining at Clashford Recovery Facility, The Naul, Co. Meath

Phase	Void Space m^3	*Compacted Volume m^3	**tonnes	Life Span
1	*14000*	*15400*	*30800*	0.2
2	*192000*	*211200*	*422400*	*2.6*
3	*160000*	*176000*	*352000*	*2.2*
Totals	*366000*	*402600*	*805200*	*5*

Notes:

* An approximate settlement factor of 10% has been assumed following placement of materials.

* Assumes 80,000 m^3 recovered per annum (subject to market conditions).

** Assumes density of imported soils as 2 tonnes/m^3

The nature of the development is the continued phased restoration of a sand and gravel pit using imported inert soils, stone and recovery of clean construction and demolition waste. It is estimated that c. 20,000 tonnes per annum of inert construction and demolition waste will be recovered at the facility. Recovered material will be used for internal haul roads and/or dispatched offsite.

The principal activity is Class R 5 (recycling or reclamation of inorganic materials) of the Fourth Schedule of the Waste Management Act, 1996 to 2010. Other activities include Class R 13 of the Fourth Schedule (temporary storage pending recycling or reclamation).

Waste material	EWC Code	Quantity		On-site recovery/disposal[2]
		Tonnes / month	m^3 / month	(Method & Location)
Concrete	17 01 01			Will be used to construct haul roads and hardstanding areas on site and/or processed for secondary aggregates
Bricks	17 01 02			As Above
Tiles & Ceramics	17 01 03			As Above
Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	17 01 07			As Above
Track ballast other than those mentioned in 17 05 07	17 05 08			As Above
Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03	17 09 04			As Above
Soil and stones other than those mentioned in 17 05 03	17 05 04	13,340	6,670	Used to restore sand & gravel pit workings
Dredging spoil other than those mentioned in17 05 05	17 05 06			Used to restore sand & gravel pit workings

[redacted]

The only waste to be accepted at the facility for recovery comprises inert soils and stone, and inert construction and demolition waste. As such the material does not undergo any form of processing involving the use of chemicals or additives.

The water supply for the site office and wheelwash is met by an existing borehole on site. On days requiring dust suppression water usage would amount to 5 to 10 m^3 per day.

The only raw materials used on site are diesel, hydraulic oil and engine oil which will used to operate diesel powered plant on site. The bunded fuel storage tank has a capacity of c.2,700 litres and is refilled bi-monthly.

Electricity will be used on site to power the office, site office, on site lighting and security camera. Energy requirements are low equivalent to a small domestic property.

[redacted]

The attached Site Infrastructure Plans (Refer to Figures D.1.1 & D.1.2) indicate the location of all activities and identifies all buildings and facilities at the Recovery Facility.

Materials to be recovered will only be accepted from approved Contractors who are aware of the need for and who undertake strict segregation and sorting of waste prior to transporting it to the application site;

All truck loads entering the site are given a preliminary visual inspection from the gantry leading to the site office at the entrance. If the material is not considered acceptable the haulier is refused entry and directed to an appropriate Waste Management Facility. Details of all truckloads entering the site are entered into a logbook maintained by the operator.

Accepted materials will be subject to a Second inspection after each load is tipped at the restoration infill area within the site. Should a load of material indicate contamination of non inert material on inspection, the material is reloaded and the driver instructed to remove the load offsite to an approved facility.

Occasionally a load will contain minor contaminants (e.g. plastics, rebar, wood and paper). These items are removed on inspection by a site operative and stored in a designated quarantine area pending removal offsite by a licensed waste disposal contractor to an appropriate disposal facility.

Following the second inspection the material will be accepted and placed within the restoration (placement by bulldozer) area or in the case of topsoil placed in temporary storage awaiting final placement.

The lands have been progressively restored subject to successive WMP's dating back to 2001. The phased scheme for final restoration of the area is shown by Figure B.2.4.

The lands are to be restored to agricultural use by importation and recovery of inert materials in accordance with a phased restoration scheme. It is the intention to develop them for amenity/equestrian use.

A bulldozer is used to appropriately grade and compact the material to the desired profile as shown by the detailed plans and sections (Refer to Figures B.2.4 and B.2.5).

Once the topsoil is re-instated it will be seeded with a suitable mix of grasses suitable for pasture in order to quickly stabilise the topsoil. Once the grass sward has become established the restored farmland can be kept either as pasture, hay meadow or arable land. Part of the area has already been restored to pasture.

Redundant structures, plant equipment and stockpiles will be removed from site on cessation of pit activity.

Clean construction and demolition waste will either be placed directly on haul roads or temporarily placed in storage awaiting recovery.

Dust Abatement

A number of measures have been adopted to minimise dust emissions to the atmosphere from general site activity, internal haulage and tipping operations as follows:

- During dry weather the haul roads and stockpiles are sprayed with water to dampen any likely dust blows. A water bowser is maintained on site for this purpose.
- Consideration will be given to location of mobile plant so as to ensure that any principle dust sources cannot adversely affect sensitive off-site locations.
- Static and mobile wet dust suppression systems will be located at strategic points in the process if required.
- Drop heights are kept to a minimum by using short conveyors and maintaining stocks under the head drum load out points.
- A wheel wash facility has been installed on site and all vehicles are required to pass through the wheel wash on exiting the site.

- A sprinkler system has been installed on the site access road and is in operation during periods of dry weather.
- Main site haulage routes within the site shall be maintained with a good temporary surface, as is the case at present.
- All internal roadways will be adequately drained, to prevent ponding.
- The operator has purchased a road sweeper and ensures that the site entrance and adjoining public roadway is regularly cleaned. The sweeper is readily available at short notice to sweep up any materials which may accidentally fall onto the public roadway.

Suitable vegetation is to be provided on restored areas at the earliest opportunity

Surface Water Abatement

As the only material to be imported to site is "Soil and stone" and inert construction and demolition waste there will be no source of possible contamination of surface and/or ground waters. The reclamation scheme has been designed so that surface water will drain to the stream at the north eastern boundary.

The wash-water from the wheel-wash is recycled through a system silt lagoons with overflow to a surface water outlet.

Fuel stored on site is within a bunded covered (double skin) tank.

Oil and Waste oil products are stored under cover. All oil barrels and lubricants are stored on spill pallets/ spill trays. Waste oils are disposed of by a licensed waste contractor and removed off site.

Spill kits are also maintained on site and the Company will put in place an emergency response procedure for hydrocarbon spills and appropriate training of site staff in its implementation.

A temporary settlement facility has been provided at the northeast boundary for the collection and settlement of suspended solids prior to the water entering the surface drainage course. It is proposed to improve this settlement/polishing facility through construction of a reed bed/wetland system (Refer to Figure D.1.2).

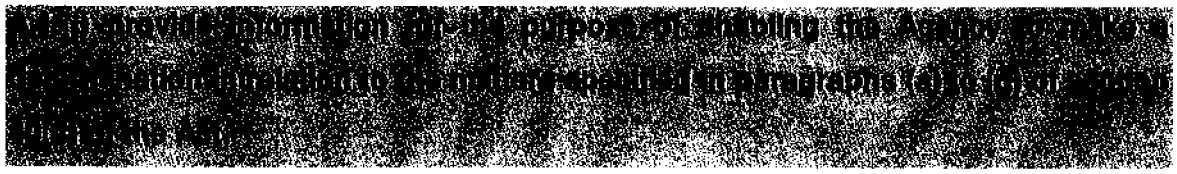
The operator has put in place a programme of surface water monitoring (for suspended solids) so as to ensure the effectiveness of the settlement ponds in removing suspended solids.

Noise Abatement

A number of noise containment measures are proposed:

- The provision of temporary peripheral screen banks to screen site activities from outside views.
- General site activity will be within the existing pit and below the level of the nearest residences.
- The use of designated haul roads to ensure that site traffic is removed from nearest noise sensitive receptors.
- Regular maintenance of all plant and machinery is an integral part of site management and is important in helping to minimise noise impact.
- All plant and equipment will conform to noise emission limits set out in Statutory Instrument No. 320 of 1998 European Communities Construction Plant and Equipment-Permissible Noise Levels (Regulations, 1998) and amendment set out in Statutory Instrument No. 359 of 1996.
- Noise monitoring can be carried out at four noise monitoring stations (N4-N7) in the vicinity of the nearest noise sensitive properties (Refer to Figure F 1) in accordance with any monitoring programme agreed with the EPA.

The results of monitoring to date shows that the development can comply with the noise level threshold as specified and as a consequence the development will have no significant effects regards noise levels in the area.



Due consideration has been given to the requirements of Section 40(4)[(a) to (i)] of the Waste Management Acts 1996-2010 through preparation of the Waste Management Licence Application as follows.

An Environmental Management System is proposed to be put in place with continued environmental monitoring of noise, dust, surface and groundwater on site. Details with respect to control and abatement, accepted emission limit values and monitoring requirements are provided in the Waste Management Application (in particular refer to Attachment F). The measures proposed will ensure that emissions from the recovery

activities will not result in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value.

Details with respect to the nature, scale, operation, impact, control and abatement, monitoring, closure and aftercare have been provided through preparation of the Waste Management Licence application. The measures proposed are considered adequate to ensure that the facility will continue to be operated in accordance with any conditions attached to the licence and the landfill directive so as not to cause environmental pollution.

The only waste to be accepted at the facility for restoration of the lands will comprise inert soils and stone, and inert construction and demolition waste. As such the material does not undergo any complicated process other than inspection prior to recovery and placement. As such there is little or no requirement to apply Best Available Technology (BAT) with respect to the recovery operations.

The continued operation of an inert waste recovery operation will significantly reduce the quantities of such waste currently being sent to landfill sites in the Region. As such, the proposed development is entirely consistent with the aims and objectives of both National Regional and Local government policy.

The applicant (Clashford Recovery Facility Ltd) or other relevant person have not been convicted under the Waste Management Acts 1996 to 2010, the EPA Act 1992 and 2003, the Local Government (Water Pollution) Acts 1977 and 1990 or the Air Pollution Act 1987.

Clashford Recovery Facility Ltd is an established small family run business based in Naul, Co Meath. Mr Larry Kiernan – Facility Manager will be responsible for the overall management of the facility including implementation of the proposed Environmental Management System. The facility manager has over 30 years experience including 6 years in operating & Managing the existing Waste Recovery Management Facility.

In accordance with the existing planning permissions for the site the operator has to maintain bonds to the value of about €93,000 to secure the satisfactory completion and restoration of the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion and restoration, including all necessary demolition and removal.

The Company has sufficient working capital to meet any financial liabilities including provision the restoration bonds as detailed above.

The only raw materials used on site are diesel, hydraulic oil and engine oil which will used to operate diesel powered plant on site. Electricity will be used on site to power the office, site office, on site lighting and security camera. Energy requirements are low equivalent to a small domestic property. Energy efficiencies will be achieved by using modern plant and equipment and servicing the equipment on a scheduled basis.

Noise emissions generated from the site activity will continue to be monitored and controlled to an acceptable standard as conditioned under the existing planning permissions and any further conditions under an EPA waste licence for the proposed restoration of the site.

Air

The materials to be recovered are principally "soils and stone" and inert construction and demolition waste. Any dust generated by the operation will comprise inert particulate matter. Dust emanates from the placement of materials, the movement of vehicles on internal roads and loading and processing operations. However the effect of wind is also an important factor in dust generation and problems may arise at reclamation workings when both factors arise simultaneously. The impact of fugitive dust will be direct, temporary and non-cumulative and largely confined to the application site.

Surface Water

As the only material to be imported to site is "Soil and stone" and inert construction and demolition waste there will be no source of possible contamination of surface waters. The reclamation scheme has been designed so that surface water will drain to the stream at the north eastern boundary. The wash-water from the wheel-wash is recycled through a system of silt lagoons with overflow to a surface water outlet.

A temporary settlement facility has been provided at the northeast boundary for the collection and settlement of suspended solids prior to the water entering the surface drainage course. It is proposed to improve this settlement/polishing facility through construction of a reed bed/wetland system (Refer to Figure D.1.2).

Sewer

On site activities will not discharge to any sewerage system. It is proposed to continue using the existing toilet facility, septic tank and percolation area.

Groundwater

As the only material to be imported to site is "Soil and stone" and inert construction and demolition waste there will be no source of possible contamination of ground waters. Due to the nature of material to be deposited the potential for pollution to the underlying aquifer and the surface watercourses will be limited.

Noise

The main source of noise and vibration on site is from:

- Movement of trucks on internal haul roads and tipping of material
- Bulldozer placing and grading the infill material
- Processing Plant

In general the future restoration works will be further removed from the nearest noise sensitive residences in the area. Noise monitoring to date has shown that site activity at the existing facility are within accepted thresholds for this type of development.

Air

The materials to be recovered are principally "soils and stone" and inert construction and demolition waste. Any dust generated by the operation will comprise inert particulate matter.

Dust emanates from the placement of materials, the movement of vehicles on internal roads loading and processing operations. However the effect of wind is also an important factor in dust generation and problems may arise at reclamation workings when both factors arise simultaneously. The impact of fugitive dust will be direct, temporary and non-cumulative and largely confined to the application site.

Routine dust deposition monitoring is carried out in compliance with condition No. 8 of planning permission P.A Reg. Ref. QY/36 (17.QC.2085) which states that the total dust deposition (soluble and insoluble) arising from the onsite operations associated with the development shall not exceed 350 milligrams per square metre per day averaged over a continuous period of 30 days.

The following table of dust monitoring results shows that the existing development is well within accepted standards for this type of development.

Station	Monitoring Period	Result (mg/m^2/day)
A2-4	21/04/08 to 21/05/08	22
A2-5	21/04/08 to 21/05/08	5

A number of measures have been adopted to minimise dust emissions to the atmosphere from general site activity, internal haulage, processing and tipping operations (Refer to Section A.1.(i) above).

It is considered given the nature of the activity, control and abatement measures and management of the existing recovery facility that emissions of pollutants (as defined in Waste Management Acts 1996 to 2010 and Air Pollution Acts 1992 and 1987 respectively) to the atmosphere are not likely to impair the environment (i.e. be injurious to public health, or have a deleterious effect on flora or fauna or damage property, or impair or interfere with amenities or with the environment).

Surface Water

As the only material to be imported to site is "Soil and stone" and inert construction and demolition waste there will be no source of possible contamination of surface waters. The reclamation scheme has been designed so that surface water will drain to the stream at the north eastern boundary. A temporary settlement facility has been provided at the northeast boundary for the collection and settlement of suspended solids prior to the water entering the surface drainage course.

The operator has put in place a programme of surface water monitoring (for suspended solids) so as to ensure the effectiveness of the settlement ponds in removing suspended solids. Monitoring is carried out upstream, downstream and at the discharge point. It is proposed to continue to carryout monitoring of the stream upstream (SW1), discharge point (SW2) and Downstream (SW3) in accordance with any monitoring programme agreed with the EPA.

Ground/groundwater emissions

It is envisaged that the inert materials used for the restoration of the site will not cause a pollution risk to the ground/groundwater in the area of the site.

A detailed hydrogeolocial risk assessment was commissioned in support of this application. This report addresses both surface and groundwater issues pertaining to the site.

A detailed ground investigation study of both the lands restored and currently under restoration has been carried out. This report provides a description of the geological character of the already-infilled subsoils on the site and details the nature, extent and complexity of the geological material from the surface downwards through this mineral subsoil. Trial pits and a visual assessment of the site were completed in the field. In general the imported material was found to comprise clean brown and black boulder clays with very little detritus material.

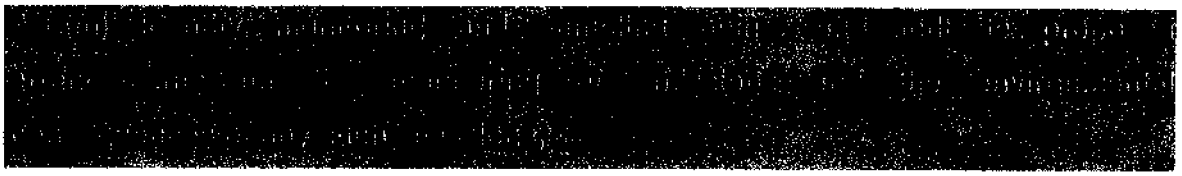
Noise

The lands are being restored to agricultural use by importation and recovery of inert materials in accordance with a phased restoration scheme. Designated internal haul roads are used to direct site traffic to the current tipping area. A bulldozer is used to appropriately grade and compact the material to the desired profile as shown by the detailed plans and sections (Refer to Figures B.2.4 and B.2.5). There is also intermittent noise associated with the sand and gravel pit and Construction and Demolition processing operations.

The principle concern in respect of potential noise emissions from the development is the effect on residential amenity. Properties within the vicinity of the development are shown on Figure B.2.2. As shown the nearest noise sensitive locations are along the R108 Regional road to the west of the existing site.

The main noise sources in the area are from the R108 Regional Road and an adjacent concrete batching plant. The area of restored lands completed to date adjoins the north western boundary of the site. In general the future restoration works will be further removed from the nearest noise sensitive residences in the area. Noise monitoring to date has shown that site activity at the existing facility are within accepted thresholds for this type of development.

Noise resulting from the operations can be kept to acceptable levels by the implementation of good design, effective operation and management and by the adoption of 'best practices'. Reducing noise at source wherever possible is the most effective way of minimising the impact but barriers and screens between noise source and receptor can also be used to very good effect. A number of noise containment measures are proposed (Refer to Section A.1.(i) above).



Air

The existing waste management permit (WMP 2005/25) states that "*dust deposition shall not exceed 350mg/sq.m/day, average over 30 days, when measured at site boundaries. The developer shall carryout twice-yearly dust monitoring at the locations indicated in the application*".

In order to comply with this condition the operator set up a dust monitoring programme using Bergerhoff Dust Gauges. Two dust monitoring stations (A2-4, A2-5) were established at the site boundary (Refer to Environmental Monitoring Plan Figure F 1). Following discussion with the Environmental Protection Agency (EPA) it has been agreed to include a further two monitoring locations so as to account for prevailing winds.

The above standard is also in accordance with guidance issued by both the Department of the Environment and the EPA in relation to dust deposition monitoring for these types of developments and will continue to be applied.

This programme will allow on-going monitoring of fugitive dust emissions from the site, thereby assisting in ensuring compliance with any future requirements or regulations.

Surface Water

The operator has put in place a programme of surface water monitoring (for suspended solids) so as to ensure the effectiveness of the settlement ponds in removing suspended solids. Monitoring is carried out upstream, downstream and at the discharge point. It is proposed to continue to carryout monitoring of the stream upstream (SW1), discharge point (SW2) and Downstream (SW3) and for a suite of parameters to be agreed with the Environmental Protection Agency. It is not considered that the surface water discharge from the site will result in any significant effect on the quality of the receiving waters.

Groundwater

An on-site groundwater monitoring program should be established, ideally comprising the monitoring of one up-gradient groundwater borehole and two down-gradient groundwater monitoring boreholes. It is recommended that 1-2 new down-gradient groundwater monitoring points are established along the lower southern boundary of the site adjacent to the Delvin River and in the immediate down-gradient direction of

groundwater flow beneath the pit area. The locations of the monitoring points GW1 to GW4 are shown on the attached Environmental Monitoring Plan Figure F.1.

It is proposed to monitor these wells in accordance with the conditions as attached to the waste licence for the facility. It is not considered that any discharge of surface water run-off to ground will result in any significant effect on the quality of the groundwater.

Noise

The operator has established an environmental monitoring programme to include noise monitoring. Noise levels will continue to be monitored in accordance with ISO 1996/1 – 1982 (E) *"Acoustics – Description and measurement of environmental noise"*.

Following discussion with the EPA it has been agreed to include a further two monitoring locations (N6, N7). In total the four noise monitoring stations correspond with the dust monitoring locations and include the nearest noise sensitive locations (Refer to Figure F.1). It is proposed to carryout noise monitoring on a bi-annual basis.

In accordance with the Environmental Protection Agency Integrated Pollution Control Licensing Guidance note for Noise in relation to Scheduled Activities 2nd Edition (2006) *"the noise attributable to on-site activities should not generally exceed a free-field LAr,T value of 55 dB by daytime (08:00 – 22:00) at any noise sensitive location. During night-time (22:00 – 08:00), the noise attributable to on-site activities should not exceed a free-field LAeq, T value of 45 dB"*.

It is therefore considered that the above EPA threshold should be applied for this development as this limit is a recognised standard within the industry and is a limit that is set by most of the Local Authorities. These levels are consistent with guidance issued by the Department of the Environment: *"Quarries and Ancillary Activities – Guidelines for Planning Authorities (2004) DOEHLG"* and the EPA *"Environmental Management in the Extractive Industry (Non-Scheduled Minerals) Environmental Management Guidelines (2006)"*.

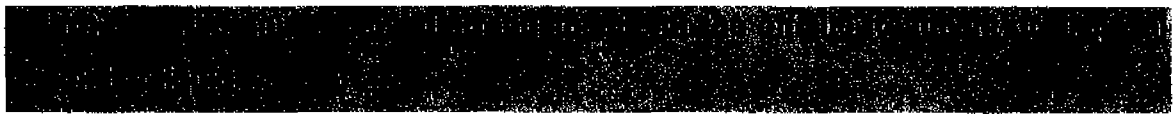
The results of monitoring to date shows that the development can comply with the noise level threshold as specified and as a consequence the development will have no significant effects regards noise levels in the area.

This programme will allow on-going monitoring of noise emissions from the site, thereby assisting in ensuring compliance with any future requirements or regulations.

Through implementation of the proposed mitigation measures it is considered the development will continue to have no significant effects with regard to noise levels on the local residences, their property, livestock and amenity.

Occasionally a load will contain minor contaminants (e.g. plastics, metal, wood and paper). These items are removed on inspection by a site operative and stored in a designated quarantine area pending removal offsite by a licensed waste disposal contractor to an appropriate recovery/disposal facility.

Waste oil products are stored within the existing container on site. Waste oils are disposed of by a licensed waste contractor and removed off site. All oil barrels and lubricants are stored on spill pallets/ spill trays. Spill kits are also maintained on site and the Company will put in place an emergency response procedure for hydrocarbon spills and appropriate training of site staff in its implementation.



Occasionally a load will contain minor contaminants (e.g. plastics, rebar, wood and paper). These items are removed on inspection by a site operative and stored in a designated quarantine area pending removal offsite by a licensed waste disposal contractor to an appropriate disposal facility.

The operator is to put in place an Environmental Management System (EMS) which will address such matters as Emergency Preparedness & Response in dealing with accident and emergency situations resulting in effects on the environment.

An emergency telephone contact list is maintained at the site inspection office.

It is considered that accidents and emergency situations resulting in effects on the environment is confined to possible emissions to surface and/or groundwater in the event of a fuel spillage. As such the following Emergency/Spill Response Procedures will be put in place.

The main risk associated with oil or chemical spills is the potential for the spill to enter drains, watercourses, soils and the ground water system, causing contamination and / or fire or explosion risk.

It should be noted that significant emphasis has been placed on control and abatement measures to ensure there is no risk to surface and /or groundwater i.e.

- Fuel stored on site is within a bunded (double skin) tank.
- Waste oil products are stored within the existing container on site. Waste oils are disposed of by a licensed waste contractor and removed off site.
- All oil barrels and lubricants are stored on spill pallets/ spill trays.
- Spill kits are also maintained on site.
- Any inappropriate materials discovered (e.g. glass, plastic, timber, steel, etc) will be stored within the designated quarantine area awaiting removal off site by an approved waste collection contractor to an approved facility.

[redacted]

The lands are to be restored to agricultural use by importation and recovery of inert materials in accordance with a phased restoration scheme. On completion of each phase of development final restoration including grading, seeding and landscaping will be carried out. The final contours and topography for the site is shown by the Final Landform Plan Figure B.2.4 and Cross Sections B.2.5.

Redundant structures, plant equipment and stockpiles will be removed from site on cessation of pit activity.

There will be no on-going requirement for environmental monitoring after extraction operations have ceased. A final site inspection 6 months after site closure will be carried out to ensure that the final site restoration scheme implemented is functioning and progressing as required.

[redacted]

A.1.1(f) In the case of an application in respect of the landfilling of waste, give particulars of—

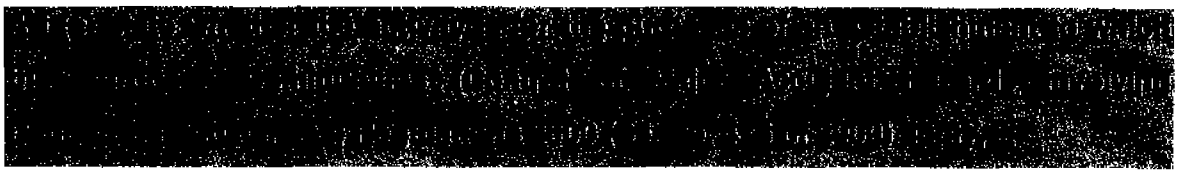
(I) such financial provision as is proposed to be made by the applicant, having regard to the provisions of Articles 7(j) and 8(a)(iv) of the Landfill Directive and section 53(1) of the Act, and

(II) such charges as are proposed or made, having regard to the requirements of section 53A of the Act,

In accordance with the existing planning permissions for the site the operator has to maintain bonds to the value of about €93,000 to secure the satisfactory completion and

restoration of the site, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion and restoration, including all necessary demolition and removal.

The Company has sufficient working capital to meet any financial liabilities including provision the restoration bonds as detailed above.



The European Communities (Control of Major Accident Hazards involving Dangerous substances) Regulations, 2000 (S.I. No. 476 of 2000) do not apply as the establishment only accepts inert material for recovery.

Groundwater for the site has been shown by monitoring to be of a high quality suitable for drinking. It is not anticipated that any List I and List II substances will be discharged to groundwater from the inert Waste Recovery Facility