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County Wexford
Ireland

WASTE LICENCE

Recommended Decision

Licence Register Number:	W0269-01
Applicant	Roadstone Wood Ltd
Location of Facility:	Fassaroe Waste Recovery Facility, Fassaroe Avenue, Fassaroe, Bray, Co.Wicklow.

INTRODUCTION

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

This waste licence relates to the operation of a waste soil and stone and construction and demolition waste recovery facility at Fassaroe Avenue, Fassoroe, Bray, Co. Wicklow by Roadstone Wood Ltd. Licensed activities comprise (i) the continued restoration of a former sand and gravel quarry using soil and stones; and (ii) the continued operation of an existing construction and demolition waste recycling operation. A maximum of 550,000 tonnes per annum of soil and stones will be used to fill completely the quarry void and to restore the landscape to its original pre-extraction level. An additional maximum of 20,000 tonnes per annum of construction and demolition waste will also be recycled to produce secondary aggregates, which will be mainly sold for further use off-site. Some secondary aggregates will be used on site to construct roads. The total estimated amount of soil and stone to be backfilled is approximately 750,000 tonnes over an estimated period of 6 years. The development sequence is to fill the site progressively from north to south in four phases.

The facility is classed as a waste soil and stones recovery facility, with the principal activity identified as Class 4 of the Fourth Schedule to the Waste Management Acts 1996 to 2010; recycling or reclamation of inorganic materials.

The licence requires the implementation of robust waste acceptance and inspection procedures to ensure that only uncontaminated, inert wastes are used in the waste recovery activities. The licence specifies a number of environmental controls in order to minimise the risk of environmental pollution and nuisance to the public arising from the activities at the facility. The environmental monitoring requirements include groundwater, dust and noise.

The licence sets out in detail the conditions under which Roadstone Wood Ltd will operate and manage this facility.

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Glossary of Terms

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 to 2007 / Waste Management Acts 1996 to 2010, unless otherwise defined in the section.

Adequate

20 lux measured at ground level.

lighting

AER

Annual Environmental Report.

Agreement

Agreement in writing.

Annually

At approximately twelve-monthly intervals.

Application

The application by the licensee for this licence.

Appropriate

A waste management facility, duly authorised under relevant law and

Facility

technically suitable.

Attachment

Any reference to Attachments in this licence refers to attachments submitted

as part of this licence application.

BAT

Best Available Techniques.

Biannually

All or part of a period of six consecutive months.

Biennially

Once every two years.

CEN

Comité Européen De Normalisation - European Committee for

Standardisation.

Construction and demolition (C&D)

Wastes that arise from construction, renovation and demolition activities:

Chapter 17 of the EWC or as otherwise may be agreed.

waste Containment

A boom that can contain spillages and prevent them from entering drains or

watercourses or from further contaminating watercourses.

Daily

boom

During all days of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement on any one day.

Dav

Any 24 hour period.

Daytime

0800 hrs to 2200 hrs.

dB(A)

Decibels (A weighted).

Documentation

Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.

Drawing

Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this

licence.

EMP

Environmental Management Programme.

Emission limits

Those limits, including concentration limits and deposition rates, established

in Schedule B: Emission Limits, of this licence.

Environmental damage

As defined in Directive 2004/35/EC.

EPA

Environmental Protection Agency.

European Waste Catalogue (EWC)

A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.

Facility

Any site or premises used for the purpose of the recovery of disposal of waste.

Fortnightly

A minimum of 24 times per year, at approximately two week intervals.

GC/MS

Gas chromatography/mass spectroscopy.

ha

Hectare.

Heavy metals

This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.

Hours of operation The hours during which the facility is authorised to be operational.

Hours of waste acceptance

The hours during which the facility is authorised to accept waste.

Incident

The following shall constitute as incident for the purposes of this licence:

- (i) an emergency;
- (ii) any emission which does not comply with the requirements of this licence;
- (iii) any exceedance of the daily duty capacity of the waste handling equipment;
- any trigger level specified in this licence which is attained or (iv) exceeded; and,
- (v) any indication that environmental pollution has, or may have, taken place.

Inert waste

Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will 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. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular must not endanger the quality of surface water and/or groundwater.

Industrial waste

As defined in Section 5(1) of the Waste Management Acts 1996 to 2010.

IPPC

Integrated Pollution Prevention & Control.

K

Kelvin.

kPa

Kilopascals.

Landfill Directive

Council Directive 1999/31/EC.

 L_{eq}

Equivalent continuous sound level.

Licensee

Roadstone Wood Ltd, Fortunestown, Tallaght, Dublin, 24.

Liquid waste

Any waste in liquid form and containing less than 2% dry matter.

List I

As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.

List II

As listed in the EC Directives 2006/11/EC and 80/68/EEC and amendments.

Local Authority

Wicklow County Council.

Maintain

Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.

Monthly

A minimum of 12 times per year, at intervals of approximately one month.

Night-time

2200 hrs to 0800 hrs.

Noise-sensitive location (NSL)

Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other

installation/facility or area of high amenity which for its proper enjoyment

requires the absence of noise at nuisance levels.

Oil separator

Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of

normal size, installation, operation and maintenance).

Quarterly

At approximately three – monthly intervals.

Sample(s)

Unless the context of this licence indicates to the contrary, the term samples

shall include measurements taken by electronic instruments.

Sanitary effluent

Wastewater from facility toilet, washroom and canteen facilities.

SOP

Standard operating procedure.

Source segregated waste

Waste which is separated at source; meaning that the waste is sorted at the point of generation into a recyclable fraction(s) for separate collection (e.g., paper, metal, glass, plastic, bulk dry recyclables, biodegradables, etc.,) and a residual fraction. The expression 'separate at source' shall be construed

accordingly.

Specified emissions Those emissions listed in Schedule B: Emission Limits, of this licence.

Standard method

A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005,

USA; or an alternative method as may be agreed by the Agency.

Storm water

Rain water run-off from roof and non-process areas.

The Agency

Environmental Protection Agency.

TOC

Total organic carbon.

Trade effluent

Trade effluent has the meaning given in the Water Services Act, 2007.

Trigger level

A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.

Water Services Authority

Wicklow County Council.

Weekly

During all weeks of plant operation and, in the case of emissions, when emissions are taking place; with at least one measurement in any one week.

WWTP

Waste water treatment plant.

Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any emissions from the activity will comply with and will not contravene any of the requirements of Section 40(4) of the Waste Management Acts 1996 to 2010.

Recommended Decision

In reaching this decision the Environmental Protection Agency has considered the application and supporting documentation received from the applicant and the report of its inspector.

Part I Schedule of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2010, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Acts to grant this Waste Licence to Roadstone Wood Ltd, Fortunestown, Tallaght, Dublin, 24, to carry on the waste activities listed below at Fassaroe Avenue, Fassaroe, Bray, Co. Wicklow subject to conditions, with the reasons therefor and the associated schedules attached thereto, set out in the licence.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2010

Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).
Class 3.	Recycling or reclamation of metals and metal compounds.
Class 4.	Recycling or reclamation of other inorganic materials (principal activity)
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

Part II Schedule of Activities Refused

None of the proposed activities as set out in the licence application have been refused.

Part III Conditions

Condition 1. Scope

- 1.1. Waste activities at this facility shall be restricted to those listed and described in *Part I Schedule of Activities Licensed*, and shall be as set out in the licence application or as modified under Condition 1.4 of this licence and subject to the conditions of this licence.
- 1.2. Activities at this facility shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3. For the purposes of this licence, the facility authorised by this licence is the area of land outlined in red on Figure No. B2.2 of the application. Any reference in this licence to "facility" shall mean the area thus outlined in red. The licensed activities shall be carried on only within the area outlined.
- 1.4. No alteration to, or reconstruction in respect of, the activity, or any part thereof, that would, or is likely to, result in
 - (i) a material change or increase in:
 - the nature or quantity of any emission;
 - the abatement/treatment or recovery systems;
 - the range of processes to be carried out;
 - the fuels, raw materials, intermediates, products or wastes generated, or
 - (ii) any changes in:
 - site management, infrastructure or control with adverse environmental significance;

shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.

- 1.5. The facility shall be controlled, operated and maintained, and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6. This licence is for purposes of waste licensing under the Waste Management Acts 1996 to 2010 only and nothing in this licence shall be construed as negating the licensee's statutory obligations, or requirements under any other enactments or regulations.
- 1.7. Hours of Operation
 - 1.7.1. The facility may be operated only between the hours of 08:00 to 18:00 Monday to Friday inclusive (excluding Public Holidays) and between 08:00 and 13:00 on Saturdays.
 - 1.7.2. The facility shall not operate on Sundays or on Bank/Public Holidays.

Reason: To clarify the scope of this licence.

Condition 2. Management of the Facility

2.1 Facility Management

2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.

2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience as required and shall be aware of the requirements of this licence. In addition, the facility manager and his/her deputy shall, within six months of date of grant of this licence, successfully complete a FAS waste management training programme or equivalent agreed by the Agency.

2.2 Environmental Management System (EMS)

- 2.2.1 The licensee shall establish and maintain an Environmental Management System (EMS) within six months of the date of grant of this licence. The EMS shall be updated on an annual basis.
- 2.2.2 The EMS shall include, as a minimum, the following elements:
 - 2.2.2.1 Management and Reporting Structure.
 - 2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall prepare and maintain a Schedule of Environmental Objectives and Targets. The schedule shall, as a minimum, provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production, and the prevention, reduction and minimisation of waste and shall include waste reduction targets. The schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall, not later than six months from the date of grant of this licence, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established and maintained by the licensee. It shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

- (i) The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined.

2.2.2.6 Awareness and Training

The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.2.2.7 Communications Programme

The licensee shall establish and maintain a Public Awareness and Communications Programme to ensure that members of the public are informed.

2.2.2.8 Maintenance Programme

The licensee shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

Reason: To make provision for management of the activity on a planned basis having regard to the desirability of ongoing assessment, recording and reporting of matters affecting the environment.

Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain all infrastructure referred to in this licence as required by the conditions of this licence.
- 3.2 Specified Engineering Works
 - 3.2.1 The licensee shall submit proposals for any Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months in advance of the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
 - 3.2.2 All specified engineering works shall be supervised by an appropriately qualified person, and that person, or persons, shall be present at all times during which relevant works are being undertaken.
 - 3.2.3 Following the completion of any specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as appropriate, include the following information:
 - (i) A description of the works;
 - (ii) As-built drawings of the works;
 - (iii) Records and results of all tests carried out (including failures);
 - (iv) Drawings and sections showing the location of all samples and tests carried out;
 - (v) Name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
 - (vi) Records of any problems and the remedial works carried out to resolve those problems; and
 - (vii) Any other information requested in writing by the Agency.

3.3 Facility Notice Board

- 3.3.1 The licensee shall, within one month of the date of grant of this licence, provide a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
- 3.3.2 The board shall clearly show:
 - (viii) the name and telephone number of the facility;
 - (ix) the normal hours of operation;
 - (x) the name of the licence holder;
 - (xi) an emergency out of hours contact telephone number;
 - (xii) the licence reference number; and,
 - (xiii) where environmental information relating to the facility can be obtained.
- 3.4 Facility Roads and Hardstanding Areas
 - 3.4.1 Effective roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
 - 3.4.2 The licensee shall, within six months of date of grant of licence, complete construction of the proposed paved road network to the extent illustrated in Figure 2.2 of the EIS.
 - 3.4.3 The facility entrance and hardstanding areas shall be appropriately paved and maintained in a fit and clean condition.
- 3.5 Facility Office

The licensee shall maintain a site office at the facility in a manner suitable for the processing and storing of documentation.

- 3.6 Waste Inspection and Quarantine Area
 - 3.6.1 A waste inspection area and a waste quarantine area shall be maintained at the facility.
 - 3.6.2 These areas shall be maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
 - 3.6.3 All waste deposited at the waste quarantine area shall be stored in a skip or other appropriate vessel as may be agreed with the Agency.
 - 3.6.4 The licensee shall, within three months of date of grant of licence, submit for the agreement of the Agency a proposal for the installation of infrastructure to divert rainwater away from the waste inspection and quarantine areas.
- 3.7 Weighbridge and Wheel Cleaner
 - 3.7.1 The licensee shall provide and maintain a weighbridge and wheel cleaner unit at the facility.
 - 3.7.2 The wheel cleaner unit shall be used by all vehicles leaving the facility as required to ensure that no process water or waste is carried off-site.
 - 3.7.3 The licensee shall, within three months of date of grant of licence, submit for the agreement of the Agency a proposal for management of wash-water and silt from the wheel cleaner unit.
- 3.8 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency. The requirement with regard to off-site points is subject to the prior agreement of the landowner(s) concerned.

- 3.9 Tank, Container and Drum Storage Areas
 - 3.9.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
 - 3.9.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:
 - (i) 110% of the capacity of the largest tank or drum within the bunded area; or
 - (ii) 25% of the total volume of substance that could be stored within the bunded area.
 - 3.9.3 All drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal.
 - 3.9.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
 - 3.9.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.10 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used, the absorbent material shall be disposed of at an appropriate facility.
- 3.11 Silt Trap and Oil Separator

The licensee shall, within three months of date of grant of this licence, install and maintain a silt trap and oil separator in the concrete production yard. The licensee shall ensure that all rainwater discharges, other than from roofs, from the concrete production yard pass through the oil separator and silt trap prior to pumping to the silt pond.

The silt trap and oil separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids).

- 3.12 Groundwater
 - 3.12.1 The licensee shall, within three months of date of grant of licence, decommission borehole BH01 as per Condition 3.12.3.
 - 3.12.2 The licensee shall, within three months of grant of licence, install and maintain a new groundwater monitoring borehole to replace borehole BH01. The borehole shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring". The location of the new borehole shall be agreed in advance with the Agency.
 - 3.12.3 All boreholes shall, within three months from the date of grant of this licence, be adequately sealed to prevent surface contamination or physical damage and, as may be appropriate, decommissioned according to the UK Environment Agency guidelines "Decommissioning Redundant Boreholes and Wells" (or as otherwise may be agreed by the Agency).
- 3.13 The licensee shall, within six months of date of grant of licence, submit for the agreement of the Agency a proposal for the management of the northern and southern rainwater ponds during backfilling activities. The proposal shall, as a minimum, address the following:
 - (i) Reuse/recirculation of pond water onsite.
 - (ii) Phased movement of water from northern and southern ponds to the silt pond.
 - (iii) Management of rainwater.
 - (iv) Prevention of groundwater contamination.
 - (v) Prevention of flooding.
- 3.14 The licensee shall not carry out any works that would enhance percolation of quarry rainwater ponds to groundwater.

- 3.15 The licensee, shall within twelve months of date of grant of licence, submit for the agreement of the Agency a proposal for the construction of the infiltration swale as recommended in Section 6.4.1 of the EIS.
- 3.16 Hedgerows
 - The licensee shall implement all mitigation measures as set out in Section 4.4 of the EIS.
- 3.17 The licensee shall, within three months of the date of grant of this licence, install and maintain in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.18 The licensee shall provide and maintain a Wastewater Treatment Plant at the facility for the treatment of sanitary effluent arising on-site. Any waste water treatment system and percolation areas shall satisfy the criteria set out in the Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e \leq 10), published by the Environmental Protection Agency.
- 3.19 The licensee shall have regard to the guidance given in the Environmental Protection Agency Landfill Manuals (Site Design, Operational Practices, Monitoring, Site Investigations, and Restoration and Aftercare), as may be relevant, in the development, operation and closure of the facility.

Reason: To provide for appropriate operation of the facility to ensure protection of the environment.

Condition 4. Interpretation

4.1 Emission limit values for emissions to the **silt pond** in this licence shall be interpreted in the following way:

No grab sample value shall exceed 1.2 times the emission limit value.

- 4.2 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.3 Noise

Noise from the facility shall not give rise to sound pressure levels (Leq, T) measured at the boundary of the facility which exceed the limit value(s).

4.4 Dust

Dust from the activity shall not give rise to deposition levels which exceed the limit value.

Reason: To clarify the interpretation of limit values fixed under the licence.

Condition 5. Emissions

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits*, of this licence. There shall be no other emissions of environmental significance.
- 5.2 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.
- 5.3 The licensee shall ensure that all or any of the following:
 - Mud
 - Dust
 - Litter

associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

- 5.4 The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 5.5 There shall be no direct emissions of polluting matter to groundwater or surface water.

Reason: To provide for the protection of the environment by way of control and limitation of emissions.

Condition 6. Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring*, of this licence.
 - 6.1.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures.
 - 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
 - 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
 - 6.1.4 Where any analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 The licensee shall ensure that:
 - (i) sampling and analysis for all parameters listed in the Schedules to this licence; and
 - (ii) any reference measurements for the calibration of automated measurement systems;

shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards that will ensure the provision of data of an equivalent scientific quality shall apply.

- 6.3 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- The integrity and water tightness of all pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee within 3 months of the date of grant of this licence. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.5 Noise
 - 6.5.1 The licensee shall carry out a noise survey of the site operations as required by the Agency. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
 - 6.5.2 The licensee shall construct or install temporary screening embankments/barriers at the facility as necessary, in order to achieve the limits specified in *Schedule B.4: Noise Emissions* of this licence.

- The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.7 Operational Controls
 - 6.7.1 There shall be no public access to the facility.
 - 6.7.2 The licensee shall ensure that no mud or waste is carried off-site.
 - 6.7.3 Wastes, once deposited and covered, shall not be excavated, disturbed or otherwise picked over unless with the prior agreement of the Agency.
 - 6.7.4 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
 - 6.7.5 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00am of the next working day after such waste is discovered.
 - 6.7.6 No smoking shall be allowed at the facility.

6.8 Dust Control

- 6.8.1 In dry weather, the site access road and hardcore areas shall be sprayed with water, as and when required, to minimise dust emissions.
- 6.8.2 Temporary stockpiles of waste shall be stored in a manner which minimises dust emissions.
- 6.8.3 Developed areas shall be seeded as soon as practicable after placement of cover soils, in a manner appropriate to the surrounding area.
- The licensee shall within three months of date of grant of licence submit a proposal for the agreement of the Agency for the following:
 - (i) Determination of normal background levels of TOC in northern and southern quarry rainwater ponds and in rainwater that has collected in the sump in the concrete production yard.
 - (ii) Setting of trigger levels for TOC.
 - (iii) Nature of onsite response to exceedance of TOC trigger levels.
- 6.10 A visual inspection of the quarry ponds for any evidence of contamination shall be carried out on a weekly basis. A log of such inspections shall be maintained on-site.
- 6.11 Topographical Monitoring

A topographical survey shall be carried out on an annual basis. The survey shall be in accordance with any written instructions issued by the Agency. The licensee shall submit a survey report to the Agency as part of the Annual Environmental Report.

6.12 Stability Assessment

The licensee shall carry out an annual stability assessment of the side slopes along the filling/deposition area at the facility. The results of this assessment shall be reported as part of the Annual Environmental Report.

6.13 Bird Survey

The licensee shall carry out an annual breeding bird survey, unless otherwise required by the Agency. The survey shall record the number of birds of conservation concern utilising the site. The results of this assessment shall be reported as part of the Annual Environmental Report.

Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions.

Condition 7. Resource Use and Energy Efficiency

7.1 The licensee shall establish and operate a programme to measure resources and energy use at the facility. This programme shall also identify actions or measures that will be implemented to maximise efficiency of use of resources and energy. A copy of this programme shall be available on-site for inspection by authorised persons of the Agency and a summary report of consumption figures as well as efficiency measures/actions/innovations shall be submitted as part of the Annual Environmental Report.

Reason: To provide for the efficient use of resources and energy in all site operations.

Condition 8. Materials Handling

- 8.1 Recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.3 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 All vehicle and machinery refuelling and maintenance operations shall be carried out in designated areas protected against spillage and run-off.
- Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.7 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.8 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 8.9 Waste Acceptance and Characterisation Procedures
 - 8.9.1 Waste shall only be accepted at the facility from Local Authority waste collection or transport vehicles, or holders of valid waste collection permits, unless exempted or excluded, issued under the Waste Management (Collection Permit) Regulations 2007, as amended.
 - 8.9.2 Within three months of the date of grant of this licence, the licensee shall submit for Agency approval written procedures for the acceptance and handling of all wastes at the facility. These procedures shall be in accordance with the requirements of Schedule A: Limitations of this licence.
 - 8.9.3 Waste received at the facility form non pre-cleared costumers shall be directed to the quarantine area.
- 8.10 Unless approved in writing, in advance, by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.

- 8.11 Only clean natural materials such as soils, stones and broken rock are permitted for backfilling at the facility.
- 8.12 No hazardous or liquid wastes, nor any waste not listed in *Schedule A: Limitations* of this licence, shall be accepted, recovered or disposed of at the facility.
- 8.13 The licensee shall neither import waste into the State nor export waste out of the State except in accordance with the relevant provisions of Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14th June 2006 on shipments of waste and associated national regulations.

Reason: To provide for the appropriate handling of material and the protection of the environment.

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Procedure is in place that addresses the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, within six months of date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation which may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
 - 9.3.1 In the event of an incident the licensee shall immediately:
 - (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (ii) isolate the source of any such emission;
 - (iii) evaluate the environmental pollution, if any, caused by the incident;
 - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof:
 - (v) identify the date, time and place of the incident;
 - (vi) notify the Agency and other relevant authorities.
 - 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed by the Agency, to:
 - (i) identify and put in place measures to avoid recurrence of the incident; and
 - (ii) identify and put in place any other appropriate remedial actions.

Reason: To provide for the protection of the environment.

Condition 10. Closure, Restoration and Aftercare Management

- 10.1 The facility shall be restored in accordance with Figure 2.6 Phasing Plan of the EIS.
- 10.2 Final Levels/Profile
 - 10.2.1 The final profile of the facility shall tie-in to the surrounding land levels and shall be as shown in Figure B2.5 Restored Cross Sections in the licence application.
 - 10.2.2 Within twelve months of completion of each phase of waste deposition, that phase shall be progressively restored to agricultural grassland.
 - 10.2.3 Developed areas shall be profiled so that no depression exists in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable capping or restoration materials.
 - 10.2.4 Final contours and landscaping should be such that the finished slopes of the facility are structurally stable, resistant to erosion, and protective of pollutant control and monitoring infrastructure.
- 10.3 Final Capping
 - 10.3.1 Unless otherwise agreed by the Agency, filled areas shall be permanently capped within 6 months of the areas having been filled to the required level.
 - 10.3.2 Unless otherwise agreed by the Agency, the final capping shall consist of the following:
 - (i) Top soil (150 300 mm); and
 - (ii) Subsoils, such that total thickness of top soil and subsoils is at least 1m.
- 10.4 No material or object that is incompatible with the proposed restoration of the facility shall be present within 1m of the final soil surface levels.
- All waste activities at the facility shall cease upon the installation of the final capping unless otherwise agreed by the Agency.
- 10.6 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery any soil, subsoil, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.7 Closure, Restoration and Aftercare Management Plan (CRAMP)
 - 10.7.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement within six months of the date of grant of the licence.
 - 10.7.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
 - 10.7.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Condition 10.7.1 above.
- 10.8 The CRAMP shall include, as a minimum, the following:
 - (i) a scope statement for the plan;
 - (ii) the criteria that define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment;
 - (iii) a programme to achieve the stated criteria;

- (iv) where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan; and
- details of the costings for the plan and the financial provisions to underwrite those costs.
- A final validation report to include a certificate of completion for the CRAMP, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

Reason: To make provision for the proper closure of the activity ensuring protection of the environment.

Condition 11. Notification, Records and Reports

- 11.1 The licence shall notify the Agency by both telephone and facsimile, if available, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
 - (i) any release of environmental significance to atmosphere;
 - (ii) any emission that does not comply with the requirements of this licence;
 - (iii) any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control and Monitoring*, of this licence which is likely to lead to loss of control of the abatement system; and
 - (iv) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environment threat to air or land, or requiring an emergency response by the Local Authority.

The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions.

- In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the Inland Fisheries Ireland as soon as practicable after such an incident.
- 11.3 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record.
- The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.5 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility.
- 11.6 The licensee shall as a minimum keep the following documents at the site:
 - (i) the licences relating to the facility;
 - (ii) the current EMS for the facility;
 - (iii) the previous year's AER for the facility;
 - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
 - (v) relevant correspondence with the Agency;
 - (vi) up-to-date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;

- (vii) up-to-date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment;
- (viii) the current Environmental Management Plan (EMP); and
- (ix) any elements of the licence application or EIS documentation referenced in this licence.

This documentation shall be available to the Agency for inspection at all reasonable times.

- 11.7 The licensee shall submit to the Agency, by the 31st March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule F: Annual Environmental Report*, of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.
- 11.8 The licensee shall maintain a written record for each load of waste arriving at the facility. The licensee shall record the following:
 - (i) the date and time;
 - (ii) the name of the carrier (including if appropriate, the waste carrier registration details);
 - (iii) the vehicle registration number;
 - (iv) the trailer, skip or other container unique identification number (where relevant);
 - (v) the origin of the waste load;
 - (vi) the name of the producer(s)/collector(s) of the waste as appropriate;
 - (vii) a description of the waste including the associated EWC codes;
 - (viii) the quantity of the waste, recorded in tonnes;
 - (ix) the name of the person checking the load; and
 - where loads or wastes are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed.
- 11.9 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be maintained on a monthly basis and shall as a minimum contain details of the following:
 - (i) the tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery;
 - (ii) the names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number);
 - (iii) details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required;
 - (iv) written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site;
 - (v) details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended). The rationale for the classification must form part of the record;
 - (vi) details of any rejected consignments;
 - (vii) details of any approved waste mixing;
 - (viii) the results of any waste analyses required under Schedule C: Control & Monitoring, of this licence; and
 - (ix) the tonnage and EWC Code for the waste materials recovered on-site.
- 11.10 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.

11.11 All reports shall be certified accurate and representative by the facility manager or a nominated, suitably qualified and experienced deputy.

11.12 Waste Recovery Reports

The licensee shall as part of the Annual Environmental Report for the site submit a report on the contribution by this facility to the achievement of the waste recovery objectives stated in Condition 2.2.2.2 and as otherwise may be stated in National and European Union waste policies and shall, as a minimum, include the tonnage of C & D derived waste materials recovered.

Reason: To provide for the collection and reporting of adequate information on the activity.

Condition 12. Financial Charges and Provisions

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of €5,577, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2010. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2010, and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

- 12.2.1 The licensee shall as part of the AER, provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.
- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) to address the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the CRAMP. A report on this assessment shall be submitted to the Agency for agreement within twelve months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. The results of the review shall be notified as part of the AER.
- 12.2.3 As part of the measures identified in Condition 12.2.1 the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.2.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 12.2.1.

12.2.4 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.

Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.

SCHEDULE A: Limitations

The following waste related processes are authorised:

Non-hazardous C&D waste recovery (incl. crushing, screening, sorting, blending). Storage of waste.

Use of inert soils and stones for land improvement.

No additions to these processes are permitted unless agreed in advance with the Agency.

A.1 Waste Acceptance

Only the inert wastes as specified in Table A.1 are acceptable for recovery at the facility unless otherwise agreed by the Agency. These wastes must satisfy the criteria in *Schedule A.2: Acceptance Criteria for materials to be used at the facility* of this licence.

Table A.1 Waste Categories and Quantities

EWC CODE	WASTE TYPE Notes 1 & 2	MAXIMUM (TONNES PER ANNUM)	
17 05 04	Soils and stones other than those mentioned in 17 05 03		
17 05 06	Dredging spoil other than those mentioned in 17 05 05	550,000	
20 02 02	Soils and stones		
17 01 01	Concrete		
17 01 02	Bricks		
17 01 03	Tiles	20,000	
17 01 07	Mixtures of concrete, bricks, tiles and ceramics (other than those mentioned in 17 01 06)		
17 09 04	Mixed construction and demolition wastes (other than those mentioned in 170901, 170902 and 170903)		
	Total	570,000	

Note 1: In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing in accordance with Schedule A.2 below shall be applied or the waste should be refused/rejected.

Note 2: Any proposals to accept other compatible waste streams must be agreed in advance by the Agency and the total amount of waste must be within the total amount specified.

A.2 Waste Acceptance

The general characterisation and testing must be based on the following three level hierarchy:

Level 1: Basic Characterisation

This constitutes a thorough determination, according to standardised analysis and behaviour testing methods, of the short and long-term leaching behaviour and/or characteristic properties of the waste.

Level 2: Compliance Testing

This constitutes periodical testing by simpler standard analysis and behaviour-testing methods to determine whether a waste complies with condition and /or specific reference criteria. The tests focus on key variables and behaviour identified by basic characterisation.

Level 3: On-site verification

This constitutes rapid check methods to confirm that a waste is the same as that which has been subjected to compliance testing and that which is described in any accompanying documents. It may merely consist of a visual inspection of a load of waste before and after unloading at the waste facility.

Each and every load of waste (and accompanying documents) accepted at the facility shall undergo Level 3 verification/inspection as a minimum. And, notwithstanding Condition 11.10, the following information shall be recorded in relation to each and every waste load following such inspection:

Waste producer	Type of process producing the waste
Source and origin of waste	Amount of waste
Licensee's job/order/invoice number	Existing data on the waste
Vehicle registration number	Physical form
Description of the waste	Colour
Waste Type and EWC code	Odour

Soil and stones (EWC codes 17 05 04) from single sources where the total quantity of waste expected to be generated is greater than or equal to 2,000 tonnes shall be subject to Level 1 and Level 2 testing. Level 1 (characterisation) testing shall be carried out prior to agreeing acceptance of the waste. Level 2 (compliance) testing shall be carried out on representative samples of waste upon delivery. A representative sample shall be taken once from the first 2,000 tonnes of waste deposited and once for every 250 loads of waste thereafter. Part of each sample shall be retained at the facility for three months and be available for inspection/analysis by the Agency. The criteria for Level 1 and Level 2 testing shall be agreed in accordance with Condition 8.9.2.

Where single sources generate less than 2,000 tonnes of soil and stones (EWC code 17 05 04), one sample for every 2,000 tonnes of waste accepted from the collective of small single sources shall be characterised according to criteria to be agreed in accordance with Condition 8.9.2 (and to incorporate appropriate elements of Level 1 and/or Level 2 testing).

In relation to all wastes proposed to be tested according to agreed protocols, the licensee shall, in accordance with **Condition 8.9.2**, propose maximum concentrations and/or trigger levels for contaminants in the materials proposed to be recovered. The exceedance of these maximum concentrations and/or trigger levels shall be considered an incident and non-compliant materials shall be dealt with in accordance with **Condition 9.3**. Arrangements shall be made for the removal of the material for disposal at an authorised facility.

Sampling and testing shall be carried out by independent and qualified persons and institutions. Laboratories shall have proven experience in waste testing and analysis and an efficient quality assurance system.

SCHEDULE B: Emission Limits

B.1 Emissions to Air

There shall be no emissions to air of environmental significance.

B.2 Emissions to Surface Water

There shall be no emissions to surface water of environmental significance.

B.3 Emissions to Sewer

There shall be no process effluent emissions to sewer.

B.4 Emissions to Silt Pond

Emission Point Reference No.:

EP1 (Rainwater pumped from quarry ponds)

EP2 (Rainwater pumped from sump in concrete production yard)

Name of Receiving Waters:

Silt Pond

Parameter 1	Emission Limit Value (mg/l)
Suspended Solids	35

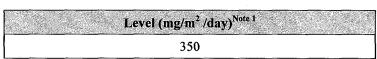
B.5 Noise Emissions

Daytime dB(A)	L _{Aeq} (30 minutes)	Night-time dB(A) L _{Aeq} (30 minutes)
55	Note 1	45 Note 1

Note 1: There shall be no clearly audible tonal component or impulsive component in the noise emission from the activity of any noise-sensitive location.

B.6 Dust Deposition Limits

Measured at the monitoring locations indicated in Schedule C: Control and Monitoring, Table C: Environmental Monitoring Locations, unless otherwise agreed with the Agency.



Note 1: 30 day composite sample with the results expressed as mg/m²/day.

SCHEDULE C: Control & Monitoring

Table C: Environmental Monitoring Locations Note 1, 2

DUST	NOISE	GROUNDWATER	RAINWATER PONDS	SILT POND
D1	N1	BH02	SW1 ^{Note 5}	EP1 Note 8
D2	N2	BH03	SW2 ^{Notes 3, 6}	EP2 Note 9
D3 ^{Note 3}	N3	BH04 Notes 3, 4	SW3 ^{Note 7}	
	N4			
	N5 Note 3			

- Note 1: Monitoring locations as shown on Figure EMP 5 Environmental Monitoring Locations of the licence application unless agreed under Note 3 below.
- Note 2: Monitoring location(s) may be amended with the agreement of the Agency.
- Note 3: Monitoring location to be agreed in advance with the Agency.
- Note 4: Replacement borehole for BH01 as required by Condition 3.12.2.
- Note 5: Northern rainwater pond in quarry.
- Note 6: Southern rainwater pond in quarry.
- Note 7: Rainwater in sump in concrete production yard.
- Note 8: Rainwater pumped from northern and southern ponds to silt pond.
- Note 9: Rainwater pumped from sump in concrete production yard to silt pond.

C.1.1. Control and Monitoring of Emissions to Air

There shall be no emissions to air of environmental significance.

C.2.1. Control of and Monitoring of Emissions to Surface Water

There shall be no emissions to surface water of environmental significance.

C.3.1. Control and Monitoring of Emissions to Sewer

There shall be no process effluent emissions to sewer.

C.4 Monitoring of Rainwater Ponds

Monitoring location Reference No:

SW1, SW2, SW3

Parameter Note 1	Monitoring Frequency Note 4	Analysis Method/Technique
Visual Inspection	Weekly	Sample and examine for colour and odour.
Suspended Solids	Quarterly	Standard method
Mineral Oils	Quarterly	Standard method
Total Organic Carbon (TOC) Note 2	Quarterly	Standard method
Dissolved metals	Annually	Standard method
List I/II Organic Substances Note 3	Annually	Standard method

- Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.
- Note 2: Background and trigger levels for TOC to be agreed as per condition 6.9.
- Note 3: Samples screened for the presence of organic compounds using Gas Chromatography Mass Spectrometry (GC/MS) or other appropriate techniques and using the List 1/11 Substances from EU Directive 76/464/EEC and 80/68/ EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 608 or equivalent I.
- Note 4: Apart from the visual inspection, the monitoring frequency for each parameter can be reduced with the prior agreement of the Agency.

C.5 Monitoring of Emissions to Silt Pond

Monitoring location Reference No:

EP1, EP2

Parameter Note 1	Monitoring Frequency Note 4	Analysis Method/Technique
Suspended Solids	Once per discharge	Standard method

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

C.6 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Non-compliant waste to be removed off-site for recovery/disposal	Per consignment	Basic Characterisation	Standard Method
Deposited waste Note 1	Dependent on rate of waste deposition.	To be agreed	To be agreed
	Maximum 5 samples per year		
Other Note 2			

Note 1: A representative sample of the deposited waste shall be taken at least every 3,000m² area of fill and to a depth of 1.5 metres, or at an equivalent frequency as may be agreed. Samples of the deposited waste shall be taken by trial

pit or other appropriate method.

Note 2: Analytical requirements to be determined on a case by case basis.

C.7 Noise Monitoring

Monitoring Location Reference No:

N1, N2, N3, N4, N5

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) _{EQ} [30 minutes]	As required	Standard Note 1
L(A) ₁₀ [30 minutes]	As required	Standard Note 1
L(A) ₉₀ [30 minutes]	As required	Standard Note 1
Frequency Analysis (1/3 Octave band analysis)	As required	Standard Note 1

Note 1: "International Standards Organisation. ISO 1996. Acoustics – description and measurement of Environmental noise. Parts 1, 2 and 3".

C.8 Dust Monitoring

Monitoring Location Reference No:

D1, D2, D3

Parameter Dust deposition	Monitoring Frequency	Analysis Method/Technique
(mg/m²/day)	Bi-annually Note 1	Bergerhoff Note 2

Note 1: Once during the period May to September, or as otherwise specified in writing by the Agency.

Note 2: Standard Method VD12119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute).

C.8 Control of Emissions to Groundwater

There shall be no emissions to groundwater of environmental significance.

C.9 Groundwater Monitoring

Monitoring Location Reference No:

BH02, BH03, BH04

Parameter Note 1	Monitoring Frequency	Analysis Method/Techniques	
Level	Quarterly	Standard Method	
Visual Inspection	Quarterly Standard Method		
PH	Biannually	pH electrode/meter	
Conductivity	Biannually Standard Method		
Ammoniacal Nitrogen (as N)	Biannually	Standard Method	
Chloride	Biannually	Standard Method	
Sulphate	Biannually	Standard Method	
Dissolved Metals	Annually Standard Method		
Total Petroleum Hydrocarbons	Annually Standard Method		
Total PAH	Annually Standard Method		
List 1/II Organic Substances Note 2	Annually	Standard Method	

Note I: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures

Note 2: Samples screened for the presence of organic compounds using Gas Chromatography Mass Spectrometry (GC/MS) or other appropriate techniques and using the List 1/11 Substances from EU Directive 76/464/EEC and 80/68/ EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 608 or equivalent I.

SCHEDULE D: Specified Engineering Works

Specified Engineering Works

Installation of infrastructure for collection and diversion of rainwater from waste quarantine and inspections areas.

Installation of groundwater infiltration swale.

Any other works notified in writing by the Agency.

SCHEDULE E: Reporting

Completed reports shall be submitted to:

The Environmental Protection Agency Office of Environmental Enforcement Headquarters PO Box 3000 Johnstown Castle Estate County Wexford

Any other address as may be specified by the Agency

Reports are required to be forwarded as required in the licence and as may be set out below:

Report	Reporting Frequency Notes	Report Submission Date
Annual Environment Report (AER)	Annually	By 31st March of each year.
Record of incidents	As they occur	Within five days of the incident.
Specified Engineering Works reports	As they arise	In advance of the works commencing.
Bund, tank and container integrity assessment	As they arise	Within three months of the date of grant of licence, and every three years thereafter as part of AER.
Licence monitoring requirements	Annually	As part of AER.
Any other monitoring/reports	As they occur	Within ten days of obtaining results.

Note 1: Unless altered at the request of the Agency.

SCHEDULE F: Annual Environmental Report

Annual Environmental Report Content Note 1

Emissions from the facility.

Waste management record.

Waste recovery report.

Progress of waste deposition works (including projected completion date).

Complaints summary.

Schedule of Environmental Objectives and Targets.

Environmental management programme – report for previous year.

Environmental management programme – proposal for current year.

Pollutant Release and Transfer Register - report for previous year.

Pollutant Release and transfer Register - proposal for current year.

Noise monitoring report summary.

Dust monitoring report summary.

Groundwater monitoring report summary.

Quarry pond monitoring report summary.

Tank and pipeline testing and inspection report.

Reported incidents summary.

Topographical survey report.

Stability assessment report.

Bird survey report.

Resource use and energy efficiency summary report.

Development/Infrastructural works summary (completed in previous year or prepared for current year).

Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.

Review of Closure, restoration & aftercare management Plan.

Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).

Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change including financial provisions).

Any other items specified by the Agency.

Note 1: Content may be revised subject to the agreement of the Agency.

Signed on behalf of the said Agency	·	
	xxxxxxxxxxx Authorised Person	