

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

# WASTE LICENCE **Recommended Decision**

| <b>Licence Register Number:</b> | W0247-01                        |
|---------------------------------|---------------------------------|
| Applicant:                      | Behans Land Restoration Limited |
| Location of                     | Blackhall,                      |
| Facility:                       | Punchestown,                    |
|                                 | Naas,                           |
|                                 | Co. Kildare                     |

### 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 restoration of a former sand and gravel quarry using imported inert soils and stones, and recycling of inert construction and demolition waste, at Blackhall, Punchestown, Naas, Co. Kildare. The amount of inert material to be imported and placed at the facility over a 15-year period is approximately 4 million tonnes (approximately 2.24 million cubic metres). Following completion of the backfilling operations, the site will be restored to improved agricultural grassland, which is in keeping with the character of the surrounding area.

This facility is classed as a natural soils recovery facility, with the principal activity identified as Class 4 of the Fourth Schedule to the Waste Management Acts 1996 to 2008; recycling or reclamation of inorganic materials.

Inert construction and demolition waste is also recycled at the facility using crushing and screening equipment to generate recycled aggregates. These aggregates will be used for the construction of temporary haul roads and infilling of groundwater ponds at the facility, with any excess aggregates exported off-site for sale as hardcore in construction works.

The licence requires the implementation of robust waste acceptance and inspection procedures to ensure that only inert wastes are used in site restoration works. The licence specifies a number of environmental controls in order to minimise nuisance to the public arising from the waste activities at the facility, including control of potential dust and noise emissions. The environmental monitoring requirements include groundwater, dust and noise.

The licence sets out in detail the conditions under which Behans Land Restoration Limited will operate and manage this facility.

# Table of Contents

| Glossary of Terms     |   | rage No |
|-----------------------|---|---------|
| ·                     |   |         |
|                       | for the Decision                              |         |
| Part I Schedule of Ac | ctivities Licensed                            | 5       |
| Part II Schedule of A | Activities Refused                            | 5       |
| Part III Conditions   |   | 6       |
| Condition 1.          | Scope   | 6       |
| Condition 2.          | Management of the Facility                    | 7       |
| Condition 3.          | Infrastructure and Operation                  | 8       |
| Condition 4.          | Interpretation                                | 11      |
| Condition 5.          | Emissions                                     | 11      |
| Condition 6.          | Control and Monitoring                        | 12      |
| Condition 7.          | Resource Use and Energy Efficiency            | 14      |
| Condition 8.          | Materials Handling                            | 15      |
| Condition 9.          | Accident Prevention and Emergency Response    | 16      |
| Condition 10.         | Closure, Restoration and Aftercare Management | 16      |
| Condition 11.         | Notification, Records and Reports             | 18      |
| Condition 12.         | Financial Charges and Provisions              | 20      |
| SCHEDULE A:           | Limitations                                   | 22      |
| SCHEDULE B:           | Emission Limits                               | 22      |
| SCHEDULE C:           | Control & Monitoring                          | 24      |
| SCHEDULE D:           | Specified Engineering Works                   | 31      |
| SCHEDULE E:           | Reporting                                     | 27      |
| SCHEDI II E F         | Annual Environmental Report                   | 33      |

# 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 2008, unless otherwise defined in the section.

Adequate

20 lux measured at ground level.

lighting

**AER** Annual Environmental Report.

Agency/EPA

Environmental Protection Agency.

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

technically suitable. **Facility** 

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.

**BOD** 

5 day Biochemical Oxygen Demand.

CEN

Comité Européen De Normalisation - European Committee for

Standardisation.

COD

Chemical Oxygen Demand.

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 boom

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

watercourses or from further contaminating watercourses.

Daily

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.

Day

Any 24 hour period.

Davtime

0800 hrs to 2200 hrs.

dB(A)

Decibels (A weighted).

DO

Dissolved oxygen.

**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.

EIS

Environmental Impact Statement submitted with Waste Licence Application Reference W0247-01 (May 2008 and amendments dated September 2008).

**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.

ICP

Inductively coupled plasma spectroscopy.

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 trigger level specified in this licence which is attained or exceeded; and,
- (iv) 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 not endanger the quality of surface water and/or groundwater.

**IPPC** 

Integrated Pollution Prevention & Control.

**Landfill Directive** 

Council Directive 1999/31/EC.

 $\mathbf{L}_{\mathsf{eq}}$ 

Equivalent continuous sound level.

Licensee

Behans Land Restoration Limited, Blackhall, Punchestown, Naas, Co. Kildare.

IXIII

Liquid waste

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

List I

As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.

List II

As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments

**Local Authority** 

Kildare 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.

Mobile plant

Self-propelled machinery used for the emplacement of wastes or for the construction of specified engineering works.

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 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).

**PAH** 

Polycyclic Aromatic Hydrocarbons

Planning Authority Kildare County Council

PRTR

Pollutant Release and Transfer Register.

**Quarterly** 

At approximately three – monthly intervals.

All or part of a period of three consecutive months beginning on the first day

of January, April, July or October.

Regional Fisheries

**Board** 

Eastern Regional Fisheries Board.

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.

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.

TA Luft

Technical Instructions on Air Quality Control – TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBI. I p 721). Federal Ministry for Environment, Bonn 1986, including the amendment for Classification of Organic Substances according to section 3.1.7 TA Luft published in July 1997.

to section 3.1.7 TA. Luft, published in July 1997.

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 Kildare 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 2008.

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 2008, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Acts to grant this Waste Licence to Behans Land Restoration Limited, Blackhall, Naas, Co. Kildare to carry on the waste activities listed below at Blackhall, Naas, Co. Kildare 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 2008

| 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

and shalling.

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 2** Existing Site Layout 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 2008 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 Waste Acceptance Hours and Hours of Operation
  - 1.7.1 Waste may be accepted at the facility only between the hours of 08.00 and 18.00 Monday to Friday inclusive (excluding Public Holidays), and between 08.00 and 14.00 hours on Saturdays, unless otherwise agreed by the Agency.
  - 1.7.2 The facility may be operated only between the hours of 08.00 to 18.00 Monday to Friday inclusive (excluding Public Holidays), and 08.00 to 14.00 on Saturdays, unless otherwise agreed by the Agency.

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 suitable 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 successfully complete the FAS Waste Management Training Programme or equivalent agreed by the Agency.

### 2.2 Environmental Management System (EMS)

- 2.2.1 Prior to the commencement of the licensed activity the licensee shall establish and maintain an Environmental Management System (EMS). 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 (including emissions prevention/reduction) and the beneficial recovery of waste. 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 maintain an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. The EMP 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.

-46 -46

### 2.2.2.5 Corrective Action

The license 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 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 can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

#### 2.2.2.8 Maintenance Programme

The licensee shall establish and maintain, within six months of the date of commencement of the licensed activity, a structured programme for maintenance and service of vehicles and equipment. This programme shall be supported by appropriate record-keeping systems and diagnostic testing.

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 all infrastructure referred to in this licence, to the design set out in the Application documentation or a may be otherwise specified or varied by the conditions of this licence.

### 3.2 Facility Notice Board

- 3.2.1 The licensee shall, prior to the commencement of the licensed activity, 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 on the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
- 3.2.2 The board shall clearly show:
  - (i) the name and telephone number of the facility;
  - (ii) the normal hours of opening;
  - (iii) the name of the licence holder;
  - (iv) an emergency out of hours contact telephone number;
  - (v) the licence reference number; and
  - (vi) where environmental information relating to the facility can be obtained.

### 3.3 Specified Engineering Works (SEW)

3.3.1 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.
- 3.3.2 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.
- 3.3.3 Following 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;
  - (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.

### 3.4 Facility Security

- 3.4.1 Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.
- 3.4.2 Gates shall be locked shut when the facility is unsupervised.
- 3.4.3 The licensee shall remedy any defect in the gates and/or fencing as follows:
  - (i) A temporary repair shall be made by the end of the working day; and
  - (ii) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

#### 3.5 Facility Roads and Hardstanding

- 3.5.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.5.2 The facility entrance and hardstanding areas shall be appropriately paved and maintained in a fit and clean condition.
- 3.5.3 The licensee shall provide and maintain an impermeable concrete surface at the waste inspection and quarantine area as shown on Figure 2.2 Site Infrastructure Layout of the EIS. The surface shall be concreted and surfaced to British Standard 8110 or an alternative as agreed by the Agency.

#### 3.6 Facility Office

- 3.6.1 The licensee shall provide and maintain a site office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.6.2 The licensee shall provide and maintain a working telephone at the facility.
- 3.6.3 The licensee shall ensure that a fax machine and a method for electronic transfer of information are made available to the facility.

### 3.7 Waste Inspection and Quarantine Areas

- 3.7.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
- 3.7.2 These areas shall be constructed and 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.
- 3.7.3 In the event of suspect material being stored at the waste inspection and quarantine area, surface water run-off from this area shall be directed to the sealed underground tank, as described in section 2.2.9 of the EIS.
- 3.7.4 Waste water collected in the underground tank as per Condition 3.7.3 shall be tankered off-site for disposal at a waste water treatment plant to be agreed with the Agency.
- 3.8 Weighbridge and Wheel Cleaner
  - 3.8.1 The licensee shall provide and maintain a weighbridge and wheel wash facility at the facility.
  - 3.8.2 The wheel wash facility shall be used by all vehicles leaving the facility as required to ensure that no **mud or waste** is carried off-site.
  - 3.8.3 All water from the wheel wash facility shall be collected and recycled, as described in section 2.2.4 of the EIS.
- 3.9 Construction and Demolition Waste Recovery Area
  - 3.9.1 The licensee shall provide and maintain a construction and demolition waste recovery area at the facility as described in section 2.2 of the EIS. The infrastructre shall include appropriate bunding to provide visual and noise screening.
  - 3.9.2 All stockpiles shall be adequately contained to minimise dust generation.
- 3.10 Tank, Container and Drum Storage Areas

\*\*\*\*\*\*\*\*

- 3.10.1 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).
- 3.10.2 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:
  - (ii) 110% of the capacity of the largest tank or drum within the bunded area; or
  - (iii) 25% of the total volume of substance that could be stored within the bunded area.
- 3.10.3 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.
- 3.10.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.10.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.10.6 Fuel storage facilities shall be located on an impermeable hardstanding area and shall be suitably protected from physical damage. All taps or valves through which fuel can be discharged from the tank/container shall be fitted with a lock and shall be locked shut when not in use.
- 3.11 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.12 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.
- 3.13 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.
- 3.14 The licensee shall provide 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.

·mirer commence and in the contract of the con

#### 3.15 Groundwater

- 3.15.1 The licensee shall provide and maintain at least one upgradient and two downgradient groundwater monitoring boreholes at the facility.
- 3.15.1 Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring".
- 3.15.2 All wells and boreholes shall be adequately sealed to prevent surface contamination and, as may be appropriate, decommissioned according to the UK Environment Agency guidelines "Decommissioning Redundant Boreholes and Wells", or otherwise as agreed by the Agency.

#### 3.16 Hedgerows

- 3.16.1 The existing boundary hedgerows shall be retained and reinforced where necessary.
- 3.16.2 The licensee shall maintain a 10m buffer zone between the existing boundary hedgerows and the infilling works.
- 3.16.3 Where removal of any shrubs or hedgerows within the site is required, these works shall take place between the months of September and March to avoid the bird nesting season.
- 3.17 The licensee shall have regard to the guidance given in the Environmental Protection Agency Landfill Manuals (Site Design, Operational Practices, Monitoring, Site Investigation, 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 In the case of emissions to waters, 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 from the facility shall not give rise to sound pressure levels (L<sub>eq</sub>, T) measured at noise sensitive locations, which exceed the limit values.
- 4.4 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.

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 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
- 6.4 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 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.
- 6.7 Prior to the commencement of the licensed activity the integrity and water tightness of all 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. 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.

- The drainage system (i.e. any visible drainage conduits and such other aspects as may be agreed), bunds and silt traps shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal.
- 6.9 Noise
  - 6.9.1 The licensee shall carry out a noise survey of the site operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.
  - 6.9.2 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.
- 6.10 Pollutant Release and Transfer Register (PRTR)

The licensee shall prepare and report a PRTR for the site. The substances and/or waste to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations No. 166/2006 concerning the establishment of the European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.

- 6.11 Prior to the commencement of the licensed activity the licensee shall develop and operate a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.12 The licensee shall ensure that waste activities at the facility shall be carried out in such a manner so as not to have an adverse effect on the drainage of adjacent lands, on watercourses, on field drains or any other drainage system including the public roadway.
- 6.13 Operational Controls
  - 6.13.1 There shall be no public access to the facility.
  - 6.13.2 Wastes, once deposited and covered, shall not be excavated, disturbed or otherwise picked over unless with the prior agreement of the Agency.
  - 6.13.3 Restored areas shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable materials.
  - 6.13.4 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
  - 6.13.5 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.
  - 6.13.6 No smoking shall be allowed at the facility.
- 6.14 Dust Control
  - 6.14.1 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
  - 6.14.2 Restored areas shall be seeded as soon as practicable after placement of cover soils.

- 6.14.3 Temporary stockpiles of imported soils shall be located away from sensitive receptors in order to minimise airborne dust emissions.
- 6.14.4 All waste vehicles shall use the wheelwash in advance of exiting the facility.

### 6.15 Groundwater Management

- 6.15.1 A visual inspection of the groundwater ponds for any evidence of contamination shall be carried out on a weekly basis. A log of such inspections shall be maintained.
- 6.15.2 Effective groundwater protection management infrastructure shall be provided and maintained during the restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the protection of the groundwater resources from pollution by the waste activities.
- 6.15.3 The infilling of low-lying areas of the facility below and immediately above the water table shall be undertaken using only clean, inert, highly permeable granular recycled aggregates. Such infilling works shall be supervised by an appropriately qualified person, and that person shall be present at all times during which infilling works are being undertaken.
- 6.15.4 The groundwater spring discharge shall be collected and discharged into the ground in accordance with Section 6.4 of the EIS.

#### 6.16 Topographical Monitoring

A topographical survey shall be carried out on an annual basis. The survey shall include a measurement of the remaining available void space. The survey shall be in accordance with any written instructions issued by the Agency.

6.17 Stability Assessment

The licensee shall carry out an annual stability assessment of the temporary side slopes along the internal access road at the facility. The results of this assessment shall be reported as part of the Annual Environmental Report (AER).

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 carry out an audit of the energy efficiency of the site within one year of the date of commencement of the licensed activity. The audit shall be carried out in accordance with the guidance published by the Agency, "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.
- 7.2 The audit shall identify all practicable opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2.2.2 above.
- 7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets under Condition 2.2.2.2 above.
- 7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets under Condition 2.2.2.2 above.

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 (including re-fuelling of plant) shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 Waste and materials 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.
- 8.6 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.
- 8.7 Waste for disposal/recovery off-site shall be analysed in accordance with Schedule C: Control & Monitoring of this licence.
- 8.8 Waste Acceptance and Characterisation Procedures
  - 8.8.1 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, or as may be amended.
  - 8.8.2 Prior to the commencement of licensed activities the licensee shall establish and maintain written procedures for the acceptance and handling of all wastes at the facility.
    - (i) These procedures shall be in accordance with the requirements of Schedule A: Limitations of this licence.
    - (ii) The procedures shall have regard to the guidance in the EU Decision (2003/33/EC) on establishing the criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive (1999/31/EC) on the landfill of waste.
    - (iii) All waste deliveries that have not been subject to pre-clearance checking arrangements shall be diverted to the quarantine area pending inspection and clearance.
  - 8.8.3 All inert waste accepted at the facility shall comply with the standards established in the EU Decision (2003/33/EC).
  - 8.8.4 No hazardous or liquid wastes shall be disposed of at the facility.

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

### Condition 9. Accident Prevention and Emergency Response

- Prior to the commencement of licensed activities the licensee shall 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 **Prior to the commencement of licensed activities** the licensee shall 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 reoccurrence 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. Restoration and Aftercare Management

- 10.1 The facility shall be restored in accordance with Section 2.3 Restoration and Recovery Activities of the EIS. The site restoration works shall be undertaken on a phased basis, in accordance with Figure 2.4 Restoration Surface of the EIS.
- 10.2 Finished Levels/Profile
  - 10.2.1 The final profile of the facility shall tie in the facility to the surrounding land levels and shall be as shown on Figure 2.4 Restoration Surface of the EIS. The final height shall not exceed 168.0 mAOD (Malin) unless otherwise required by the Planning Authority.
  - 10.2.2 Restored 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.
  - 10.2.3 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.
- 10.5 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 closure, restoration and aftercare of the site or part thereof. This plan shall have regard to the commitments given in the application documentation for this licence. The plan shall be submitted to the Agency for agreement as part of the first AER.
  - 10.7.2 The plan shall be maintained and reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of subsequent AERs. No amendments may be implemented without the prior agreement of the Agency.
- 10.8 The CRAMP shall include, as a minimum, the following:
  - (i) A scope statement for the plan;
  - (ii) The criteria, including those specified in this licence, which define the successful closure and restoration of the facility or part thereof, and which ensure 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 plan;
  - (v) Details of any proposed or required aftercare supervision, monitoring, control, maintenance and reporting requirements for the restored facility; and
  - (vi) Details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.9 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 from any potential emissions point;
  - (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 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 **Eastern Regional Fisheries Board** 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;

des 14 .

- (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; and
- (viii) 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 31<sup>st</sup> 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;
  - (ii) the name of the carrier (including if appropriate, the waste carrier registration details);
  - (iii) the vehicle registration number;
  - (iv) the origin of the waste load;
  - (v) the name of the producer(s)/collector(s) of the waste as appropriate;
  - (vi) a description of the waste including the associated EWC codes;
  - (vii) the quantity of the waste, recorded in tonnes;
  - (viii) the name of the person checking the load; and
  - (ix) 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 Codes 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 waste sent off-site 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 Schedule E: Reporting or as otherwise 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 recovery of C & D derived waste materials.

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 €7,269, 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 2008. The first payment shall be a pro-rata amount for the period from the date of commencement of the licensed activity to the 31st day of December, and shall be paid to the Agency within one month from the date of commencement of the licensed activity. 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 2008, 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 as part of the first AER. 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 subsequent AERs.
- 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 Unless otherwise agreed, any revision to that part of the indemnity dealing with restoration and aftercare liabilities (refer Condition 10.7.1) shall be computed using the following formula:

 $Cost = (ECOST \times WPI) + CiCC$ 

Where:

Cost = Revised restoration and aftercare cost

ECOST = Existing restoration and aftercare cost

WPI = Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e. Materials & Wages) Index], as published by the Central Statistics Office, for the year since last closure calculation/revision.

calculation ie vision.

CiCC = Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes

12.2.5 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

### A.1 Waste Acceptance

Only the inert wastes in Table A.1 are acceptable for recovery at the facility unless otherwise agreed with the Agency. These wastes must satisfy the criteria in Schedule A.2: Acceptance Criteria and Schedule A.3: Limit Values for Pollutant Content for Inert Waste Facilities of this licence.

Table A.1 Waste Categories and Quantities

| EWC<br>CODE                      | WASTE TYPE Notes 1 & 2   | MAXIMUM<br>(TONNES<br>PER<br>ANNUM) |
|----------------------------------|--|-------------------------------------|
| 17 05 04                         | Soils and stones other than those mentioned in 17 05 03 Note 3                       | 344,000                             |
| 17 01 01<br>17 01 02<br>17 01 07 | Concrete, bricks, tiles and ceramics (other than those mentioned in 17 01 06) Note 4 | 56,000                              |
|                                  | TOTAL  | 400,000                             |

Note 1: In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing should be applied or the waste should be refused.

Note 2: The limitation on individual waste types may be varied with the agreement of the Agency subject to the total limit remaining the same.

Note 3: This waste stream may be used for site restoration purposes without further processing.

Note 4: These waste streams may be processed at the facility and re-used for site engineering/development works or exported off-site as recycled aggregates.

### A.2 Acceptance Criteria

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.

All waste loads must provide the following information (if available):

| 494 - 254                           |                            |
|-------------------------------------|----------------------------|
| Waste owner                         | Amount of waste            |
| Source and origin of waste          | Existing data on the waste |
| Description of the waste            | Physical form              |
| Waste Type and EWC code             | Colour                     |
| Type of process producing the waste | Odour                      |

All wastes accepted for recovery at the facility shall undergo the Level 3: On-site verification at a minimum. In addition, a representative load from every excavation/demolition/waste removal works is subjected to a comprehensive assessment which must satisfy Level 1: Basic Characterisation.

The comprehensive assessment must at a minimum include the following:

- 1. A chemical analysis of a representative sample. At least one sample per 2,000 tonnes or portion thereof must be taken for chemical analysis for each excavation or demolition works. However, if the comprehensive assessment is undertaken prior to the commencement of excavation or clearance activity, the licensee may reduce the number of samples for chemical analysis to one for each 5,000 tonnes or portion thereof. The sampling location must be identified on a sampling grid and enclosed in the comprehensive assessment.
- 2. An evaluation of the acceptability of the recovery of the waste at the facility including observance of eluate quality in accordance with Schedule A.3: Limit Values for Pollutant Content for Inert Waste Facilities, of this licence.
- 3. A statement of any pre-treatment requirement (if any).
- 4. Evidence that the waste displays no hazardous properties upon recovery.

If, as a result of examinations undertaken in the course of excavation or clearance activity, the suspicion of contamination should arise, the type and concentration of the contamination must be determined, and its extent established through additional sampling.

Wastes of unknown origin or with insufficient waste description must be subjected to a chemical analysis.

In addition to the assessment above, representative samples upon delivery of wastes must be taken for compliance testing purposes (Level 2). The tests shall focus on key variables and behaviour identified by the chemical analysis. A representative sample shall be taken from **one in every 250 loads of waste** accepted at the facility. This sample shall be subjected to Level 2 testing. Part of this sample shall be retained at the facility for three months and be available for inspection/analysis by the Agency.

### A.3 Limit Values for Pollutant Content for Inert Waste Facilities.

Unless otherwise agreed in writing by the Agency, the eluate quality for any Level 1, or as relevant Level 2, compliance testing on waste for placement in the facility, should be equivalent to background groundwater quality (established in the upgradient well, c.f. Condition 3.15.1, or other approved) for the parameters listed in Schedule C.2.2. The Agency may add to the analytical schedule as deemed necessary.

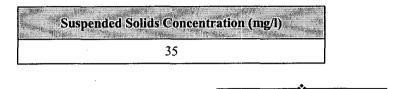
Sampling and testing shall be carried out by independent and qualified persons and institutions. Laboratories shall have proven experience in waste testing and analysis and an efficient quality assurance system. Unless otherwise agreed, the sampling and test methods provided in the Council Decision 2003/33/EC establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Council Directive 1999/31/EC on the landfill of waste shall be used.

### **SCHEDULE B:** Emission Limits

### **B.1** Emissions to Air

There shall be no emissions to air of environmental significance.

### **B.2** Emissions to Water



### **B.3** Emissions to Sewer

There shall be no process effluent emissions to sewer.

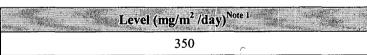
### **B.4** Noise Emissions

| Daytime dB(A) L <sub>Aeq</sub> (30 minutes) | Night-time dB(A) L <sub>Aeq</sub> (30 minutes) |
|---|--|
| 55 Note 1                                   | 45 Note 1                                      |

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

### **B.5** Dust Deposition Limits

Measured at the monitoring points indicated in Schedule C: Control and Monitoring, Table C: Environmental Monitoring Locations



**Note 1:** 30 day composite sample with the results expressed as mg/m<sup>2</sup>/day.

# **SCHEDULE C:** Control & Monitoring

### Table C: Environmental Monitoring Locations

Monitoring locations are shown on Figure EMP5 *Environmental Monitoring Locations* of the Waste Licence Application documentation.

| GROUNDWATER  | DUST | NOISE |
|--------------|------|-------|
| GW1 (PBH2a)  | D1   | N1    |
| GW2 (PBH1a)  | D2   | N2    |
| GW3 (PBH3)   | D3   | N3    |
| GW4 (Well 1) |      |       |
| GW5 (Well 2) |      |       |

**Note:** These monitoring locations may be amended with the agreement of the Agency under Condition 6.6 of this licence.

### C.1.1. Control of Emissions to Air

There shall be no emissions to air of environmental significance.

### C.1.2. Monitoring of Emissions to Air

There shall be no emissions to air of environmental significance.

### C.2.1. Control of Emissions to Groundwater

There shall be no emissions to groundwater of environmental significance.

### C.2.2. Monitoring of Groundwater

| PARAMETER Note 1                    | GROUNDWATER  Monitoring Frequency |
|-------------------------------------|-----------------------------------|
| Level                               | Quarterly                         |
| Visual Inspection                   | Quarterly                         |
| <b>pH</b>                           | Quarterly                         |
| Electrical Conductivity             | Quarterly                         |
| Ammoniacal Nitrogen (as N)          | Quarterly                         |
| Chloride                            | Quarterly                         |
| Sulphate                            | Quarterly                         |
| Dissolved Metals                    | Quarterly                         |
| Total Petroleum Hydrocarbons        | Bi-annually                       |
| Total PAH                           | Bi-annually                       |
| List I/II organic substances Note 2 | Bi-annually                       |

Note 1: 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 VII 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 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent).

### C.2.3. Noise Monitoring

Table C.2.3. Noise Monitoring Frequency & Technique

| Parameter  | Monitoring Frequency | Analysis Method/Technique |
|--|----------------------|---------------------------|
| L(A) <sub>EQ</sub> [30 minutes]                  | Annually             | Standard Note 1           |
| L(A) <sub>10</sub> [30 minutes]                  | Annually             | Standard Note 1           |
| L(A) <sub>90</sub> [30 minutes]                  | Annually             | Standard Note 1           |
| Frequency Analysis (1/3<br>Octave band analysis) | Annually             | Standard Note 1           |

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

### C.2.4 Dust Monitoring

Table C.2.4. Dust Monitoring Frequency and Technique

| Parameter                   | Monitoring Frequency | Analysis Method/Technique |
|-----------------------------|----------------------|---------------------------|
| Dust deposition (mg/m²/day) | Bi-annually          | Standard Method           |

### C.3.1. Control of Emissions to Sewer

There shall be no process effluent emissions to sewer.

### C.3.2. Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.

### C.4 Waste Monitoring

| Waste Class  | Frequency       | Parameter                 | Method          |
|--|-----------------|---------------------------|-----------------|
| Non-inert waste to be removed off-site for recovery/disposal | Per consignment | Basic<br>Characterisation | Standard Method |
| Other Note:1   |                 |                           |                 |

Note 1: Analytical requirements to be determined on a case by case basis.

# **SCHEDULE D:** Specified Engineering Works

### **Specified Engineering Works**

Installation of weighbridge and new wheel wash facility.

Installation of groundwater management infrastructure.

Installation of surface water management infrastructure.

Removal of site infrastructure.

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

or 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<br>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                | Prior to the commencement of the licensed activity, 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.

Remaining void, projected completion date.

Resource consumption summary.

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.

Tank and pipeline testing and inspection report.

Reported incidents summary.

Energy efficiency audit report summary.

Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.

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.

Any amendments to 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 Age | ncy         |                   |  |
|----------------------------------|-------------|-------------------|--|
| On the xx day of xxxxx. 200X     | xxxxxxxxxxx | Authorised Person |  |