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Ireland

**WASTE LICENCE
Proposed Decision**

Licence Register Number:	W0255-02
Company Register Number:	300658
Licensee:	Tulligmore Quarry Solutions Limited
Location of Facility:	Tulligmore Dripsey County Cork

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 infill of spent areas of a quarry using imported inert soils and stones and suitable construction and demolition (C&D) material at Tulligmore, Dripsey, County Cork. The amount of inert material to be imported and placed at the facility is approximately 280,000 tonnes per annum. Following completion of the infilling operations, the facility will be restored to agricultural grassland, which is in keeping with the character of the surrounding area.

The facility will accept construction and demolition (C&D) waste and process it by inspection, segregation and mechanical screening to an aggregate product or for use on on-site roads and hardstanding.

This facility is classed as a recovery facility, with the principal activity identified as Class 5 of the Fourth Schedule to the Waste Management Acts 1996 to 2012; recycling or reclamation of inorganic materials.

Only C&D recycled material, which has already been recovered/processed and deemed fit for re-use will be used as part of the on-site engineering works.

The licence requires the implementation of robust waste acceptance and inspection procedures to ensure that only inert wastes are used in facility 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 facility's process emission to water is not generated by the licensable activities on-site, but rather the by the associated quarrying activity. Groundwater is used to wash the sands and gravels and this water is recirculated within the quarry via settlement lagoons. The water used in the quarry washing plant is stored in a sump/pond. The spent wash water, which contains sand and silt, is pumped to settlement ponds on the facility, whereupon clarification, it is recirculated to the sump/pond. Rainfall on-site requires the provision for seasonal discharging of excess lagoon water to a stream on the eastern facility boundary (the Deeshart/Meeshal stream, WFD Code: IE_SW_19_1473; a tributary of the River Dripsey). The licence allows the discharge of 2000m³/day (75m³/hour) of wastewater during the months of October to April inclusive, from the quarry operations, to this stream.

The licence sets out in detail the conditions under which Tulligmore Quarry Solutions Limited 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 2012 / Waste Management Acts 1996 to 2012, unless otherwise defined in the section.

Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Agreement	Agreement in writing.
Annually	At approximately twelve-monthly intervals.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility, duly authorised under relevant law and 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	At approximately six – monthly intervals.
Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
CBOD	5 day Carbonaceous Biochemical Oxygen Demand (with nitrification suppression).
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Construction and demolition (C&D) waste	Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.
Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
CRO Number	300658.

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.
Daytime	0700hrs to 1900hrs.
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.
EMP	Environmental Management Programme.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> , 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.
Evening Time	1900hrs to 2300hrs.
Extractive waste	As defined in Regulation 3(2) of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, S.I. No. 566 of 2009.
Facility	Any site or premises used for the purpose of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
Gas Oil	Gas Oil as defined in Council Directive 1999/32/EC and meeting the requirements of S.I. No. 119 of 2008.
GC/MS	Gas chromatography/mass spectroscopy.

Green Waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
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.
HFO	Heavy Fuel Oil as defined in Council Directive 1999/32/EC and meeting the requirements of S.I. No. 119 of 2008.
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 exceedance of the daily duty capacity of the waste handling equipment; (iv) any trigger level specified in this licence which is attained or exceeded; and, (v) any indication that environmental pollution has, or may have, taken place.
Industrial waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2012.
IPPC	Integrated Pollution Prevention & Control.
K	Kelvin.
kPa	Kilopascals.
Landfill Directive	Council Directive 1999/31/EC.
L_{eq}	Equivalent continuous sound level.
Licensee	Tulligmore Quarry Solutions Limited, Tulligmore, Dripsey, County Cork, CRO Number 300658.

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	Cork 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.
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
Mass flow threshold	A mass flow rate above which a concentration limit applies.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
Night-time	2300hrs to 0700hrs.
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	Cork County Council.
Pollution Reduction Plan	Plan established in accordance with Part V of the European Communities Environmental Objectives (Surface Waters) Regulations S.I No. 272 of 2009, as amended, for the reduction of pollution from priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.
PRTR	Pollutant Release and Transfer Register.
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 <i>Schedule B: Emission Limits</i> , 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	Cork County Council.
Extractive waste facility	As defined in Regulation 3(2) of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009.
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 2012.

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 2012, the Environmental Protection Agency (the Agency), proposes under Section 46(8) of the said Acts to grant this Waste Licence to Tulligmore Quarry Solutions Limited, Tulligmore, Dripsey, County Cork, to carry on the waste activities listed below at Tulligmore, Dripsey, County Cork, 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 2012

Class R 5.	Recycling/reclamation of other inorganic materials, which includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.
Class R 13.	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage (being preliminary storage according to the definition of 'collection' in section 5(1)), pending collection, on the site where the waste is produced).

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 Drawing No. 2, Rev. C *Site layout plan licence area* of Attachment B.2 of the licence application Register Number W0255-01. 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:
- facility 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 2012 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 This licence is being granted in substitution for the waste licence granted to the licensee on 20 July 2010 (Register No: W0255-01). The previous waste licence (Register No: W0255-01) is superseded by this licence.
- 1.8 Waste Acceptance Hours and Hours of Operation
- 1.8.1 Waste may be accepted at the facility only between the hours of 08:00 and 18:30 Monday to Friday inclusive (excluding Public Holidays), and between 08:00 and 14:00 hours on Saturdays, unless otherwise agreed by the Agency.
- 1.8.2 The facility may be operated only between the hours of 07:30 to 18:30 Monday to Friday inclusive (excluding Public Holidays), and 07:30 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 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 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 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

The licensee shall maintain onsite written details of the management structure of the facility. Any proposed replacement in the management structure from that submitted in the application shall be notified in advance in writing to the Agency. Written details of the management structure shall include the following information:

- a) The names of all persons who are to provide the management and supervision of the waste activities authorised by the licence, in particular the name of the facility manager and any nominated deputies;
- b) Details of the responsibilities for each individual named under a) above; and
- c) Details of the relevant education, training and experience held by each of the persons nominated under a) above.

2.2.2.2 Schedule of Environmental Objectives and Targets

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

2.2.2.9 Efficient Process Control

The licensee shall maintain a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented, and analysed to identify any necessary corrective action.

<p>Reason: <i>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.</i></p>

Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain, for each component of the facility, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application that relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.
- 3.2 Facility Notice Board
- 3.2.1 The licensee shall maintain the 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.
- 3.2.2 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.
- 3.2.3 A plan of the facility clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the entrance to the facility. The plan shall be displayed on a durable material such that is legible at all times. The plan shall be replaced as material changes to the facility are made.
- 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 A Quality Assurance Plan shall be in place for all specified engineering works and shall have regard to the guidance set out in the EPA Manual *Landfill Site Design*.
- 3.3.4 Construction Quality Assurance shall be undertaken by an independent third party on behalf of the licensee.
- 3.3.5 Following the completion of any specified engineering works, the licensee shall complete a Construction Quality Assurance Validation Report. 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) The Quality Assurance Plan (including the Construction Quality Assurance and Manufacturing Quality Assurance Plans);
 - (iv) The name(s) of the independent contractor(s)/individual(S) responsible for each aspect of the Construction Quality Assurance and Manufacturing Quality Assurance Plans;

- (v) Records and results of all tests carried out (including failures);
 - (vi) Drawings and sections showing the location of all samples and tests carried out;
 - (vii) Name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
 - (viii) Records of any problems and the remedial works carried out to resolve those problems;
 - (ix) Records of Manufacturing Quality Assurance and Construction Quality Assurance certification; and
 - (x) 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 facility 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 Road and Hardstanding
- 3.5.1 Effective facility 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 Drawing No. 0513902-03 *Site layout Plan Eastern Section* 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 Surface water run-off from this area shall be directed to the underground attenuation tank, as shown on Drawing No. 0513902-03 *Site layout Plan Eastern Section* of the EIS and shall be tankered off-site for disposal at a waste water treatment plant to be agreed by the Agency.

- 3.8 Weighbridge and wheelwash
 - 3.8.1 The licensee shall provide and maintain a weighbridge and wheelwash at the facility.
 - 3.8.2 The wheelwash 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 wheelwash facility shall be collected and directed to a silt trap and oil interceptor as described in section 3.1.1.3 of the EIS included as part of the application for licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.
- 3.9 Silt Traps and Oil Separators
 - 3.9.1 All storm water discharges from the installation, other than from roofs, shall pass through a silt trap in advance of discharge; unless otherwise agreed with the Agency.
 - 3.9.2 All storm water discharges from yard areas shall pass through an oil separator. The separator shall be a Class I full retention separator, unless otherwise agreed by the Agency.
 - 3.9.3 The silt traps and separator shall be in accordance with I.S. EN-858-2: 2003 (separator systems for light liquids), unless otherwise agreed by the Agency.
- 3.10 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.
- 3.11 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.
- 3.12 Tank, Container and Drum Storage Areas
 - 3.12.1 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).
 - 3.12.2 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.
 - 3.12.3 All drainage from bunded areas shall be treated as contaminated unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal, unless it can be deemed uncontaminated and does not exceed the trigger levels set for storm water emissions under Condition 6.12.
 - 3.12.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
 - 3.12.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
 - 3.12.6 Facilities for fuel storage and re-fuelling of plant 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.
- 3.13 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 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate).

- 3.15 The provision of a catchment system to collect any leaks from flanges and valves of all over-ground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2, of this licence for the reduction in fugitive emissions.
- 3.16 The licensee shall maintain in a prominent location on the facility a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the facility.
- 3.17 Groundwater
- 3.17.1 The licensee shall maintain groundwater monitoring boreholes at MW-2, MW-3 and MW-4 as shown on Fig. 1 Rev A in Attachment E.4 included in the application for licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.
- 3.17.2 The location of all monitoring boreholes shall be subject to reassessment and agreement by the Agency every three years, or as otherwise requested by the Agency.
- 3.17.3 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.
- 3.18 Surface water
- 3.18.1 The licensee shall maintain a continuous recording flow meter at emission point SW1.
- 3.18.2 The licensee shall provide and maintain collection drains which will drain to the settlement ponds as described in Section 6 of the EIS and as detailed in Drawing 0513902-05 *Site Layout Map*, included in the application for licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.
- 3.18.3 The licensee shall submit a method statement to Inland Fisheries Ireland for approval prior to the construction of the proposed settlement pond adjacent to the Materials Recycling/Recovery Area (Drawing No. 0513902-03 Site layout Plan- Eastern Section, included in the application for licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.) having regard to the Fisheries guideline document "Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites".
- 3.19 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.
- 3.20 The licensee shall have regard to the Agency Guidance document *Environmental Management in the Extractive Industry (non-scheduled activities)* and any future guidance published by the Agency relevant to the extractive industry.
- 3.21 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 system and percolation area shall satisfy the criteria set out in the *Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (p.e ≤ 10)*, published by the Environmental Protection Agency.

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 waters in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring
No flow value shall exceed the specific limit.
- 4.1.2 Discrete Sampling
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 ($L_{Aeq, T}$) measured at noise sensitive locations of the facility 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 facility shall result in an impairment of, or an interference with amenities or the environment beyond the installation boundary or any other legitimate uses of the environment beyond the installation boundary.
- 5.3 No substance shall be discharged in a manner, or at a concentration, that, following initial dilution, causes tainting of fish or shellfish.
- 5.4 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.
- 5.5 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.
- 5.6 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 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.4 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).
- 6.5 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.
- 6.6 All treatment/abatement and emission control equipment shall be calibrated and maintained in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.7 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.
- 6.8 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.9 In advance of commencement of the licensed activity the integrity and water tightness of all underground 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. 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.
- 6.10 The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected

- for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.
- 6.11 An inspection for leaks on all flanges and valves on over-ground pipes used to transport materials other than water shall be carried out weekly. A log of such inspections shall be maintained.
- 6.12 Storm Water
- 6.12.1 A visual examination of the storm water discharges shall be carried out daily. A log of such inspections, shall be maintained.
- 6.12.2 A licensee shall, within six months of the date of grant of this licence, establish suitable trigger levels for pH, Conductivity, COD and TOC in storm water discharges, such that storm waters exceeding these levels will be diverted for retention and suitable disposal. The licensee shall have regard to the Environmental Protection Agency "Guidance on the setting of trigger values for storm water discharges to off-site surface waters at EPA IPPC and Waste licensed facilities" when establishing the suitable trigger levels.
- 6.13 Noise
- 6.13.1 The licensee shall carry out a noise survey of the installation operations annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)' as published by the Agency.
- 6.13.2 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.
- 6.14 Pollutant Release and Transfer Register (PRTR)
- The licensee shall prepare and report a PRTR for the facility. The substance and/or wastes 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. 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.
- 6.15 In advance of commencement of the licensed activity, the licensee shall develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.16 The licensee shall review the Pollution Reduction Plan for their river basin district and shall, where appropriate, implement applicable measures or controls in order to reduce emissions of priority substances and/or cease or phase out emissions, discharges and losses of priority hazardous substances. The licensee shall submit a report on such measures as part of the Annual Environmental Report (AER).
- 6.17 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.
- 6.18 Operational Controls
- 6.18.1 There shall be no public access to the facility.
- 6.18.2 Wastes, once deposited and covered, shall not be excavated, disturbed or otherwise picked over unless with the prior agreement of the Agency.
- 6.18.3 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.
- 6.18.4 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.

- 6.18.5 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.
- 6.18.6 No smoking shall be allowed at the facility.
- 6.19 Dust Control
 - 6.19.1 In dry weather, facility roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
 - 6.19.2 Each completed sub phase shall be seeded within 1 month of commencement of the next sub phase.
 - 6.19.3 Restored areas (completed phases) shall be seeded within 1 month after placement of cover soils
 - 6.19.4 Temporary stockpiles of imported soils shall be located away from sensitive receptors in order to minimise airborne dust emissions.
- 6.20 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.
- 6.21 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 and to provide for the requirements of the Water Services Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2012.*

Condition 7. Resource Use and Energy Efficiency

- 7.1 The licensee shall carry out an audit of the energy efficiency of the facility. 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 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.
- 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.

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

Condition 8. Materials Handling

- 8.1 Disposal or 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 facility of the activity to the facility 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 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.
- 8.6 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 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.
- 8.9 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.
- 8.10 Waste and materials shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The licensee shall submit, for the agreement of the Agency, prior to the commencement of waste acceptance, a revision of Drawing No. 2 Rev C of the licence application clearly showing the designated areas. The waste and materials shall be clearly labelled and appropriately segregated. The quantity of waste to be stored in each location shall be agreed with the Agency and shall not be exceeded unless agreed by the Agency.
- 8.11 Waste Acceptance and Characterisation Procedures
- 8.11.1 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.
- 8.11.2 Prior to the commencement of licensed activities 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.
- 8.11.3 No hazardous or liquid wastes shall be disposed of at the facility.
- 8.12 Extractive Waste Management
- The licensee shall draw up a Waste Management Plan (to be known as an Extractive Waste Management Plan) for the minimisation, treatment, recovery and disposal of extractive waste. This Plan shall meet the requirements of Regulation 5 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009. The Plan shall be submitted for agreement by the Agency within six months of the date of grant of this licence.

The Plan shall be reviewed at least once every five years thereafter in a manner agreeable to the Agency and amended in the event of substantial changes to the operation of a waste facility or to the waste deposited. Any amendments shall be notified to the Agency.

All extractive waste shall be managed in accordance with the Extractive Waste Management Plan. A report on the implementation of the Extractive Waste Management Plan shall be provided in the AER.

8.13 Excavation Voids

When placing extractive waste into excavation voids for rehabilitation and construction purposes, the licensee shall, in accordance with Regulation 10 of the Waste Management (Management of Waste from the Extractive Industries) Regulations, 2009, and the Extractive Waste Management Plan:

- (i) Secure the stability of the waste.
- (ii) Put in place measures to prevent pollution of soil, surface water and ground water.
- (iii) Carry out monitoring of the extractive waste and excavation void.

8.14 Extractive Waste Facilities

8.14.1 No new extractive waste facility may be developed or an existing extractive waste facility modified unless agreed by the Agency.

8.14.2 The licensee shall ensure that all existing extractive waste facilities are managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.

8.14.3 The licensee shall ensure that all new extractive waste facilities are constructed, managed and maintained to ensure their physical stability and to prevent pollution or contamination of soil, air, surface water or groundwater.

8.14.4 Operational measures shall be continuously employed to prevent damage to extractive waste facilities from personnel, plant or equipment.

8.14.5 The licensee shall establish and maintain a system for regular monitoring and inspection of extractive waste facilities.

8.14.6 All records of monitoring and inspection of extractive waste facilities, as required under the licence, shall be maintained on-site in order to ensure the appropriate handover of information in the event of a change of operator or relevant personnel.

<p>Reason: <i>To provide for the appropriate handling of material and the protection of the environment.</i></p>

Condition 9. Accident Prevention and Emergency Response

9.1 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 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 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 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the facility 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.

10.2 The facility shall be restored in accordance with Attachment K2 – Aftercare Management Plan of the licence application register number W0255-01. The facility restoration works shall be undertaken on a phased basis, in accordance with the stages outlined in Attachment K2 and Drawing No. 0513902-5 and No. 0513903 of said licence application.

10.3 Finished Levels/Profiles

10.3.1 The final profile of the facility shall tie in the facility to the surrounding land levels and shall be as shown on Drawing No. 0513903 and No. 0513904 in the licence application register number W0255-01.

10.3.2 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.

10.3.3 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.

10.4 Final Capping

10.4.1 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.

10.4.2 Unless otherwise agreed by the Agency, the final capping shall consist of the following:

- (i) Top soil (at least 150 – 300mm); and
- (ii) Subsoils, such that total thickness of top soil and subsoils is at least 1m.

- 10.5 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.
- 10.6 All waste activities at the facility shall cease upon the installation of the final capping unless otherwise agreed by the Agency.
- 10.7 The licensee shall undertake measures as necessary to prevent the release of suspended solids to receiving waters during the facility restoration activities, in particular during final capping, final contouring and landscaping works.
- 10.8 Closure, Restoration and Aftercare Management Plan (CRAMP)
 - 10.8.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning, closure restoration and aftercare of the facility or part thereof. This plan shall have regard to the commitments given in the application documentation for this licence. This plan shall be submitted to the Agency for agreement.
 - 10.8.2 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.
 - 10.8.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Residuals Management Plans and Financial Provision when implementing Condition 10.8.1 above.
- 10.9 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 decommissioning, closure and restoration 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
 - (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.
- 10.10 A final validation report to include a certificate of completion for the Decommissioning Management Plan, for all or part of the facility 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 including bypasses;

- (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.

- 11.2 In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and 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. A Reported Incidents Summary shall be submitted in the AER.
- 11.4 Within 18 months of the date of commencement of waste acceptance, the licensee shall arrange for the carrying out of an independent assessment and report on surface VOC emissions at the facility and a report shall be submitted in the AER. This assessment shall be repeated as required by the Agency.
- 11.5 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.
- 11.6 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.
- 11.7 The licensee shall as a minimum keep the following documents at the facility:
- (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 facility 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.

- 11.8 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.
- 11.9 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.
- 11.10 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 facility. 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/disposed on-site.
- 11.11 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.
- 11.12 All reports shall be certified accurate and representative by the facility manager or a nominated, suitably qualified and experienced deputy.
- 11.13 Waste Recovery Reports
- The licensee shall as part of the Annual Environmental Report for the facility 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 tonnages of 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 €10,861.72, 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 2012. 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 Waste Management Acts 1996 to 2012, 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 facility 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) which addresses 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. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. Review results are to 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 associated with the operation (including closure, restoration and aftercare). 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 revise the cost of closure, restoration and aftercare annually and any adjustments shall be reflected in the financial provision made under Condition 12.2.3.
- 12.2.5 Unless otherwise agreed, any revision to that part of the indemnity dealing with closure, restoration and aftercare liabilities shall be computed using the following formula:

$$\text{Cost} = (\text{ECOST} \times \text{WPI}) + \text{CiCC}$$

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.

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

12.2.6 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Residuals 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 by the Agency. These wastes must satisfy the criteria in *Schedule A.2: Acceptance Criteria for materials to be used for restoration at the facility*, of this licence.

Table A.1 Waste Categories and Quantities

EW CODE	WASTE TYPE ^{Notes 1 & 2}	MAXIMUM (tonnes per annum) ^{Note 5}
17 05 04	Soil and stones other than those mentioned in 17 05 03 ^{Note 3}	100,000
17 01 01	Concrete ^{Note 4}	180,000
17 01 02	Bricks ^{Note 4}	
17 01 03	Tiles and ceramics ^{Note 4}	
17 01 07	Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 ^{Note 4}	

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.

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

Note 4: These waste streams may be used for on-site engineering works.

Note 5: The limitation on individual waste types may be varied with the agreement of the Agency subject to the total limit remaining the same.



A.2 Acceptance Criteria for materials to be used for restoration (including site engineering/development) at the facility

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 for restoration at the facility shall undergo Level 3 verification/inspection as a minimum. And, notwithstanding Condition 11.9, 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 code 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 8.11.2.

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 8.11.2 (and to incorporate appropriate elements of Level 1 and/or Level 2 testing).

Wastes of EWC code 17 01 01, 17 01 02, 17 02 03 and 17 01 07, where these are to be used for site engineering/ development works, shall be subject, on a batch basis but prior to use, to Level 1 and/or Level 2 testing according to a procedure to be agreed in accordance with Condition 8.11.2. For sampling and characterisation purposes, individual batches shall be no larger than 5,000 tonnes. All batches of recycled waste used for site engineering/development works, however small, shall be associated with at least one sample taken for Level 1 and/or Level 2 testing and records shall be maintained to demonstrate this.

In relation to all wastes proposed to be tested according to agreed protocols, including soil and stones (EWC code 17 05 04) and wastes of EWC code 17 01 01, 17 01 02, 17 02 03 and 17 01 07, the licensee shall, in accordance with Condition 8.11.2, propose maximum concentrations and/or trigger levels for contaminants in the materials proposed to be recovered (as restoration materials). 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 Water

Emission Point Reference No: SW1
Name of Receiving Waters: Deeshart/Meeshal Stream
Location: Grid Ref. E148279, N077148
Volume to be emitted: ^{Note 1} Maximum in any one day: 2000 m³
 Maximum in any one hour: 75 m³

Parameter ^{Note 2}	Emission Limit Value
pH	6 – 8.5
	mg/l
Suspended Solids	25
Total Petroleum Hydrocarbons	0.1
	µg/l
Mercury	0.15
Cadmium	0.6
Arsenic	35
Lead	10
Chromium	5
Copper	7
Nickel	25
Zinc	70

Note 1: There shall be no discharge between the months of May to September inclusive without the prior written agreement of the Agency.

Note 2: Samples taken for the purposes of compliance with this schedule may be taken by grab sampling at times of discharge. The procedure for this sampling shall be agreed by the Agency prior to the commencement of activity at the facility. This procedure shall ensure that the sample(s) taken are representative of the process water contained in the settlement lagoon prior to discharge.

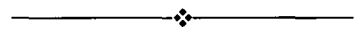
B.3 Emissions to Sewer

There shall be no process effluent emissions to sewer.

B.4 Noise Emissions ^{Note 1}

Daytime dB L_{Ar, T} (30 minutes)	Night-time dB L_{Aeq, T} (15-30 minutes)
55	45

Note 1: 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*, of this licence.

Level (mg/m² /day) ^{Note 1}
350

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}

GROUNDWATER	DUST	NOISE
MW-2	AD1	AN1
MW-3	AD2	AN2
MW-4	AD3	AN3
	AD4	AN4
		AN5

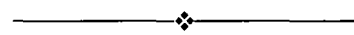
Note 1: These monitoring locations may be amended with the agreement of the Agency under Condition 6.7 of this licence.

Note 2: Monitoring locations as shown on Drawing No. 4 *proposed Monitoring Locations* of Attachment F.2 of licence application, included as part of the application for Licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.



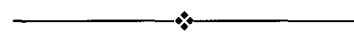
C.1.1. Control of Emissions to Air

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.



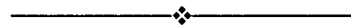
C.2.1. Monitoring of Emissions to Water

Emission Point Reference No: SW1 – discharge to stream and receiving water locations SW2 and SW3 on Drawing No. 4 of Attachment F.2 of licence application, included as part of the application for Licence Register No. W0255-01, submitted to the Agency on the 20th January 2009.

Description of Treatment: Settlement Lagoons

Control Parameter	Monitoring	Analysis Method/Technique
Flow	Continuous during discharge ^{Note 1}	Standard Method
Suspended solids	Quarterly grab sample ^{Note 4}	Standard method
Total Petroleum Hydrocarbons	Quarterly grab sample ^{Note 4}	Standard Method
Total Heavy Metals ^{Note 2}	Quarterly grab sample ^{Note 4}	Standard Method
Priority Substances ^{Note 3}	As required by the Agency	Standard Method

- Note 1: Not applicable to receiving water locations.
- Note 2: Arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc.
- Note 3: The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to "Guidance on the Screening for Priority Substances for Waste Water Discharge Licences" issued by the Agency. Monitoring for the identified priority substances or pollutants shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency.
- Note 4: Quarterly sampling requirement not applicable to SW1. Grab sample during discharge only required for discharge to stream.



C.3.1. Control of Emissions to Groundwater

There shall be no emissions to groundwater of environmental significance.



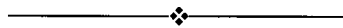
C.3.2 Monitoring of Groundwater

Location: MW-2, MW-3, MW-4

Parameter	Monitoring Frequency	Analysis Method/Techniques
Level	Quarterly	pH electrode/meter
Visual Inspection	Quarterly	Standard Method
pH	Quarterly	Standard Method
Conductivity	Quarterly	Standard Method
Total Ammonia	Quarterly	Standard Method
Chloride	Quarterly	Standard Method
Sulphate	Quarterly	Standard Method
Dissolved Metals ^{Note 1}	Annually	Standard Method
Total Petroleum Hydrocarbons	Annually	Standard Method
Total PAH	Annually	Standard Method
Hazardous Substances ^{Note 2}	Annually	Standard Method

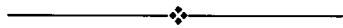
Note 1: Aluminium, arsenic, boron, cadmium, chromium, copper, lead, mercury, nickel, and sodium.

Note 2: The relevant hazardous substances for monitoring in groundwater shall be identified by the licensee by undertaking a risk based assessment. The Licensee shall have regard to the 'Classification of Hazardous and Non-hazardous Substances in Groundwater' issued by the Agency. Monitoring for the identified hazardous substances shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency.



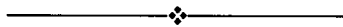
C.4.1. Control of Emissions to Sewer

There shall be no process effluent emissions to sewer.



C.4.2. Monitoring of Emissions to Sewer

There shall be no process effluent emissions to Sewer.



C.5 Waste Monitoring

Waste Class	Frequency	Parameter	Method
Non-inert 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. Maximum 120 samples per year	To be agreed	To be agreed
Other ^{Note 2}			

Note 1: A representative sample of the deposited waste shall be taken at least every 3 metres depth and 2,000m² area of fill, 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.

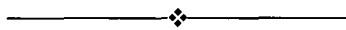


C.6 Dust Monitoring

Location:

AD1, AD2, AD3, AD4

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition (mg/m ² /day)	Bi-annually	Standard Method



SCHEDULE D: Specified Engineering Works

Specified Engineering Works
Installation of surface water management infrastructure.
Installation of waste management infrastructure (hardstanding and quarantine areas).
Each stage of deposition/infilling.
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 Frequency ^{Note 1}	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}
<p>Emissions from the facility.</p> <p>Waste management record.</p> <p>Report on implementation of Extractive Waste Management Plan.</p> <p>Waste recovery report.</p> <p>Remaining void space, projected completion date.</p> <p>Annual stability assessment report.</p> <p>Resource consumption summary.</p> <p>Statement of compliance of facility with any updates of the relevant Waste Management Plan.</p> <p>Complaints summary.</p> <p>Schedule of Environmental Objectives and Targets.</p> <p>Environmental management programme – report for previous year.</p> <p>Environmental management programme – proposal for current year.</p> <p>Pollutant Release and Transfer Register – report for previous year.</p> <p>Pollutant Release and Transfer Register – proposal for current year.</p> <p>Pollution Reduction Measures Report.</p> <p>Noise monitoring report summary.</p> <p>Dust monitoring summary.</p> <p>Tank and pipeline testing and inspection report.</p> <p>Reported incidents summary.</p> <p>Energy efficiency audit report summary.</p> <p>Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.</p> <p>Development/Infrastructural works summary (completed in previous year or prepared for current year).</p> <p>Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.</p> <p>Review of Closure, restoration & aftercare management Plan.</p> <p>Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).</p> <p>Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on-site change) including financial provisions.</p> <p>Surface VOC emissions report.</p> <p>Any other items specified by the Agency.</p>

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

Signed on behalf of the said Agency

On the 1st day of February, 2013



 Mary Turner, **Authorised Person**