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WASTE LICENCE

Recommended Final Decision

Licence Register Number:	W0213-01
Applicant:	Roadstone Dublin Limited
Location of Facility:	Roadstone Dublin Remediation Facility, Dillonsdown, Deerpark, Newpaddocks and Santryhill Townlands, Blessington, County Wicklow

INTRODUCTION

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

This waste licence is for activities associated with the cleanup of unauthorised landfill of approximately 300,000 tonnes (applicant's estimate) of mixed construction, demolition, commercial, industrial and municipal wastes within Roadstone Dublin's landholding, north of Blessington, Co. Wicklow. This licence sets out the framework and requisite control's for the excavation, treatment, recovery and handling of all illegally deposited waste at the application site. The licence mandates the removal off-site of all domestic and commercial and other non-inert wastes to an approved disposal/recovery facility. The licence requires that excavated areas be landscaped and reclaimed using inert materials recovered on the site, and set out certain requirements for post-remediation validation and monitoring. The duration of the remediation project is expected to be 4 to 6 months, with the historical wastes excavated for processing within the first 8 weeks of commencement of the activity.

The licensee must manage and operate the facility to ensure that the activities do not cause environmental pollution. The licensee is required to carry out regular environmental monitoring and submit all monitoring results, and a wide range of reports on the operation and management of the facility to the Agency. The licence establishes a framework for independent supervision of the remediation activities.

The licence sets out in detail the conditions under which Roadstone Dublin 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 & 2003, and the Waste Management Acts 1996 to 2005, (the Acts), unless otherwise explained in this section.

Agent (site Agent)	Independent specialist retained by the Agency and authorised under Section 14 of the Waste Management Acts 1996 – 2005, to monitor and report on the remediation program for the site.
Applicant	Roadstone Dublin Limited, Fortunestown, Tallagh, Dublin 24
Application	Means the application documentation for waste licence register 213-01 .
BAT	Best Available Techniques.
Bi-annually	All or part of a period of six consecutive months.
Biennially	Once every two years.
Biodegradable waste/Biowaste	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
BOD	5 day Biochemical Oxygen Demand.
CEN	Comité Européen De Normalisation – European Committee for Standardisation
COD	Chemical Oxygen Demand.
Compost	Stable, sanitised and humus like material rich in organic matter and free from offensive odours resulting from composting, of separately collected biowaste which complies with the environmental quality classes outlined in <i>Schedule E: Standards for Compost Quality</i> , of this licence.
Construction and Demolition Waste	Wastes that arise from construction, renovation and demolition activities, as identified in Chapter 17 of the EWC or as otherwise may be agreed with Agency.
Containment boom	A boom which 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.
Daytime	0800 hrs to 2000 hrs.
DB(A)	Decibels (A weighted).
DO	Dissolved Oxygen.
Documentation	Any report, record, result, 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.
Emission Limits	Those limits, including concentration limits and deposition rates established in

Schedule B: Emission Limits, of this licence.

EMP	Environmental Management Programme.
Environmental Damage	Has the meaning given it 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 purposes of the recovery or disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
GC/MS	Gas Chromatography/Mass Spectroscopy
Green waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
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.
HSA	Health & Safety Authority.
ICP	Inductively Coupled Plasma Spectroscopy.
Incident	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none">a) an emergency;b) any emission which does not comply with the requirements of this licence;c) any exceedence of the daily duty capacity of the waste handling equipment;d) any trigger level specified in this licence which is attained or exceeded; and,e) 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 2005.
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.
Initial Development Works	Means such works, actions or constructions as may be specified, which for the purposes of environmental protection and safe construction and operation of the facility, have to be carried out in the initial stages of site development, and in

	any case prior to the commencement of construction of the landfill cells.
Landfill Directive	Council Directive 1999/31/EC.
Leq	Equivalent continuous sound level.
Licensee	Roadstone Dublin Ltd, Fortunestown, Tallagh, Dublin 24
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	Wicklow County Council
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
Mass Flow Limit	An Emission Limit Value which is expressed as the maximum mass of a substance which can be emitted per unit time.
Mass Flow Threshold	A mass flow rate, above which, a concentration limit applies.
MBT	Mechanical Biological Treatment.
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 approximately monthly intervals.
Night-time	2000 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.
Odour Sensitive Location (OSL)	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 odour at nuisance levels.
Oil Separator	Device installed according to the International Standard I.S.EN 858-2:2003 (Separator systems for light liquids, (e.g. oil and petrol)-Part 2:Selection of nominal size, installation, operation and maintenance.
PER	Pollution Emission Register.
Quarterly	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.
Remediation operations	In the context of this facility, means works and activities associated with the preparation for the removal of the illegal waste, its excavation and processing/recovery, and the restoration of the excavated areas. Operations will include export of non-inert waste from the site for safe disposal/recovery, and the placement of inert waste on the site as part of the

restoration; and also includes monitoring, maintenance, supervision, control and reporting activities, and other matters as specified in this licence.

Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
Sanitary Authority	Wicklow County Council
Sanitary Effluent	Waste water from facility toilet, washroom and canteen facilities
SOP	Standard Operating Procedure.
Stabilised Biowaste	Waste resulting from the mechanical/biological treatment of unsorted waste or residual municipal waste including treated biowaste which does not comply with the environmental quality classes outlined in <i>Schedule F: Reporting</i> , of this licence.
Standard Method	A National, European or internationally recognised procedure (eg, I.S. EN, ISO, CEN, BS or equivalent), as 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.
Temporary storage	In relation to waste is a period of less than six months as defined in the Waste Management Acts 1996 to 2005.
The Agency	Environmental Protection Agency.
TOC	Total Organic Carbon.
Trade Effluent	Trade Effluent has the meaning given in the water pollution Acts 1977 and 1990
Trigger Level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
WEEE	As defined in S.I. No. 340 of 2005
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 Decisions

The Environmental Protection Agency, pursuant to its powers under Section 40(1) of the Waste Management Acts, 1996-2005 **grants a waste licence to Roadstone Dublin Limited to carry on the waste activities specified in Part I of this licence that are the subject of waste licence application register number 213-01 at Roadstone Dublin Remediation Facility, Dillonsdown, Deerpark, Newpaddocks and Santryhill Townlands, Blessington, County Wicklow, subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in this licence. The activities specified in Part II of this licence, similarly applied for, are refused for the reason specified therein.**

The 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 2005.

In reaching this decision the Environmental Protection Agency **has considered the Circular of the Department of the Environment, Heritage & Local Government (WIR 04/05, 3-5-05)**, the application, the objection and supporting documentation received from the applicant, all submissions received from other parties, and the reports of its inspectors.

For the purposes of Article 48 of the Waste Management (Licensing) Regulations 2004 (S.I. No. 395) this facility is classed as an inert waste land filling facility.

Part I Schedule of Activities Licensed

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2005

Class 1.	Deposit on, in or under land (including landfill).
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2005

Class 4.	Recycling or reclamation of other inorganic materials.
Class 10.	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.
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

Refused waste disposal activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2005

Class 5.	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.
	<i>Reason: The construction of lined and capped landfill cells is not provided for in the licence, as it requires the removal off-site of all domestic and commercial and other non-inert wastes to an approved disposal/recovery facility</i>

Part III Conditions

Condition 1. Scope

- 1.1 Waste activities at this facility shall be restricted to those listed and described in Part I Activities Licensed, and shall be as set out in the licence applications or as modified under Condition 1.6 of this licence and subject to the conditions of this licence.
- 1.2 Waste processing operations at this facility shall be limited as set out in *Schedule A: Limitations*, of this licence.
- 1.3 The facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.4 For the purposes of this licence, the facility authorised by this licence, is the area of land outlined in **red on Drawing Reference: Figure 2 – Application Area, dated Dec 2004, of the application EIS**. Any reference in this licence to “facility” shall mean the area thus outlined in red colour (as appropriate). The licensed activities shall be the carried on only within the area outlined.
- 1.5 Waste despatch Hours and Hours of Operation
- 1.5.1** With the exception of emergencies or as may be agreed by the Agency, waste shall be despatched from the facility only between the hours of **0800 to 1800 Monday to Friday inclusive and 0800 to 1600 on Saturdays**.
- 1.5.2** The facility shall be operated (automated continuous processes excepted) only during the hours of **0730 to 1800 Monday to Friday inclusive and 0800 to 1600 on Saturdays**.
- 1.5.3 Except in an emergency, the facility shall not operate or despatch waste on Sundays or on Bank Holidays without the agreement of the Agency.
- 1.6 No alteration to, or reconstruction in respect of, the activity or any part thereof which 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.
- 1.7 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2005 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under the Planning and Development Act 2000 (as amended), or any other enactments or regulations.

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.

2.2 Environmental Management System (EMS)

2.2.1 Prior to the commencement of the remediation project, the licensee shall establish 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 Documentation

(i) The licensee shall establish and maintain an environmental management documentation system, which shall be to the satisfaction of the Agency.

(ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.3 Awareness

Personnel/contractors performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required. The licensee must ensure that contractors/agents involved in transport of waste are appropriately trained and/or experienced, and receive adequate supervision on site.

2.2.2.4 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 initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined

2.2.2.5 Communications Programme

The licensee shall establish and 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.

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

Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish and maintain all infrastructure referred to in this licence, to the design set out in the Application's documentation **and EIS** or as may be otherwise specified or varied by the conditions of this licence, or as otherwise instructed by, or agreed with, the Agency **or its Agent**.
- 3.2 Facility Notice Board
- 3.2.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm.
- 3.2.2 The board shall clearly show:-
- (i) the name and telephone number of the facility;
 - (ii) the normal hours of operation;
 - (iii) the name of the licence holder;
 - (iv) an emergency out of hours contact telephone number;
 - (v) the current licence reference number; and
 - (vi) where environmental information relating to the facility can be obtained.
- 3.3 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.
- 3.4 Sampling equipment shall be operated and maintained such that sufficient sample is collected to meet both internal monitoring requirements and those of the Agency. A separate composite sample or homogeneous sub-sample (of sufficient volume as advised) should be refrigerated immediately after collection and retained as required for EPA use.
- 3.5 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points (subject to agreement to land owner where appropriate) as required by the Agency.
- 3.6 Tank and Drum Storage Areas
- 3.6.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.6.2 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 which could be stored within the bunded area.
- 3.6.3 All drainage from bunded areas shall be diverted for collection and safe disposal.

- 3.6.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.6.5 The integrity and water tightness of all the bunding structures and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee at least once every three years, and reported as part of the AER. This testing shall be carried out in accordance with any guidance published by the Agency.
- 3.7 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.
- 3.8 Surface Water Management.
- 3.8.1 Effective surface water management infrastructure shall be provided and maintained at the facility during **excavation**, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:
- (i) the prevention of contaminated water and leachate discharges **onto/into unprotected ground**, into surface water drains and courses; and
 - (ii) the **management of run off arising from restored** areas.
- 3.9 As part of the construction of hardstanding areas and structures for use in the storage, treatment and recovery of waste, the licensee shall carry out the following works to the trade effluent/surface water handling system at the facility:
- 3.9.1 Runoff shall be separated into trade effluent (from operational hardstanding and floor areas), and storm-water drainage (from roof and non-process and landscaped areas) systems.
- 3.9.2 Trade effluent from hardstanding areas and structures for use in the storage, treatment and processing of waste shall discharge to adequately sized collection tanks.
- 3.9.3** Collected trade effluent shall be **disposed off-site at an agreed facility**.
- 3.10 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 separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate).
- 3.11 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..
- 3.12 Sanitary Waste-water Treatment System.
- The licensee shall provide and maintain effective sanitary facilities at the site for the collection/treatment of sanitary waste arising from toilets and personnel related water services on-site. Any percolation area shall satisfy the criteria set out in the Wastewater Treatment Manual, Treatment Systems for Single Houses, published by the Environmental Protection Agency.
- 3.13 Groundwater
- 3.13.1 **Unless otherwise agreed in writing by the Agency**, all wellheads, whose locations are shown on drawing reference **Figure 2.11 of the EIS, dated Dec 2004, and titled *Environmental Monitoring - Existing***, of the licence application **or as may be agreed under Condition 6.1**, shall be adequately protected to prevent contamination or physical damage, and, as may be appropriate, decommissioned according to the UK Environment Agency

- guidelines 'Decommissioning Redundant Boreholes and Wells' (or as otherwise may be agreed by the Agency).
- 3.13.2 Any additional/**replacement** groundwater monitoring wells as may be specified by the Agency – having regard to the principles of BAT – shall be similarly protected and recorded/notified according to the provisions of Condition 6.21.
- 3.13.3 **Additional/replacement** groundwater monitoring wells, **where required**, shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring".
- 3.13.4 **The licensee shall ensure that adequate interceptor, well, pump and storage facilities are in place to capture contaminated surface water, groundwater and leachates arising from the illegal wastes. The design of these facilities shall consider the scale and type of infrastructure to cater for pre- and post-excavation periods as well as that provided during the excavation operation. The scheme should be suitably resourced and flexible to deal with unexpected groundwater/leachate events as may arise during the excavation. The design details for this scheme shall be submitted to the Agency prior to the commencement of the remediation operation.**
- 3.14 **Prior to the commencement of the remediation operation the** licensee shall install in a prominent location on the site a wind-sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.15 The licensee shall operate a weather monitoring station on the site at a location agreed by the Agency, **or identify a suitable representative existing station**, which records the data specified in *Schedule C.6*.
- 3.16 Specified Engineering Works
- 3.16.1 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 **one** month prior to the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency **or its agent**.
- 3.16.2 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.
- 3.16.3 Following the completion of any specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as appropriate, include the following information:-
- (i) A description of the works;
 - (ii) Drawings and sections showing the location of all samples and tests carried out; and
 - (iii) Any other information requested in writing by the Agency **or its agent**.
- 3.17 Facility Security
- 3.17.1 Appropriate security and stockproof fencing and gates shall be installed and maintained **around the waste processing areas and other vulnerable infrastructure**. 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.

- 3.17.2 Gates shall be locked shut when the facility is unsupervised.
- 3.17.3 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.
- 3.18 Facility Roads and Hardstanding
- 3.18.1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 3.18.2 The facility entrance and hardstanding areas, shall be appropriately paved and maintained in a fit and clean condition.
- 3.19 Facility Office
- 3.19.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.19.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.20 Waste Treatment, Set-down and Storage Areas (including Recovered materials storage areas pending dispatch off-site)
- 3.20.1 The licensee shall provide and maintain appropriate waste processing/treatment, set-down and storage areas. This infrastructure shall at a minimum comprise the following:-
- (i) An impermeable concrete slab (or equivalent approved);
 - (ii) Collection and disposal infrastructure for all run-off;
 - (iii) Appropriate bunding to provide visual and noise screening;
 - (iv) All stockpiles shall be adequately contained to minimise dust generation;
 - (v) Covered facilities for the temporary storage of segregated putrescible wastes and other odorous wastes;**
 - (vi) Covered enclosed facilities for the temporary storage of segregated hazardous waste;**
 - (vii) Appropriate Agency, **or its Agent**, approved storage arrangements for recovered materials **pending dispatch off-site**.
- 3.21 Waste Inspection and Quarantine Areas
- 3.21.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
- 3.21.2 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.
- 3.21.3 Drainage from these areas shall be directed to the trade effluent management system.
- 3.22 Weighbridge and Wheel Cleaner

- 3.22.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
- 3.22.2** The wheel cleaners shall be used by all **operational** vehicles leaving the facility as required to ensure that no process water or waste is carried off-site **in an un-controlled manner. All water from the wheel cleaning area shall be directed to a Class I interceptor (in accordance with European Standard I.S. EN 585-2:2003 installations for the separation of light liquids) prior to discharge to an agreed percolation area.**
- 3.23 Waste handling, ventilation and processing plant
- 3.23.1 Items of plant deemed critical to the efficient and adequate processing and recovery of waste at the facility (including *inter alia* waste loading vehicles) shall be provided on the following basis:-
- (i) 100% duty capacity;
 - (ii) 20% standby capacity available on a routine basis; and
 - (iii) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.23.2 The licensee shall, as part of the AER, provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the **predicted waste tonnages**, as per the licence application.
- 3.23.3 The quantity of waste to be **processed** at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of **capacity limits** shall be treated as an incident.
- 3.24 Leachate Management Infrastructure
- 3.24.1 Leachate management infrastructure shall be provided and maintained at the facility.
- 3.24.2 Any leachate produced from waste recovery **or excavation** activities shall be directed to the trade effluent collection system.
- 3.25 Landfill Gas Management
- 3.25.1 Landfill Gas management infrastructure shall be provided and maintained at the facility as described in the Application's documentation, or as may be varied by a licence condition.

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 atmosphere in this licence shall be interpreted in the following way:
- 4.1.1 For Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.

- (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
 - (iii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.
- 4.2 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.3 Noise
Noise from the facility shall not give rise to sound pressure levels (Leq,T) measured at noise sensitive locations of the facility which exceed the limit value(s).
- 4.4 Dust and Particulate Matter
Dust and particulate matter from the activity shall not give rise to deposition levels which exceed the limit value(s).

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 Unless otherwise agreed by the Agency, no trade effluent, leachate and/or contaminated storm water shall be discharged to **ground, groundwater**, surface water drains or surface water courses.
- 5.3 The licensee shall ensure that the activities shall be carried out in a manner such that emissions including odours do not result in significant impairment of, and/or significant interference with amenities or the environment beyond the facility boundary.
- 5.4 Prior to dispatch of leachate or trade effluent off-site for disposal, the licensee shall submit to the Agency for approval, evidence to demonstrate that an agreement is in place regarding acceptance and treatment of such effluents.
- 5.5 The licensee shall ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.
- 5.6 The road network in the vicinity of the installation/facility shall be kept free from any debris caused by vehicles entering or leaving the installation/facility. Any such debris or deposited materials shall be removed without delay.

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

Condition 6. Control and Monitoring

- 6.1 **Prior to the commencement of the remediation operations the licensee shall submit to the Agency for agreement, a plan detailing environmental monitoring**

locations both on and off-site. This plan shall be based on Figures 2.11 and 2.12 of the EIS - amended appropriately to have regard to the conditions and restrictions of this licence. The selected monitoring locations shall have regard to validation required following restoration of the site (refer Conditions 10.6 and 10.7 of this licence). This plan shall be revised and resubmitted as necessary, to reflect any agreed changes.

- 6.2 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:
- 6.2.1 Analysis shall be undertaken by competent staff in accordance with documented operating procedures.
- 6.2.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics determined.
- 6.2.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
- 6.2.4 Where analysis is sub-contracted it shall be to a competent laboratory.
- 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. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency **or its agent, as may be appropriate.**
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 6.5 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.6 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended as instructed by the Agency following evaluation of test results.
- 6.7 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions. This programme shall be included in the Environmental Management Programme.
- 6.8 The storm water and trade effluent drainage system, bunds, any silt traps and oil separators 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. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the interceptors, bunds and drains.
- 6.9 All tanks and pipelines shall be maintained impervious to the materials carried out or stored therein. The integrity and water tightness of all underground pipes and tanks 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. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.10 Storm water percolation areas
- A visual examination of the storm water discharges shall be carried out daily. A log of such inspections shall be maintained.

6.11 Noise

The licensee shall carry out a noise survey of the site operations **Quarterly**. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.

6.12 Pollution Emission Register (PER)

The licensee shall prepare and maintain a PER for the site. The substances to be included in the PER shall be agreed by the Agency each year by reference to the list specified in the Agency's AER Guidance Note. The PER shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted as part of the AER.

6.13 Leachate & Trade Effluent Management

6.13.1 The frequency of leachate and trade effluent removal from the holding tank(s) shall be such that a minimum freeboard of 0.5m shall be maintained in the tank at all times. The required freeboard shall be clearly indicated in the tank.

6.13.2 Leachate and trade effluent stored in the holding tank shall be disposed of by tankering off-site in fully enclosed road tankers, to an approved treatment facility.

6.14 The licensee shall monitor meteorological conditions as specified in *Schedule C.5*.

6.15 Landfill Gas

6.15.1 Prior to the commencement of the remediation operation, the licensee shall submit to the Agency, for agreement, a landfill gas monitoring programme that includes the monitoring of representative locations during the remediation operation, and subsequently at selected locations for the purpose of validating the completed remediation programme.

6.15.2 Monitoring locations should be installed to 2m below the groundwater table or to 2m below the maximum depth of landfilled waste or placed inert landscaping material, whichever is the least.

6.15.3 The specification for the construction and location of landfill gas monitoring facilities, shall be to the satisfaction of the Agency.

6.15.4 At least two rounds of landfill gas sampling (one during falling atmospheric pressure) in locations external to the illegal waste deposits should be completed prior to commencement of the remediation operation.

6.15.5 In relation to landfill derived gases the following shall constitute a trigger level:

- (i) Methane greater than 1% v/v; or,
- (ii) Carbon Dioxide greater than 1.5% v/v,

measured in any monitoring borehole, service duct, manhole or other point as may be specified, located external to the body of waste.

6.16 Litter Control

6.16.1 The measures and infrastructure as described in the Applications documentation shall be applied to control litter at the facility.

6.16.2 All litter control infrastructure shall be inspected on a daily basis. The licensee shall remedy any defect in the litter netting 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 netting shall be undertaken within three working days.
- 6.16.3 Operation in Adverse Wind Conditions

The licensee shall, to the Agency's **or its site Agent** satisfaction, implement a management programme for the operation of the facility in adverse wind conditions. The programme is to set the maximum wind speed for continued operation of external waste handling operations on the site (covered transport excluded).
- 6.16.4 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.
- 6.16.5 The licensee shall ensure that all vehicles removing waste and materials from the facility are appropriately covered.
- 6.17 Dust & Odour Control
 - 6.17.1 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.
 - 6.17.2 The licensee shall operate and maintain adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility.
 - 6.17.3 Following excavation and processing of the illegally deposited waste, all segregated putrescible, odorous or odour forming and hazardous waste shall be removed from the site to an authorised facility within 48hours of its segregation.**
 - 6.17.4 When siting and operating landfill gas ventilation infrastructure regard shall be had to the potential for, and mitigation of, odour nuisance.**
- 6.18 Prior to exiting the facility, all operational waste vehicles shall use the wheelwash. The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and processed in the waste recovery area.
- 6.19 Bird Control

Birds shall be prevented from gathering on and feeding at the facility by the use of birds of prey and/or other bird scaring techniques.
- 6.20 Operational Controls
 - 6.20.1 During excavation of the historically deposited areas, the exposed working face, or faces, shall each day at the end of the day, be covered with suitable material.**
 - 6.20.2 Scavenging shall not be permitted at the facility.
 - 6.20.3 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
 - 6.20.4 The waste transfer and processing areas where putrescible waste is handled shall be cleaned on a weekly basis.
 - 6.20.5 No smoking shall be allowed at the facility.

- 6.20.6 Fuels shall be stored only at appropriately bunded locations on the facility.
- 6.20.7 All tanks and drums shall be labelled to clearly indicate their contents.
- 6.20.8 There shall be no casual public access to the facility.
- 6.21 **Monitoring Locations**
- The licensee shall maintain, and have available on site, a scaled drawing(s) showing all the monitoring locations that are stipulated in this licence and as agreed under Condition 6.1, including any noise sensitive locations and private wells to be monitored. The drawing shall include the eight-digit national grid reference of each monitoring point. A copy of this plan with any amendments is to be included as part of the AER.
- 6.22 **Nuisance Monitoring**
- The licensee shall, at a minimum of one-week intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. The licensee shall maintain a record of all nuisance inspections.
- 6.23 **Groundwater Trigger Levels**
- 6.23.1 **Prior to the commencement of the remediation operations**, the licensee shall implement an appropriate programme for monitoring of groundwater trigger levels, in accordance with the requirements of Directive 1999/31/EC.
- 6.23.2 The trigger levels as specified in Condition 6.23.1 for groundwater shall be measured at monitoring boreholes to be agreed in advance with the Agency.
- 6.23.3 The monitoring program, trigger levels, and location of monitoring points shall be adjusted as necessary to accommodate any Agency specifications as may be issued.

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 identify all opportunities for energy use reduction and efficiency.
- 7.2 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible..

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

Condition 8. Materials Handling

- 8.1 Disposal or recovery of waste 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 only from the site of the activity to the site of recovery/disposal in a manner which 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 waste prior to transfer to another person, 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 Material Storage/Placement
- 8.4.1 **Waste excavated from historical deposit areas** on the site for processing in the on-site plant, shall be stored only in designated areas, protected as may be appropriate against spillage and leachate run-off. Incompatible waste streams shall be appropriately segregated.
- 8.4.2 The temporary storage of fully or part-processed waste, recovered material, and waste for disposal off site, shall only be in designated areas, protected as may be appropriate against spillage and leachate run-off.
- 8.4.3 **Prior to the commencement of the remediation operation** the licensee shall submit to the Agency for approval a plan indicating the various designated waste and recovered materials (pre-processed, part-processed and processed) temporary storage and set-down areas for the site. Any variation to this plan requires the prior written approval of the Agency.
- 8.4.4 **Inert waste recovered from the excavated historically deposited waste shall be used only to landscape and restore excavated waste areas.**
- 8.5 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the agreement of the Agency.
- 8.6 Inert waste used in the landscaping of the excavated illegal waste areas shall be analysed in accordance with *Schedule C: Control & Monitoring*, of this licence.
- 8.7 Waste Acceptance and Characterisation Procedures
- 8.7.1 **Only pre-certified inert materials are acceptable for placement on the site for the purposes of landscaping and reclamation of excavated illegal waste areas.**
- 8.7.2 **Inert waste to be used in the reclamation and restoration operation shall meet the standards specified in EU Council Decision 2003/33/EC.**
- 8.7.3 **The following wastes shall not be disposed of at the facility: -**
- (i) **hazardous wastes,**
 - (ii) **biodegradable, commercial, industrial, or household waste, or**
 - (iii) **liquid wastes.**
- 8.7.4 The licensee shall maintain written procedures for the acceptance and handling of all wastes. These procedures shall include details of the methods for the characterisation of waste in order to distinguish between inert, non-hazardous and hazardous wastes. The procedures shall have regard to 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.
- 8.7.5 **The licensee shall maintain and operate written procedures, methodologies and standards to distinguish between waste and categories of recovered materials. These procedures, methods and**

standards shall be agreed prior to the commencement of remediation operations with the Agency.

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

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, **prior to the commencement of the remediation operation**, ensure that a documented Accident Prevention Policy is in place that will address 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 maintain a documented Emergency Response Procedure for the facility, which shall address 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 In the event of an incident the licensee shall immediately:-
- (i) isolate the source of any such emission;
 - (ii) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - (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) provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed with the Agency to:-
 - identify and put in place measures to avoid reoccurrence of the incident; and
 - identify and put in place any other appropriate remedial action.
- 9.4 In the event of a breakdown of equipment or any other occurrence which results in the closure of the **waste processing areas**, any waste already collected at the facility shall be transferred directly to appropriate landfill sites or any other appropriate facility until such time as the **waste processing areas** are returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
- 9.5 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.6 No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

Reason: To provide for the protection of the environment.

Condition 10. Decommissioning & Closure, Restoration and Aftercare Management Plan

- 10.1 Following termination, or planned cessation, 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, subsoils, 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 licensee shall restore the **excavated waste areas to a standard approved by the Agency, and within a period of 12 months following completion of the excavation operations.**
- 10.3 **Restored areas of the facility formally occupied by historical waste** shall be profiled so that slopes are stable, runoff is directed to appropriate drainage networks, and no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable restoration materials.
- 10.4 **No material or object that is incompatible with the proposed restoration of the facility shall be present within the placed inert restoration material.**
- 10.5 Closure, Restoration & Aftercare Management Plan (CRAMP):
- 10.5.1 **Prior to the commencement of the remediation operations**, the licensee shall prepare for agreement by the Agency, a fully detailed plan for the closure, restoration and aftercare of the site or part thereof.
- 10.5.2 **The plan shall also address any interception/remediation/monitoring necessary for mitigation, remediation or control of groundwater contamination as may exist off-site.**
- 10.5.3 The plan shall be maintained and reviewed annually **for as long as the licence or its conditions are in effect**, and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the prior written agreement of the Agency.
- 10.6 The CRAMP shall include as a minimum, the following:-
- 10.6.1 A scope statement for the plan.
- 10.6.2 The criteria, including those specified in this licence, which define the successful closure & restoration of the facility or part thereof, and which ensures minimum impact to the environment.
- 10.6.3 A programme to achieve the stated criteria.
- 10.6.4 Where relevant, a test programme to demonstrate the successful implementation of the plan.
- 10.6.5 Details of the aftercare supervision, monitoring, control, maintenance and reporting requirements for the restored facility,
- 10.6.6 Details of costings for the plan and a statement as to how these costs will be underwritten.
- 10.7 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. Notifications, Records and Reports

- 11.1 The licensee shall notify the Agency by both telephone and either facsimile or electronic mail, 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:
- 11.1.1 Any release of environmental significance to atmosphere from any potential emission point including bypasses.
 - 11.1.2 Any emission which does not comply with the requirements of this licence.
 - 11.1.3 Any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control & Monitoring*, of this licence which is likely to lead to loss of control of the abatement system.
 - 11.1.4 Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental 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 which relates to discharges to water, the licensee shall notify the Local 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.
- 11.4 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 and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.5 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility.
- 11.6 The licensee shall as a minimum keep the following documents at the site:-
- (i) the licences relating to the facility;
 - (ii) the current EMS for the facility;
 - (iii) the previous year's AER for the facility;
 - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility;
 - (v) relevant correspondence with the Agency;

- (vi) an up to date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points

and this documentation shall be available to the Agency for inspection on-site at all reasonable times.

- 11.7 The licensee shall submit to the Agency, at the frequency and by the date specified, the reports identified in *Schedule E: Reporting*, or as may otherwise be required by this licence.
- 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 submit to the Agency every month following commencement of the remediation operation, a summary statement outlining the progress made in relation to the excavation, processing and reclamation of the waste and source areas.**
- 11.10 A full record, which shall be open to inspection on-site, by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management/recovered materials operations and practices at this site. This record shall be maintained on a weekly basis and shall as a minimum contain details of the following:
 - (i) The tonnages and EWC Code for the waste materials 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 exported 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 wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
 - (vi) Details of any rejected consignments.
 - (vii) The results of any waste analyses required under *Schedule C: Control & Monitoring*, of this licence.
 - (viii) The tonnages and EWC Code for the waste materials recovered on-site.
 - (ix) A description, sample results and tonnages of all recovered materials (subject to the approved standards agreed under Condition 8.7.5) dispatched from the site.
- 11.11 A record shall be kept of each consignment of trade effluent, leachate and/or contaminated storm water wastes removed from the facility. The record shall be included as part of that specified in Condition 11.9.**
- 11.12 A record shall be kept at the facility of the programme for the control and eradication of vermin and fly infestations at the facility. These records shall include as a minimum the following:-
 - (i) the date and time during which spraying of insecticide is carried out;
 - (ii) contractor details;

- (iii) contractor logs and site inspection reports;
- (iv) details of the rodenticide(s) and insecticide(s) used;
- (v) operator training details;
- (vi) details of any infestations;
- (vii) mode, frequency, location and quantity of application; and,
- (viii) measures to contain sprays within the facility boundary.

11.13 Waste Recovery Reports

The licensee shall as part of the AER prepare a report examining waste recovery achievements and options at the facility. This report shall address methods to contribute to the achievement of the recovery targets stated in national and European Union waste policies and shall include the following:-

- (i) proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste to landfill as specified in the Landfill Directive;
- (ii) the separation of recyclable materials from the waste;
- (iii) the recovery of Construction and Demolition Waste;
- (iv) the recovery of metal waste;
- (v) inert waste to be used for cover/restoration material at the facility or elsewhere.

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 **€27,628.00**, 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 2005. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2005, 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 defraying its costs in regard to items not covered by the said annual contribution.

12.1.3 The licensee shall pay, when so charged, the cost of the Agency's site agent(s) who are to be appointed by the Agency to independently supervise and report the excavation, remediation and restoration operations.

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.

*Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment, **and to apply the polluter pays principle.***

SCHEDULE A: Limitations

A.1 Approved Waste Processes

The following waste related processes are authorised:

- i. Excavation of historically deposited waste and associated materials for processing in the on-site recovery/treatment plant
- ii. Separation, crushing, sorting, shredding, screening, bailing, blending, repackaging processes
- iii. Disposal/Recovery off-site of non-inert waste
- iv. Use of inert waste in filling of excavation voids and associated landscaping works
- v. Storage of waste

No addition to these processes is permitted unless agreed in advance with the Agency.



A.2 Waste Acceptance

Table A.1 Waste Categories and Quantities

WASTE TYPE	TONNES PER ANNUM
Household, Commercial, Industrial, and C & D wastes waste excavated on-site	<u>All</u> historically deposited waste to be excavated for processing
Inert non-hazardous C & D wastes reclaimed on site to be used in filling excavated illegal wastes areas and landscaping same.	All recovered inert waste to be used beneficially in remediation operations as may be approved under this licence
Waste imported	Nil



SCHEDULE B: Emission Limits

B.1 EMISSIONS TO AIR

Landfill Derived Gas Concentration Limits:

(Measured in any building on or adjacent to the facility and perimeter boreholes agreed under Condition 6.1).

Methane	Carbon Dioxide
20 % LEL (1% v/v)	1.5 % v/v

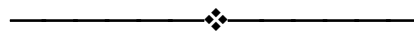


Activity Derived Dust Deposition Limits:

Measured at the monitoring points agreed under Condition 6.1.

Level (mg/m ² /day) ^{Note 1}
350

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



B.2 NOISE EMISSIONS

Measured at any noise sensitive location.

Day dB(A) L _{Aeq} (30 minutes)	Night dB(A) L _{Aeq} (30 minutes)
55 ^{Note 1}	45 ^{Note 1}

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



SCHEDULE C: Control & Monitoring

C.1.1 CONTROL OF EMISSIONS TO AIR

Emission Point Reference No.: Gas vents

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Passive Vents Carbon filtration	Olfactory & visual (monthly)	Carbon filters

Note 1: The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



C.1.2 MONITORING OF LANDFILL GAS EMISSIONS

Locations: Perimeter Landfill Gas boreholes/vents at locations to be agreed under Condition 6.1, or as may be amended by written agreement;
and
Such locations as may be specified under the CRAMP (Condition 10) for post-restoration validation

Parameter	Monitoring Frequency	Analysis Method/Technique ^{Note 1}
Methane (CH ₄) Carbon Dioxide (CO ₂) Oxygen (O ₂) Atmospheric pressure & Trend	All Monthly	InfraRed Analyser/FID InfraRed Electrochemical Cell Standard method

Note 1: Or other method agreed.



C.2.1 CONTROL OF EMISSIONS TO GROUND

Emission Control Location: Percolation areas for runoff from wheelwash facilities.

Description of Treatment: Oil interceptor/Silt Trap

Control Parameter	Monitoring	Key Equipment ^{Note 1}
Oil Removal	Visual inspection of water discharging from interceptors. Sludge/solids levels in interceptor chambers	Class I Full Retention Oil Interceptor
Suspended Solids		Silt traps

Note 1: The licensee shall ensure that in the event of contamination on the stormwater, that the outlets from the interceptor(s) are sealed for the duration of clean-up operations.



C2.2 LEACHATE/TRADE EFFLUENT MONITORING**Location:** Leachate/Trade Effluent Holding Tank.

PARAMETER ^{Note 1}	LEACHATE ^{Note 2} Monitoring Frequency
Visual Inspection/Odour	Daily
Leachate/Trade Effluent Level	Daily
BOD	Quarterly
COD	Quarterly
Chloride	Quarterly
Ammoniacal Nitrogen	Quarterly
Electrical Conductivity	Quarterly
Ph	Quarterly
Metals / non metals ^{Note 3}	Quarterly
Cyanide (Total)	Bi-Annually
Fluoride	Bi-Annually
List I/II organic substances ^{Note 4}	Bi-Annually
Mercury	Bi-Annually
Sulphate	Bi-Annually
Total P/orthophosphate	Bi-Annually
Total Oxidised Nitrogen	Bi-Annually

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

Note 2: Visual Inspection and Levels to be monitored at collection sumps and holding tank. Leachate/trade effluent composition to be monitored at the leachate/trade effluent holding tank.

Note 3: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II 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 (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).



C.3 WASTE MONITORING

Waste Class	Frequency	Parameter	Method
Recovered inert waste stockpiles	Per 3,000t of recovered material	Metals / non metals Note 2 List I/II organic substances Note 3 Asbestos And other parameters necessary to demonstrate compliance with Council Decision 33/2003/EC for inert wastes	Standard Method
Hazardous waste identified in illegal fill	Per consignment off-site	To be agreed	To be agreed
Other Note 1			

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

Note 2: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 3: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II 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 (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).



C.4 NOISE MONITORING

Noise Monitoring Frequency and Technique

Location:

At locations to be agreed under Condition 6.1

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

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



C.5 AMBIENT MONITORING

Air Monitoring

Location: At locations identified agreed under Condition 6.1

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust (mg/m ² /day)	Monthly during excavation of illegal waste, Four times a year otherwise ^{Note 2}	Standard Method ^{Note 1}
Odour	Daily during excavation of Area 6, Monthly during excavation of other areas of illegal waste.	Agreed method

Note 1: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). Any modifications to eliminate interference due to algae growth in the gauge should be reported to the Agency.

Note 2: Twice during the period May to September.



Groundwater Monitoring

Location: Groundwater Wells as agreed under Condition 6.1.

PARAMETER ^{Note 1}	SURFACE WATER Monitoring Frequency ^{NOTE 5}
Visual Inspection/Odour ^{Note 2}	Monthly
Groundwater Level (wells)	Monthly
Electrical Conductivity	Monthly
Ammoniacal Nitrogen	Monthly
Chloride	Monthly
pH	Monthly
Sulphate (SO ₄)	Monthly
Metals / non metals ^{Note 3}	Quarterly
List I/II organic substances (Screen) ^{Note 4}	Quarterly
Mercury	Quarterly
Nitrate	Quarterly
Faecal Coliforms	Quarterly
Total Coliforms	Quarterly

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

Note 2: Where there is evident gross contamination, additional samples should be analysed and the full suite of parameters shown tested.

Note 3: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II 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 (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).

Note 5: Or such other frequency as may be agreed with the Agency in writing.



Surface Water Monitoring

Location: Locations identified as per Condition 6.1.

Parameter	Monitoring Frequency	Analysis Method/Technique ^{Note 1}
Visual Inspection ^{Note 2} DO Electrical Conductivity (EC) Ammoniacal Nitrogen Chloride pH Sulphate (SO₄) Metals / non metals ^{Note 3} List I/II organic substances (Screen) ^{Note 4} Mercury Nitrate Total P/orthophosphate	Visual Inspection, DO and EC at Weekly intervals. All others Quarterly	Standard Methods

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

Note 2: Where there is evident gross contamination, additional samples should be analysed and the full suite of parameters shown tested.

Note 3: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.

Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II 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 (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).



Meteorological Monitoring

Location : At the facility at a location to be agreed, or from an agreed representative station in the region.

Parameter	Monitoring Frequency	Analysis Method/Technique
Precipitation Volume	Daily	Standard
Temperature (min/max.)	Daily	Standard
Wind Direction	Daily	Standard
Wind Force ^{Note 1}	Daily	Standard
Atmospheric Pressure ^{Note 1}	Daily	Standard

Note 1: Monitoring frequency for these parameters may be decreased with the agreement of the Agency.



SCHEDULE D: Specified Engineering Works

Specified Engineering Works

Development of the facility including preparatory works for excavation, installation of waste handling, processing, recycling/recovery infrastructure (including buildings) and installation of increased waste processing capacity as well as any abatement system(s).

Installation of Landfill Gas Management Infrastructure.

Installation of Leachate/Trade Effluent Management Infrastructure.

Installation of Groundwater Control Infrastructure.

Installation of Surface Water Management Infrastructure.

Installation drainage network including of silt traps and oil interceptors.

Installation of dust/odour system.

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
Regional Inspectorate
McCumiskey House
Richview
Clonskeagh Road
Dublin 14 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 ^{Note1}	Report Submission Date
Annual Environment Report (AER)	Annually	By 31 st March of each year.
Record of incidents	As they occur	Within five days of the incident.
Specified Engineering Works reports	As they arise	Prior to the works commencing.
Summary Progress Report on Remediation Operations	Monthly	Ten days after end of the month being reported on.
Monitoring of landfill gas	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Surface Water Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Quarterly	Ten days after end of the quarter being reported on.
Monitoring of Leachate/Trade effluent	Quarterly	Ten days after end of the quarter being reported on.
Dust Monitoring	Quarterly	Ten days after end of the quarter being reported on.
Closure Plan (CRAMP)	-	Prior to the commencement of the remediation operations.
Leachate/Trade effluent Disposal Agreement	-	Prior to commencement of leachate/trade effluent disposal off-site

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



SCHEDULE F: Annual Environmental Report

Annual Environmental Report Content^{Note 1}

Statement of waste activities carried out at the facility in the reporting year.
 Emissions from the installation/facility.
 Waste management record.
 Waste analysis.
 Waste Recovery Report.
 Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).
 Annual topographical survey
Remaining void to be filled and landscaped, projected completion date.
Remaining volumes of historically deposited waste to be treated.
Detailed Statement, with mass balance, of inert waste used in on-site restoration.
 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
 Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.
 Pollution emission register – report for previous year
 Pollution emission register – proposal for current year
 Noise monitoring report summary
 Meteorological data summary
 Review of Nuisance Controls.
 Ambient monitoring summary
 Current monitoring location reference drawing (with any amendments shown).
 Volume of trade effluent/leachate and/or contaminated stormwater produced and volume transported off-site.
 Tank and pipeline testing and inspection report
 Reported incidents summary
 Energy efficiency audit report summary
 Report on progress made and proposals being developed to minimise generation of leachate/trade effluent for disposal.
 Development / Infrastructural works summary (completed in previous year or prepared for current year).
 Report on management and staffing structure of the installation/facility.
 Report on the programme for public information.
 Report on Duty & Standby capacities of waste processing plant at the facility.
 Reports on financial provision made under this licence.
 Any amendments to the CRAMP.
 Any other items specified by the Agency.

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

Signed on behalf of the said Agency _____

on the xx day of xxxxxx, 2006

xxxxxxx,

Authorised Person