

This licence was amended on 28-08-2012 under Section 42B(1) of the Waste Management Acts, 1996 to 2011. The details of Amendment A must be read in conjunction with this licence. The amendment document is entitled "Technical Amendment A"

Headquarters,
P.O. Box 3000,
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County Wexford, Ireland

WASTE LICENCE
LANDFILL FOR INERT WASTE

Waste Licence	80-1
Register Number:	
Licensee:	Carnegie J.W. & Company Limited
Location of Facility:	Dillonsdown, 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 licence is for the operation of an inert landfill at Carnegie J.W. & Company Limited in the townland of Dillonsdown, County Wicklow with a total capacity of 2.02 million tonnes. The licensee must carry out certain investigative works before installing lining or landfilling commences.

The site is a large partly worked out sand and gravel pit (currently in operation) of area 14.5ha. The licence is for the disposal and recovery of construction, demolition and quarrying wastes. The environmental controls required by this licence are also applicable to any ongoing quarrying activities.

The licence requires that there will be no direct discharges to ground water. To this effect a low permeability clay liner shall be installed above the water table. The facility will be restored to agricultural use.

The licensee must manage and operate the facility to ensure that the activities do not cause environmental pollution. The licensee has 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 sets out in detail the conditions under which Carnegie J.W. & Company Limited are required to operate and manage this facility.

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DECISION & REASONS FOR THE DECISION

Reasons for the Decision

The Environmental Protection Agency (the Agency) is satisfied, on the basis of the information available, that the requirements of Section 40(4) of the Waste Management Act, 1996 have been complied with in respect of the application for a waste licence for the activities listed hereunder in Part I.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions and an objection received and the reports of its inspectors.

Part I Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Agency, under Section 40(1) of the said Act hereby grants this Waste Licence to Carnegie J.W. & Company Limited to carry on the waste activities listed below at Dillonsdown, Blessington, County Wicklow subject to twelve conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Act 1996

Class 1.	Deposit on, in or under land (including landfill): This activity is limited to the deposit of inert Construction and Demolition waste and inert mineral extraction waste subject to the maximum quantities and other constraints listed in Schedule A: <i>Waste Acceptance</i> of this licence into a lined 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. This activity is limited to the temporary storage of unacceptable wastes in the waste quarantine area pending their dispatch to appropriate disposal facilities.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Act 1996

Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes): This activity is limited to the reclamation of organic materials segregated from the excavated waste body or to the recovery of organic waste delivered to the facility with Construction & Demolition waste. Organic materials shall be dispatched onwards to appropriate recovery facilities. This activity shall cease upon restoration of the landfill. Recovered organic waste shall be dispatched onwards to appropriate recovery facilities.
Class 4.	Recycling or reclamation of other inorganic materials: This activity is limited to the recovery of inert Construction and Demolition waste and inert mineral extraction waste at the facility for use in site development and site restoration works.
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: This activity is limited to the storage of wastes for recovery purposes at this facility (eg. stockpiles of soil) and the temporary storage of unacceptable waste types such as timber and metal pending their dispatch to appropriate recovery facilities.

INTERPRETATION

All terms in this licence should be interpreted in accordance with the definitions in the Waste Management Act, (the Act), unless otherwise defined in this section.

Agreement	Agreement in writing.
Annually	At approximately twelve monthly intervals.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the waste licence application.
Application	The application by the licensee for this waste licence.
Appropriate facility	A waste management facility, duly authorised under relevant law and technically suitable.
Condition	A condition of this licence.
Construction and Demolition Waste	All wastes which arise from construction, renovation and demolition activities.
Cover material	Bricks, crushed concrete, tarmac, earth, soil, sub-soil, stone, rock, or other cover material the use of which has been agreed by the Agency.
Daytime	8.00 a.m. to 10.00 p.m.
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.
Emergency	Those occurrences defined in Condition 9.4
Emission Limits	Those limits, including concentration limits and deposition levels established in <i>Schedule C: Emission Limits</i> , of this licence.
European Waste Catalogue (EWC)	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 94/3/EC and any subsequent amendment published in the Official Journal of the European Community.
Green Waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
Hours of Operation	The hours during which the facility is authorised to be operational.
Hours of Waste Acceptance	The hours during which the facility is authorised to accept waste.
Incident	The following shall constitute an incident for the purposes of this licence:- <ol style="list-style-type: none">An emergency;Any emission which does not comply with the requirements of this licence;Any trigger level specified in this licence which is attained or exceeded;Any indication that environmental pollution has, or may have, taken place; andThe non-acceptance or rejection of waste at the facility

Inert waste	Inert Waste as defined in S.I. No. 336 of 2002 Waste Management (Licensing) (Amendment) Regulations 2002.
Intermediate Cover	Term used to describe the placement of material (minimum 300mm if soil is used) for a period of time prior to restoration or prior to further disposal of waste.
Landfill Footprint	Refers to the area of the facility where the waste is disposed of by placement on the ground or on other waste.
Landfill Gas	Gases generated from the landfilled waste.
LEL (Lower Explosive Limit)	The lowest percentage concentration by volume of a mixture of flammable gas with air which will propagate a flame at 25°C and atmospheric pressure.
Licence	A Waste Licence issued in accordance with the Act.
Licensee	Carnegie J.W. & Company Limited, Dillonsdown, Blessington, County Wicklow.
List I/II Organics	Substances classified pursuant to EC Directives 76/464/EEC and 80/68/EEC.
Liquid Waste	Any waste in liquid form and containing less than 2% dry matter. Any waste tankered to the facility.
Maintain	Keep in a fit state, including such regular inspection, servicing and repair as may be necessary to adequately perform its function.
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	10.00 p.m. to 8.00 a.m.
Quarterly	At approximately three monthly intervals.
Sample(s)	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
Sludge	The accumulation of solids resulting from chemical coagulation, flocculation and/or sedimentation after water or wastewater treatment with greater than 2% dry matter.
Specified Emissions	Those emissions listed in <i>Schedule C: Emission Limits</i> of this licence.
Specified Engineering Works	Those engineering works listed in <i>Schedule B: Specified Engineering Works</i> of this licence.
Treatment	Treatment means the physical, thermal, chemical or biological processes, including sorting, that change the characteristics of the waste in order to reduce its volume or hazardous nature, facilitate its handling or enhance recovery.
Trigger Level	A parameter value specified in the licence, the achievement or exceedance of which requires certain actions to be taken by the licensee.
EPA Working Day	Refers to the following hours; 9.00 a.m. to 5.30 p.m. Monday to Friday inclusive.
Working Face	The area of the site in which waste other than cover material or material for the purposes of the construction of specified engineering works is being deposited.

PART II CONDITIONS

CONDITION 1 SCOPE OF THE LICENCE

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I: Activities Licensed and authorised by this licence.
- 1.2. For the purposes of this licence, the facility is the area of land outlined in red on Drawing No. B2.1 of the application. Any reference in this licence to “facility” shall mean the area thus outlined in red.
- 1.3. This licence is for the purposes of waste licensing under the Waste Management Act 1996 only and nothing in this licence shall be construed as negating the licensee’s statutory obligations or requirements under any other enactments or regulations.
- 1.4. Only those waste types listed in *Schedule A: Waste Acceptance*, Table F.1 and Table F.2 of this licence may be recovered and disposed of at the facility subject to the maximum quantities and other constraints specified in the Schedules and in this licence.
- 1.5. Waste Acceptance.
 - 1.5.1. Whole used tyres shall not be disposed of at the facility.
 - 1.5.2. No hazardous wastes, liquid wastes or sludges shall be disposed of at the facility.
 - 1.5.3. The licensee shall ensure that all waste accepted at the facility is subject to treatment. This provision may not apply to inert wastes for which treatment is not technically feasible nor to any other waste for which such treatment does not contribute to the objectives of the Landfill Directive as set out in Article 1 of the Directive by reducing the quantity of the waste or the hazards to human health or the environment.
- 1.6. Waste Acceptance Hours and Hours of Operation (unless otherwise agreed by the Agency)
 - 1.6.1. Waste may be accepted at the facility only between the hours of 7.00am to 6.00pm Monday to Friday inclusive and 7.00am to 1.00pm on Saturdays.
 - 1.6.2. The facility may be operated only during the hours of 7.00am to 7.00pm Monday to Friday inclusive and 7.00am to 2.00pm on Saturdays.
 - 1.6.3. Waste shall not be accepted at the landfill on Sundays and or on Bank Holidays.
- 1.7. Where the Agency considers that a non-compliance with any condition of this licence has occurred, it may serve a notice on the licensee specifying.
 - 1.7.1. That only those wastes as specified, if any, in the notice are to be accepted at the facility after the date set down in the notice.
 - 1.7.2. That the licensee shall undertake the works stipulated in the notice, and/or otherwise comply with the requirements of the notice as set down therein, within the time-scale contained in the notice.
 - 1.7.3. That the licensee shall carry out any other requirement specified in the notice.

When the notice has been complied with, the licensee shall provide written confirmation that the requirements of the notice have been carried out. No waste, other than that which is stipulated in the notice, shall be accepted at the facility until written permission is received from the Agency.

- 1.8. Every plan, programme or proposal submitted to the Agency for its agreement pursuant to any condition of this licence shall include a proposed timescale for its implementation. The Agency

may modify or alter any such plan, programme or proposal in so far as it considers such modification or alteration to be necessary and shall notify the licensee in writing of any such modification or alteration. Every such plan, programme or proposal shall be carried out within the timescale fixed by the Agency but shall not be undertaken without the agreement of the Agency. Every such plan, programme or proposal agreed by the Agency shall be covered by the conditions of this licence.

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 facility manager with experience commensurate with the level of expertise required, 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.
- 2.1.2 Both the facility manager and deputy, and any replacement manager or deputy, shall successfully complete both the FAS waste management training programme (or equivalent agreed by the Agency) and associated on site assessment appraisal within twelve months of appointment.
- 2.1.3 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 Management Structure

- 2.2.1 Prior to the commencement of waste activities, the licensee shall submit written details of the management structure of the facility to the Agency. Any proposed replacement in the management structure 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.

2.3 Environmental Management System (EMS)

- 2.3.1 The licensee shall establish and maintain an EMS. Within twelve months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a proposal for a documented Environmental Management System (EMS) for the facility. Following the agreement of the Agency, the licensee shall establish and maintain such a system. The EMS shall be updated on an annual basis with amendments being submitted to the Agency for its agreement.
- 2.3.2 The EMS shall include as a minimum the following elements:

2.3.2.1 Schedule of Environmental Objectives and Targets

The objectives should be specific and the targets measurable. The Schedule shall address a five-year period as a minimum. The Schedule

shall include a time-scale for achieving the objectives and targets and shall comply with any other written guidance issued by the Agency.

2.3.2.2 Environmental Management Plan (EMP)

The EMP shall include, as a minimum, the following:

- (i) Methods by which the objectives and targets will be achieved and the identification of those responsible for achieving those objectives and targets; and
- (ii) Any other items required by written guidance issued by the Agency.

2.3.2.3 Corrective Action Procedures

The Corrective Action Procedures shall detail the corrective actions to be taken should any of the procedures detailed in the EMS not be followed.

2.3.2.4 Awareness and Training Programme

The Awareness and Training Programme shall identify training needs, for personnel who work in or have responsibility for the licensed facility.

2.4 Communications Programme

- 2.4.1 The licensee shall establish and maintain a Communications Programme to ensure that members of the public can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility. This shall be established within three months of the date of grant of the licence.

REASON: To make provision for the proper 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 FACILITY INFRASTRUCTURE

- 3.1 The licensee shall establish, to the satisfaction of the Agency, all infrastructure referred to in this licence prior to the commencement of the licensed activities or as required by the conditions of this licence.

3.2 Specified Engineering Works

- 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule B: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months 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.
- 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 3.2.3 Following the completion of all 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 include the following information;
 - a) a description of the works;

- b) as-built drawings of the works;
- c) records and results of all tests carried out (including failures);
- d) drawings and sections showing the location of all samples and tests carried out;
- e) daily record sheets/diary;
- f) name(s) of contractor(s)/individual(s) responsible for undertaking the specified engineering works;
- g) name(s) of individual(s) responsible for supervision of works and for quality assurance validation of works;
- h) records of any problems and the remedial works carried out to resolve those problems; and
- i) any other information requested in writing by the Agency.

3.3 Facility Notice Board

3.3.1 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.

3.3.2 The board shall clearly show:

- a) state that the facility is a Landfill for Inert Waste;
- b) the name and telephone number of the facility;
- c) the normal hours of opening;
- d) the name of the licence holder;
- e) an emergency out of hours contact telephone number;
- f) the licence reference number; and
- g) where environmental information relating to the facility can be obtained.

3.4 Facility Security

3.4.1 Two metre high security and stockproof fencing and gates shall be installed and maintained around the entire boundary of the facility apart from the boundaries that lie on or at the groundwater lake. All fencing and gates shall be finished as to blend in with the general environment. The base of the fencing shall be set in the ground. Subject to the implementation of the restoration and aftercare plan and to the agreement of the Agency, the requirement for such site security may be removed.

3.4.2 The licensee shall remedy any defect in the gates and/or fencing as follows:

- a) a temporary repair shall be made by the end of the working day; and
- b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days.

3.4.3 Gates shall be locked shut when the facility is not operational.

3.5 Facility Roads and Site Surfaces

3.5.1 Site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.

3.5.2 The facility entrance area shall be paved and maintained.

3.6 Facility Office

- 3.6.1 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.
- 3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at 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 Drainage from the waste inspection area which is suitable for on site treatment shall be directed to the wastewater treatment system. In the event of unsuitable or non-compliant waste being discovered during an inspection of incoming waste the runoff from waste deposited in the inspection area shall be collected for disposal off site, unless otherwise agreed by the Agency.
- 3.8 Weighbridge
- 3.8.1 The licensee shall provide and maintain a weighbridge at the facility.
- 3.9 Wheel Cleaning
- 3.9.1 The licensee shall establish and maintain a wheelwash at the facility which shall drain to the wastewater treatment system.
- 3.10 Waste Water Treatment System
- 3.10.1 The licensee shall provide and maintain a Wastewater Treatment system at the facility for the treatment of wastewater arising 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.
- 3.11 Tank and Drum Storage Areas
- 3.11.1 All tank and drum storage areas shall be rendered impervious to the materials stored therein.
- 3.11.2 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:
- (a) 110% of the capacity of the largest tank or drum within the bunded area; or
 - (b) 25% of the total volume of substance which could be stored within the bunded area.
- 3.11.3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.11.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.11.5 The integrity and water tightness of all the bunds and their resistance to penetration by water or other materials stored therein shall be confirmed by the licensee and shall be reported to the Agency following its installation and prior to its use as a storage area.
- This confirmation shall be repeated at least once every three years thereafter and reported to the Agency on each occasion.

3.12 Landfill Lining

3.12.1 The landfill liner shall be installed and shall comprise the following:

Base and side wall

- a) a mineral layer of a minimum thickness of 1m with a hydraulic conductivity less than or equal to 1.0×10^{-7} m/s, or similar with equivalent protection to the foregoing.

3.12.2 The liner detailed design and its construction shall be in accordance with the guidelines provided in the Agency's Landfill Manual, Landfill Site Design.

3.12.3 All boreholes located in the base of the quarry shall be decommissioned according to the UK Environment Agency guidelines 'Decommissioning Redundant Boreholes and Wells' prior to the emplacement of the liner.

3.12.4 The formation level of the basal liner prior to emplacement of compacted clay shall be constructed at least one metre above the water table and in any event the formation level of the liner shall be no lower than 217mAOD. Any excavations deeper than the formation level shall be backfilled only with granular materials quarried from the facility.

3.13 Landfill Gas Management

3.13.1 Landfill gas management infrastructure shall be provided and maintained at the facility unless otherwise agreed by the Agency.

3.14 Surface Water Management

3.14.1 Effective surface water management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:-

- a) The prevention of contaminated water and leachate discharges into surface water drains and courses, and groundwater; and
- b) The collection/diversion of run off arising from capped and restored areas.

3.15 Groundwater Management

3.15.1 Effective groundwater management infrastructure shall be provided and maintained at the facility during construction, operation, restoration and aftercare of the facility. As a minimum, the infrastructure shall be capable of the following:-

- a) The protection of the groundwater resources from pollution by the waste activities.

3.16 External Access Road

3.16.1 Prior to the acceptance of waste, road improvements or equivalent works should be carried out on the access road to and from the site entrance specified in Attachment D1b of the application.

3.17 Monitoring Infrastructure

3.17.1 Landfill Gas

- a) Within three months of the date of grant of this licence, the licensee shall install five landfill gas monitoring boreholes within the Phase 2 area, located at the western and southern perimeter boundary of the facility, at locations to be agreed by the Agency.
- b) Within six months of the date of grant of this licence, all boreholes monitored for landfill gas shall be fitted with gas sampling valves.
- c) Within two months of the date of grant of this licence, the licensee shall install landfill gas perimeter monitoring boreholes around the perimeter of the existing waste mass in order to determine or detect any off site gas migration.

3.17.2 Groundwater

- a) Within three months from the date of grant of this licence, the licensee shall establish four groundwater boreholes with bollard protection, at locations to be agreed by the Agency, to allow for the monitoring of groundwater levels and quality. Three monitoring boreholes should be located on the south and south east side and downgradient of the facility.
- b) All groundwater boreholes shall have their elevations (mOD Malin) marked on their respective casings or borehole caps. The licensee shall within three months of the date of grant of this licence submit to the Agency top of casing and ground level elevations for all groundwater boreholes.

3.17.3 Replacement of Infrastructure

- a) Monitoring infrastructure which is damaged or proves to be unsuitable for its purpose shall be replaced within one month of it being damaged or recognised as being unsuitable.

REASON: To provide appropriate infrastructure for the protection of the environment.

CONDITION 4 RESTORATION AND AFTERCARE

- 4.1. Within six months of the date of grant of the licence, the licensee shall submit a detailed Restoration and Aftercare Plan for the facility to the Agency for its agreement. The Restoration and Aftercare Plan for the facility shall incorporate Drawing No. G1.1 of the application and shall refer to the phased restoration of the facility.
- 4.2. The final height of the facility shall be as shown in Drawing No. G1.1 'Final Elevations of Site' of the EIS 270mOD.
- 4.3. The surface profile shall be graded to allow the return of the lands for agricultural purposes on completion of the works required by the licence.
- 4.4. Final Capping
 - 4.4.1. The final capping for the inert landfill shall consist of the following:-
 - a) Top soil (150 -300mm);
 - b) Subsoils, such that total thickness of top soil and subsoils is at least 1m;
 - 4.4.2. Following the review of the Quantitative Risk Assessment as specified in Condition 5.2, the Agency may specify more stringent design for the capping, and any such capping shall be installed as instructed or as agreed by the Agency.

- 4.5. No material or object that is incompatible with the proposed restoration of the facility shall be present within one metre of the final soil surface levels.
- 4.6. Where tree planting is to be carried out above waste-filled areas, a synthetic barrier shall be used to augment the clay cap. Combined topsoil and subsoil depths shall be a minimum of 1m.

REASON: To provide for the restoration of the facility.

CONDITION 5 FACILITY OPERATION AND WASTE MANAGEMENT

- 5.1 Work on the construction of the inert landfill shall not commence and waste shall not be deposited or recovered in any part of the facility a) without the prior agreement of the Agency and b) before the Quantitative Risk Assessment and remediation strategy required under Condition 5.2 is agreed by the Agency.
- 5.2 Quantitative Risk Assessment
 - 5.2.1 Within one month from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a conceptual model of the site to identify potential contaminants, pathways and receptors, as specified in BS 10175:2001 or ASTM E1689-95.
 - 5.2.2 Within four months from the date of grant of this licence, the licensee shall carry out ground or geophysical investigations to determine the amount and types of waste previously deposited at the facility, and to assess the impacts the waste is having on the receiving groundwater. The investigations shall be based on a systematic sampling and analysis regime, to a defined grid pattern of sufficient density in order that the waste be characterised for a quantitative risk assessment, and can be assessed as per the Waste Management (Landfill Levy) Regulations 2002. The results of these investigations shall be used to refine the conceptual model specified in Condition 5.2.1.
 - 5.2.3 Within six months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a quantitative risk assessment to determine a remediation strategy for the facility. The remediation strategy shall be agreed by the Agency and shall be implemented within a timescale specified by the Agency.
 - 5.2.4 The investigations and assessments required under Conditions 5.2.1, 5.2.2 and 5.2.3 shall be carried out by independent consultants agreed by the Agency.
- 5.3 Wastes shall be accepted at the facility only from holders of waste collection permits issued under the Waste Management (Collection) Permit Regulations 2001 and from licensed/permitted facilities. Copies of the waste collection permits, waste licences and waste permits must be maintained at the facility.
- 5.4 Waste Acceptance and Characterisation Procedures
 - 5.4.1 Prior to commencement of waste acceptance at the facility, the licensee shall submit to the Agency and obtain its agreement on written procedures for the acceptance and handling of all wastes. These procedures shall include details of the pre-treatment of all waste to be carried out prior to acceptance at the facility and shall also include 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 Council 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.

- 5.4.2 Waste shall be accepted in accordance with the criteria set out in *Schedule F: Acceptance of Inert Waste*.
- 5.4.3 The leaching limit for waste acceptable at the inert landfill shall be as specified in Council Decision of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EEC (2003/33/EC).
- 5.5 All wastes shall be checked at the working face. Any wastes not suitable for acceptance shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. No waste shall be stored in the Waste Quarantine Area for more than three months.
- 5.6 Working Face
- 5.6.1 Unless the prior agreement of the Agency is given, the following shall apply at the landfill:-
- a) Only one working face shall exist at the landfill at any one time for the deposit of waste other than cover or restoration materials; and
 - b) The working face of the landfill shall be no more than 2.5 metres in height after compaction, no more than 25 metres wide and 25 metres in length and have a slope no greater than 1 in 3.
- 5.6.2 The working face, or faces, shall each day at the end of the day, be covered with suitable cover material.
- 5.7 Landscaping
- 5.7.1 Landscaping of the facility as described in Attachment G1 shall be carried out within the first planting season from the date of grant of this licence.
- 5.7.2 The existing hedgerow network which forms the boundary of the facility shall be retained by the licensee.
- 5.8 Operational Controls
- 5.8.1 The landfill shall be filled in accordance with the three phase sequence outlined in Section 1.3.2 and specified on Drawing No. G1.3 of the application unless otherwise agreed by the Agency.
- 5.8.2 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
- 5.8.3 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over unless otherwise agreed by the Agency.
- 5.8.4 Completed areas of the landfill 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 capping or restoration materials.
- 5.8.5 Filled cells shall be permanently capped within twelve months of the cells having been filled to the required level.
- 5.8.6 Scavenging shall not be permitted at the facility.
- 5.8.7 Gates shall be locked shut when the facility is unsupervised.
- 5.8.8 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 5.8.9 Fuels shall be stored only at appropriately bunded locations on the facility.
- 5.8.10 All tanks and drums, including tankers used to transport leachate from the facility shall be labelled to clearly indicate their contents.

- 5.8.11 No smoking shall be allowed on the facility other than in the administration building.
- 5.9 Off-site Disposal and Recovery
- 5.9.1 All wastes derived from any remediation of the facility other than the waste types listed in *Schedule F: Acceptance of Inert Waste*, of this licence shall be exported from the facility and disposed of or recovered at an appropriate facility or facilities to be agreed in advance with the Agency.
- 5.9.2 All waste transferred from the facility shall be transferred only to an appropriate facility agreed by the Agency;
- 5.9.3 All wastes removed off-site for recovery or disposal shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.
- 5.10 Maintenance
- 5.10.1 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer. Written records of the calibrations and maintenance shall be made and kept by the licensee.
- 5.10.2 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 disposed of at the working face.

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

CONDITION 6 EMISSIONS

- 6.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule C: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 6.2. The licensee shall ensure that the activities shall be carried out in a manner such that emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 6.3. Groundwater
- 6.3.1 There shall be no direct emissions to groundwater.
- 6.3.2 Within three months of the date of grant of this licence, the licensee shall submit to the Agency for its agreement, groundwater monitoring trigger levels in accordance with the requirements of Directive 1999/31/EC.
- 6.4. Emissions to Surface Water
- 6.4.1. No substance shall be discharged in a manner, or at a concentration which, following initial dilution causes tainting of fish or shellfish.
- 6.4.2. Within three months of the date of grant of this licence, the applicant shall submit to the Agency for its agreement proposals for the monitoring of water in the surface water/groundwater ponds at the south side of the facility.
- 6.5. Noise
- 6.5.1 There shall be no clearly audible tonal component or impulsive component in the noise emissions from the facility at the facility boundary.

REASON: To control emissions from the facility and provide for the protection of the environment.

CONDITION 7 NUISANCE CONTROL

- 7.1 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.
- 7.2 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.
- 7.3 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
- 7.4 Dust Control
- 7.4.1 From the date of commencement of construction of the facility, dust control measures shall be implemented at the facility.
- 7.4.2 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.
- 7.4.3 Potential dust emissions from all stockpiles of construction and demolition waste shall be controlled by appropriate covering of such materials or by other means to be agreed by the Agency.
- 7.5 Prior to exiting the facility, all commercial vehicles shall use the wheelwash.

REASON: To provide for the control of nuisances.

CONDITION 8 MONITORING

- 8.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in *Schedule D: Monitoring* of this licence and as specified in this licence. Unless otherwise specified by this licence, all environmental monitoring shall commence no later than two months after the date of grant of this licence.
- 8.2. The licensee shall amend the frequency, locations, methods and scope of monitoring as required by this licence only upon the written instruction of the Agency and shall provide such information concerning such amendments as may be requested in writing by the Agency. Such alterations shall be carried out within any timescale nominated by the Agency.
- 8.3. Monitoring and analysis equipment shall be operated and maintained in accordance with the manufacturers' instructions (if any) so that all monitoring results accurately reflect any emission, discharge or environmental parameter.
- 8.4. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 8.5. All persons conducting the sampling, monitoring and interpretation as required by this licence shall be suitably competent.

- 8.6. Within six months of the date of grant of this licence the licensee shall submit to the Agency for its agreement an updated appropriately scaled drawing showing all the monitoring locations that are stipulated in this licence. The drawing shall include the twelve figure National Grid Reference for the various monitoring points.
- 8.7. Groundwater Monitoring
- 8.7.1. Subject to the agreement of the well owners, all private wells within 250m of the facility shall be included in the monitoring programme set out in *Schedule D: Monitoring* of this licence.
- 8.8. Meteorological Monitoring
- 8.8.1. The licensee shall either provide and maintain a meteorological station at the facility capable of monitoring the parameters listed in *Schedule D.5: Meteorological Monitoring* of this licence, or the licensee shall make arrangements for representative meteorological data to be collated for the facility to fulfil the requirements of *Schedule D.5: Meteorological Monitoring* of this licence.
- 8.9. Topographical Survey
- 8.9.1. A topographical survey shall be carried out within six months of the date of grant of this licence. The survey shall include a measurement of the remaining available void space (broken down into actual available void space and any estimated void space which will be generated by future quarrying activities). It shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency.
- 8.10. Archaeological/Heritage Assessment
- 8.10.1. During the development of any undisturbed area, the advice of Dúchas The Heritage Service shall be sought, should it be requested by the Agency. On completion of such development a report of the results of any archaeological/heritage monitoring shall be submitted to Dúchas and to the Agency.
- 8.11. Stability Assessment
- 8.11.1. Within six months of the date of grant of this licence, and annually thereafter, the licensee shall carry out a stability assessment of the side slopes of the quarry.
- 8.12. Nuisance Monitoring
- 8.12.1. The licensee shall, at a minimum of one weekly intervals, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. Written records shall be made of all inspections and any actions taken as a result of these inspections.
- 8.13. Wildlife Monitoring
- 8.13.1. The licensee shall, through the nesting season, inspect the facility and its immediate surrounds to determine if peregrine falcons are nesting at the site.
- 8.13.2. The licensee shall notify Duchas and the Agency, in the event that peregrine falcons are found to nest on the site, and shall carry out whatever steps are required by the Agency.

REASON: *To ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*

CONDITION 9 CONTINGENCY ARRANGEMENTS

- 9.1. In the event of an incident the licensee shall immediately:
- a) identify the date, time and place of the incident;
 - b) carry out an immediate investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
 - c) isolate the source of any such emission;
 - d) evaluate the environmental pollution, if any, caused by the incident;
 - e) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
 - f) provide a proposal to the Agency for its agreement within one month of the incident occurring to:
 - i) identify and put in place measures to avoid reoccurrence of the incident; and,
 - ii) identify and put in place any other appropriate remedial action.
- 9.2. The licensee shall, within six months of the date of grant of this licence submit a written Emergency Response Procedure (ERP) to the Agency for its agreement. The ERP shall address any emergency situations which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment. This shall include a risk assessment to determine the requirements at the facility for fire fighting and fire water retention facilities. The Fire Authority shall be consulted by the licensee during this assessment.
- 9.3. 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.
- 9.4. Emergencies
- 9.4.1. 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.
 - 9.4.2. 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.
 - 9.4.3. In the event that monitoring of local wells indicates that the facility is having a significant adverse effect on the quantity and/or quality of the water supply this shall be treated as an emergency and the licensee shall provide an alternative supply of water to those affected.
 - 9.4.4. In the event that monitoring of the side slopes of the facility indicate that there may be a risk of slope failure this will be treated as an emergency.

REASON: *To ensure compliance with the conditions of this licence by provision of a satisfactory system of monitoring of emissions.*

CONDITION 10 RECORDS

- 10.1 The licensee shall keep the following documents at the facility office.
- a) the current waste licence relating to the facility;
 - b) the current EMS for the facility;
 - c) the previous year's AER for the facility; and
 - d) all written procedures produced by the licensee which relate to the licensed activities.
- 10.2 The licensee shall maintain a written record for each load of waste arriving at and leaving the facility. The licensee shall record the following as appropriate:
- a) the date;
 - b) the name of the carrier (including, if appropriate, the waste collection permit details);
 - c) the vehicle registration number;
 - d) the name of the producer(s)/collector(s) of the waste as appropriate;
 - e) the name of the waste facility (if appropriate) from which the load originated including the waste licence or waste permit register number;
 - f) a description of the waste including the associated EWC codes;
 - g) the quantity of the waste, recorded in tonnes;
 - h) the name of the person checking the load; and
 - i) 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.
- 10.3 Written Records
- The following written records shall be maintained by the licensee:
- a) the types and quantities of waste recovered and disposed of at the facility each month and each year. These records shall include the relevant EWC Codes;
 - b) all training undertaken by facility staff;
 - c) results from all integrity tests of bunds and other structures and any maintenance or remedial work arising from them;
 - d) details of all nuisance inspections; and
 - e) the names and qualifications of all persons who carry out all sampling and monitoring as required by this licence and who carry out the interpretation of the results of such sampling and monitoring.
- 10.4 The licensee shall maintain a written record of all complaints relating to the operation of the activity. Each such record shall give details of the following:
- a) date and time of the complaint;
 - b) the name of the complainant;
 - c) details of the nature of the complaint;
 - d) actions taken on foot of the complaint and the results of such actions; and
 - e) the response made to each complainant.

REASON: To provide for the keeping of proper records of the operation of the facility.

CONDITION 11 REPORTS AND NOTIFICATIONS

- 11.1 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
- a) be sent to the Agency's headquarters;
 - b) comprise one original and three copies unless additional copies are required;
 - c) be formatted in accordance with any written instruction or guidance issued by the Agency;
 - d) include whatever information as is specified in writing by the Agency;
 - e) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
 - f) be submitted in accordance to the relevant reporting frequencies specified by this licence, such as in *Schedule E: Recording and Reporting to the Agency* of this licence;
 - g) be accompanied by a written interpretation setting out their significance in the case of all monitoring data;
 - h) be transferred electronically to the Agency's computer system if required by the Agency.
- 11.2 In the event of an incident occurring on the facility, the licensee shall:
- a) notify the Agency as soon as practicable and in any case not later than 10.00 a.m. the following working day after the occurrence of any incident;
 - b) submit a written record of the incident, including all aspects described in Condition 9.1(a-e), to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident;
 - c) in the event of any incident which relates to discharges to surface/sewer water, notify the Eastern Regional Fisheries Board as soon as practicable and in any case not later than 10:00 a.m. on the following working day after such an incident;
 - d) Should any further actions be taken as a result of an incident occurring, the licensee shall forward a written report of those actions to the Agency as soon as practicable and no later than ten days after the initiation of those actions.
- 11.3 Annual Environmental Report
- 11.3.1. The licensee shall submit to the Agency for its agreement, within thirteen months from the date of grant of this licence, and within one month of the end of each year thereafter, an Annual Environmental Report (AER).
- 11.3.2. The AER shall include as a minimum the information specified in *Schedule G: Content of Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant written guidance issued by the Agency.

REASON: To provide for proper reports to and notifications to the Agency.

CONDITION 12 CHARGES AND FINANCIAL PROVISIONS

12.1 Agency Charges

- 12.1.1 The licensee shall pay to the Agency an annual contribution of €20,586 or such sum as the Agency from time to time determines, towards the cost of monitoring the activity or otherwise in performing any functions in relation to the activity, as the Agency

considers necessary for the performance of its functions under the Waste Management Act, 1996. The licensee shall in 2004 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Public Sector Average Earnings Index from the date of the licence to the renewal date. The updated amount shall be notified to the licensee by the Agency. For 2003, the licensee shall pay a pro rata amount from the date of this licence to 31st December. This amount shall be paid to the Agency within one month of the date of grant of this licence.

- 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.

12.2 Financial Provision for Closure, Restoration and Aftercare

- 12.2.1 Within four months of the date of grant of this licence, the licensee shall arrange for an independent third party risk assessment of the facility to be carried out. The risk assessment shall have particular regard to any accidents, emergencies, or other incidents, which might occur at the facility and their effect on the environment. The risk assessment shall include a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility together with a proposal for Financial Provision arising from the carrying on of the activities to which this licence relates including the restoration of the facility as required by this licence.

- 12.2.2 The licensee shall within six months establish and maintain a fund, or provide a written guarantee for the costs determined under Condition 12.2.1. The type of fund established and means of its release/recovery shall be agreed by the Agency prior to its establishment.

- 12.2.3 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under Condition 12.2.2, forward to the Agency written proof of such indemnity.

- 12.2.4 Unless otherwise agreed any revision to the fund 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 site conditions, changes in law, regulations, regulatory authority charges, or other significant changes.

- 12.2.5. The licensee shall provide a statement in writing to the Agency on an annual basis as part of the AER in respect of the determination of charges for the disposal of waste. The statement shall be in accordance with the requirements of S.I. 337 of 2002 European Communities (Amendment of Waste Management (Licensing) Regulations, 2000) Regulation, 2002.

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

SCHEDULE A : Waste Acceptance

A.1 Waste Acceptance

Table A.1 Waste Categories and Quantities

Waste Type	Maximum (Tonnes per Annum)
Inert Construction & Demolition Waste	150,000
Inert mineral extraction wastes arising from quarrying activities at the facility.	No limit

SCHEDULE B : Specified Engineering Works

Specified Engineering Works
Development of the facility including preparatory works and lining.
Ground Investigation Works and Risk Assessment Aspects.
Landfill capping including intermediate and final.
Restoration and Aftercare works.
Installation of Waste Water Treatment Plant.
Installation of waste quarantine and waste inspection areas.
Installation of Surface Water Management Infrastructure.
Installation of Groundwater Management Infrastructure.
Installation of Monitoring Infrastructure.
Any other works notified in writing by the Agency.

SCHEDULE C : Emission Limits

C.1 Noise Emissions: (Measured at the noise sensitive locations indicated in Table D.1 Monitoring Locations.)

Day dB(A) L_{Aeq} (30 minutes)	Night dB(A) L_{Aeq} (30 minutes)
55	45

C.2 Dust Deposition Limits: (Measured at the monitoring points indicated in Table D.1 Monitoring Locations.)

Level (mg/m ² /day) ^{Note 1}
350

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

C.3 Surface Water Discharge Limits: (Measured at any discharge point to the groundwater lake which is located to the immediate south of the facility)

Level (Suspended Solids mg/l)
35

SCHEDULE D : Monitoring

Monitoring to be carried out as specified below.

D.1 Monitoring Locations

Monitoring locations shall be those as set out in Table D.1.1

Table D.1.1 Monitoring Locations

Dust & Noise Stations	Landfill Gas Stations	Surface Groundwater Lake Stations	Leachate Stations	Groundwater Stations
Three dust and noise locations shall be agreed by the Agency within one month of the date of grant of licence.	Five landfill gas locations as required by Condition 3.17.1 shall be submitted for agreement by the Agency within one month of the date of grant of licence. Perimeter landfill monitoring boreholes as required under Condition 3.17.1 c) shall be submitted for agreement by the Agency within one month of the date of grant of licence.	Two sampling points shall be agreed by the Agency and shall be established within one month of the date of grant of licence at the groundwater/surface water lake immediately south of the facility. Additional sampling points shall be established as specified by the Agency following qualitative risk assessment.	Sampling points shall be installed as specified by the Agency	a) MW 4 b) FOUR monitoring wells as required by Condition 3.17.2 c) Private wells required by Condition 8.7.1 d) Additional sampling points shall be installed as specified by the Agency following qualitative risk assessment

D.2 Dust

Table D.2.1 Dust Monitoring Frequency and Technique

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust Deposition (mg/m ² /day)	Quarterly ^{Note 3}	Standard Method ^{Note 1}
PM ₁₀ (µg/m ³)	Six Monthly ^{Note 3}	See ^{Note 2}

Note 1: Standard method VDI2119 (Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method) German Engineering Institute). A modification (not included in the standard) in which 2 methoxy ethanol may be employed to eliminate interference due to algae growth in the gauge may be employed.

Note 2: As described in prEN12341 "Air Quality - field test procedure to demonstrate reference equivalence of sampling methods for PM10 fraction of particulate matter" or an alternative agreed in writing with the Agency.

Note 3: A wind rose, obtained from the meteorological station for the relevant sampling period, shall be submitted with each set of results.

D.3 Noise

Table D.3.1 Noise Monitoring Frequency and Technique

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

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

D.4 Surface Water and Groundwater

Table D.4.1 Water and Leachate - Parameters / Frequency

PARAMETER ^{Note 1}	SURFACE WATER	GROUNDWATER
	Monitoring Frequency	Monitoring Frequency
Visual Inspection/Odour ^{Note 2}	Weekly	Quarterly
Groundwater Level ^{Note 7}	Not Applicable	Monthly
Ammoniacal Nitrogen	Quarterly	Quarterly
BOD	Quarterly	Not Applicable
COD	Quarterly	Not Applicable
Chloride	Quarterly	Quarterly
Dissolved Oxygen	Annually	Not Applicable
Electrical Conductivity ^{Note 7}	Quarterly	Quarterly
pH ^{Note 7}	Quarterly	Quarterly
Total Suspended Solids	Quarterly	Not Applicable
Temperature ^{Note 7}	Quarterly	Quarterly
Metals / non metals ^{Note 3}	Annually	Annually
Cyanide (Total)	Not Applicable	Annually
Fluoride	Not Applicable	Annually
List I/II organic substances ^{Note 4}	Annually ^{Note 5}	Annually ^{Note 5}
Mercury	Annually	Annually
Sulphate	Annually	Annually
Total Alkalinity	Annually	Annually
Total P/orthophosphate	Annually	Annually
Total Oxidised Nitrogen	Annually	Annually
Total Organic Carbon	Annually	Annually
Biological Assessment	Annually ^{Note 6}	Not Applicable

Note 1: 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 of leachate, additional samples should be analysed.

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:** 2 surface water locations, 3 groundwater locations to be agreed by the Agency for these parameters.
- Note 6:** Appropriate biological methods (such as EPA Q-Rating System) to be used for the assessment of rivers and streams.
- Note 7:** For groundwater and surfacewater these parameters should be measured on-site with a portable electronic meter.

D.5 Meteorological Monitoring

Data to be obtained from a source agreed by the Agency.

Table D.5.1 Meteorological Monitoring:

Parameter	Monitoring Frequency	Analysis Method/Technique
Precipitation Volume	Daily	Standard
Temperature (min/max.)	Daily	Standard
Wind Force and Direction	Daily	Standard
Evaporation	Quarterly	Standard
Evapotranspiration	Quarterly	Standard
Humidity	Quarterly	Standard
Atmospheric Pressure	Daily	Standard

SCHEDULE E : Recording and Reporting to the Agency

Report	Reporting Frequency <small>Note 1</small>	Report Submission Date
Environmental Management System Updates	Annually	One month after the end of the year reported on.
Annual Environment Report (AER)	Annually	Thirteen months from the date of grant of licence and one month after the end of each year thereafter.
Record of incidents	As they occur	Within five days of the incident.
Bund, tank and container integrity assessment	Every three years	Prior to commissioning and one month after end of the three year period being reported on.
Specified Engineering Works reports	As they arise	Prior to the works commencing.
Monitoring of Surface Water Quality	Six monthly	Ten days after end of the quarter being reported on.
Monitoring of Groundwater Quality	Six monthly	Ten days after end of the quarter being reported on.
Monitoring of Leachate Quality	Six monthly	Ten days after end of the quarter being reported on.
Meteorological Monitoring	Annually	One month after end of the year being reported on.
Dust Monitoring	Six monthly	Ten days after the period being reported on.
Noise Monitoring	Annually	One month after end of the year being reported on.
Any other monitoring ^{Note 2}	As they occur	Within ten days of obtaining results.

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

Note 2: Other than Nuisance Monitoring Reports.

SCHEDULE F : Acceptance of Inert Waste

F.1 Acceptable Waste for Recovery

Only the wastes listed below are acceptable for recovery at the facility, unless otherwise agreed by the Agency.

WASTE	
Topsoil	Solid Road Planings, Solid Tarmacadam, Solid Asphalt *
Subsoil	Brickwork
Stone, Rock and Slate	Natural Sand
Clay, Pottery and China	Concrete

*only for use in constructing and maintaining site road and tarmac hardstanding areas.

F.2 Acceptable Construction and Demolition Waste for Disposal at the Inert Landfill

Only the wastes listed below are acceptable for recovery at the facility, unless otherwise agreed by the Agency.

EWC Code ^{Note 1}	Description	Restrictions ^{Notes 2 to 7}
17 01 01	Concrete	Selected C&D waste only (*)
17 01 02	Bricks	Selected C&D waste only (*)
17 01 03	Tiles and ceramics	Selected C&D waste only (*)
17 01 07	Mixtures of concrete, bricks, tiles and ceramics	Selected C&D waste only (*)
17 05 04	Soil and Stones	Excluding topsoil, peat; excluding soil and stones from contaminated sites

(*) Selected construction and demolition waste (C&D waste): with low contents of other types of materials (like metals, plastic, organics, wood, rubber, etc). The origin of the waste must be known.

Note 1: Waste not appearing on this list above (F.2) must be agreed by the Agency and must be subject to testing as laid down under Section 1 of Council Decision 2003/33/EC to determine if it fulfils the criteria for waste acceptance at landfills for inert waste as set out in Section 2.1.2 of the Council Decision 2003/33/EC.

Note 2: Waste on the list in Table F.2 are assumed to fulfil the criteria as set out in the definition of inert waste in Article 2(e) of the Landfill Directive and the criteria listed in Section 2.1.2 of Council Decision 2003/33/EEC. The waste can be admitted without testing at the inert landfill.

Note 3: The waste must be a single stream (only one source) of a single waste type. Different wastes contained in the list may be accepted together, provided they are from the same source.

Note 4: In the case of suspicion of contamination (either from visual inspection or from knowledge of the origin of the waste) testing should be applied or the waste refused. If the listed wastes are contaminated or contain other material or substances such as metals, asbestos, plastics, chemicals etc to an extent which increases the risk associated with the waste sufficiently to justify their disposal in other classes of landfills, they may not be accepted in the landfill.

Note 5: If there is a doubt that the waste fulfils the definition of inert waste according to Article 2(e) of the Landfill Directive and the criteria listed in Section 2.1.2 of Council Decision 2003/33/EEC or about the lack of contamination of the waste, testing must be applied. For this purpose the methods listed in Section 3 of Council Decision 2003/33/EEC shall be used.

Note 6: No C&D waste from constructions, polluted with inorganic or organic dangerous substances e.g. because of production process in the construction, soil pollution, storage and usage of pesticides or other dangerous substances, etc., unless it is made clear that the demolished construction was not significantly polluted.

Note 7: No C&D waste from constructions, treated, covered or painted with materials, containing dangerous substances in significant amounts.

SCHEDULE G: Content of the Annual Environmental Report

Annual Environmental Report Content

Reporting Period.

Waste activities carried out at the facility.

The following summary information should be presented graphically where possible:

- Quantity and Composition of waste received, disposed of and recovered during the reporting period and each previous year.
- Summary report on emissions.
- Summary of results and interpretation of environmental monitoring.
- Resource and energy consumption summary.

Proposed development of the facility and timescale of such development.

Calculated remaining capacity of the facility and year in which final capacity is expected to be reached.

Methods of deposition of waste.

Report on development works undertaken during the reporting period, and a timescale for those proposed during the coming year.

Report on restoration of completed phases.

Site survey showing existing levels of the facility at the end of the reporting period.

Estimated annual and cumulative quantity of indirect emissions to groundwater.

Annual water balance calculation and interpretation.

Report on the progress towards achievement of the Environmental Objectives and Targets contained in previous year's report.

Schedule of Environmental Objectives and Targets for the forthcoming year.

Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.

Tank, pipeline and bund testing and inspection report.

Reported incidents and Complaints summaries.

Review of Nuisance Controls.

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

Report on training of staff.

Any other items specified by the Agency.

Sealed by the seal of the Agency on this 14th day of November 2003

PRESENT when the seal of the Agency
was affixed hereto:

Gerry Carty, Director/Authorised Person