This licence was amended on 20/10/05 under Section 76(4) of the Waste Management Acts, 1996 to 2003. The details of the amendment must be read in conjunction with this licence. The Amendment document is titled 48-1S76(4)AmendmentA.doc

This licence was also amended on 31/01/2013 under Section 42B(1) of the Waste Management Acts, 1996 to 2012. The details of Amendment B must be read in conjunction with this licence. The amendment is entitled "Technical Amendment B".



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

WASTE LICENCE

Waste Licence 48-1

Register Number:

Licensee: Marrakesh Limited

Location of Facility: Kilmurry South Landfill, Kilmurry South,

Kilmacanogue, Bray, Co. Wicklow.

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Reasons for the Decision

The Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence (including Condition 5.11, which provides that no waste shall be disposed of, recovered, stored or otherwise handled in the area referred to as Phase III in the application), any emissions from the activity will comply with and not contravene any of the requirements of Section 40(4) of the Waste Management Act, 1996. It provides for the rehabilitation and restoration of the existing landfilled area and the protection of an area of outstanding natural beauty.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions and objections 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 Environmental Protection Agency (the Agency), under Section 40(1) of the said Act hereby grants this Waste Licence to Marrakesh Limited to carry on the waste activities listed below at Kilmurry South, Bray, Co. Wicklow subject to eleven 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 disposal of the waste types specified in Schedule F, Table F.2 only in Phases I and II of the existing landfill (as shown in drawing number G1.3 of the application) for the purposes of restoration and rehabilitation.

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, prior to disposal at an alternative appropriate facility, of waste not acceptable for disposal at this facility.

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 receipt and recovery of organic substances found in Construction and Demolition wastes such as wood and plastics. Composting or other biological transformation processes are not permitted.

Class 4: Recycling or reclamation of other inorganic materials.

This activity is limited to the receipt and recovery of inorganic substances found in Construction and Demolition wastes such as clay, topsoil, metal, broken concrete, asphalt. Some of these recovered materials may be utilised at this facility for development and/or restoration purposes.

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 temporary storage of accepted waste prior to subjection to a recovery process, and to the temporary storage of recovered materials prior to reuse or to dispatch from the

facility

INTERPRETATION

Act The Waste Management Act, 1996 (No. 10 of 1996).

Adequate lighting 20 lux measured at ground level.

Agreement Agreement in writing.

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, including any

other material submitted to the Agency in writing by the licensee between the date of the application and the date of grant of this licence.

Appropriate facility

A waste management facility, duly authorised under relevant law and

technically suitable.

BATNEEC Best Available Technology Not Entailing Excessive Cost as defined in

section 5 (2) of the Act.

Biodegradable

waste

Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food and garden waste, and paper and

paperboard.

Commercial waste As defined in Section 5 (1) of the Act.

Condition A condition of this licence. In any case where this licence refers to a

numbered condition, the reference shall be taken to mean the condition and any sub-condition therein which the context of the reference

requires that reference is made to

Containment

boom

A boom which can contain spillages and prevent these from entering

drains or watercourses.

Cover material Bricks, crushed concrete, tarmac, earth, soil, sub-soil, stone, rock or

other similar natural materials; or

other cover material the use of which has been agreed with 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.

Emission As defined in Section 5 (1) of the Act.

Emission Limit Those limits, including concentration limits and deposition levels

Value established in Schedule E.

Environmental Pollution

As defined in Section 5 (1) of the Act.

European Waste Catalogue (EWC)

The EWC is 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.

Facility That area or areas defined under Condition 1.2

Green waste Plant matter and other vegetation.

Hazardous Waste As defined in Section 4 (2) of the Act.

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.

Incident Any reference to an incident in this licence means an incident as

defined in Condition 3.1.

Landfill As defined in Section 5 (1) of the Act.

Landfill Gas Gases generated from the landfilled waste.

Leachate Any liquid percolating through the deposited waste and emitted from or

contained within a landfill as defined in Section 5 (1) of the Act.

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 Marrakesh Limited, Kilmurry South, Bray Co. 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

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 At least 12 times per year, at approximately monthly intervals.

Municipal Waste Municipal waste as defined in Section 5 (1) of the Act.

Night-time 10.00 p.m. to 8.00 a.m.

Quarterly A period of three calendar months, the first period of which commences

on the date of grant of this licence.

Recovery As defined in Section 4 (4) of the Act.

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 between 2% and 14% dry matter.

Specified Emissions Those emissions listed in Schedule E: Emission Limits of this licence.

Specified Engineering Works Those engineering works listed in Schedule C: Specified Engineering

Works of this licence.

Submit Unless the context of this licence indicates otherwise, submit in writing

to the Agency for its agreement

Treated Sludge Sludge which has undergone biological, chemical or heat treatment,

long-term storage or any other appropriate process so as significantly to reduce its fermentability and the health hazards resulting from its

use.

Trigger Level A parameter value which when achieved or exceeded requires certain

actions to be taken.

Waste As defined in Section 4(1) of the Act.

Waste disposal activity

Includes the activities referred to in Section 4 of the Act and listed in the

Third Schedule thereto.

Waste recovery

activity

Includes the activities referred to in Section 4 of the Act and listed in the

Fourth Schedule thereto.

White Goods Refrigerators, cookers, ovens and other similar appliances.

Working Day 9.00 a.m. to 6.00 p.m. Monday to Friday (other than bank holidays),

and 9.00 a.m. to 2.00 p.m. Saturday.

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

- 1.1. Waste activities at the facility shall be restricted to those listed and described in Part I and required by the licence.
- 1.2. Waste activities shall be restricted to the area of land outlined in red on Drawing No. B2.1 entitled "Site Plan" of the application, subject to Condition 5.11. Any reference in this licence to "facility" shall mean the area thus outlined in red.
- 1.3. 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. Every 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.
- 1.4. 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.
- 1.5. Where the Agency considers that a non-compliance with the Conditions of this licence has occurred, it may serve a notice on the licensee specifying:
 - a) 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;
 - b) 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; and,
 - c) 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 confirmation is received from the Agency that the notice is withdrawn.

Reason: To clarify the scope of this licence.

CONDITION 2 MANAGEMENT OF THE ACTIVITY

- 2.1 Environmental Management System
 - 2.1.1 The licensee shall within nine months from the date of grant of this licence, 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.
 - 2.1.2 The EMS shall include as a minimum those elements specified in the Conditions 2.2 to 2.5 below.

2.2 Schedule of Environmental Objectives and Targets

- 2.2.1 The licensee shall, within twelve months from the date of grant of this licence, submit to the Agency for its agreement a Schedule of Objectives and Targets. The objectives should be specific and the targets measurable.
- 2.2.2 The Schedule shall address a five year period as a minimum and shall be reviewed and submitted annually to the Agency for its agreement.

2.3 Corrective Action

2.3.1 Within six months of the date of grant of this licence the licensee shall establish and maintain written Corrective Action Procedures to ensure that corrective action is taken should specified requirements to this licence not be fulfilled.

2.4 Management Structure

- 2.4.1 Within three months from the date of grant of this licence, the licensee shall submit written details of the management structure of the facility for the agreement of the Agency. Any proposed changes in the management structure shall be submitted in writing to the Agency for its agreement. 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;
 - b) details of the responsibilities for each individual named under a) above;
 - c) details of the relevant experience, competence and qualifications held by each of the persons nominated under a) above; and
 - d) contingency arrangements for the absences of the named persons from the facility.

2.5 Communications

2.5.1 Within nine months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement a Communications Programme to ensure that members of the public can obtain information concerning the environmental performance of the facility at all reasonable times.

2.6 Annual Environmental Report

- 2.6.1 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).
- 2.6.2 The AER shall include as a minimum the information specified in Schedule A: Content of Annual Environmental Report and shall be prepared in accordance with any relevant written guidance issued by the Agency.
- 2.7 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 suitably qualified and experienced deputy, shall be present at all times during the operation of the facility.
- 2.8 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and/or experience, as required and shall be aware of the requirements of this licence.

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 NOTIFICATION AND RECORD KEEPING

- 3.1 The licensee shall make written records of the following incidents:
 - a) any nuisance caused by the activity
 - b) any emission which does not comply with the requirements of this licence;
 - c) any trigger level specified in this licence which is attained or exceeded;
 - d) any indication that environmental pollution has, or may have, taken place; and,
 - e) any emergency.
- 3.2 The written record shall include all aspects described in Condition 10.6(a-e).
- 3.3 Unless otherwise instructed in writing by the Agency, the licensee shall:
 - a) notify the Agency as soon as practicable and in any case not later than 10.00 am the following working day after the occurrence of any incident;
 - b) submit the written record required by this condition to the Agency as soon as practicable and in any case within five working days after the occurrence of any incident; and,
 - c) in the event of any incident which relates to discharges to surface water, notify the Eastern Regional Fisheries Board as soon as practicable and in any case not later than 10:00am on the following working day after such an incident.
- 3.4 Should any further actions be taken after the date of written notification, 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.
- 3.5 Unless otherwise agreed by the Agency, all documentation submitted to the Agency shall:
 - (a) be sent to the Agency's headquarters;
 - (b) comprise one original and three copies;
 - (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; and
 - (g) in the case of results of any environmental monitoring, be accompanied by a written interpretation setting out their significance.

- Copies of all environmental monitoring data obtained by the licensee which relates to the facility shall be forwarded to the Agency at the frequencies set out in Schedule B: Recording and Reporting to the Agency of this licence.
- 3.7 Unless otherwise agreed with the Agency, all documentation and records required to be made under this licence, shall be retained by the licensee.
- 3.8 The licensee shall provide additional copies of any documentation and records referred to in this licence to the Agency upon written request, within the time specified in writing by the Agency.
- 3.9 The licensee shall keep the following documents at the facility office referred to in Condition 4.7.
 - 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;
 - d) all written procedures produced by the licensee which relate to the licensed activities.
- 3.10 The licensee shall maintain a written record for each load of waste arriving at and departing from the facility. The licensee shall record the following:
 - a) the name of the carrier;
 - b) the vehicle registration number;
 - c) the name of the producer(s) of the waste;
 - d) the source of accepted waste (address):
 - e) a description of the waste including the associated European Waste Catalogue codes;
 - f) the quantity of the waste, recorded in tonnes;
 - g) the date; and,
 - h) the name of the person checking the load.
 - 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.
- 3.11 The licensee shall maintain a written record of the type and quantity, recorded in tonnes, of all wastes recovered or disposed of at the facility.
- 3.12 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 notification of incidents, to update information on the activity and to provide for the keeping of records.

CONDITION 4 SITE INFRASTRUCTURE

4.1 The licensee shall establish all infrastructure referred to in this licence as instructed by the Agency.

4.2 Site Notice Board

- 4.2. 1 The licensee shall provide and maintain a Site Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the identification board shall be 1200 mm by 750 mm.
- 4.2. 2 The board shall clearly show:
 - a) the name and telephone number of the facility;
 - b) the normal hours of opening;
 - c) the name, address and telephone number of the licence holder;
 - d) an emergency out of hours contact telephone number;
 - e) the licence reference number; and,
 - where and when environmental monitoring information relating to the facility can be obtained.

4.3 Site Security

- 4.3.1 The licensee shall within six months of the date of grant of this licence provide and maintain the following:
 - (a) stockproof fencing (sheep standard) and gates shall be installed and maintained at the facility perimeter as shown on Drawing No. B2.1 entitled "Site Plan" of the application where there is an absence of a distinctive and natural barrier unless agreed otherwise by the Agency;
 - (b) a cattle grid at the facility entrance. This cattle grid shall be installed in a manner which facilitates the removal of any mud/debris which accumulates therein; and,
 - (c) a security hut and barrier at the facility entrance.
- 4.3. 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,
 - a repair to the standard of the original gates and/or fencing shall be undertaken within three working days or as otherwise agreed with the Agency.
- 4.3. 3 Gates shall be locked shut when the facility is unsupervised.
- 4.4 Facility Boundary / Perimeter Planting
 - 4.4. 1 The existing hedgerow network which forms part of the boundary of the facility shall be retained by the licensee.
 - 4.4. 2 Where no hedgerow currently exists at the facility boundary (other than at gates and unless agreed otherwise by the Agency), a hedgerow shall be planted and maintained within twelve months of the date of grant of this licence. The species composition of new hedgerows shall be as described in Attachment 8 of the Environmental Impact Statement unless agreed otherwise by the Agency.

4.5 Waste Water

4.5. 1 The licensee shall maintain the septic tank systems for the treatment of sewage arising from the facility office and the site operators quarters as described in the application. The licensee shall demonstrate to the Agency within twelve months of the date of grant of this licence that these septic tanks and their associated percolation areas conform to the criteria set out in SR6 Septic Tank Systems (NSAI 1991).

4.6 Site Roads and Hardstanding

- 4.6. 1 Effective site roads shall be provided and maintained to ensure the safe movement of vehicles within the facility.
- 4.7 The licensee shall provide and maintain an office on the facility, at the location shown in Drawing No. B2.1 entitled "Site Plan", unless agreed otherwise by the Agency. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 4.8 The licensee shall provide and maintain a working telephone and facsimile machine in the office specified in Condition 4.7 above.
- 4.9 Waste Inspection/Quarantine
 - 4.9. 1 A Waste Quarantine Area shall be provided and maintained within 6 months of the date of grant of this licence. The waste quarantine area shall, inter alia, include a bunded area of 1000 litre capacity or greater.
- 4.10 The licensee shall provide and maintain a weighbridge at the facility within six months of the date of grant of this licence.
- 4.11 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.

4.12 Liquid Storage Areas

- 4.12. 1 The licensee shall provide and maintain a bunded fuel storage area at the facility within nine months of the date of grant of this licence. Unless otherwise agreed with the Agency the location of the fuel storage area shall be within the Workshop as shown on Drawing No. B2.2. Fuels shall only be stored at the agreed location.
- 4.12. 2 All tank and drum storage areas shall be rendered impervious to the materials stored therein. In addition, 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.
- 4.12. 3 All drainage from bunded areas shall be diverted for collection and safe disposal.
- 4.12. 4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 4.12. 5 The integrity and water tightness of all the bunds, tanks and containers and their resistance to penetration by water or other materials stored therein shall be tested and demonstrated by the licensee and shall be reported to the Agency following its installation and prior to its use as a fuel storage area. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. The licensee shall also submit to the Agency for its agreement in each case a written report on the storage of fuels at the facility. A

- written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 4.12. 6 All tanks and containers shall be labelled to clearly indicate their contents and volume.
- 4.13 Any bunds shall be inspected weekly, desludged as necessary and properly maintained at all times. Septic tanks shall be inspected at least every six months. All sludge and drainage from these operations shall be collected for safe disposal as appropriate. A written record shall be kept of the inspections, desludging, cleaning, disposal of associated waste products, maintenance and performance of the bunds and septic tanks.

4.14 Specified Engineering Works

- 4.14. 1 The licensee shall submit written proposals for all Specified Engineering Works, as defined in Schedule C: Specified Engineering Works, 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.
- 4.14. 2 All specified engineering works shall be supervised by a competent person(s) agreed in advance by the Agency and that person, or persons, shall be present at all times during which relevant works are being undertaken.
- 4.14. 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) where relevant a drawing and sections showing the location of all samples and tests carried out:
 - e) where relevant daily records sheets/diary;
 - f) name(s) of contractor(s)/individual(s) responsible for undertaking the 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; and
 - i) any other information requested in writing by the Agency.
- 4.15 Within three months of the date of grant of this licence, the licensee shall provide and maintain a fixed bench mark referenced in situ to Ordinance Datum (Malin Head).
- 4.16 Landfill Gas Management:
 - 4.16. 1 All buildings constructed on the facility shall have regard to the guidance given in the Department of Environments 1994 publication "Protection of New Buildings and Occupants from Landfill Gas" and any subsequent revisions.

4.17 Surface Water Management

4.17. 1 Within three months of the date of grant of this licence the licensee shall submit to the Agency for its agreement an ongoing management programme for the control of surface water run off from the facility during operation and restoration.

4.18 Wheel Cleaner

- 4.18. 1 The licensee shall establish and maintain a wheelwash/dry wheel shake out at the facility as agreed by the Agency within six months of the date of grant of this licence.
- 4.18. 2 The wheelwash shall be inspected on a daily basis and drained as required. Silt stones and other accumulated solid material shall be removed as required from the wheel cleaner and disposed of at the working face. Liquid drainage shall only be disposed of as agreed by the Agency.

Reason: To provide for the protection of the environment.

CONDITION 5 WASTE MANAGEMENT

- 5.1. No hazardous waste, liquid waste, sludge (treated or otherwise), green waste, vegetable matter waste, food stuff waste, white goods or municipal waste shall be accepted at the facility.
 - 5.2 Subject to Condition 5.1 and any requirements of Condition 5.3, 5.4 and 5.5, only those waste types and quantities listed in Schedule F: Waste Acceptance shall be recovered or disposed of at the facility.
 - 5.3 Waste Acceptance Procedures
 - 5.3.1 Unless agreed otherwise with the Agency, Waste Acceptance Procedures shall be carried out in accordance with Attachments E.2 and E.3 of the application. Any wastes deemed to be in contravention of this licence and/or unsuitable for recovery or disposal at this facility shall be removed for recovery or disposal at an appropriate alternative facility. Such waste shall be stored in the Waste Quarantine Area only. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.
- 5.4. The quantity of wastes to be accepted for disposal and recovery at the landfill, shall not exceed 100,000 tonnes per annum, unless otherwise agreed in advance with the Agency.
- 5.5. Once sufficient waste has been accepted at the facility to achieve the restoration requirements of Condition 8.1, no further waste shall be accepted for disposal or for recovery.
- 5.6. No waste shall be deposited within five metres of the ephemeral stream which runs adjacent to the northern boundary of the facility.
- 5.7. 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, capping or restoration materials;
 - all waste deposited at the working face shall be compacted in layers no deeper than 250mm as soon as is practicable and at any rate prior to the end of the working day;
 - a D5 Dozer as specified in the application, or other such vehicle as agreed with the Agency, shall be used for compacting all waste other than that used for restoration or construction purposes; and,
 - d) the working face of the operational cell shall, at the end of each day, be covered with material suitable to minimise any nuisances occurring.
- 5.8. Scavenging shall not be permitted at the facility.
- 5.9. No waste shall be burnt within the boundaries of the facility.
- 5.10. Waste shall only be handled, accepted at or dispatched from the facility between the hours of 8.00am and 6.00 pm Monday to Friday (excluding Bank Holidays) and 8.00 am to 2.00 pm on Saturdays unless otherwise agreed in advance with the Agency.

- 5.11. The landfill shall be filled in accordance with the phase sequence outlined as Phases I and II in drawing number G1.3. No waste shall be disposed of, recovered, stored or otherwise handled in the area outlined as Phase III in drawing number G1.3.
- 5.12. In order to prevent the formation of voids, all large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
- 5.13. Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over without prior agreement from the Agency.

5.14. Recovery

- 5.14.1 Within three months of the date of grant of this licence, a proposal for the recovery of Construction and Demolition Waste which is not acceptable for disposal at the facility shall be submitted to the Agency for its agreement.
- 5.14.2 The recovery of soils, rocks and stones shall be carried out in accordance with the application unless otherwise agreed by the Agency.
- 5.15 All wastes removed off site for recovery or disposal shall only be conveyed to a waste contractor agreed by the Agency, and shall be transported from the facility to the consignee in a manner which will not adversely affect the environment.

Reason:

To provide for the acceptance and management of wastes authorised under this waste licence in a manner which enables the rehabilitation and restoration of the existing landfilled areas and which restricts the licensed activities to the existing landfilled areas, for the protection of an area of outstanding natural beauty.

CONDITION 6 ENVIRONMENTAL NUISANCES

- 6.1. 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. A roadsweeper, as described in the application, may be employed as required to clean the paved access road and the approach road to the facility provided it does not generate a dust nuisance. The waste from any roadsweeper employed, provided it is inert, may be deposited at the active working face unless instructed otherwise by the Agency.
- 6.2. Litter Control
 - 6.2.1. All loose litter accumulated within the facility and its environs shall be removed and appropriately disposed of on a daily basis.
- 6.3. Any waste placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed by the licensee immediately and in any event by 10:00am of the next working day, after such waste is discovered. Such waste shall be disposed of at an appropriate facility.
- 6.4. Derelict machinery, plant and other debris shall be removed from the facility within six months of the date of grant of this licence unless agreed otherwise by the Agency. The facility thereafter shall be maintained in a tidy state.
- 6.5. The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered
- 6.6. Dust Control

- 6.6.1. 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.
- 6.6.2. During wet periods, appropriate materials shall be laid on any unpaved roads as required to minimise mud generation.
- 6.7. The storage of recovered waste or development/restoration materials shall not give rise to nuisance.
- 6.8. The licensee shall ensure that vermin, birds, flies, mud, dust and odours do not give rise to nuisance at the facility or the immediate environs of the facility. Any method used by the licensee to control any such nuisance shall not cause environmental pollution.

Reason: To provide for the control of nuisance.

CONDITION 7 EMISSIONS AND ENVIRONMENTAL IMPACTS

- 7.1. No specified emission from the facility shall exceed the emission limit values set out in Schedule E: Emission Limits of this licence. There shall be no other emissions of environmental significance.
- 7.2. 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.
- 7.3. 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.
- 7.4. Landfill Gas
 - 7.4.1. The following are the trigger levels for landfill gas emissions from the facility measured in any service on, at or immediately adjacent to the facility and/or at any other point located outside the body of the waste:
 - a) Methane, greater than or equal to 1.0% v/v; and
 - b) Carbon dioxide, greater than or equal to 1.5% v/v.
- 7.5. Emissions to Groundwater
 - 7.5.1. There shall be no direct emissions to groundwater.

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

CONDITION 8 RESTORATION AND AFTERCARE

8.1. The Restoration Plan for the facility shall be based on the Restoration and Aftercare information submitted to the Agency on the 7th April 1999 subject to the following:

- a) the final slopes of the deposited waste shall be no greater than 35 degrees to the horizontal;
- b) the final profile of Phases I and II of the facility shall be based on that shown in Drawing No. 103, entitled "Restoration Plan" but adjusted to a maximum elevation of 164 metres above Ordnance Datum (Malin Head) and finished in a manner designed to reduce surface water infiltration (a plateau finish is not acceptable). The licensee shall submit a revised version of Drawing No. 103, entitled "Restoration Plan" which conforms to this Condition within three months of the date of grant of this licence:
- c) the access route to the quarry located immediately south of the facility shall not traverse restored phases;
- d) topsoil and subsoil depths shall be a minimum of 1m unless otherwise agreed in advance with the Agency;
- e) all plantings shall be adequately maintained;
- upon achievement of agreed Phase II elevations, any remaining wastes, whether for disposal or for recovery or recovered, shall be dispatched from the facility to appropriate facilities within a timeframe agreed by the Agency;
- g) each Phase shall be restored as agreed within one year of reaching agreed elevations (which allow for the emplacement of the restoration layer); and,
- h) any further instructions issued by the Agency.
- 8.2. Within twelve months of the date of grant of this licence, the licensee shall submit a proposal for the aftercare of the facility to the Agency for its agreement.
- 8.3. 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.
- 8.4. 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.

Reason: To provide for the restoration and aftercare of the facility.

CONDITION 9 ENVIRONMENTAL MONITORING

- 9.1. The licensee shall carry out such monitoring and at such locations and frequencies as set out in Schedule D: Monitoring and as specified in the Conditions of this licence.
- 9.2. The licensee shall provide safe and permanent access to all on-site sampling and monitoring points and off-site points as required by the Agency.
- 9.3. The licensee shall maintain all sampling and monitoring points so that they may be used for representative sampling and monitoring.
- 9.4. 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 or discharge or environmental parameter.
- 9.5. The licensee shall amend the frequency, locations, methods and scope of monitoring, sampling, analyses and investigations 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.
- 9.6. Unless otherwise agreed with the Agency, a written record shall be kept of the names, qualifications and a summary of relevant experience 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.
- 9.7. All on-site monitoring points as described in Condition 9 shall be tagged in situ with their agreed sampling point codes within ten months of the date of grant of this licence.
- 9.8. A topographical survey, including the remaining void spaces subject to Condition 8.1 for Phases I and II as shown in drawing number G1.3 of the application, shall be carried out within three months of the date of grant of this licence. It shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency.
- 9.9. Within three 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 facility and provide a report on that assessment to the Agency. A stability assessment of the side slope contours specified in Condition 8.1 shall also be carried out and the results submitted to the Agency for agreement within six months of the date of grant of this licence.
- 9.10. Unless otherwise specified by this licence or agreed by the Agency, all environmental monitoring shall commence no later than two months after the date of grant of this licence.
- 9.11. An assessment of the ecology of restored phases of the landfill shall be undertaken during the second summer season following their restoration and submitted to the Agency. The scope, content and details of such assessments shall be similar to that contained in Attachment 9, Volume 2 of the Environmental Impact Statement unless instructed otherwise by the Agency. Further ecological assessments shall be undertaken as instructed by the Agency.
- 9.12. Within nine months of the date of grant of this licence, the licensee shall submit to the Agency an updated appropriately scaled drawing(s) showing the location of all the monitoring locations that are stipulated in this licence along with a table of their respective 12 digit national grid references.

9.13. Groundwater

- 9.13.1. Subject to the agreement of the well owners, the licensee shall, within three months of the date of grant of this licence, submit to the Agency for its agreement a proposal for the inclusion of the private wells listed below (and as shown in drawing number C6.1 & C6.2, revision C) in the groundwater monitoring programme set forth in Schedule D, Table D.4.4:
 - a) The private wells sampled in Report Number K971-GW of the application; and,
 - b) A private well located north of the surface water channel which itself lies to the immediate north of the facility.
- 9.13.2. The licensee shall provide the following additional boreholes:
 - a) Within six months of the date of grant of this licence, the licensee shall install a borehole east of the office referred to in Condition 4.7 and outside of the fill area in order to monitor overburden groundwater in that sector

- downgradient of the landfill. The exact location shall be agreed with the Agency prior to commencement of drilling.
- b) Within six months of the date of grant of this licence, the licensee shall install two further boreholes in order to monitor groundwater in the bedrock aquifer downgradient of the landfill.

The boreholes in a) and b) above shall also be capable of monitoring landfill gas levels.

9.13.3. Within three months of the installation of the boreholes referred to in Condition 9.13.2(b), the licensee shall submit to the Agency a report detailing the groundwater gradient and time of travel in the bedrock aquifer.

9.14. Surface Waters

9.14.1. The licensee shall, within three months of the date of grant of this licence, submit to the Agency for its agreement a proposed monitoring location (downstream of any possible surface water discharges from the facility) for the surface water channel which lies to the immediate north of the facility.

9.15. Meteorological Monitoring

9.15.1. The licensee shall, within three months of the date of grant of this licence, make arrangements for representative meteorological data to be collated for the facility and maintained as a record in the office specified in Condition 4.7. The required parameters and frequencies are listed in Schedule D.5: Meteorological Monitoring.

Reason:

To ensure compliance with the requirements of other conditions of this licence by provision of a satisfactory system of measurement and monitoring of emissions.

CONDITION 10 CONTINGENCY ARRANGEMENTS

- 10.1. 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.
- 10.2. The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any significant spillage at the facility.

 Once used the absorbent material shall be disposed of at an appropriate facility.
- 10.3. 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.
- 10.4. A fire at the facility shall be treated as an emergency. Immediate action shall be taken to extinguish it and the appropriate authorities notified.
- 10.5. In the event that monitoring of local wells (identified in Condition 9) 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 incident. The licensee shall submit to the Agency for its agreement and within a time specified in writing by the Agency, written proposals for the provision of an alternative supply of water to those affected.

- 10.6. Unless otherwise notified in writing by the Agency, in the event that any monitoring, sampling, complaints or observations indicate that an incident has, or may have, taken place, 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;
 - c) isolate the source of the 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 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.
- 10.7. In the event that monitoring of the facility indicates that there may be a risk of slope failure, this will be treated as an incident and a proposal for remediation action submitted to the Agency for its agreement within one month of the date of the monitoring being carried out.

Reason: To provide for the protection of the environment.

CONDITION 11 CHARGES AND FINANCIAL PROVISIONS

11.1 Agency Charges

- 11.1.1 The licensee shall pay to the Agency an annual contribution of £ 8,785 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 2001 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 2000, the licensee shall pay a pro rata amount from the date of this licence to 31st December 2000. This amount shall be paid to the Agency within one month of the date of grant of this licence.
- 11.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased or decreased the licensee shall contribute such sums as determined by the Agency to defraying its costs.
- 11.2 Financial Provision for Closure, Restoration and Aftercare
 - 11.2.1 The licensee shall arrange for the completion of a comprehensive and fully costed Environmental Liabilities Risk Assessment for the facility which will address liabilities arising from the carrying on of the activities to which this

- licence relates. A report on this assessment shall be submitted to the Agency for its agreement within six months of date of grant of this licence.
- 11.2.2 Within nine months of the date of grant of this licence, the licensee shall make a Proposal for Financial Provision to the Agency for its agreement to cover any liabilities incurred by the licensee in carrying on the activities to which this licence relates. Such provision shall be maintained by the licensee unless otherwise agreed by the Agency.
- 11.2.3 The amount of financial provision, held under condition 11.2.2 shall be reviewed and revised as necessary, but at least annually. Unless otherwise agreed any revision to the fund shall be computed using the following formula:

Cost = (ECOST x WPI) + CiCC

Where:

Cost = Revised restoration and aftercare cost

ECOST = Existing restoration and aftercare cost

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

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

11.2.4 The licensee shall within two weeks of purchase, renewal or revision of the financial provision required under condition 11.2.2, forward to the Agency written proof of such indemnity.

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

SCHEDULE A : Content of the Annual Environmental Report

Annual Environmental Report Content NOTE 1

Reporting Period.

Waste activities carried out at the facility.

Quantity and Composition of waste received, disposed of and recovered during the reporting period and each previous year.

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

Methods of deposition of waste.

Summary report on emissions.

Summary of results and interpretations of environmental monitoring, including plans and any updates of all monitoring locations including 12 digit grid references.

Resource and energy consumption summary.

Report on restoration of completed phases.

Proposed restoration of the facility and timescale of such restoration.

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

Site stability.

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

Schedule of Environmental Objectives and Targets for the forthcoming year.

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

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.

Any other items specified by the Agency.

NOTE 1 Content to be revised subject to the agreement of the Agency after cessation of waste acceptance at the facility.

SCHEDULE B :Recording and Reporting to the Agency

Table B.1 Recurring Reports

| Report | Reporting Frequency Note1 | Report Submission Date |
|---|---------------------------------|--|
| Environmental Management System Updates | Annually | Nine months from the date of grant of licence and one month after the end of each year thereafter. |
| 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 | Six months from the date of grant of licence 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 landfill gas | Quarterly | Ten days after end of the quarter being reported on. |
| Monitoring of Surface Water Quality | Biannually | One month after sampling. |
| Monitoring of Groundwater Quality | Quarterly | Ten days after end of the quarter being reported on. |
| Monitoring of Leachate | Quarterly | 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 | Three times a year | Ten days after the period being reported on |
| Noise Monitoring | Annually | One month after end of the year being reported on. |
| Any other monitoring | As they occur | Within ten days of obtaining results. |

Note 1: Unless altered at the request of the Agency

SCHEDULE C : Specified Engineering Works

| Specified Engineering Works | |
|---|--|
| Security hut, barrier and cattle grid. | Installation of alternative drinking water supplies. |
| Bunding of fuel and oil storage areas. | Installation of groundwater control and/or monitoring systems. |
| Waste Quarantine Area. | Surface water management works. |
| Weighbridge. | Restoration and Aftercare Works. |
| Wheel Cleaner. | Nuisance control measures |
| Fixed benchmark. | Any component separation on site |
| Installation of landfill gas management and monitoring systems. | Any other works notified in writing by the Agency. |

SCHEDULE D: Monitoring

Monitoring to be carried out as specified below.

D.1 Landfill Gas

Landfill gas monitoring locations shall be those as set out in Table D.1.1.

Table D.1.1 **Monitoring Locations**

| STATION |
|---|
| BH-1 |
| BH-2 |
| BH-3 |
| New downgradient monitoring boreholes as per Condition 9.13.2 |
| BH-5 |
| Workshop ^{Note 1} |
| Toilet/Outhouse Note 1 |
| Site Office |

Note 1: As identified in Report Number K971-LG of the application.

Table D.1.2 Landfill Gas Monitoring Frequency and Technique

| Parameter | Monitoring Frequency | | Analysis Method ^{Note1} /Technique ^{Note2} |
|---|----------------------|-------------------|---|
| | Boreholes | Site Buildings | |
| Methane (CH₄) % v/v | Quarterly | Quarterly | Infrared analyser/flame ionisation detector ^{Note 3} |
| Carbon dioxide (CO ₂) %v/v | Quarterly | Quarterly | Infrared analyser |
| Oxygen (O ₂) %v/v | Quarterly | Quarterly | Electrochemical cell |
| Atmospheric Pressure | Quarterly | Quarterly | Standard |
| Temperature | Quarterly | Quarterly | Standard |

Note1: All monitoring equipment used should be intrinsically safe. Note 2: Or other methods agreed in advance with the Agency.

Note 3: Where methane levels are less than 1%, a flame ionisation detector shall be employed.

D.2 Dust

Dust monitoring locations shall be those as set out in Table D.2.1.

Table D.2.1 Dust Deposition Monitoring Locations

| STATION Note 1 | APPLICATION DESIGNATION |
|----------------|----------------------------|
| D1 | DS-1 |
| D3 | DS-4 |
| D4 | BH-2 |

Note 1: Unless agreed otherwise by the Agency

Table D.2.2 Dust Deposition Monitoring Frequency and Technique

| Parameter (mg/m²/day) | Monitoring Frequency | Analysis Method/Technique |
|-----------------------|---------------------------|--------------------------------|
| Dust Deposition | Three times a year Note 2 | Standard Method Note 1, Note 3 |

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 is permitted.

Note 2: Twice during the period May to September, or as otherwise specified in writing by the Agency.

Note 3: A wind rose for the relevant monitoring period shall be submitted with each set of results.

D.3 Noise

Noise monitoring locations shall be those as set out in Table D.3.1.

Table D.3.1 Noise Monitoring Locations

| STATION | |
|---------|--|
| NSL1 | |
| NSL2 | |
| NSL3 | |

Table D.3.2 Noise Monitoring Frequency and Technique

| Parameter | Monitoring Frequency | Analysis Method/Technique |
|---|----------------------|---------------------------|
| L(A) _{EQ} [30 minutes] | Annual | Standard Note 1 |
| L(A) ₁₀ [30 minutes] | Annual | Standard Note 1 |
| L(A) ₉₀ [30 minutes] | Annual | Standard Note 1 |
| Frequency Analysis(1/3 Octave band analysis) | Annual | 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, Groundwater and Leachate

Surface water monitoring locations shall be those as set out in Table D.4.1.

Table D.4.1 Surface Water Monitoring Locations

| STATION | APPLICATION DESIGNATION | |
|---------|-------------------------|--|
| SW1 | SW-02 | |
| SW2 | As per Condition 9.14.1 | |

Groundwater monitoring locations shall be those as set out in Table D.4.2.

Table D.4.2 Groundwater Monitoring Locations

| STATION |
|--|
| BH-6 |
| BH-1 |
| BH-2 |
| BH-3 |
| New downgradient overburden monitoring borehole as per Condition 9.13.2(a) |
| Two new downgradient bedrock monitoring boreholes as per Condition 9.13.2(b) |
| Private Wells as specified in Condition 9.13.1 |

Leachate monitoring locations shall be those as set out in Table D.4.3.

Table D.4.3 Leachate Monitoring Locations

| LEACHATE INSPECTION MANHOLES |
|------------------------------|
| BH-5 |

Table D.4.4 Water and Leachate - Parameters /Frequency

| Parameter Note 1 | SURFACE WATER | GROUNDWATER | LEACHATE |
|-------------------------------------|--------------------------------|-----------------------------|-------------------------|
| | Monitoring Frequency Note 3 | Monitoring Frequency | Monitoring Frequency |
| Groundwater Level | Not Applicable | Quarterly ^{Note 4} | Not Applicable |
| Leachate Level | Not Applicable | Not Applicable | Quarterly |
| Ammoniacal Nitrogen | Not Applicable | Quarterly ^{Note 5} | Not Applicable |
| BOD | Biannually | Not Applicable | Not Applicable |
| COD | Biannually | Not Applicable | Not Applicable |
| Chloride | Biannually | Quarterly | Not Applicable |
| Dissolved Oxygen | Biannually | Not Applicable | Not Applicable |
| Electrical Conductivity | Biannually | Quarterly ^{Note 5} | Not Applicable |
| pH | Biannually | Quarterly ^{Note 5} | Not Applicable |
| Total Suspended Solids | Biannually | Not Applicable | Not Applicable |
| Temperature | Biannually | Not Applicable | Not Applicable |
| Aluminium | Not Applicable | Annually | Not Applicable |
| Arsenic | Not Applicable | Annually | Not Applicable |
| Barium | Not Applicable | Annually | Not Applicable |
| Boron | Not Applicable | Annually | Not Applicable |
| Cadmium | Not Applicable | Annually | Not Applicable |
| Calcium | Biannually | Quarterly | Not Applicable |
| Chromium (Total) | Not Applicable | Annually | Not Applicable |
| Copper | Not Applicable | Annually | Not Applicable |
| Cyanide (Total) | Not Applicable | Annually | Not Applicable |
| Fluoride | Not Applicable | Annually | Not Applicable |
| Iron | Not Applicable | Annually | Not Applicable |
| Lead | Not Applicable | Annually | Not Applicable |
| List I/II organic substances Note 6 | Not Applicable | Annually | Not Applicable |
| Magnesium | Not Applicable | Annually | Not Applicable |
| Manganese | Not Applicable | Annually | Not Applicable |
| Mercury | Not Applicable | Annually | Not Applicable |
| Mineral Oils | Not Applicable | Annually | Not Applicable |
| Nickel | Not Applicable | Annually | Not Applicable |
| Nitrate | Not Applicable | Annually | Not Applicable |
| Nitrite | Not Applicable | Annually | Not Applicable |
| Kjeldahl Nitorgen | Not Applicable | Annually | Not Applicable |
| Polycyclic Aromatic Hydrocarbons | Not Applicable | Annually | Not Applicable |
| Potassium | Not Applicable | Quarterly | Not Applicable |
| Selenium | Not Applicable | Annually | Not Applicable |
| Sulphate | Biannually | Quarterly | Not Applicable |
| Sodium | Biannually | Quarterly | Not Applicable |
| Silver | Not Applicable | Annually | Not Applicable |
| Total Alkalinity | Not Applicable | Annually | Not Applicable |
| Total Phosphorus / orthophosphate | Not Applicable | Annually | Not Applicable |

| Parameter Note 1 | SURFACE WATER | GROUNDWATER | LEACHATE |
|-------------------------|--------------------------------|-------------------------|-------------------------|
| | Monitoring Frequency Note 3 | Monitoring Frequency | Monitoring Frequency |
| Total Oxidised Nitrogen | Not Applicable | Quarterly | Not Applicable |
| Total Organic Carbon | Not Applicable | Annually | Not Applicable |
| Residue on evaporation | Not Applicable | Annually | Not Applicable |
| Zinc | Not Applicable | Annually | Not Applicable |
| Faecal Coliforms Note 2 | Not Applicable | Annually | Not Applicable |
| Total Coliforms Note 2 | Not Applicable | Annually | Not Applicable |

- Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures. The testing laboratory and the testing procedures shall be agreed with the Agency in advance.
- Note 2: If there is evidence of bacterial contamination, the analysis at upgradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.
- Note 3: If the flow during a particular sampling occasion does not allow such monitoring, repeat sampling visits shall be undertaken.
- Note 4: Not applicable to the private domestic wells.
- Note 5: Only applicable on a quarterly basis to the private wells listed in Condition 9.13.1.
- Note 6: 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 methods include: volatiles (US EPA method 524 or equivalent), semi-volatiles (US EPA method 525 or equivalent, and pesticides (US EPA method 608 or equivalent).
- Note 7: PAH monitoring to be undertaken on upgradient and downgradient wells within three months of the date of grant of the licence.

D.5 Meteorological Monitoring

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 |
| Humidity | Daily | Standard |
| Atmospheric Pressure | Daily | Standard |

SCHEDULE E: Emission Limits

E.1 Noise Emissions: (Measured at the monitoring points indicated in Table D.3.1).

| Day dB(A) L _{Aeq} (30 minutes) | Night dB(A) L _{Aeq} (30 minutes) |
|---|---|
| 55 | 45 |

There shall be no clearly audible tonal component or impulsive component in the noise emissions from the activity.

E.2 Landfill Gas Concentration Limits: (Measured in any building on or adjacent to the facility).

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

E.3 Dust Deposition Limits: (Measured at the monitoring points indicated in Table D.2.1).

| Level (mg/m² /day) ^{Note 1} |
|--------------------------------------|
| 350 |

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

SCHEDULE F: Waste Acceptance

Table F.1 sets forth the waste types **and quantities per annum** acceptable at the facility, while Table F.2 sets forth the waste types acceptable for disposal at the facility.

Table F.1 Acceptable Waste Categories and Quantities

| WASTE TYPE | MAXIMUM TONNES PER ANNUM |
|------------------------------------|-----------------------------|
| Construction and Demolition Note 1 | 100,000 |

Note 1: Subject to Conditions 5.1, 5.3, 5.4 and 5.5

F.2 Waste Acceptable for Disposal

Only the following inert wastes are acceptable for disposal:

| INERT OR INACTIVE WASTE | | |
|-------------------------|--|--|
| Subsoil | Solid Road Planings, Solid Tarmacadam, Solid Asphalt | |
| Topsoil | Plasterboard and Plaster | |
| Stone, Rock and Slate | Natural Sand | |
| Clay | Concrete | |
| Pottery and China | | |

Sealed by the seal of the Agency on this 20th day of October, 2000.

| PRESENT when the seal of the Agency was affixed hereto: | |
|---|---|
| Anne Butler Director/Authorised Person | - |