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

WASTE LICENCE PROPOSED DECISION

Waste Licence53-1Register Number:Noble Waste Disposal LimitedApplicant:Noble Waste Disposal LimitedLocation of Facility:Fassaroe, 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 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.

In reaching this decision the Agency has considered the application and supporting documentation received from the applicant, all submissions received from other parties and the report of its inspector.

Part I: Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Act, 1996, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act to grant this Waste Licence to Noble Waste Disposal Limited, Fassaroe, Bray, Co. Wicklow to carry on the waste activities listed below at Fassaroe, Bray, Co. Wicklow, subject to 11 No. 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).
- *Class 11:*Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule:
- *Class 12:* Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
- *Class 13*:Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licensed waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996

- *Class 2:* Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
- *Class 3:* Recycling or reclamation of metals and metal compounds.
- Class 4: Recycling or reclamation of other inorganic materials.
- *Class 12:* Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
- *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.

INTERPRETATION

| Act | The Waste Management Act, 1996 (No. 10 of 1996). |
|----------------------------|---|
| Aerosol | A suspension of solid or liquid particles in a gaseous medium. |
| Adequate lighting | 20 lux measured at ground level. |
| Agreed/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. |
| Daytime | 0800 hrs to 2200 hrs. |
| 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 Value | Those limits, including concentration limits and deposition levels established in Schedule G. |
| 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** Waste wood, plant matter and other vegetation.
- 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.
- Hazardous Waste As defined in Section 4 (2) of the Act.
- Household Waste As defined in Section 5 (1) of the Act.
- Industrial waste As defined in Section 5 (1) of the Act.
- 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 Noble Waste Disposal Limited
- 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 20% dry matter
- MaintainKeep 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 2200 hrs to 0800 hrs.

| Non hazardous waste | Non-Hazardous Waste is any waste which is not a hazardous waste as defined in the Act. |
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| 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. |
| Specified Emissions | Those emissions listed in Schedule G of this licence. |
| Specified Engineering Works | Those engineering works listed in Schedule E of this licence. |
| Submit | Unless the context of this licence indicates otherwise, submit to the Agency in writing for agreement |
| Trigger Level | A parameter value which when achieved or exceeded requires certain |
| | actions to be taken. |
| Waste | actions to be taken. As defined in Section 4(1) of the Act. |
| Waste Waste disposal activity | |
| Waste disposal | As defined in Section 4(1) of the Act. Includes the activities referred to in Section 4 of the Act and listed in |
| Waste disposal activity Waste recovery | As defined in Section 4(1) of the Act. Includes the activities referred to in Section 4 of the Act and listed in the Third Schedule thereto. Includes the activities referred to in Section 4 of the Act and listed in |
| Waste disposal activity Waste recovery activity | As defined in Section 4(1) of the Act. Includes the activities referred to in Section 4 of the Act and listed in the Third Schedule thereto. Includes the activities referred to in Section 4 of the Act and listed in the Fourth Schedule thereto. |

Part II CONDITIONS

CONDITION 1 SCOPE

- 1.1 Waste activities at the facility shall be restricted to those listed and described in Schedule A 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 "Site Plan" June 1998 of the application. 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 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 eighteen 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 agreement.
 - 2.1.2 The EMS shall include as a minimum those elements specified in the Conditions 2.2 to 2.8 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 Environmental Management Programme
 - 2.3.1 The licensee shall, within twelve months from the date of grant of this licence, submit to the Agency for its agreement an Environmental Management Programme (EMP). The EMP shall include a time-scale for achieving the Schedule of Objectives and Targets and shall comply with any other guidance issued by the Agency.
 - 2.3.2 The EMP shall include, as a minimum, the information specified in *Schedule B: Content of the Environmental Management Programme*. The EMP shall be reviewed and submitted to the Agency for its agreement annually.
- 2.4 Corrective Action
 - 2.4.1 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.
- 2.5 Awareness and Training
 - 2.5.1 The licensee shall establish and maintain Awareness and Training Procedures for identifying training needs and for providing appropriate training, for personnel whose work is related to the licensed facility. Written records of training shall be maintained.
- 2.6 Management Structure
 - 2.6.1 The management structure shall be as outlined in Attachment I.1 of the application. 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.
- 2.7 Communications
 - 2.7.1 Within twelve months from the date of grant of this licence, the licensee shall submit for agreement to the Agency a Communications Programme to ensure that members of the public can obtain information concerning the environmental performance of the facility at all reasonable times.
- 2.8 Annual Environmental Report
 - 2.8.1 The licensee shall submit to the Agency for its agreement, within twelve months from the date of grant of this licence, and within one month of the end of the year thereafter, an Annual Environmental Report (AER).
 - 2.8.2 The AER shall include as a minimum the information specified *in Schedule C: Content of Annual Environmental Report* and shall be prepared in accordance with any relevant written guidance issued by the Agency.
- 2.9 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.
- 2.10 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:
 - any emission which results in the contravention of any relevant standard, including any standard for an environmental medium, or any relevant emission limit value, prescribed under any relevant enactment;
 - b) any emission which does not comply with the requirements of this licence;
 - c) any trigger level specified in this licence or in the EMS which is attained or exceeded;

- d) any malfunction of any environmental control system;
- e) any indication that contamination has, or may have, taken place;
- f) the cessation of waste activities at the facility for a period in excess of 28 days, and their recommencement;
- g) any occurrence with the potential for environmental pollution; and,
- h) any emergency.
- 3.2 The written record specified in Condition 3.1 shall include all aspects described in Condition 10.6
- 3.3 Unless otherwise instructed in writing by the Agency, the licensee shall notify the Agency by telephone and facsimile if available, as soon as practicable and in any case not later than 10.00am the following working day after the occurrence of any incident.
- 3.4 Unless otherwise instructed in writing by the Agency, the licensee shall:
 - a) notify the Agency by telephone, and by facsimile if available, as soon as practicable and in any case not later than 10.00 am the following working day after the occurrence of any incident; and
 - 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.
- 3.5 Should any further actions be taken after the date of 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.
- 3.6 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) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
 - (e) be submitted in accordance to the relevant reporting frequencies specified by this licence;
 - (f) be certified as accurate and representative by the licensee; and
 - (g) in the case of results of any environmental monitoring, be accompanied by a written interpretation setting out their significance.
- 3.7 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 D to this licence.
- 3.8 In the event of any incident which relates to discharges to surface water, or which affects the interests of the local authority, the licensee shall notify the Eastern Regional

Fishery Board and/or Wicklow County Council as soon as practicable by telephone and in writing (by facsimile if available) and in any case not later than 10:00am on the following working day after such an incident.

- 3.9 Unless otherwise agreed in writing with the Agency, all documentation required to be maintained under this licence, shall be retained by the licensee.
- 3.10 The licensee shall provide copies of any documentation referred to in this licence to the Agency upon written request, within the time specified in writing by the Agency.
- 3.11 Unless otherwise agreed in advance with the Agency, the licensee must give at least fourteen days notice to the Agency of the following events:
 - a) the cessation of waste disposal activities at the facility for a period in excess of twenty-eight days;
 - b) the re-commencement of waste disposal activities at the facility following a period of cessation referred to at a) above.
- 3.12 The licensee shall keep the following documents at the facility office referred to in Condition 4.5.
 - a) the current waste licence relating to the facility;
 - b) any previous waste licence in respect of the facility;
 - c) the current EMS for the facility;
 - d) the previous year's AER for the facility;
 - e) all written procedures produced by the licensee which relate to the licensed activities.
- 3.13 The licensee shall maintain a written record for each load of waste arriving at or being dispatched from the facility. The licensee shall record the following:
 - a) the time and date of arrival or departure;
 - b) the name of the carrier;
 - c) the vehicle registration number;
 - d) for incoming loads, the name of the producers and collectors of the waste as appropriate;
 - e) the identification of each bin or other container contained in the load;
 - f) a description of the waste including the associated EWC codes;
 - g) the quantity of waste accepted at the facility, recorded in kilograms or tonnes;
 - h) the name of the person checking the load;
 - where incoming or outgoing loads or parts thereof are removed or rejected, details of the date of occurrence, the types of waste and the facility to which they were removed;
 - j) a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate);

- k) the destination of outgoing waste (including facility name and waste licence or permit number as appropriate);
- written confirmation that consigned waste has reached its destination and/or has been subjected to the recovery/disposal process for which it was destined, as appropriate; and
- m) any other information which may be required from time to time by the Agency.
- 3.14 The licensee shall maintain a written record of all complaints of an environmental nature related 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 prior to the commencement of the licensed activities or as agreed in advance in writing with the Agency.
- 4.2 Site Notice Board
 - 4.2.1 Within six months of the date of grant of this licence, the licensee shall provide and maintain a 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 name, address and telephone number of the operator of the facility;
 - f) the licence reference number; and
 - g) where and when environmental monitoring information relating to the facility can be obtained.
- 4.3 Site Security

- 4.3.1 Security and fencing and gates shall be installed and maintained as described in D.1 Infrastructure dated 22 June 1999 and located on drawing number D.1.1 Rev A.
- 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,
 - b) a repair to the standard of the original gates and/or fencing shall be undertaken within three working days or as otherwise agreed in writing with the Agency.
- 4.3.3 Gates shall be locked shut when the facility is unsupervised.
- 4.4 Site Roads and Hardstanding
 - 4.4.1 The entrance and internal roads shall be provided as per Attachment:D.1 Infrastructure 2.b. dated 22 June 1999 and maintained at the location shown on Drawing No. D.1.1 Rev. A.
 - 4.4.2 A hardstanding area shall be provided and maintained at the location shown on Drawing No. D.1.1 Rev. A and in accordance with Attachment: D.1 Infrastructure 2.b. dated 22 June 1999.
- 4.5 The licensee shall provide and maintain an office on the facility, at the existing location shown in Drawing No. D.1.1 Rev. A. Prior agreement of the Agency is required before re-location to the proposed offices as shown in Drawing No. D.1.1 Rev. A. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 4.6 The licensee shall provide and maintain a working telephone and facsimile machine in the office specified in *Condition 4.5* above.
- 4.7 Within six months of the date of this licence the licensee shall provide a Waste Inspection Area and Quarantine Area at a location to be agreed in advance with the Agency. The licensee shall ensure that this area 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 suitably and clearly segregated from each other.
- 4.8 The licensee shall provide and maintain a weighbridge at the facility. Unless otherwise agreed in writing with the Agency the location of the weighbridge shall be as shown on Drawing No. D.1.1 Rev. A
- 4.9 Within nine months of the date of grant of this licence, the licensee shall install the truck washing area as per Attachment D.1.1. rev., unless otherwise agreed in writing with the Agency.
- 4.10 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 4.11 The licensee shall establish and maintain a septic tank system. Unless otherwise agreed with the Agency the location of the septic tank system shall be as shown on Drawing No. D.1.1 Rev. A.

- 4.12 Fuel Storage
 - 4.12.1 Within three months of the date of grant of this licence, the licensee shall with the prior agreement of the Agency provide a bunded fuel storage area for all fuels at an 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 within six months of the date of grant of this licence. 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 on site. 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.
- 4.13 Within six months of the date of grant of the licence, the licensee shall submit proposals to the Agency for its agreement for enclosing the Trommel, the Extec screening plant, and the Shredder and proposals for a waste inspection area.
- 4.14 Within six months of the date of grant of this licence the licensee shall submit proposals to the Agency for its agreement for the recovery of all plastics on-site.
- 4.15 Landfill Lining:
 - 4.15.1 Unless otherwise agreed with the Agency, any deposit of waste on land in the previously unfilled areas as defined by the site survey (Condition 9.12) shall only occur in a lined area. This lined area shall consists of a base and side wall mineral layer of minimum thickness of 1m with a minimum hydraulic conductivity of less than or equal to 1×10^{-7} m/s or a 0.5m artificially enhanced soil or similar giving equivalent protection to the foregoing.
- 4.16 Leachate Management
 - 4.16.1 Within six months of the date of grant of this licence, the licensee shall submit proposals to the Agency for its agreement for leachate management at the facility for the protection of surface waters and groundwater including timescales and objectives and targets relating to discharges.

- 4.17 Landfill Gas Management:
 - 4.17.1 Within six months of date of grant of this licence, the licensee shall submit the following to the Agency for its agreement;
 - (i) an assessment of the extent of landfill gas;
 - (ii) proposals for additional landfill gas monitoring points to determine the nonmigration or otherwise of same from site; and
 - (iii) mitigation measures to control landfill gas (if any) from the site.
- 4.18 Capping
 - 4.18.1 The capping system as outlined in Attachment D.6 of the application shall be installed on completion of each phase.
- 4.19 Surface Water Management
 - 4.19.1 Within six months of the date of grant of this licence the licensee shall submit to the Agency for its agreement an ongoing management programme for control of surface water run off from the facility during construction, operation and restoration.
- 4.20 The licensee shall submit as built drawings of the transfer station building to the Agency within three months of the date of grant of the licence.
- 4.21 Prior to commencement of the proposals outlined in Attachment I.2 Conditioning Plan the works and timeframe shall be agreed with the Agency.
- 4.22 Specified Engineering Works
 - 4.22.1 The licensee shall submit written proposals for all Specified Engineering Works, as defined in *Schedule E: Specified Engineering Works*, to the Agency for its agreement prior to any such works being carried out. No such works shall be carried out without the prior agreement of the Agency.
 - 4.22.2 All specified engineering works shall be supervised by a competent person(s) agreed in writing in advance by the Agency and that person, or persons, shall be present at all times during which relevant works are being undertaken.
 - 4.22.3 Following the completion of all specified engineering works, the licensee shall submit a construction quality assurance validation report to the Agency. The validation 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) 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.

Reason: To provide for the protection of the environment

CONDITION 5 WASTE ACCEPTANCE AND HANDLING

- 5.1 The following wastes only shall be accepted at the transfer station: household waste, commercial waste and industrial non-hazardous solid wastes and construction and demolition wastes.
- 5.2 No biodegradable waste, liquid wastes, sludges, vegetable matter; food stuffs or green wastes shall be disposed of in the on-site landfill.
- 5.3 Subject to *Condition 5.1 and 5.2* only those Waste Types and quantities listed in *Schedule H: Waste Types* shall be accepted at the facility unless the prior agreement of the Agency has been obtained.
- 5.4 The quantity of wastes to be accepted for disposal at the landfill, shall not exceed 50,000 tonnes per annum and for the transfer station, shall not exceed 55,000 tonnes per annum, unless otherwise agreed in advance with the Agency.
- 5.5 Waste shall only be accepted at the facility between the hours of 7.30 to 18.00 Monday to Saturday (excluding Bank Holidays) unless otherwise agreed in advance with the Agency.
- 5.6 Wastes shall not be deposited in any cell or part of the landfill or at the transfer station without the prior agreement of the Agency.
- 5.7 Within six months of the date of grant of this licence, the licensee shall submit to the Agency for agreement written procedures for the acceptance and sorting of waste (to distinguish between inert and non-hazardous) and shall outline the procedures for dealing with hazardous waste.
- 5.8 All suspect materials identified by the visual inspection of the waste or during deposition at the working face shall be diverted to the Waste Quarantine Area (as required by Condition 4.7), or other designated area as agreed in advance by the Agency, for further examination and classification. Wastes other than those permitted by this licence shall be submitted to an alternative appropriate facility. Such waste shall be stored in the Waste Quarantine Area only and may be stored for a maximum of twenty-four hours.
- 5.9 The licensee shall within six months of the date of grant of this licence submit a written procedure for the management of unacceptable wastes received at the facility for the agreement of the Agency. This procedure will detail unacceptable waste types, handling procedures, waste quarantine procedures, record keeping and levels of staff responsibility.
- 5.10 All waste accepted into the Transfer Station for compaction shall be compacted within 12 hours unless otherwise agreed with the Agency.
- 5.11 At the end of the working day the floor of the Transfer Station shall be cleaned of all waste.
- 5.12 Unless subject to the prior agreement of the Agency, a maximum of 3 enclosed waste containers (including sealed containers of compacted waste or fully enclosed collection vehicles containing waste), shall be stored on the facility overnight. These containers shall be stored at areas clearly designated for this purpose and agreed in advance with the Agency.

- 5.13 No waste shall be placed, or allowed to accumulate outside the Transfer Building other than baled cardboard in fully enclosed trailers/containers pending removal from the site, unless agreed in advance by the Agency.
- 5.14 The licensee shall, within nine months of the date of grant of this licence, submit proposals to the Agency, for its agreement, regarding the separation and recovery of appropriate components of the waste being accepted at the facility.
- 5.15 Waste sent off-site for recovery or disposal shall only be conveyed to a waste contractor, agreed in advance by the Agency.
- 5.16 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 have a slope no greater than 1 in 3.
- 5.17 The Shredder shall not be operated on very windy days and the working face of the operational cell shall, at the end of each day, be covered with suitable material.
- 5.18 A steel wheeled compactor 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.
- 5.19 In order to prevent the formation of voids, all hollow objects and large articles deposited on the site shall be crushed, broken up, flattened or otherwise treated.
- 5.20 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over without prior agreement from the Agency.
- 5.21 No smoking shall be allowed on the facility other than in the Office as shown on Drawing No. D.1.1 Rev. A or at the proposed offices referred to in *Condition 4.5.*
- 5.22 Scavenging shall not be permitted at the facility.

Reason: To provide for the acceptance and management of wastes authorised under this waste licence

CONDITION 6 ENVIRONMENTAL NUISANCES

- 6.1. All compacted waste shall be removed from the facility within forty eight hours of being compacted, unless subject to the prior agreement of the Agency.
- 6.2. The licensee shall, at a minimum of one week intervals, inspect the facility and its immediate surrounds for nuisances caused by vermin and odours. Written records shall be made of all inspections and any actions taken as a result of these inspections.
- 6.3. 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. The measures outlined in Attachment F.5 of the application shall be applied for road cleansing.
- 6.4. The measures and infrastructure as described in Attachment F.3 "Litter Control" of the application shall be applied to control litter at the facility.
- 6.5. All loose litter accumulated within the facility and its environs, excluding that which is deposited on the working face, shall be removed and appropriately disposed of on a daily basis.
- 6.6. 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.
- 6.7. The licensee shall ensure that all vehicles delivering waste to and from the facility are adequately secured to prevent spillage and are appropriately covered.
- 6.8. 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.
- 6.9. The licensee shall ensure that the activities shall be carried out in a manner such that dust and odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the facility boundary.
- 6.10. The licensee shall ensure that birds and vermin do not give rise to nuisance at the facility or the immediate area of the facility. The method used by the licensee as outlined in Attachment F.7 to control vermin and flies at the facility shall not cause environmental pollution.

Reason: To provide for the control of nuisances

CONDITION 7 EMISSIONS AND ENVIRONMENTAL IMPACTS

- 7.1. No specified emission from the facility shall exceed the emission limit values set out in *Schedule G Emission Limits* of this licence.
- 7.2. The licensee shall ensure that the activities shall be carried out in a manner such that noise does not result in significant impairment of, or significant interference with, the environment beyond the facility boundary.

- 7.3. There shall be no clearly audible tonal component in the noise emissions from the activity at the facility boundary.
- 7.4. 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.
- 7.5. The licensee shall ensure that the activities shall be carried out in a manner such that emissions including dust and odours do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 7.6. The following are the trigger levels for landfill gas emissions from the facility measured in any service on 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.
- 7.7. 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. Unless otherwise agreed in advance in writing with the Agency, the final profile of the landfill shall be as shown in Drawing No. G.1.1 "Contour map -Final Elevations of Site" June 1998. Within twelve months of the date of grant of this licence, the licensee shall submit proposals to the Agency for its agreement for the decommissioning of the transfer station.
- 8.2. Within twelve months of the date of grant of this licence, a detailed Restoration and Aftercare Plan for the facility shall be submitted to the Agency for approval.
- 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 site 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 frequencies as set out in *Schedule F: Monitoring* and as specified in the Conditions of this licence.

- 9.2. Monitoring locations shall be those as set out in Attachment: Table J.2 "Monitoring Points and Grid Reference Locations" of the application.
- 9.3. Within six months from the date of grant of this licence, the licensee shall submit a proposal to the Agency for its agreement on monitoring of leachate within the filled waste. The report shall include a drawing showing all leachate monitoring locations. The drawing shall also contain a unique reference number and the twelve figure grid reference number given for each monitoring point.
- 9.4. Within six months of the date of grant of this licence, the licensee shall submit a proposal to the Agency for its agreement for the installation of two additional groundwater monitoring boreholes, one located upgradient (SW) of any historic landfilling and the other located to the east of the active tipping area and down gradient of the septic tank system in the vicinity of BH1. These monitoring wells shall then be included in the monitoring as outlined in Schedule F.
- 9.5. Within three months from the date of grant of this licence, the licensee shall submit to the Agency for its agreement details of the permanent gas monitoring system to be installed in the site office and in the proposed offices prior to its occupancy.
- 9.6. 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. All ditches and drains located around the perimeter of site are to be kept clear such that monitoring can be carried out successfully.
- 9.7. 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.
- 9.8. 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.
- 9.9. Unless otherwise agreed in writing 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.
- 9.10. The licensee shall maintain all sampling and monitoring points so that they may be used for representative sampling and monitoring.
- 9.11. A topographical survey including the void space 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.
- 9.12. Prior to any development of the undisturbed area, the advice of Dúchas the Heritage Service shall be sought. On completion a report of the results of any archaeological monitoring shall be submitted to Dúchas and copied to the Agency.

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. Within six months of the date of grant of this licence, proposals for an Emergency Response Procedure (ERP) for the facility shall be submitted to the Agency for its agreement. The EPR shall address any emergency situation which may originate on the facility and shall include provision for minimising the effects of any emergency on the environment.
- 10.2. Contingency Arrangements for the facility shall be as detailed in Attachment K.1 of the application.
- 10.3. 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.
- 10.4. 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.
- 10.5. No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency. Immediate action shall be taken to extinguish it and the appropriate authorities notified.
- 10.6. In the event that any monitoring, sampling 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) identify and put in place measures to avoid reoccurrence of the incident, and;
 - g) identify and put in place any other appropriate remedial action.

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 £12,200 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 2000 and subsequent years, not later than January 31 of each year, pay to the Agency this amount updated in accordance with changes in the Consumer Price Index from the date of the licensee by the Agency. For 1999, the licensee shall pay a pro rata amount from the date of this licence to 31st December 1999. 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 due to an incident occurring on or adjacent to the facility and associated with the facility, the licensee shall contribute such sums as determined by the Agency to defraying its costs.
- 11.2 Environmental Liabilities
 - 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 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 unless otherwise agreed in writing 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. Any proposal for such a revision shall be submitted to the Agency for its agreement.
 - 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 Waste Activities

Activities authorised by the licence shall be restricted to those described below.

| Waste Management Act, 1996: Third Schedule Note 1 | | |
|---|---|--|
| Class 1. | Deposit on, in or under land (including landfill): | |
| | This activity is limited to the disposal of the waste types specified in Condition 5. | |
| Class 11 | Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule. | |
| | This activity is limited to the mixing of household and commercial/industrial wastes prior to compaction. | |
| Class 12 | Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule. | |
| | This activity is limited to the compaction of waste prior to the removal off site to 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 was produced. | |
| | This activity is limited to the storage of commercial/industrial and domestic waste, prior to disposal at an alternative appropriate landfill facility, of wastes not acceptable for disposal at this facility. | |

Note 1: Any reference to an activity Class is to be taken as being from the Third Schedule of the Waste Management Act, 1996, unless otherwise stated.

| Waste Manag | Waste Management Act, 1996: Fourth Schedule Note 1 | | |
|--|---|--|--|
| 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 proposals for the recycling of plastics on-site. | | |
| Class 3 | Recycling or reclamation of metals and metal compounds. | | |
| | This activity is limited to receipt, holding and collection of metals and wire found in construction and demolition wastes and aluminium cans. | | |
| Class 4 | Recycling or reclamation of other inorganic materials. | | |
| | This activity is limited to receipt, holding and reusing inert construction and demolition wastes such as clay, topsoil, broken concrete and asphalt. | | |
| 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 inert materials such as glass, aluminium cans prior to processing and reuse. | | |

Note 1: Any reference to an activity Class is to be taken as being from the Fourth Schedule of the Waste Management Act, 1996, unless otherwise stated.

SCHEDULE B Content of the Environmental Management Programme

Environmental Management Programme

Items specified to be contained in an Environmental Management Plan in the Landfill Operational Practices Manual published by the Agency, or otherwise as agreed in writing with the Agency

Timescale for achieving the objectives and targets listed in the Schedule of Objectives and Targets

Designation of Responsibility for Achieving Targets and Objectives

Other items as specified in writing by the Agency

SCHEDULE C 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 site and year in which final capacity is expected to be reached.

Area occupied by waste.

Methods of deposition of waste.

Waste sent off site for recovery/disposal including waste contractors and final destination.

Summary report on emissions (Certified results/data sheets to be attached as Appendices)

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

Resource and energy consumption summary.

Proposed development of the site and timescale of such development.

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

Report on restoration of completed cells/ phases.

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

Estimated annual and cumulative quantities of landfill gas emitted from the site.

Monthly water balance calculation and interpretation.

Meteorological Report.

Environmental Management Programme -report

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 summary and complaints summary.

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

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

SCHEDULE D Recording and Reporting to the Agency

Table D.1 Recurring Reports

| Report | Reporting Frequency ^{Note1} | Report Submission Date |
|--|---|---|
| Environmental Management System Updates | Annually | One month after the end of the year reported on. |
| Annual Environment Report (AER) | Annually | Eighteen 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. |
| Incident Action Report | As they occur | Within ten days of initiation of the action |
| 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. |
| Specialised Engineering Works reports | As they arise | Prior to the works commencing. |
| Financial Provision Revisions as per Condition 11.2.2 | Annually | One month after end of the year being reported on. |
| Financial Provision Revisions as per Condition 11.2.4 | As they occur | Within two weeks of the purchase, renewal or revision of the financial provision required under Condition 11.2.2. |
| Noise Monitoring | Annually | One month after end of the year being reported on. |
| Meteorological Monitoring | Annually | One month after end of the year being reported on. |
| Topographical survey | Annually | Three months from the date of grant of the licence and one month after end of each year thereafter. |
| Dust Monitoring | three times a year | Ten days after end of the period being reported on. |
| Monitoring of Surface Water Quality | Quarterly | Ten days after end of the quarter being reported on. |
| Monitoring of Groundwater Quality | Quarterly | Ten days after end of the quarter being reported on. |
| Monitoring of Leachate | Quarterly | Ten days after end of the quarter being reported on |
| Monitoring of landfill gas | Quarterly | Ten days after end of the quarter being reported on. |

Note 1: Unless altered at the request of the Agency

Table D.2 Once-off Reports

| Report and Contents | Condition Number | Report Submission Date (Number of months within which to submit, from date of grant of licence, unless otherwise specified) |
|--|------------------|--|
| Environmental Management System | | |
| (i)EMS Proposals | 2.1.1 | 18 |
| (ii)Schedule of Objectives and Targets | 2.2 | 12 |
| (iii)Environmental Management Programme | 2.3 | 12 |
| (iv)Communications | 2.7 | 12 |
| (v)Annual Environmental Report | 2.8 | 12 |
| Infrastructure | | |
| (i) Bunded fuel storage | 4.12 | 3 |
| (ii) Proposals for enclosing waste segregation area | 4.13 | 6 |
| (iii) Proposals for plastics recovery | 4.14 | 6 |
| (iv) Proposals for leachate management | 4.16.1 | 6 |
| (v) Proposals for landfill gas management | 4.17.1 | 6 |
| (vi) Proposals for surface water management | 4.19.1 | 6 |
| (vii) As built drawing of the Transfer Station | 4.20 | 3 |
| Waste Acceptance Procedures | | |
| (i) Waste acceptance and sorting procedure | 5.7 | 6 |
| (ii) Management of unacceptable waste | 5.9 | 6 |
| (iii) Recovery of C & D Waste | 5.14 | 9 |
| Restoration and Aftercare | | |
| (i) Decommissioning Plan | 8.1 | 12 |
| (ii) Restoration and Aftercare Plan | 8.2 | 12 |
| Environmental Monitoring | | |
| (i) A proposal for the monitoring of leachate within the waste | 9.3 | 6 |
| (ii) Installation of additional groundwater monitoring wells | 9.4 | 6 |
| (iii) A proposal for a permanent gas monitoring system to be installed in the site office. | 9.5 | 3 |
| Contingency Arrangements | | |
| (i) Proposal for Emergency Response Procedure | 10.1 | 6 |
| Financial Provisions | | |
| (i) Environmental Liabilities Risk Assessment | 11.2.1 | 6 |
| (ii) Proposals for Financial Provision | 11.2.2 | 9 |

SCHEDULE E Specified Engineering Works

Specified Engineering Works

Development of Phases and future Cells of the facility including preparatory works and lining system.

Landfill cap installation, including temporary and intermediate capping, installation and all other containment works (including any containment works relating to leachate control).

Proposed office building

Enclosure of the Trommel and Extec Screening plant

Waste Inspection and Quarantine Area

Recycling Plant for Plastics

Truck washing Area

Bunding of fuel and oil storage areas.

Installation of landfill gas management and monitoring systems.

Installation of leachate management systems.

Installation of additional groundwater monitoring wells.

Installation of surface water management systems.

Restoration and Aftercare Works.

Any other works notified in writing by the Agency.

SCHEDULE F Monitoring

All monitoring location are those shown in drawing No. J1.0 (Rev. 1) June 1998 Environmental monitoring.

F.1 Landfill Gas

Landfill gas monitoring locations shall be those as set out in Table F.1.1 and in the site office and at the frequencies outlined in Table F.1.2

| Table F.1.1 | | |
|--|---------|----------|
| STATION | EASTING | NORTHING |
| GS-01 | 324347 | 218153 |
| GS-02 | 324214 | 218255 |
| GS-03 | 324149 | 218291 |
| GS-04 | 324201 | 218010 |
| Within all enclosed buildings on site particularly the transfer station. | | |

Table F.1.2 Landfill Gas Monitoring

| Parameter | Monitoring Frequency | | Analysis Method ¹ /Technique ² |
|---------------------------------------|-------------------------------|-------------|---|
| | Gas Boreholes/ Vents/Wells | Site Office | |
| Methane (CH ₄) % v/v | Monthly | Weekly | Infrared analyser/flame ionisation detector |
| Carbon dioxide (CO ₂)%v/v | Monthly | Weekly | Infrared analyser/ flame ionisation detector |
| Oxygen(O₂) %v/v | Monthly | Weekly | Infrared analyser |
| Atmospheric Pressure | Monthly | Weekly | Standard |
| Temperature | Monthly | Weekly | Standard |

¹ All monitoring equipment used should be intrinsically safe.

²Or other methods agreed in advance with the Agency.

F.2 Dust

Dust monitoring locations shall be those as set out in Table F.2.1below and at the frequencies outlined in Table F.2.2

Table F.2.1

| 100101.2.1 | | |
|------------|---------|----------|
| STATION | EASTING | NORTHING |
| DS-1 | 324302 | 218012 |
| DS-2 | 324288 | 218185 |
| DS-3 | 324152 | 218298 |
| DS-4 | 324199 | 218003 |

Table F.2.2 Dust Monitoring

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

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) which 2 methoxy ethanol may be employed to eliminate interference due to algae growth in the gauge.

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

F.3 Noise

Noise monitoring locations shall be those as set out in Table F.3.1. and at the frequencies outlined in Table F.3.2

| Table F.3.1 | | |
|-------------|---------|----------|
| STATION | EASTING | NORTHING |
| N1 | 324308 | 217954 |
| N2 | 324326 | 218018 |
| N3 | 324347 | 218153 |
| N4 | 324221 | 218260 |

| 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."

F.4 Surface Water, Groundwater and Leachate

Surface water, Groundwater and Leachate monitoring locations shall be those as set out in Table F.4.1 and of the parameters and frequencies outlined in Table F.4.2

| Table F.4.1 | | |
|--|--|----------|
| STATION | EASTING | NORTHING |
| SW-1 | 324145 | 218313 |
| SW-2 | 324247 | 218253 |
| SW-3 | 324335 | 218185 |
| SW-4 | 324391 | 218125 |
| 2 No. Boreholes as required by Condition 9.4 | _ | _ |
| BH2 | 324214 | 218255 |
| BH3 | 324149 | 218291 |
| BH4 | 324201 | 218010 |
| Leachate | to be agreed with the Agency as required by Condition 9.3 | |

| Parameter Note 1 | SURFACE WATER | GROUNDWATER | LEACHATE |
|-------------------------------------|-------------------------|-------------------------|-------------------------|
| | Monitoring Frequency | Monitoring Frequency | Monitoring Frequency |
| Visual Inspection/Odour Note 2 | Weekly | Quarterly | Note 5 |
| Groundwater Level | Not Applicable | Monthly | Not Applicable |
| Leachate Level | Not Applicable | Not Applicable | Weekly |
| Ammoniacal Nitrogen | Quarterly | Monthly | Note 5 |
| Nitrite | Quarterly | Not Applicable | Not Applicable |
| BOD | Quarterly | Not Applicable | Note 5 |
| COD | Quarterly | Not Applicable | Note 5 |
| Chloride | Quarterly | Quarterly | Note 5 |
| Dissolved Oxygen | Quarterly | Quarterly | Not Applicable |
| Electrical Conductivity | Quarterly | Monthly | Note 5 |
| рН | Quarterly | Monthly | Note 5 |
| Total Suspended Solids | Quarterly | Not Applicable | Not Applicable |
| Temperature | Quarterly | Monthly | Note 5 |
| Phenols | Quarterly | Not Applicable | Not Applicable |
| Boron | Not Applicable | Annually | Note 5 |
| Cadmium | Annually | Annually | Note 5 |
| Calcium | Annually | Annually | Note 5 |
| Chromium (Total) | Annually | Annually | Note 5 |
| Copper | Annually | Annually | Note 5 |
| Cyanide (Total) | Not Applicable | Annually | Note 5 |
| Fluoride | Not Applicable | Annually | Note 5 |
| Iron | Annually | Annually | Note 5 |
| Lead | Annually | Annually | Note 5 |
| List I/II organic substances Note 3 | Annually | Annually | Note 5 |
| Magnesium | Annually | Annually | Note 5 |
| Manganese | Annually | Annually | Note 5 |
| Mercury | Annually | Annually | Note 5 |
| Potassium | Annually | Quarterly | Note 5 |
| Sulphate | Annually | Annually | Note 5 |
| Sodium | Annually | Quarterly | Note 5 |
| Total Alkalinity | Annually | Annually | Not Applicable |
| Total Phosphorus / orthophosphate | Annually | Annually | Note 5 |
| Total Oxidised Nitrogen | Annually | Quarterly | Note 5 |
| Total Organic Carbon | Not Applicable | Quarterly | Not Applicable |
| Residue on evaporation | Not Applicable | Annually | Not Applicable |
| Zinc | Annually | Annually | Note 5 |
| Faecal Coliforms | Not Applicable | Annually Note 4 | Note 5 |
| Total Coliforms | Not Applicable | Annually Note 4 | Note 5 |

Table F.4.2 Water and Leachate - Parameters /Frequency

- 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 in writing with the Agency in advance.
- Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.
- Note 3: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent), semi-volatiles (US Environmental Protection Agency method 525 or equivalent, and pesticides (US Environmental Protection Agency method 608 or equivalent). In cases where large quantities of harbour dredgings have been accepted at the site it is recommended to analyse for organotin compounds. Where there is reason to suspect organophosphorous contamination it is recommended to also scan for these compounds.
- Note 4: If there is evidence of bacterial contamination, the analysis at up gradient and downgradient monitoring points should include enumeration of total bacteria at 22°C and 37°C and faecal streptococci.
- Note 5: Once off for all indicated parameters and thereafter as required by the Agency.

F.5 Meteorological Monitoring

At the location specified in Attachment C.2 of the application.

Table F.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 | Daily | Standard |
| Evapotranspiration | Daily | Standard |
| Humidity | Daily | Standard |
| Atmospheric Pressure | Daily | Standard |

SCHEDULE G Emission Limits

G.1 Noise Emissions: (Measured at the noise monitoring points indicated in Table F.3.1.

| Day dB(A)L _{Aeq} (15 minutes) | Night dB(A) L _{Aeq} (15 minutes) |
|--|---|
| 55 | 45 |

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

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

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

| Level (mg/m ² /day) ^{Note 1} | | |
|--|--|--|
| 350 | | |

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

SCHEDULE H Waste Types

TABLE H.1 WASTE CATEGORIES AND QUANTITIES

| WASTE TYPE | TONNES PER ANNUM |
|--------------------------------|------------------|
| Household | 35,000 |
| Commercial | 20,000 |
| Construction and Demolition | 50,000 |
| Hazardous | < 1 |

TABLE H.2 HAZARDOUS WASTE TYPES AND QUANTITIES

| HAZARDOUS WASTE | DETAILED DESCRIPTION | Comment |
|-----------------|----------------------|-----------------------|
| Batteries | Machinery batteries | Recycled off- site |

TABLE H.3 NON-HAZARDOUS WASTE TYPES

| INERT OR INACTIVE WASTE | Check (if accepted) | Additional Information |
|----------------------------|------------------------|--------------------------|
| Subsoil | Х | ~ 14 % recycled off site |
| Topsoil | Х | ~ 14 % recycled off site |
| Brickwork | Х | |
| Stone, Rock and Slate | Х | |
| Clay | Х | ~ 14 % recycled off site |
| Natural Sand | Х | |
| Concrete | Х | |
| Pottery & China | Х | |
| Solid Road Planings, Solid | Х | |
| Tarmacadam, Solid Asphalt | | |
| BIODEGRADABLE WASTE | Check (if accepted) | Additional Information |
| Wood & Wood Products | Х | Recycled off-site |
| Paper & Paper Products | Х | Recycled off-site |
| Vegetable Matter | Х | Disposed off-site |
| Natural & Manmade Fibres | Х | Disposed off-site |
| Road Sweepings | Х | Disposed off-site |
| Ash & Cinders | Х | Disposed off-site |
| Food Stuffs | Х | Disposed off-site |

TABLE H.4 OTHER WASTES

| OTHER WASTES | Check (if accepted) | Additional Information |
|---------------------------|------------------------|------------------------|
| Plasterboard and Plaster | Х | Disposed off-site |
| Solid, Fully Polymerised | Х | |
| Plastics | | |
| Empty Containers | Х | Recycled off-site |
| Non-Hazardous Ferrous and | Х | Recycled off-site |
| Non-Ferrous Metals | | |

Given by the Agency on the 2nd day of September 1999.

Signed on behalf of the said Agency on the 2nd day of September 1999:

B. Sheehan Authorised Person