

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

WASTE LICENCE PROPOSED DECISION

Waste Licence 100-1

Register Number:

Applicant: Dublin Docklands Development Authority

Location of Facility: Sir John Rogersons Quay Gasworks,

Dublin 1

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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, submission received from third party 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 Dublin Docklands Development Authority to carry on the waste activities listed below at Sir John Rogersons Quay Gasworks, Dublin 1 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 11: Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.

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 4: Recycling or reclamation of other inorganic materials.

INTERPRETATION

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

Adequate lighting 20 lux measured at ground level.

Agreed Agreed in writing

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.

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

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

Hazardous Waste As defined in Section 4 (2) 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.

Licence A Waste Licence issued in accordance with the Act.

Licensee **Dublin Docklands Development Authority**

Substances classified pursuant to EC Directives 76/464/EEC and List I/II Organics

80/68/EEC

Liquid Waste Any waste in liquid form and containing less than 20% dry matter

Keep in a fit state, including such regular inspection, servicing and Maintain

repair as may be necessary to adequately perform its function.

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

2200 hrs to 0800 hrs. Night-time

Non-hazardous

waste

Non-Hazardous Waste is any waste which is not a hazardous waste as

defined in the Act.

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

commences on the date of grant of this licence

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

Sample(s) Unless the context of this licence indicates to the contrary, samples

shall include measurements by electronic instruments

Sanitary Authority **Dublin Corporation**

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 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.

Working Day 07.00 to 18.00 Monday to Saturdays.

Part II CONDITIONS

CONDITION 1 SCOPE

- The waste activities authorised by this licence are listed and described in Schedule A: Waste Activities. Waste activities at the facility shall be restricted to those listed in Schedule A and any restrictions set down therein.
- Waste activities shall be restricted to the areas of land outlined in red on Drawing No. 21803/OB/06 Version A, Drawing Title "Waste Licence Boundaries" of the application. Any reference in this licence to "facility" shall mean the areas 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 treated 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 treated 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 prior to commencement of the waste activities, 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 as required 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 2.8 below:

2.2 Schedule of Environmental Objectives and Targets

- 2.2.1 The licensee shall, prior to commencement of the waste activities, 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 remediation of the facility and shall be reviewed as required and submitted to the Agency for its agreement.

2.3 Environmental Management Programme

- 2.3.1 The licensee shall, prior to commencement of the waste activities, 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 as required.

2.4 Corrective Action

2.4.1 Prior to the carrying on of the waste activities at the facility, 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 Prior to the carrying on of the waste activities at the facility, 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 Prior to the carrying on of the waste activities at the facility, 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) a named contact person for communications with the Sanitary Authority;
- c) details of the responsibilities for each individual named under a) above;
- d) details of the relevant experience, competence and qualifications held by each of the persons nominated under a) above; and
- e) contingency arrangements for the absences of the named persons from the facility.

2.7 Communications

2.7.1 Prior to the carrying on of the waste activities at the facility, 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 each 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.

To make provision for management of the activity on a planned basis having regard Reason: 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 which occur in respect to the waste activities licensed herein:
 - a) 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, occurred;
 - 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 shall include all aspects described in sections (a) to (e) of *Condition*
- 3.3. 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.
- 3.4. 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) 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.
- 3.6. 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.
- 3.7. In the event of any incident which relates to discharges to surface water, the licensee shall also notify Dublin Corporation 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.
- 3.8. Unless otherwise agreed in writing with the Agency, all documentation required to be maintained under this licence, shall be retained by the licensee.
- 3.9. The licensee shall provide additional copies of any documentation referred to in this licence to the Agency upon written request, within the time specified in writing by the Agency.
- 3.10. The licensee shall keep the following documents at the facility office referred to in Condition 4.4.
 - 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.
- 3.11. The licensee shall maintain a written record for each load of waste transferred within the facility from one area to another and for each load of waste dispatched from the facility. In both cases the licensee shall record the following where relevant:
 - a) the name of the carrier;
 - b) the vehicle registration number/ship identification;
 - c) the name of the producer(s)/collector(s) of the waste as appropriate;
 - d) a description of the waste, including the associated EWC codes;
 - e) the quantity of the waste, recorded in tonnes;
 - f) the name of the person(s) checking the load;
 - g) a consignment note number (including transfrontier shipment notification and movement/tracking form numbers, as appropriate);
 - h) the destination of the waste (including a facility name and address and waste licence or permit number as appropriate);
 - i) chemical analysis of the waste;
 - written confirmation that the consigned waste has reached its destination and/or has been subjected to the recovery/disposal process for which it was destined;
 - k) 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; and
 - any other information which might be required from time to time by the Agency.

- 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.
- 3.13. In the event of accidental discharge, spillage or deposit of any polluting matter which enters or is likely to enter a sewer, or which poses a risk to personnel working in connection with a sewer, or requiring an emergency response by the local authority, the licensee shall notify the Sanitary Authority 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.

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

- The licensee shall establish all infrastructure referred to in this licence prior to the 4.1. commencement of the licensed activities unless where the Conditions of this licence provide otherwise, or as instructed in writing by the Agency.
- 4.2. Site Notice Board
 - 4.2.1. 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:
 - g) where and when environmental monitoring information relating to the facility can be obtained.

4.3. Site Security

- 4.3.1. Security and stockproof fencing and gates shall be installed and maintained as described in Attachment D 1 (a) Facility Security Arrangements of the application.
- 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. The licensee shall provide and maintain an office on or adjacent to the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 4.5. The licensee shall provide and maintain a working telephone and facsimile machine in the office specified in *Condition 4.4* above.
- 4.6. The licensee shall provide and maintain a weighbridge or weighbridges at the facility. Prior to the commencement of waste activities at the facility, the licensee shall submit a proposal for a weighbridge or weighbridges to the Agency for its agreement. The proposal shall include arrangements for the weighing of all wastes which are removed from the facility.
- 4.7. Prior to the commencement of waste activities at the facility, the licensee shall submit a proposal for the location and design of a wheelwash to the Agency for its agreement. The wheelwash, once installed shall be inspected on a daily basis and maintained as necessary.
- 4.8. The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 4.9. Fuel Storage
 - 4.9.1. The licensee shall establish and maintain a bunded fuel storage area at the facility. Unless otherwise agreed in writing with the Agency the location of the fuel storage area shall be as shown on Drawing No. 21803/OB/23 Version C Title "Site Accommodation Layout".
 - 4.9.2. 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:
 - 4.9.2.1.1.(a) 110% of the capacity of the largest tank or drum within the bunded area; or
 - 4.9.2.1.2.(b) 25% of the total volume of substance which could be stored within the bunded area.
 - 4.9.3. All drainage from bunded areas shall be diverted for collection and safe disposal.
 - 4.9.4. All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.

- 4.9.5. 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 three months of the date of commencement of waste activities at the facility. 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.
- 4.9.6. All tanks and containers shall be labelled to clearly indicate their contents.
- 4.10. The licensee shall install a perimeter cut-off wall around the perimeter of Sites 1 and 2, to prevent the ingress of groundwater to these sites, prior to the commencement of waste activities at the facility. Unless otherwise agreed with the Agency, the cut-off wall shall be at the location and to the specification as shown on Drawing No. 21803/OB/20 Version A Drawing Title "Cut off Wall Location".
- 4.11. Prior to the commencement of waste activities at the facility, the licensee shall submit a proposal to the Agency for its agreement for the construction of a groundwater and wastewater treatment plant on the facility.
- 4.12. Specified Engineering Works
 - 4.12.1. 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.
 - 4.12.2. 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.
 - 4.12.3. Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation report. The validation report shall be made available to the Agency on request. The report shall 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 remediation of the facility shall be in accordance with Remediation Specification, Volumes 1 and 2, Report Number 21803/OU/02. Any variations to that specification must be agreed in advance with the Agency.
- 5.2. No wastes shall be disposed of at the facility and no wastes shall be imported into the facility for treatment. Only those wastes which comply with the acceptance criteria specified in Section 11, Conclusion and Recommendations of the Risk Assessment Report, March 1999 in the application shall be recovered at the facility. Such acceptable wastes shall be recovered in accordance with the procedures laid down in that section.
- 5.3. All wastes, other than those recovered in accordance with Condition 5.2, shall be exported from the facility and disposed of or recovered at an appropriate facility or facilities to be agreed in advance with the Agency.
- 5.4. The quantity of wastes to be exported from the facility shall not exceed 200,000 tonnes per annum, unless otherwise agreed in advance with the Agency.
- 5.5. Prior to the commencement of waste activities at the facility, the licensee shall submit a proposal to the Agency for its agreement concerning the identification, handling and removal of any tanks or containers, or their contents, on or from the facility.
- 5.6. The identification of the presence of asbestos and the handling of any asbestos on the facility shall be in accordance with Clause D700 of the Remediation Specification, Volume 1, Report Number 21803/OU/02
- 5.7. Scavenging shall not be permitted at the facility.
- 5.8. Waste activities shall only be carried out at the facility between the hours of 0700 to 1800 Monday to Saturdays unless otherwise agreed in advance with the Agency.
- 5.9. Prior to the commencement of waste activities at the facility, a proposal for the recovery of construction and demolition waste arising at the facility shall be submitted to the Agency for its agreement.
- 5.10. No smoking shall be allowed on the facility.
- At least three months prior to the commencement of waste activities at the facility, the 5.11. licensee shall submit a proposal regarding on site treatment of the wastes as an alternative to being sent for treatment overseas, to the Agency for its agreement.

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

CONDITION 6 ENVIRONMENTAL NUISANCES

6.1. 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.

- 6.2. The road network in the vicinity of the facility shall be kept free from any debris caused by vehicles entering or leaving the facility. Any such debris or deposited materials shall be removed without delay.
- 6.3. All loose litter accumulated within the facility and its environs, shall be removed and disposed of on a daily basis at an appropriate facility to be agreed with the Agency.
- Any waste placed on or in the vicinity of the facility, other than in accordance with the 6.4. 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 to be agreed with the Agency.
- 6.5. The licensee shall ensure that all waste being transferred from one site to another or being exported from the facility is appropriately covered.
- 6.6. 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.
- 6.7. The licensee shall ensure that the activities shall be carried out in a manner such that odours do not result in significant impairment of, or significant interference with amenities or the environment beyond the facility boundary.
- 6.8. The licensee shall ensure that birds, vermin, flies and dust do not give rise to nuisance at the facility or the immediate area 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 G: Emissions 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.
- The licensee shall ensure that the activities shall be carried out in a manner such that 7.3. emissions do not result in significant impairment of, or significant interference with the environment beyond the facility boundary.
- 7.4. No substance shall be present in the emissions to sewer in such concentrations as would constitute a danger to sewer maintenance personnel working in the sewerage system, or as would be damaging to the fabric of the sewer, or as would interfere with the biological functioning of a downstream wastewater treatment works.
- 7.5. The licensee shall permit authorised persons of the Agency and the Sanitary Authority to inspect, examine and test, at all reasonable times, any works and apparatus installed, in connection with the discharge or emission, and to take samples of the discharge or emission.

- 7.6. No discharge or emission to sewer shall take place which gives rise to any reaction within the sewer or to the liberation of by-products which may be of environmental significance.
- 7.7. The licensee shall ensure that the discharge shall not contain dissolved methane, petroleum spirits or organic solvents (including chlorinated organic solvents), at concentrations which would give rise to flammable or explosive vapours in the sewer.
- 7.8. Non-trade effluent wastewater (e.g. firewater, accidental spillage) which occurs on-site shall not be discharged to the sewer without the prior authorisation of the Sanitary Authority.
- 7.9. The licensee shall provide and maintain an inspection chamber in a suitable position in connection with each pipe through which a discharge or emission is being made. Each such inspection chamber or manhole shall be constructed and maintained by the licensee so as to permit the taking of samples of the discharge or emission.
- 7.10. The acute toxicity of the undiluted final effluent for discharge, to at least four aquatic species, from different trophic levels, shall be determined, by standardised and internationally accepted procedures and carried out by a competent laboratory. The name of the laboratory and the scope of testing to be undertaken shall be submitted, in writing, to the Agency, within three months of the date of grant of the waste licence. Once the testing laboratory and the scope of testing have been agreed by the Agency, the Agency shall decide when this testing is to be carried out and copies of all reports shall be submitted by the licensee to the Agency, within six weeks of completion of testing.
- 7.11. Having identified the more sensitive species, subsequent compliance toxicity monitoring on the two most sensitive species shall be carried out by the laboratory identified in Condition 7.10 of this licence, as per the Schedule to the licence entitled Sewer Emissions Monitoring. The Agency shall decide when this testing is to be carried out and copies of all reports shall be submitted by the licensee to the Agency within six weeks of completion of testing.
- 7.12. Non-hazardous wastewater runoff and leachate arising from areas where wastes are stored or washed shall be discharged to the wastewater treatment plant. Treated effluent may be discharged to sewer if emission limits specified in Schedule G are complied with.
- 7.13. Liquids and sludges classified as hazardous wastes by the second schedule of the Waste Management Act 1996 may not be discharged to sewer. In particular, free products consisting of Light Non-Aqueous Phase Liquids and Dense Non-Aqueous Phase Liquids shall not be discharged to sewer.
- 7.14. Trade effluent shall not be discharged to sewer unless test results first establish that the effluent complies with all discharge conditions.
- 7.15. Prior to the commencement of waste activities on the facility, the licensee shall submit a proposal to the Agency for its agreement which will ensure that leachate from stockpiles and washwaters from the gravel washing plant will not recontaminate the ground or groundwater.
- 7.16. Where settling tanks or treatment tanks are mandatory, a record or log book of cleaning, maintenance and performance of each tank shall be kept and made available for inspection at all times by officials from the Sanitary Authority.
- 7.17. Technical details for the proposed gravel washing plant and wastewater treatment plant shall be forwarded to the Sanitary Authority prior to commencement of operations.

7.18. Emission limits, in this waste licence, for emissions to sewer shall be interpreted as follows:-

For Continuous Monitoring:

No flow value shall exceed the specified limit.

For Non-Continuous Monitoring:

No pH value shall deviate from the specified range.

No temperature value shall exceed the emission limit value.

For parameters other than pH, temperature and flow, eight out of ten consecutive results, calculated as daily mean concentration or mass emission values on the basis of flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed the emission limit value.

For parameters other than pH, temperature and flow, no grab sample value shall exceed the emission limit value.

- 7.19. The licensee shall provide safe and permanent access to the final effluent as discharged to sewer.
- 7.20. All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on, unless alternative sampling or monitoring has been agreed, in writing, by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Prior written agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 7.21. The leachate and effluent treatment control equipment, including backup equipment, specified in this licence, shall be provided on-site. All treatment/abatement, control and monitoring equipment shall be calibrated and maintained at all times when in use or as otherwise approved by the Agency under the EMP associated with this licence.

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

CONDITION 8 RESTORATION AND AFTERCARE

8.1. The decommissioning of the facility shall be as described in Attachment G.1 Decommissioning of the application. At least three months prior to the cessation of waste activities on the facility, the licensee shall submit a detailed Decommissioning Plan to the Agency for its agreement.

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 F: Monitoring and as specified in the Conditions of this licence.

- 9.2. The licensee shall, prior to the commencement of waste activities on the facility, submit proposals to the Agency, for its agreement, for the monitoring of noise, vibration, asbestos, groundwater, emissions from the groundwater and wastewater treatment plant, and soil gas.
- 9.3. The licensee, shall, prior to the commencement of waste activities at the facility, submit a proposal to the Agency for its agreement, for the monitoring of groundwater levels at a number of locations external to the facility.
- 9.4. Monitoring and analysis of the soil to ensure compliance with *Condition 5.2* shall be as described in Clause E920 of the *Remediation Specification, 21803/OU/03.* A proposal for the chemical parameters to be analysed for shall be submitted to the Agency for its agreement, prior to the commencement of any waste activities at the facility.
- 9.5. The licensee, shall, prior to the commencement of waste activities at the facility, submit a proposal to the Agency for its agreement, specifying a unique identification number for all environmental monitoring locations, including in each case a twelve-figure grid reference.
- 9.6. Monitoring of odours and vapours shall be in accordance with Clause A871 of the *Remediation Specification*, 21803/OU/03 unless otherwise agreed with the Agency.
- 9.7. 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.
- 9.8. 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.
- 9.9. 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.
- 9.10. 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.
- 9.11. The licensee shall maintain all sampling and monitoring points so that they may be used for the representative sampling and monitoring of emissions from the facility.
- 9.12. A topographical survey shall be carried out prior to the commencement of waste activities at the facility. It shall be repeated annually thereafter. The survey shall be in accordance with any written instructions issued by the Agency.
- 9.13. Prior to the commencement of waste activities at the facility, the licensee shall submit a proposal concerning the monitoring of air emissions from the groundwater and wastewater treatment plant to the Agency for its agreement.
- 9.14. Monitoring results relevant to the discharge to sewer shall be submitted to the Sanitary Authority on a weekly basis.
- 9.15. A flowmeter shall be installed at the point of discharge to sewer. The licensee shall submit flow monitoring results to the Sanitary Authority on a weekly basis.

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, prior to the commencement of waste activities at the facility, 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 Contingency Arrangements for the facility shall be as detailed in *Attachment K, Contingency Arrangements* 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 monitoring of groundwater levels locally (as required in *Condition 9.3*), indicates that the facility is having a significant effect on those levels, 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 remediation of such effects.
- 10.7 Unless otherwise notified in writing by the Agency, in the case of repeat incidents, 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) provide a proposal to the Agency for 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.

Reason: To provide for the protection of the environment.

CONDITION 11 CHARGES AND FINANCIAL **PROVISIONS**

11.1 Agency Charges

- The licensee shall pay to the Agency an annual contribution of £14,794 or such 11.1.1 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 licence to the renewal date. The updated amount shall be notified to 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.
- In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defraying its costs.
- 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 agreement within six months of date of grant of this licence.
 - 11.2.2 Prior to the commencement of waste activities at the facility, 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 in writing by the Agency.
 - The amount of financial provision, held under Condition 11.2.2 shall be 11.2.3 reviewed and revised as necessary, but at least annually. Any proposal for such a revision shall be submitted to the Agency for its agreement.
 - The licensee shall within two weeks of establishment, renewal or revision of the financial provision required under Condition 11.2.2, forward to the Agency written proof of such indemnity.

11.3 Sanitary authority charges

Sanitary authority charges of 13.15 pence per cubic metre of trade effluent at shall be made payable to the Sanitary Authority directly on a quarterly basis. Annual monitoring costs of £2,600 incurred by the Sanitary Authority shall also be defrayed by the licensee. Sanitary Authority charges will increase from time to time in response to increased costs in providing drainage and monitoring.

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 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 excavation, stockpiling, sorting and preparation of waste prior to removal from the facility for recovery or disposal at an alternative 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 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 recovery of such substances for use on the facility.

Recycling or reclamation of other inorganic materials: Class 4.

This activity is limited to the recovery of such substances for use on the facility.

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 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 specified 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 disposed of and recovered during the reporting period and each previous year.

Summary report on emissions.

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.

Volume of groundwater treated and discharged off-site.

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

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.

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

Any other items specified by the Agency.

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

SCHEDULE D : Recording and Reporting to the Agency

Table D.1 Recurring Reports

Report	Reporting Frequency Note1	Report Submission Date	
Environmental Management System Updates	As required	As required.	
Annual Environment Report (AER)	Annually	Twelve 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	Three months from the date of commencement of wast activities at facility 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 Groundwater Quality and Levels	Monthly	Ten days after end of the period being reported on.	
Dust Monitoring	Monthly	Ten days after end of the period being reported on.	

Noise Monitoring	Monthly	Ten days after end of the period being reported on.
Odours and Vapours Monitoring	Monthly	Ten days after end of the period being reported on.
Soil Gas Monitoring	Monthly	Ten days after end of the period being reported on.
Asbestos Fibre Monitoring	Monthly	Ten days after end of the period being reported on.
Soil Monitoring	As required	Prior to the soil being recovered.

Note 1: Unless altered at the request of the Agency

Table D.2 Once-off Reports

	Report and Contents	Condition Number	Report Submission Date (Prior to commencement of waste activities at the facility, unless otherwise specified, in months from date of grant of licence)
Envi	ronmental Management System		
(i)	EMS Proposals	2.1.1	
(ii)	Schedule of Objectives and Targets	2.2.1	
(iii)	Environmental Management Programme	2.3.1	
(iv)	Management Structure	2.6.1	
(v)	Communication Programme	2.7.1	
(vi)	Annual Environmental Report	2.8.1	12 after the commencement of the waste activities.
Infra	structure		
(i)	Proposals for weighbridge	4.6	
(ii)	Proposals for wheelwash	4.7	
(iii)	Integrity of bunds	4.9.5	
(iv)	Groundwater and wastewater treatment plant	4.11	
Was	te Acceptance Procedures		
(i)	Identification, handling and treatment of tanks	5.5	
(ii)	Identification, handling and treatment of asbestos	5.6	
(iii)	Recovery of C & D Waste	5.9	
(iv)	On-site treatment of wastes	5.11	
Envi	ronmental Monitoring		
(i)	Monitoring proposals for noise, vibration, asbestos, groundwater and soil gas.	9.2	
(ii)	Monitoring proposals for off-site groundwater levels	9.3	
(iii)	Chemical parameters for analyses of soil	9.4	
(iv)	Identification code for all monitoring locations	9.5	
(v)	Air emissions monitoring treatment plant	9.13	
Cont	ingency Arrangements		
(i)	Emergency Response Procedures	10.1	
Char	ges & Financial Provisions		
(i)	Proposal for Financial Provision	11.2.1	3

SCHEDULE E : Specified Engineering Works

Specified Engineering Works

Design and construction of the Cut-off Wall around Sites 1 and 2.

Design and construction of the conveyor to transport waste to ships.

Design and construction of the groundwater and wastewater treatment plant.

Bunding of fuel and oil storage areas.

Restoration and Aftercare Works.

Any other works notified in writing by the Agency.

SCHEDULE F: Monitoring

Monitoring to be carried out as specified below.

F.1 Dust

Dust monitoring locations shall be those five locations as set out in Drawing No. 21803/OB/16, Version C, Titled; Environmental Monitoring

Table F.1.1 **Dust Monitoring Frequency and Technique**

Parameter (mg/m²/day)	Monitoring Frequency	Analysis Method/Technique
Dust	Continuous with weekly analysis	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.

F.2 Noise

Noise monitoring locations shall be as agreed with the Agency.

Table F.2.1 Noise Monitoring Frequency and Technique

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

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

F.3, Groundwater

Groundwater monitoring locations shall be those thirty-eight locations as set out in *Drawing No.* 21803/OB/16, Version C, Titled; Environmental Monitoring. Parameters and frequency to be agreed with the Agency.

F4, Soil Gas

Soil gas monitoring locations shall be those twenty-one locations as set out in Drawing No. 21803/OB/16, Version C, Titled; Environmental Monitoring. Parameters and frequency to be agreed with the Agency.

F.5 Asbestos Fibre Monitoring

Locations and frequency to be as agreed with the Agency

Parameter (fibres/ml)	Monitoring Frequency	Analysis Method/Technique
Asbestos Fibre Concentration	As agreed with the Agency	Standard Method ^{Note 1}

Note 1: Method used shall be "Asbestos Fibre in Air" Health and Safety Executive MDHS 39/4, UK (1995) or another method agreed with the Agency. Monitoring shall be carried out by an independent laboratory agreed with the Agency.

F.6 Sewer Emissions Monitoring

Monitoring Point Reference No: E3174 N2341, Foul Sewer in Pearse Street

Parameter	Monitoring Frequency	Sampling Method/Type
Flow to sewer	Each Batch	Flowmeter
BOD	Each Batch	Grab
COD	Each Batch	Grab
Ammoniacal nitrogen (NH ₄ - N)	Each Batch	Grab
Suspended Solids	Each Batch	Grab
Sulphates (as SO ₄)	Each Batch	Grab
pH	Each Batch	Grab
Temperature	Each Batch	Grab
PAH's (Total of 14)	Each Batch	Grab
Mineral Oils	Each Batch	Grab
Volatile Organics Oils	Each Batch	Grab
Total Phenols	Each Batch	Grab
Total Cyanides (as CN)	Each Batch	Grab
Thiocyanates (as SCN)	Each Batch	Grab
Arsenic (mg/l As)	Each Batch	Grab
Cadmium (mg/l Cd)	Each Batch	Grab
Chromium (mg/l Cr)	Each Batch	Grab

Lead (mg/l Pb)	Each Batch	Grab
Mercury (mg/l Hg)	Each Batch	Grab
Copper (as Cu)	Each Batch	Grab
Nickel (as Ni)	Each Batch	Grab
Zinc (as Zn)	Each Batch	Grab
Boron (as B)	Each Batch	Grab
Iron (as Fe)	Each Batch	Grab
Toxicity Units (as T.U.)	Each Batch	Grab

SCHEDULE G: Emission Limits

Sewer Emission Limits: Measured at the following point. **G.1**

Emission Point Reference No: E3174 N2341 Emission to Foul Sewer in Pearse Street

Volume to be emitted : Maximum in any one day : 500m³
Maximum rate per hour :80m³
Maximum rate per second:0.02m³

Parameter (delete parameters which are not applicable)	Emission Limit Value			Parameter to be limited
	Grab Sample (mg/l)	Daily Mean Concentratio n (mg/l)	Daily Mean Loading (kg/day)	(Yes/No)
BOD	70	50	25	Yes
COD	560	300	150	Yes
Ammoniacal nitrogen (NH ₄ - N)	70	50	25	Yes
Suspended Solids	500	400	200	Yes
Sulphates (as SO ₄)	1,500	1,000	500	Yes
pH	6 to 10	6 to 10	Not Applicable	Yes
Temperature	25 °C	25 °C	Not Applicable	Yes
PAH's (Total of 14)	0.2	0.2	0.1	Yes
Mineral Oils	20.0	20.0	10.0	Yes
Total Phenols	3.0	3.0	1.5	Yes

Total Cyanides (as CN)	3.0	3.0	1.5	Yes
Thiocyanates (as SCN)	1.0	1.0	0.5	Yes
Arsenic (mg/l As)	0.60	0.60	0.30	Yes
Cadmium (mg/l Cd)	0.05	0.05	0.025	Yes
Chromium (mg/l Cr)	0.5	0.5	25.0	Yes
Lead (mg/l Pb)	0.5	0.5	25.0	Yes
Mercury (mg/l Hg)	0.01	0.01	0.005	Yes
Copper (as Cu)	5.00	5.00	2.5	Yes
Nickel (as Ni)	5.00	5.00	2.5	Yes
Zinc (as Zn)	10.0	10.0	5.0	Yes
Boron (as B)	5.0	5.0	2.5	Yes
Iron (as Fe)	50.0	50.0	25.0	Yes
Toxicity Units (as T.U.)	10.0	10.0		Yes

G.2 Dust Deposition Limits: (Measured at the monitoring points indicated in <u>Table</u> *F.*2.1).

Level (mg/m² /day) ^{Note 1}	
350	

Note 1: 7 day composite sample with the results expressed as mg/m²/day.

Given by the Agency on the 27th day of August 1999

Signed on behalf of the said Agency _	
_	Patrick J. Nolan
on the 27th day of August 1999	Authorised Person