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**WASTE LICENCE  
Recommended Decision**

<b>Licence Register Number:</b>	W0211-01
<b>Applicant:</b>	AVR-Environmental Solutions Limited
<b>Location of Facility:</b>	Foxhole, Youghal, Co. Cork.

# **INTRODUCTION**

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

The development consists of a Waste Recovery/Transfer and Sludge Drying Facility. The location of the development is on a 3.5 acre brownfield site, close to the Youghal Landfill and Civic Amenity Centre (Waste Licence Reg. No. W0068-02). A maximum 70,000 tonnes per annum (tpa) of commercial and industrial waste will be managed in the Waste Recovery/Transfer Facility. The Sludge Drying Facility will treat a maximum 30,000tpa of non-hazardous biological sludge from waste water treatment plants and washwater generated from cleaning the containers used to deliver sludge.

The Waste Recovery/Transfer facility will be used for the recovery and transfer of solid, non-hazardous commercial and industrial waste. Such waste consists of cardboard, paper, plastic, metals, wood, glass, electrical and electronic equipment and wood. Operations will include waste inspection, segregation, recovery, storage and transfer into vehicles for removal off-site. Other activities to be carried out include baling, compacting and shredding.

The Sludge Drying Facility will treat sludge from industrial, pharmaceutical and municipal sources. Sludges accepted on-site will have a minimum dry solids content of 10%. Effluent from the sludge drying plant will be treated in the on-site waste water treatment plant (WWTP) prior to discharge to the Sanitary Authority sewer. The licensee may accept leachate from the nearby Youghal Landfill to be treated in the on-site WWTP, subject to agreement in advance with the Agency and the Sanitary Authority.

The licence sets out in detail the conditions under which AVR-Environmental Solutions Limited will operate and manage this facility.

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## *Glossary of Terms*

All terms in this licence should be interpreted in accordance with the definitions in the Environmental Protection Agency Acts 1992 and 2003 / Waste Management Acts 1996 to 2005, unless otherwise defined in this section.

<b>Aerosol</b>	A suspension of solid or liquid particles in a gaseous medium.
<b>Adequate lighting</b>	20 lux measured at ground level.
<b>AER</b>	Annual Environmental Report.
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At approximately twelve monthly intervals.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
<b>Application</b>	The application by the licensee for this licence.
<b>Appropriate facility</b>	A waste management facility, duly authorised under relevant law and technically suitable.
<b>BAT</b>	Best Available Techniques.
<b>Biannually</b>	All or part of a period of six consecutive months.
<b>Biennially</b>	Once every two years.
<b>Biodegradable waste</b>	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
<b>BOD</b>	5 day Biochemical Oxygen Demand.
<b>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation.
<b>COD</b>	Chemical Oxygen Demand.
<b>Commercial Waste</b>	As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.
<b>Construction and Demolition Waste</b>	Wastes that arise from construction, renovation and demolition activities: Chapter 17 of the EWC or as otherwise may be agreed.
<b>Containment boom</b>	A boom which can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
<b>Daily</b>	During all days of plant operation, and in the case of emissions, when emissions are taking place; with at least one measurement on any one day.
<b>Day</b>	Any 24 hour period.
<b>Daytime</b>	0800 hrs to 2200 hrs.
<b>dB(A)</b>	Decibels (A weighted).

<b>DO</b>	Dissolved Oxygen.
<b>Documentation</b>	Any report, record, result, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Emission Limits</b>	Those limits, including concentration limits and deposition rates established in <i>Schedule B: Emission Limits</i> of this licence.
<b>Environmental Damage</b>	Has the meaning given it in Directive 2004/35/EC.
<b>EPA</b>	Environmental Protection Agency.
<b>European Waste Catalogue (EWC)</b>	A harmonised, non-exhaustive list of wastes drawn up by the European Commission and published as Commission Decision 2000/532/EC and any subsequent amendment published in the Official Journal of the European Community.
<b>Facility</b>	Any site or premises used for the purposes of the recovery or disposal of waste.
<b>Fortnightly</b>	A minimum of 24 times per year, at approximately two week intervals.
<b>GC/MS</b>	Gas Chromatography/Mass Spectroscopy.
<b>Green waste</b>	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
<b>Heavy Metals</b>	This term is to be interpreted as set out in "Parameters of Water Quality, Interpretation and Standards" published by the Agency in 2001. ISBN 1-84095-015-3.
<b>HFO</b>	Heavy Fuel Oil.
<b>Hours of Operation</b>	The hours during which the facility is authorised to be operational.
<b>Hours of Waste Acceptance</b>	The hours during which the facility is authorised to accept waste.
<b>ICP</b>	Inductively Coupled Plasma Spectroscopy.
<b>Incident</b>	The following shall constitute an incident for the purposes of this licence: <ul style="list-style-type: none"><li>(i) an emergency;</li><li>(ii) any emission which does not comply with the requirements of this licence;</li><li>(iii) any exceedence of the daily duty capacity of the waste handling equipment;</li><li>(iv) any trigger level specified in this licence which is attained or exceeded; and,</li><li>(v) any indication that environmental pollution has, or may have, taken place.</li></ul>

<b>Industrial Waste</b>	As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.
<b>Inert waste</b>	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.
<b>Installation</b>	A stationary technical unit or plant where the activity concerned referred to in the First Schedule of EPA Acts 1992 and 2003 is or will be carried on, and shall be deemed to include any directly associated activity, which has a technical connection with the activity and is carried out on the site of the activity.
<b>IPPC</b>	Integrated Pollution Prevention & Control.
<b>K</b>	Kelvin.
<b>kPa</b>	Kilo Pascals.
<b>Landfill Directive</b>	Council Directive 1999/31/EC.
<b>Leq</b>	Equivalent continuous sound level.
<b>Licence</b>	A Waste Licence issued in accordance with the Waste Management Acts 1996 to 2005.
<b>Licensee</b>	<b>AVR-Environmental Solutions Limited, Corrin, Fermoy, Co. Cork.</b>
<b>Liquid Waste</b>	Any waste in liquid form and containing less than 2% dry matter.
<b>List I</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>List II</b>	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments.
<b>Local Authority</b>	<b>Cork County Council.</b>
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to adequately perform its function.
<b>Mass Flow Limit</b>	An Emission Limit Value which is expressed as the maximum mass of a substance which can be emitted per unit time.
<b>Mass Flow Threshold</b>	A mass flow rate, above which, a concentration limit applies.
<b>Monthly</b>	A minimum of 12 times per year, at approximately monthly intervals.
<b>Municipal Waste</b>	As defined in Section 5(1) of the Waste Management Acts 1996 to 2005.
<b>Night-time</b>	2200 hrs to 0800 hrs.
<b>Noise Sensitive</b>	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity

<b>Location (NSL)</b>	which for its proper enjoyment requires the absence of noise at nuisance levels.
<b>Oil Separator</b>	Device installed according to the International Standard I.S.EN 858-2:2003 (Separator systems for light liquids, (e.g. oil and petrol)-Part 2: Selection of nominal size, installation, operation and maintenance.
<b>PRTR</b>	Pollutant Release and Transfer Register
<b>Quarterly</b>	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Recyclable Materials</b>	Those waste types, such as cardboard, batteries, gas cylinders, etc., which may be recycled.
<b>Regional Fisheries Board</b>	Southern Regional Fisheries Board.
<b>Sanitary Authority</b>	Cork County Council
<b>Sanitary Effluent</b>	Waste water from facility toilet, washroom and canteen facilities
<b>Samples</b>	Unless the context of this licence indicates to the contrary, samples shall include measurements by electronic instruments.
<b>SOP</b>	Standard Operating Procedure.
<b>Specified Emissions</b>	Those emissions listed in <i>Schedule B: Emission Limits</i> of this licence.
<b>Specified Engineering Works</b>	Those engineering works listed in <i>Schedule D: Specified Engineering Works</i> of this licence.
<b>Standard Method</b>	A National, European or internationally recognised procedure (e.g., I.S. EN, ISO, CEN, BS or equivalent), as an in-house documented procedure based on the above references, a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater", (prepared and published jointly by A.P.H.A., A.W.W.A & W.E.F), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or, an alternative method as may be agreed by the Agency.
<b>Storm Water</b>	Rain water run-off from roof and non-process areas.
<b>Temporary storage</b>	In relation to waste is a period of less than six months as defined in the Waste Management Acts 1996 to 2005.
<b>The Agency</b>	Environmental Protection Agency.
<b>TA Luft</b>	Technical Instructions on Air Quality Control - TA Luft in accordance with art. 48 of the Federal Immission Control Law (BImSchG) dated 15 March 1974 (BGBl. I p.721). Federal Ministry for Environment, Bonn 1986, including the amendment for Classification of Organic Substances according to section 3.1.7 TA Luft, published in July 1997.
<b>TOC</b>	Total Organic Carbon.

<b>Trade Effluent</b>	Trade Effluent has the meaning given in the water pollution Acts 1977 and 1990
<b>Trigger Level</b>	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
<b>WEEE</b>	As defined in S.I. No. 340 of 2005.
<b>Weekly</b>	During all weeks of plant operation, and in the case of emissions, when emissions are taking place; with at least one measurement in any one week.
<b>WWTP</b>	Waste Water Treatment Plant.



## ***Decision & Reasons for the Decisions***

### ***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 will not contravene any of the requirements of Section 40(4) of the Waste Management Acts 1996 to 2005.

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

### ***Part I Schedule of Activities Licensed***

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2005, the Environmental Protection Agency (the Agency) proposes, under Section 40(1) of the said Act to grant this Waste Licence to **AVR-Environmental Solutions Limited, Corrin, Fermoy, Co. Cork** to carry on the waste activities listed below at **Foxhole, Youghal, Co. Cork** subject to 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 Acts 1996 to 2005***

<b>Class 7.</b>	<b>Physico-chemical treatment not referred to elsewhere in this Schedule which results in final compounds or mixtures which are disposed of by means of any activity referred to in paragraphs 1 to 5 or paragraphs 8 to 10 of this Schedule (including evaporation, drying and calcination).</b>
<b>Class 11.</b>	<b>Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 12.</b>	<b>Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 13.</b>	<b>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.</b>

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

<b>Class 2.</b>	<b>Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).</b>
<b>Class 3.</b>	<b>Recycling or reclamation of metals and metal compounds.</b>
<b>Class 4.</b>	<b>Recycling or reclamation of other inorganic materials.</b>
<b>Class 9.</b>	<b>Use of any waste principally as a fuel or other means to generate energy.</b>
<b>Class 11.</b>	<b>Use of waste obtained from any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 12.</b>	<b>Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.</b>
<b>Class 13.</b>	<b>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.</b>

## ***Part II Schedule of Activities Refused***

None of the proposed activities as set out in the licence application have been refused.

## ***Part III Conditions***

### **Condition 1. Scope**

- 1.1 Waste activities at this facility shall be restricted to those listed and described in Part I Activities Licensed, and shall be as set out in the licence application or as modified under Condition 1.6 of this licence and subject to the conditions of this licence.
- 1.2 Activities at this facility shall be limited as set out in *Schedule A: Limitations*.
- 1.3 Waste Acceptance Hours and Hours of Operation
  - 1.3.1 With the exception of emergencies or as may be agreed by the Agency, **the waste recovery/transfer facility shall be operated, and waste shall be accepted at or despatched from the waste recovery/transfer facility and sludge drying facility, only during the hours of 07.00hrs and 22.00hrs Monday to Friday, and 07.00 hrs and 14.00 hours on Saturdays.**
  - 1.3.2 The **waste recovery/transfer facility** shall not operate or accept/despatch waste on Sundays or on Public Holidays without the agreement of the Agency.
  - 1.3.3 The **sludge drying facility** shall not accept/despatch waste on Sundays or on Public Holidays without the agreement of the Agency.
- 1.4 The facility shall be controlled, operated, and maintained and emissions shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence, become part of this licence.
- 1.5 For the purposes of this licence, the facility, is the area of land outlined in red on **Drawing No. 2004\_121 Site Plan\_B2(a) of the application**. Any reference in this licence to "facility" shall mean the area thus outlined in red. The licensed activities shall be the carried on only within the area outlined.
- 1.6 No alteration to, or reconstruction in respect of, the activity or any part thereof which would, or is likely to, result in
  - (i) a material change or increase in:
    - The nature or quantity of any emission,
    - The abatement/treatment or recovery systems,
    - The range of processes to be carried out,
    - The fuels, raw materials, intermediates, products or wastes generated, or
  - (ii) any changes in:
    - Site management infrastructure or control with adverse environmental significance,shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.
- 1.7 This licence is for the purposes of waste licensing under the Waste Management Acts 1996 to 2005 only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.

**Reason:** *To clarify the scope of this licence.*

## Condition 2. Management of the Facility

### 2.1 Facility Management

- 2.1.1 The licensee shall employ a suitably qualified and experienced facility manager who shall be designated as the person in charge. The facility manager or a nominated, suitably qualified and experienced, deputy shall be present on the facility at all times during its operation or as otherwise required by the Agency.
- 2.1.2 The licensee shall ensure that personnel performing specifically assigned tasks shall be qualified on the basis of appropriate education, training and experience, as required and shall be aware of the requirements of this licence. In addition, the facility manager and his/her deputy shall successfully complete FAS waste management training programme or equivalent agreed with the Agency.

### 2.2 Environmental Management System (EMS)

- 2.2.1 The licensee shall establish and maintain an Environmental Management System (EMS) **prior to the commencement of the licensed activities**. The EMS shall be updated on an annual basis.

- 2.2.2 The EMS shall include as a minimum the following elements:

2.2.2.1 Management and Reporting Structure.

2.2.2.2 Schedule of Environmental Objectives and Targets.

The licensee shall prepare a Schedule of Environmental Objectives and Targets. The Schedule shall as a minimum provide for a review of all operations and processes, including an evaluation of practicable options, for energy and resource efficiency, the use of cleaner technology, cleaner production, and the prevention, reduction and minimisation of waste, and shall include waste reduction targets. The Schedule shall include time frames for the achievement of set targets and shall address a five-year period as a minimum. The Schedule shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER).

2.2.2.3 Environmental Management Programme (EMP)

The licensee shall, not later than **six months from the date of commencement of the licensed activities**, submit to the Agency for agreement an EMP, including a time schedule, for achieving the Environmental Objectives and Targets prepared under Condition 2.2.2.2. Once agreed the EMP shall be established and maintained by the licensee. It shall include:

- (i) designation of responsibility for targets;
- (ii) the means by which they may be achieved;
- (iii) the time within which they may be achieved.

The EMP shall be reviewed annually and amendments thereto notified to the Agency for agreement as part of the Annual Environmental Report (AER) (Condition 11.9).

A report on the programme, including the success in meeting agreed targets, shall be prepared and submitted to the Agency as part of the AER. Such reports shall be retained on-site for a period

of not less than seven years and shall be available for inspection by authorised persons of the Agency.

2.2.2.4 Documentation

- (i) The licensee shall establish and maintain an environmental management documentation system which shall be to the satisfaction of the Agency.
- (ii) The licensee shall issue a copy of this licence to all relevant personnel whose duties relate to any condition of this licence.

2.2.2.5 Corrective Action

The licensee shall establish procedures to ensure that corrective action is taken should the specified requirements of this licence not be fulfilled. The responsibility and authority for initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined

2.2.2.6 Awareness and Training

The licensee shall establish and maintain procedures for identifying training needs, and for providing appropriate training, for all personnel whose work can have a significant effect upon the environment. Appropriate records of training shall be maintained.

2.2.2.7 Communications Programme

The licensee shall establish and maintain a Public Awareness and Communications Programme to ensure that members of the public are informed, and can obtain information at the facility, at all reasonable times, concerning the environmental performance of the facility.

2.2.2.8 Maintenance Programme

The licensee shall establish and maintain a programme for maintenance of all plant and equipment based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning, management and execution of all aspects of this programme to appropriate personnel (see Condition 2.1 above).

2.2.2.9 Efficient Process Control

The licensee shall establish and maintain a programme to ensure there is adequate control of processes under all modes of operation. The programme shall identify the key indicator parameters for process control performance, as well as identifying methods for measuring and controlling these parameters. Abnormal process operating conditions shall be documented and analysed to identify any necessary corrective action.

2.3 Maintenance Programme

The licensee shall establish and maintain within **six months of the commencement of the licensed activities** a structured programme for maintenance and service of vehicles and equipment. This programme shall be supported by appropriate record keeping systems and diagnostic testing.

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

### Condition 3. Infrastructure and Operation

- 3.1 The licensee shall establish all infrastructure referred to in this licence in advance of the commencement of the licensed activities or as required by the conditions of this licence.
- 3.2 Facility Notice Board
- 3.2.1 The licensee shall provide and maintain a Facility Notice Board on the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200mm by 750mm.
- 3.2.2 The board shall clearly show:-
- (i) the name and telephone number of the facility;
  - (ii) the normal hours of operation;
  - (iii) the name of the licence holder;
  - (iv) an emergency out of hours contact telephone number;
  - (v) the licence reference number; and
  - (vi) where environmental information relating to the facility can be obtained.
- 3.2.3 A plan of the facility clearly identifying the location of each storage and treatment area shall be displayed as close as is possible to the entrance to the facility. The plan shall be displayed on a durable material such that it is legible at all times. The plan shall be replaced as material changes to the facility are made.
- 3.3 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 3.4 In the case of composite sampling of aqueous emissions from the operation of the facility, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised) should be refrigerated immediately after collection and retained as required for EPA use.
- 3.5 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 3.6 Tank, Container and Drum Storage Areas
- 3.6.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds should be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).
- 3.6.2 All tank and drum storage areas shall, as a minimum, be bunded, either locally or remotely, to a volume not less than the greater of the following:-
- (i) 110% of the capacity of the largest tank or drum within the bunded area; or
  - (ii) 25% of the total volume of substance which could be stored within the bunded area

- 3.6.3 All drainage from bunded areas shall be treated as hazardous waste unless it can be demonstrated to be otherwise. All drainage from bunded areas shall be diverted for collection and safe disposal.
- 3.6.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.6.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.7 The licensee shall have in storage an adequate supply of containment booms and/or suitable absorbent material to contain and absorb any spillage at the facility. Once used the absorbent material shall be disposed of at an appropriate facility.
- 3.8 Silt Traps and Oil Separators
- The licensee shall install and maintain silt traps and oil separators at the facility to ensure that all storm water discharges from the facility pass through a silt trap and oil separator in advance of discharge. The separators shall be Class I full retention separators and the silt traps and separators shall be in accordance with I.S. EN 585-2:2003 (separator systems for light liquids).
- 3.9 Firewater Retention
- 3.9.1 The licensee shall carry out a risk assessment to determine if the activity should have a firewater retention facility. The licensee shall submit the assessment and a report to the Agency on the findings and recommendations of the assessment **within six months prior to the commencement of the licensed activities.**
- 3.9.2 In the event that a significant risk exists for the release of contaminated firewater, the licensee shall, based on the findings of the risk assessment, prepare and implement, with the agreement of the Agency, a suitable risk management programme. The risk management programme shall be fully implemented within three months from date of notification by the Agency.
- 3.9.3 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Firewater Retention Facilities when implementing Conditions 3.9.1 and 3.9.2 above.
- 3.10 All pump sumps, storage tanks, lagoons or other treatment plant chambers from which spillage of environmentally significant materials might occur in such quantities as are likely to breach local or remote containment or separator, shall be fitted with high liquid level alarms (or oil detectors as appropriate) **prior to the commencement of the licensed activities.**
- 3.11 The provision of a catchment system to collect any leaks from flanges and valves of all over ground pipes used to transport material other than water shall be examined. This shall be incorporated into a schedule of objectives and targets set out in Condition 2.2 of this licence for the reduction in fugitive emissions.
- 3.12 The licensee shall, **prior to commencement of the licensed activities**, install in a prominent location on the site a wind sock, or other wind direction indicator, which shall be visible from the public roadway outside the site.
- 3.13 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 3.14 Facility Security
- 3.14.1 Security and stockproof fencing and gates shall be installed and maintained. The base of the fencing shall be set in the ground.

- 3.14.2 Gates shall be locked shut when the facility is unsupervised.
- 3.14.3 The licensee shall remedy any defect in the gates and/or fencing as follows:-
- (i) A temporary repair shall be made by the end of the working day; and
  - (ii) A repair to the standard of the original gates and/or fencing shall be undertaken within three working days.
- 3.15 Facility Roads and Site Surfaces
- 3.15.1 Effective site roads shall be provided and maintained to ensure the safe and nuisance free movement of vehicles within the facility.
- 3.15.2 **The licensee shall provide, and maintain an impermeable concrete surface in all areas of the facility associated with the movement, processing, storage and handling of waste and emissions.** The surfaces shall be concreted and constructed to British Standard 8110 or an alternative standard as agreed by the Agency. The licensee shall remedy any defect in concrete surfaces within five working days.
- 3.16 Facility Office
- 3.16.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
- 3.16.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.17 Waste Inspection and Quarantine Areas
- 3.17.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
- 3.17.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
- 3.17.3 Drainage from the waste inspection area shall be directed to the **waste water treatment plant.**
- 3.17.4 **The quarantine area shall drain to a containment sump from where it shall be sent for treatment on-site in the WWTP or sent off site for disposal, as appropriate.**
- 3.18 Weighbridge and Wheel Cleaner.
- 3.18.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
- 3.18.2 The wheel cleaners shall be used by all vehicles leaving the facility as required to ensure that no trade effluent/storm water or waste is carried off-site. All water from the wheel cleaning area shall be directed to trade effluent drainage network.
- 3.18.3 The wheel-wash shall be inspected on a daily basis and drained as required. Silt, stones and other accumulated material shall be removed as required from the wheel-wash and disposed of appropriately.
- 3.19 Waste handling, ventilation and processing plant
- 3.19.1 Items of plant deemed critical to the efficient and adequate processing of waste at the facility (including *inter alia* waste loading vehicles and ejector trailers) shall be provided on the following basis:-
- (i) 100% duty capacity;
  - (ii) 20% standby capacity available on a routine basis; and

- (iii) Provision of contingency arrangements and/or back up and spares in the case of breakdown of critical equipment.
- 3.19.2 In advance of the commencement of **licensed** activities, the licensee shall provide a report for the agreement of the Agency detailing the duty and standby capacity in tonnes per day, of all waste handling and processing equipment to be used at the facility. These capacities shall be based on the licensed waste intake, as per *Schedule A: Limitations*, of this licence.
- 3.19.3 The quantity of waste to be accepted at the facility on a daily basis shall not exceed the duty capacity of the equipment at the facility. Any exceedance of this intake shall be treated as an incident.
- 3.20 Sanitary Effluent Treatment
  - 3.20.1 The licensee shall provide and maintain an appropriately sized Wastewater Treatment System at the facility for the treatment of sanitary effluent arising on-site.
  - 3.20.2 Sanitary effluent shall discharge to the Sanitary Authority sewer downstream of the trade effluent monitoring point.
- 3.21 Waste water treatment plant
  - 3.21.1 Treatment of trade effluent shall be as described in Appendix 5 of the Art. 14(2)(b)(ii) response, received 23/12/2005, subject to amendment in light of the requirements of Condition 6.21 (test programme).
  - 3.21.2 Unless treated on the facility, trade effluent shall be tankered off-site in fully enclosed road tankers to an agreed WWTP for treatment.
  - 3.21.3 The acceptance of leachate from Youghal Landfill, (Waste Licence Reg. No. W0068-02), shall be subject to the prior approval of the Agency and the Sanitary Authority, following successful commissioning and proving of the on-site WWTP. The total amount of waste accepted must be within the amount specified in *Schedule A*.
- 3.22 Specified Engineering Works
  - 3.22.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule D: Specified Engineering Works*, of this licence, to the Agency for its agreement at least two months in advance of the intended date of commencement of any such works. No such works shall be carried out without the prior agreement of the Agency.
  - 3.22.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
  - 3.22.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, as **appropriate**, include the following information:-
    - (i) A description of the works;
    - (ii) As-built drawings of the works;
    - (iii) Any other information requested in writing by the Agency.
- 3.23 Monitoring Infrastructure
  - (i) Within **three months of the date of commencement of the licensed activities**, the licensee shall install three monitoring points at MW1, MW2 and MW3 in accordance with *Schedule C.6 Groundwater Monitoring* to allow for the sampling and analyses of groundwater.



- (ii) Groundwater monitoring wells shall be constructed having regard to the guidance given in the Agency's landfill manual "Landfill Monitoring" and shall be adequately protected to prevent contamination or physical damage.

3.24 Dust/Odour Control

In advance, of the date of commencement of licensed activities at the facility, the licensee shall install and provide odour abatement plant for the control of odours and dust emissions, including fugitive dust emissions, from the facility. Installation of an odour management system shall as a minimum include the following:-

- 3.24.1 Dust curtains (or equivalent approved by the Agency) shall be maintained on the entry/exit points from the waste recovery and transfer building, all other doors in this building shall be kept closed where possible.
- 3.24.2 An appropriately sized biofilter shall be installed to treat gaseous emissions from the sludge dryer cooling tower, the wet sludge storage silo and the waste water treatment plant.
- 3.24.3 All waste recovery activities, including wood shredding, shall be conducted indoors.
- 3.24.4 The wood shredder shall be operated only during daytime hours.
- 3.24.5 The sludge drying equipment shall operate as a closed system and shall be operated within a fully enclosed sludge drying building.
- 3.24.6 Provision of 100% duty capacity and 20% stand by capacity, back ups and spares must be provided for the air handling, ventilation and abatement plant.

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

## Condition 4. Interpretation

- 4.1 Emission limit values for emissions to atmosphere in this licence shall be interpreted in the following way:
- 4.1.1 Continuous Monitoring:
- (i) No 24 hour mean value shall exceed the emission limit value.
  - (ii) 97% of all 30 minute mean values taken continuously over an annual period shall not exceed 1.2 times the emission limit value.
  - (iii) No 30 minute mean value shall exceed twice the emission limit value.
- 4.1.2 For Non-Continuous Monitoring
- (i) For any parameter where, due to sampling/analytical limitations, a 30 minute sample is inappropriate, a suitable sampling period should be employed and the value obtained therein shall not exceed the emission limit value.
  - (ii) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
  - (iii) For all other parameters, no 30 minute mean value shall exceed the emission limit value.

- 4.2 The concentration and volume flow limits for emissions to atmosphere specified in this licence shall be achieved without the introduction of dilution air and shall be based on gas volumes under standard conditions of :-
- 4.2.1 In the case of non-combustion gases:  
Temperature 273K, Pressure 101.3 kPa (no correction for oxygen or water content).
- 4.2.2 In the case of combustion gases:  
Temperature 273K, Pressure 101.3 kPa, dry gas; 3% oxygen for liquid and gas fuels; **11% oxygen for untreated wood.**
- 4.3 Emission limit values for emissions to sewer in this licence shall be interpreted in the following way:-
- 4.3.1 Continuous monitoring:
- (i) No flow value shall exceed the specified limit.
  - (ii) No pH value shall deviate from the specified range.
  - (iii) No temperature value shall exceed the limit value.
- 4.3.2 Composite Sampling:
- (i) No pH value shall deviate from the specified range.
  - (ii) For parameters other than pH and flow, eight out of ten consecutive composite results, based on flow proportional composite sampling, shall not exceed the emission limit value. No individual result similarly calculated shall exceed 1.2 times the emission limit value.
- 4.3.3 Discrete Sampling  
For parameters other than pH and temperature, no grab sample value shall exceed 1.2 times the emission limit value.
- 4.4 Where the ability to measure a parameter is affected by mixing before emission, then, with agreement from the Agency, the parameter may be assessed before mixing takes place.
- 4.5 Noise from the facility shall not give rise to sound pressure levels (Leq,T) measured **at the boundary of the facility or at the noise sensitive locations** which exceed the limit values.
- 4.6 Dust and particulate matter from the activity shall not give rise to deposition levels which exceed the limit value.

*Reason: To clarify the interpretation of limit values fixed under the licence.*

## Condition 5. Emissions

- 5.1 No specified emission from the facility shall exceed the emission limit values set out in *Schedule B: Emission Limits* of this licence. There shall be no other emissions of environmental significance.
- 5.2 The licensee shall ensure that activities on the site are carried out such that emissions including odours, do not result in an impairment of, or an interference with amenities beyond the facility boundary or other legitimate uses of the environment beyond the facility boundary.

5.3 No substance shall be discharged in a manner, or at a concentration that, following initial dilution, causes tainting of fish or shellfish.

5.4 The licensee shall ensure that all or any of the following:-

- vermin
- birds
- flies
- mud
- dust
- litter

which are associated with the activity do not result in an impairment of, or an interference with amenities or the environment or any other legitimate uses of the environment beyond the facility boundary. Any method used by the licensee to control or prevent any such impairment/interference shall not cause environmental pollution.

5.5 Emissions to Sewer

5.5.1 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 trade effluent, and to take samples of the trade effluent.

5.5.2 The licensee shall at no time discharge or permit to be discharged into the sewer any liquid matter or thing which is or may be liable to set or congeal at average sewer temperature or is capable of giving off any inflammable or explosive gas or any acid, alkali or other substance in sufficient concentration to cause corrosion to sewer pipes, penstock and sewer fittings or the general integrity of the sewer.

5.5.3 In accordance with the Fourth Schedule of the Urban Waste Water Treatment Regulations (S.I. No. 254 of 2001), no materials may be discharged to the sewer that will affect the health of staff working in collecting systems and treatment plants.

5.5.4 The licensee shall connect to the 'Area Main Drainage Scheme' when the scheme is operational.

5.5.5 The licensee shall supply all information requested by the Sanitary Authority as part of the process for the tendering and installation of the 'Area Main Drainage Scheme'.

5.6 Emissions to Surface Water

5.6.1 No trade effluent, leachate and/or contaminated storm water shall be discharged to surface water drains and surface water courses.

5.6.2 All stormwater which is found to be contaminated shall be immediately diverted to the storm water retention tank pending treatment in the on-site waste water treatment plant or tankering off-site to an agreed waste water treatment plant.

5.7 There shall be no direct emissions to groundwater.

5.8 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.

*Reason: To provide for the protection of the environment by way of control and limitation of emissions and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.*

## Condition 6. Control and Monitoring

- 6.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and as in accordance with *Schedule C: Control & Monitoring* of this licence:
- 6.1.1 Analysis shall be undertaken by competent staff in accordance with documented operating procedures
- 6.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics determined.
- 6.1.3 Such procedures shall be subject to a programme of Analytical Quality Control using control standards with evaluation of test responses.
- 6.1.4 Where analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 Sampling and analysis of all pollutants as well as reference measurement methods to calibrate automated measurement systems shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards which will ensure the provision of data of an equivalent scientific quality shall apply.
- 6.3 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the activity is being carried on unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable, and alternative sampling and monitoring facilities shall be put in place. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission or discharge.
- 6.5 The licensee shall ensure that groundwater monitoring well sampling equipment is available/installed on-site and is fit for purpose at all times. The sampling equipment shall be to Agency specifications.
- 6.6 All treatment/abatement and emission control equipment shall be calibrated and maintained, in accordance with the instructions issued by the manufacturer/supplier or installer.
- 6.7 **Litter Control**
- 6.7.1 All loose litter or other waste, placed on or in the vicinity of the facility, other than in accordance with the requirements of this licence, shall be removed, subject to the agreement of the landowners, immediately and in any event by 10.00am of the next working day after such waste is discovered.
- 6.7.2 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
- 6.7.3 **Outgoing wastes from the waste recovery and transfer building shall be compacted or baled, where appropriate.**
- 6.8 **Dust/Odour Control**
- 6.8.1 All waste for disposal stored overnight at the facility, shall be stored in suitably covered and enclosed containers, and shall be removed from the facility within forty eight hours, except at Public Holiday weekends. At Public Holiday weekends, waste for disposal shall be removed within seventy-two hours of its arrival on site.

- 6.8.2 In dry weather, site roads and any other areas used by vehicles shall be sprayed with water as and when required to minimise airborne dust nuisance.
- 6.8.3 Sludge reception bins shall be located within the sludge reception building. The bins shall be covered with hydraulic lids and gratings and head gases shall be vented to a biofilter for odour abatement.
- 6.8.4 Gaseous emissions from the cooling tower shall be treated in a biofilter.
- 6.8.5 The waste water treatment plant shall be covered and active extraction installed. Gaseous emissions shall be treated in a biofilter.
- 6.8.6 All putrescible wastes arising from the Waste Recovery/Transfer Facility shall be removed from the site within 48 hours of arrival, where possible.
- 6.9 Operational Controls
- 6.9.1 The floor of the waste recovery and transfer building shall be cleaned on a weekly basis. The floor of the storage bays for recovered wastes shall be washed down and cleaned on each occasion such bays are emptied, or as a minimum on a weekly basis.
- 6.9.2 Scavenging shall not be permitted at the facility.
- 6.9.3 All tanks and drums shall be labelled to clearly indicate their contents.
- 6.9.4 There shall be no casual public access to the facility.
- 6.10 Monitoring Locations
- Within three months of the date of commencement of the licensed activities, the licensee shall submit to the Agency an appropriately scaled drawing(s) showing all the monitoring locations that are stipulated in this licence. The drawing shall include the eight-digit national grid reference of each monitoring point.
- 6.11 Nuisance Monitoring
- The licensee shall, at a minimum of **daily**, inspect the facility and its immediate surrounds for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. The licensee shall maintain a record of all nuisance inspections.
- 6.12 The frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- 6.13 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions. This programme shall be included in the Environmental Management Programme.
- 6.14 All tanks and pipelines shall be maintained impervious to the materials carried by or stored therein. The integrity and water tightness of all underground pipes, tanks, bunding structures and containers and their resistance to penetration by water or other materials carried or stored therein shall be tested and demonstrated by the licensee prior to use. This testing shall be carried out by the licensee at least once every three years thereafter and reported to the Agency on each occasion. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.15 The drainage system, bunds, silt traps and oil separators shall be inspected weekly, desludged as necessary and properly maintained at all times. All sludge and drainage from these operations shall be collected for safe disposal.
- 6.16 Trade Effluent
- 6.16.1 The acute toxicity of the undiluted final effluent 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 commencement of discharge to sewer**. 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 the complete reports shall be submitted by the licensee to the Agency within six weeks of completion of the testing.

6.16.2 Having identified the most sensitive species outlined in 6.17.1, subsequent compliance toxicity monitoring on the two most sensitive species shall be carried out by the laboratory identified in 6.17.1 as per *Schedule C.3.2*. The Agency shall decide when this testing is to be carried out and copies of the complete reports shall be submitted by the licensee to the Agency within six weeks of completion of the testing.

6.16.3 A representative sample of effluent shall be screened for the presence of organic compounds. Such screening shall be repeated at intervals as requested by the Agency thereafter.

6.17 Storm water

A visual examination of the storm water discharge shall be carried out daily. A log of such inspections shall be maintained.

6.18 Ground Water

6.18.1 Groundwater shall be sampled and analysed in accordance with *Schedule C.6: Groundwater Monitoring*. A report of the results of monitoring shall be submitted annually as part of the AER.

6.18.2 The licensee shall, within six months of the date of grant of this licence, submit a comprehensive proposal for the monitoring and remediation of hydrocarbon contamination in soil and groundwater at the site. The proposal shall have particular regard to the ground in, around, under and hydraulically down-gradient of the area historically used for diesel storage; as well as to the three dimensional configuration of any plume that may extend from the source area. The scope, detail and reporting of the monitoring shall be agreed by the Agency prior to implementation. Due regard shall be given to the findings of any previous reports that may be relevant. Any recommendations arising from a report on the monitoring results shall be implemented within a timeframe to be specified by the Agency.

6.18.3 Following planned excavation and removal of historical waste on-site, and prior to the construction of infrastructure in the excavated areas, the licensee shall submit to the Agency for agreement an independent technical report certifying that all historical solid has been removed off-site for safe disposal.

6.19 Noise

The licensee shall carry out a noise survey of the site operations **within six months of the date of commencement of the licensed activities** and thereafter annually. The survey programme shall be undertaken in accordance with the methodology specified in the 'Environmental Noise Survey Guidance Document' as published by the Agency.

6.20 Pollutant Release and Transfer Register (PRTR)

The licensee shall prepare and report a PRTR for the site. The substances and/or waste to be included in the PRTR shall be agreed by the Agency each year by reference to EC Regulation No.166/2006 concerning the establishment of the European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC. The PRTR shall be prepared in accordance with any

relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.

6.21 Test Programmes

6.21.1 The licensee shall prepare, to the satisfaction of the Agency, a test programme for each of the following: **the waste water treatment plant, the sludge dryer, and the biofilter**. These programmes shall be submitted to the Agency in advance of implementation of each.

6.21.2 These programmes, following agreement with the Agency, shall be completed within three months of the commencement of operation of either **the waste water treatment plant, or the sludge dryer, or the biofilter**.

6.21.3 The criteria for the operation of the **waste water treatment plant, the sludge dryer, and the biofilter**, as determined by the test programmes, shall be incorporated into the standard operating procedures.

6.22 The test programmes shall include as a minimum, the following:

6.22.1 Establish all criteria for operation, control and management of the **waste water treatment plant, the sludge dryer, and the biofilter** to ensure compliance with the emission limit values specified in this licence.

6.22.2 Assess the performance of any monitors on the **waste water treatment plant, the sludge dryer, and biofilter systems**, and establish a maintenance and calibration programme for each monitor.

6.22.3 A report on the test programmes shall be submitted to the Agency for **approval** within one month of completion of **each test programme**.

6.23 The licensee shall, **within three months of the date of commencement of the licensed activities**, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the environmental monitoring data generated as a result of this licence.

*Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.*

## Condition 7. Resource Use and Energy Efficiency

7.1 The licensee shall carry out an audit of the energy efficiency of the site **within one year of the commencement of the licensed activities**. The audit shall be carried out in accordance with the guidance published by the Agency; "Guidance Note on Energy Efficiency Auditing". The energy efficiency audit shall be repeated at intervals as required by the Agency.

7.2 The audit shall identify all opportunities for energy use reduction and efficiency and the recommendations of the audit will be incorporated into the Schedule of Environmental Objectives and Targets under **Condition 2.2.2.2** above.

7.3 The licensee shall identify opportunities for reduction in the quantity of water used on site including recycling and reuse initiatives, wherever possible. Reductions in water usage shall be incorporated into Schedule of Environmental Objectives and Targets.

7.4 The licensee shall undertake an assessment of the efficiency of use of raw materials in all processes, having particular regard to the reduction in waste generated. The assessment should take account of best international practice for

this type of activity. Where improvements are identified, these shall be incorporated into the Schedule of Environmental Objectives and Targets.

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

## Condition 8. Materials Handling

- 8.1 Disposal or recovery of waste on-site shall only take place in accordance with the conditions of this licence and in accordance with the appropriate National and European legislation and protocols.
- 8.2 Waste sent off-site for recovery or disposal shall be transported only by an authorised waste contractor. The waste shall be transported only from the site of the activity to the site of recovery/disposal in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.3 Waste shall only be accepted at the facility, from Local Authority waste collection or transport vehicles or holders of waste permits, unless exempted or excluded, issued under the Waste Management (Collection Permit) Regulations 2001, or as may be amended.
- 8.4 The licensee shall ensure that waste in advance of transfer to another person shall be classified packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.5 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.6 Waste shall be stored in designated areas, protected as may be appropriate, against spillage and leachate run-off. The waste is to be clearly labelled and appropriately segregated.
- 8.7 No waste classified as green list waste in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No.259/1993, as amended) shall be consigned for recovery without the agreement of the Agency.
- 8.8 **Waste for disposal/recovery off-site shall be analysed in accordance with Schedule C.4: Waste Monitoring of this licence.**
- 8.9 Unless approved in writing by the Agency the licensee is prohibited from mixing a hazardous waste of one category with a hazardous waste of another category or with any other non-hazardous waste.
- 8.10 **All waste processing shall be carried out inside the waste recovery and transfer building or the sludge reception/drying buildings. No waste shall be stored or handled in open containers outdoors.**
- 8.11 Waste Acceptance and Characterisation Procedures
  - 8.11.1 Waste shall be accepted at the facility only from known customers or new customers subject to initial waste profiling and waste characterisation off-site. The written records of this off-site waste profiling and characterisation shall be retained by the licensee for all active customers and for a two year period following termination of licensee/customer agreements. There shall be no casual public access to the facility.
  - 8.11.2 Any waste deemed unsuitable for processing at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time. Temporary storage of such



wastes shall be in a designated Waste Quarantine Area. Waste shall be stored under appropriate conditions in the quarantine area to avoid putrefaction, odour generation, the attraction of vermin and any other nuisance or objectionable condition.

**8.11.3** Prior to the commencement of waste acceptance at the facility, the licensee shall establish and maintain detailed written procedures for the acceptance and handling of wastes.

**8.11.4** In relation to the acceptance and handling of non-hazardous biological sludge, these procedures shall detail the sludge characterisation process including as a minimum:

- (i) the parameters to be analysed for each source of sludge;
- (ii) the test methods for sampling and analysis of sludge;
- (ii) the criteria that must be fulfilled prior to acceptance, and
- (ii) the quantities of each type of sludge that may be accepted.

**8.12** Waste Recovery/Transfer Facility

Waste arriving at the facility shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the waste recovery and transfer building. Off-loading shall be undertaken as soon as practicable in the waste recovery and transfer building and each load of waste shall be inspected upon tipping within this building. Only after such inspections shall the waste be processed for disposal or recovery.

**8.13** Sludge Dying Facility

Non-hazardous biological sludge shall have a minimum dry solid content of 10% prior to acceptance at the facility.

**8.14** Sludge Dryer Boiler

**8.14.1** The Sludge Dryer Boiler shall be operated on light fuel oil, biomass, or wood waste which satisfies Condition 8.14.2.

**8.14.2** Wood waste, with the exception of wood waste which may contain halogenated organic compounds or heavy metals as a result of treatment with wood-preservatives or coating, and with the exception in particular of such wood waste originating from construction and demolition waste, may be used as fuel for the sludge dryer boiler.

**8.14.3** The licensee shall, prior to the commencement of the operation of the Sludge Dryer Boiler, establish detailed written procedures for the acceptance and handling on site of waste wood for use as a fuel.

**8.14.4** Wood waste arriving at the facility shall be inspected at the point of entry to the facility. A record of all inspections of incoming waste loads shall be maintained.

**8.14.5** Any wood waste deemed unsuitable for use as a fuel at the facility and/or in contravention of this licence shall be immediately separated and removed from the facility at the earliest possible time.

**8.14.6** The licensee shall maintain a register of suppliers of the wood waste that is used as a fuel in the Sludge Dryer Boiler. This register shall be available for inspection on-site by the Agency at all reasonable times.

**8.14.7** The licensee shall ensure that all wood waste, bark, sawdust and woodchip are held in suitable storage within the woodchip storage building, protected from the elements. No wood waste, bark, sawdust or woodchip shall be stored outdoors.

- 8.14.8 The transportation of wood waste, bark, sawdust and woodchip shall be carried out using covered vehicles and in such a manner so as to minimise fugitive emissions.

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

## Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, **in advance of the commencement of the licensed activities**, ensure that a documented Accident Prevention Procedure is in place which will address the hazards on-site, particularly in relation to the prevention of accidents with a possible impact on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.2 The licensee shall, **in advance of the commencement of the licensed activities**, ensure that a documented Emergency Response Procedure is in place, which shall address any emergency situation which may originate on-site. This Procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 9.3 Incidents
- 9.3.1 In the event of an incident the licensee shall immediately:-
- (i) carry out an investigation to identify the nature, source and cause of the incident and any emission arising therefrom;
  - (ii) isolate the source of any such emission;
  - (iii) evaluate the environmental pollution, if any, caused by the incident;
  - (iv) identify and execute measures to minimise the emissions/malfunction and the effects thereof;
  - (v) identify the date, time and place of the incident, and
  - (vi) notify the Agency and other relevant authorities.
- 9.3.2 The licensee shall provide a proposal to the Agency for its agreement within one month of the incident occurring or as otherwise agreed with the Agency to:-
- (i) identify and put in place measures to avoid reoccurrence of the incident, and
  - (ii) identify and put in place any other appropriate remedial action.
- 9.4 Emergencies
- 9.4.1 In the event of a breakdown of equipment or any other occurrence which results in the closure of the **waste recovery/transfer and/or sludge drying** buildings, any waste arriving at or already collected at the facility shall be transferred directly to appropriate landfill sites or any other appropriate facility until such time as the **waste recovery/transfer and/or sludge drying** buildings are returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.

- 9.4.2 All significant spillages occurring at the facility shall be treated as an emergency and immediately cleaned up and dealt with so as to alleviate their effects.
- 9.4.3 With the exception of use of recovered fuels as may be approved for this site by the Agency, no waste shall be burned at the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

*Reason: To provide for the protection of the environment.*

## Condition 10. Closure, Restoration and Aftercare

- 10.1 Following termination, or planned cessation for a period greater than six months, of use or involvement of all or part of the site in the licensed activity, the licensee shall, to the satisfaction of the Agency, decommission, render safe or remove for disposal/recovery, any soil, subsoils, buildings, plant or equipment, or any waste, materials or substances or other matter contained therein or thereon, that may result in environmental pollution.
- 10.2 Residuals Management Plan:
- 10.2.1 The licensee shall prepare, to the satisfaction of the Agency, a fully detailed and costed plan for the decommissioning or closure of the site or part thereof. This plan shall be submitted to the Agency for agreement **in advance of the commencement of the licensed activities.**
- 10.2.2 The plan shall be reviewed annually and proposed amendments thereto notified to the Agency for agreement as part of the AER. No amendments may be implemented without the agreement of the Agency.
- 10.3 The Residuals Management Plan shall include as a minimum, the following:-
- 10.3.1 A scope statement for the plan.
- 10.3.2 The criteria which define the successful decommissioning of the activity or part thereof, which ensures minimum impact on the environment.
- 10.3.3 A programme to achieve the stated criteria.
- 10.3.4 Where relevant, a test programme to demonstrate the successful implementation of the decommissioning plan.
- 10.3.5 Details of costings for the plan and the financial provisions to underwrite those costs.
- 10.4 A final validation report to include a certificate of completion for the residuals management plan, for all or part of the site as necessary, shall be submitted to the Agency within three months of execution of the plan. The licensee shall carry out such tests, investigations or submit certification, as requested by the Agency, to confirm that there is no continuing risk to the environment.

*Reason: To make provision for the proper closure of the activity ensuring protection of the environment.*

## Condition 11. Notifications, Records and Reports

- 11.1 The licensee shall notify the Agency, in writing, one month in advance of the intended date of commencement of Scheduled activities.
- 11.2 The licensee shall notify the Agency by both telephone and either facsimile or electronic mail, if available, to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any of the following:
- 11.2.1 Any release of environmental significance to atmosphere from any potential emission point including bypasses.
  - 11.2.2 Any emission which does not comply with the requirements of this licence.
  - 11.2.3 Any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control & Monitoring* which is likely to lead to loss of control of the abatement system.
  - 11.2.4 Any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to air or land, or requiring an emergency response by the Local Authority.
- The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any emissions.
- 11.3 In the event of any incident which relates to discharges to sewer, having taken place, the licensee shall notify the Agency, Local Authority and Sanitary Authority as soon as practicable, after such an incident.
- 11.4 In the case of any incident which relates to discharges to water, the licensee shall notify the Local Authority and the Southern Regional Fisheries Board as soon as practicable after such an incident.
- 11.5 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to; manage the incident, minimise wastes generated and the effect on the environment, and avoid recurrence. The licensee shall as soon as practicable following incident notification, submit to the Agency the incident record.
- 11.6 The licensee shall record all complaints of an environmental nature related to the operation of the activity. Each such record shall give details of the date and time of the complaint, the name of the complainant and give details of the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.
- 11.7 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and all other such monitoring which relates to the environmental performance of the facility.
- 11.8 The licensee shall as a minimum keep the following documents at the site:-
- (i) the licences relating to the facility;
  - (ii) the current EMS for the facility;
  - (iii) the previous year's AER for the facility;
  - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this

licence and all other such monitoring which relates to the environmental performance of the facility;

- (v) relevant correspondence with the Agency;
- (vi) an up to date site drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and emission points;
- (vii) up to date Standard Operational Procedures for all processes, plant and equipment necessary to give effect to this licence or otherwise to ensure that standard operation of such processes, plant or equipment does not result in unauthorised emissions to the environment,

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

11.9 The licensee shall submit to the Agency, by the 31<sup>st</sup> March of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule F: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.

11.10 A full record, which shall be open to inspection by authorised persons of the Agency at all times, shall be kept by the licensee on matters relating to the waste management operations and practices at this site. This record shall be maintained on a **monthly** basis and shall as a minimum contain details of the following:

- (i) The tonnages and EWC Code for the waste materials imported and/or sent off-site for disposal/recovery.
- (ii) The names of the agent and carrier of the waste, and their waste collection permit details, if required (to include issuing authority and vehicle registration number).
- (iii) Details of the ultimate disposal/recovery destination facility for the waste and its appropriateness to accept the consigned waste stream, to include its permit/licence details and issuing authority, if required.
- (iv) Written confirmation of the acceptance and disposal/recovery of any hazardous waste consignments sent off-site.
- (v) Details of all wastes consigned abroad for Recovery and classified as 'Green' in accordance with the EU Transfrontier Shipment of Waste Regulations (Council Regulation EEC No. 259/1993, as amended). The rationale for the classification must form part of the record.
- (vi) Details of any rejected consignments.
- (vii) Details of any approved waste mixing.
- (viii) The results of any waste analyses required under *Schedule C.4: Waste Monitoring*.
- (ix) The tonnages and EWC Code for the waste materials recovered/disposed on-site.

11.11 A record shall be kept of each consignment of trade effluent, leachate and/or contaminated storm water removed from the facility. The record shall include the following:-

- (i) the name of the carrier;
- (ii) the date and time of removal of trade effluent, leachate and/or contaminated storm water from the facility;
- (iii) the volume of trade effluent, leachate and/or contaminated storm water, in cubic metres, removed from the facility on each occasion;

- (iv) the name and address of the Waste Water Treatment Plant to which the trade effluent, leachate and/or contaminated storm water was transported; and
- (v) any incidents or spillages of trade effluent, leachate and/or contaminated storm water during its removal or transportation.

11.12 A record shall be kept at the facility of the programme for the control and eradication of vermin and fly infestations at the facility. A report on programme shall be prepared and submitted to the Agency as part of the AER.

#### 11.13 Waste Recovery Reports

The licensee shall as part of the EMP submit a report on the contribution by this facility to the achievement of the recovery targets stated in national and European Union waste policies and shall include the following:-

- (i) proposals for the contribution of the facility to the achievement of targets for the reduction of biodegradable waste to landfill as specified in the Landfill Directive;
- (ii) the separation of recyclable materials from the waste;
- (iii) the recovery of Construction and Demolition Waste;
- (iv) the recovery of metal waste and WEEE;

**Reason:** *To provide for the collection and reporting of adequate information on the activity.*

## Condition 12. Financial Charges and Provisions

### 12.1 Agency Charges

12.1.1 The licensee shall pay to the Agency an annual contribution of €17,784, or such sum as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the activity as the Agency considers necessary for the performance of its functions under the Waste Management Acts 1996 to 2005. The first payment shall be a pro-rata amount for the period from the date of commencement of enforcement to the 31st day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Management Acts 1996 to 2005, and all such payments shall be made within one month of the date upon which demanded by the Agency.

12.1.2 In the event that the frequency or extent of monitoring or other functions carried out by the Agency needs to be increased the licensee shall contribute such sums as determined by the Agency to defraying its costs in regard to items not covered by the said annual contribution.

### 12.2 Sanitary Authority Charges

The licensee shall pay to the Sanitary Authority such sum as may be determined from time to time, having regard to the variations in the cost of providing drainage and the variation in effluent reception and treatment costs. Payment to be made on demand.

## 12.3 Environmental Liabilities

- 12.3.1 The licensee shall as part of the AER provide an annual statement as to the measures taken or adopted at the site in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with the carrying on of the activity.
- 12.3.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA), which addresses the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the RMP/CRAMP. A report on this assessment shall be submitted to the Agency for agreement **within twelve months of date of commencement of the licensed activities**. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement: review results are to be notified as part of the AER.
- 12.3.3 As part of the measures identified in Condition 12.3.1 the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 12.3.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least annually. Proof of renewal or revision of such financial indemnity shall be included in the annual 'statement of measures' report identified in Condition 12.3.1.

*Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment and to provide for the requirements of the Sanitary Authority in accordance with Section 52 of the Waste Management Acts 1996 to 2005.*

## SCHEDULE A: Limitations

### A.1 Limitations

The following waste related processes are authorised:

- i. Sorting, separating, shredding, compacting, bailing, repackaging processes
- ii. Non-hazardous construction and demolition (C&D) waste recovery (incl. crushing, screening, sorting)
- iii. Storage of waste
- iv. Use of waste as a fuel
- v. Recovery of dry recyclables
- vi. Drying sludge

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



### A.2 Waste Acceptance

**Table A.1 Waste Categories and Quantities**

WASTE TYPE <sup>Note 1</sup>	MAXIMUM (TONNES PER ANNUM) <sup>Notes 2 &amp; 3</sup>
Non-hazardous commercial and industrial waste	70,000
Non-hazardous liquid industrial waste (leachate)	10,000
Non-hazardous treated sewage sludge and industrial sludge from municipal or industrial WWTP	30,000
<b>TOTAL</b>	<b>110,000</b>

Note 1: Any proposals to accept other compatible waste streams must be agreed in advance with the Agency and the total amount of waste must be within the amount specified.

Note 2: The individual limitation on waste streams may be varied with the agreement of the Agency subject to the overall total limit staying the same.





## SCHEDULE B: Emission Limits

### B.1 Emissions to Air

Emission Point Reference No.: A1  
 Location: Sludge Dryer Boiler Stack  
 Volume to be emitted: Maximum rate per hour: 11,600 m<sup>3</sup>  
 Minimum discharge height: 16.5m above ground

Parameter	Emission Limit Value (mg/Nm <sup>3</sup> )
Nitrogen oxides (as NO <sub>2</sub> )	250
Particulates	20
CO	150



### B.2 Dust Deposition Limits

Measured at the monitoring point indicated in *Schedule C.6: Air Monitoring* (or as may be amended under Condition 6.12).

Level (mg/m <sup>2</sup> /day) <sup>Note 1</sup>
350

Note 1: 30 day composite sample with the results expressed as mg/m<sup>2</sup>/day.



### B.3 Emissions to Water

There shall be no Emissions to Water of environmental significance



**B.4 Emission to Sewer**

**Emission Point Reference No.:** SE1  
**Name of Receiving Waters:** Blackwater Estuary Lower  
**Location:** To be agreed with Youghal Urban District Council and the Water Services Department of Cork County Council.  
**Volume to be emitted:** Maximum in any one day: 170 m<sup>3</sup>  
 Maximum rate per hour: 7 m<sup>3</sup>

Parameter	Emission Limit Value
Temperature	25°C (max.)
pH	6.0 – 8.5
	mg/l
BOD	20
COD	125
Suspended Solids	35
Total Nitrogen (as N)	10
Sulphate	100
Ammonia (as N)	0.5
Total Phosphorus (as P)	1.0
Cyanide	0.01
	µg/l
VOC	50
Semi VOC	50
Lead	5
Zinc	100
Copper	30
Cadmium (Total)	5
Arsenic (Total)	20
Chromium	15
Nickel	25
Faecal Coliforms (FC)	< 250 FC/100 mls

**B.5 Noise Emissions**

Daytime dB(A) L <sub>Aeq</sub> (30 minutes)	Night-time dB(A) L <sub>Aeq</sub> (30 minutes)
55 <sup>Note 1</sup>	45 <sup>Note 1</sup>

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

## SCHEDULE C: Control & Monitoring

### C.1.1 Control of Emissions to Air

**Emission Point Reference No.:** A1  
**Description of Treatment:** Bag Filter

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Bag Filter Integrity	Differential Pressure	Manometer
Air Flow	Pitot tube/flow meter	Filter
	Visual Inspection	Fan

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

**Emission Point Reference No.:** A2  
**Description of Treatment:** Biofilter

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Intake Air	Weekly	Fan/Motor/Belt assembly
Differential Pressure	Weekly	Manometer
Gas loading	Weekly	Flowmeter
Fan Operation	Daily	Visual Inspection
Sprinkler System	Daily	Visual Inspection
Visual Inspection of Bed <sup>Note 2</sup>	Weekly	Visual Inspection
pH Return Water	Monthly	Standard Method
Bed material – moisture	Biannually	Standard Method
Other <sup>Note 3</sup>		

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

**Note 2:** The biofilter bed shall be examined to ensure that no channelling or drying out of the bed material is evident. Turning, restructuring and dampening of the bed material and the addition of supplementary bed material, or total bed material replacement shall be carried out, as required, subject to bed performance.

**Note 3:** Additional parameters established as a result of the test programme referred to in Condition 6.

**C.1.2 Monitoring of Emissions to Air**

**Emission Point Reference No.:** A1 - Boiler

Parameter	Monitoring Frequency	Analysis Method/Technique
NOx	Quarterly	Flue gas analyser
CO	Quarterly	Flue gas analyser
Particulates	Quarterly	Isokinetic/Gravimetric
SO <sub>x</sub>	Quarterly	Flue gas analyser

**Emission Point Reference No.:** A2 - Biofilter

Parameter	Monitoring Frequency	Analysis Method/Technique <sup>Note 1</sup>
Ammonia	Biannually	Colorimetric Indicator Tube
Organics	Biannually	Adsorbent tubes and pumps/GC
Hydrogen Sulphide	Biannually	Colorimetric Indicator Tube
Mercaptans	Weekly	Colorimetric Indicator Tube
Amines	Biannually	NIOSH Method 2010

**Note 1:** Or an equivalent method agreed with the Agency.



**C.2.1 Control of Storm Water Emission**

**Emission Control Location:** Interceptor Compound (*Drawing No. 2004\_121\_Emissions Points*).

**Description of Treatment:** Four Oil interceptors/Silt Traps

Control Parameter	Monitoring	Key Equipment <sup>Note 1</sup>
Oil Removal	Mineral Oil content in water at discharge point (visual)	Class I, Full Retention Oil Interceptor
Suspended Solids		Silt traps

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



**C.2.2 Monitoring of Storm Water Emission**

**Emission Point Reference No.:** SW1, monitoring point downstream of SE1 (*Drawing No. 2004\_121\_Emissions Points*)

<b>Parameter</b>	<b>Monitoring Frequency</b> <sup>Note 1</sup>	<b>Analysis Method/Technique</b> <sup>Note 2</sup>
<b>Visual</b>	Daily	Sample and examine for colour and odour
<b>Temperature</b>	Quarterly	Temperature probe
<b>pH</b>	Quarterly	pH electrode/meter
<b>Conductivity</b>	Quarterly	Conductivity meter
<b>Suspended Solids</b>	Quarterly	Standard Method/Grab sample

**Note 1:** Where there is evident gross contamination, additional samples should be analysed and the full suite of parameters shown tested.

**Note 2:** The analyses shall be carried out by a competent laboratory using standard and internationally accepted procedures.

**C.3.1 Control of Emissions to Sewer**

Emission Point Reference No.: SE1  
 Description of Treatment: Waste Water Treatment Plant

Control Parameter	Monitoring	Key Equipment <sup>Note 2</sup>
pH Temperature Flow	Continuous Continuous Continuous	pH meter with recorder Temperature probe with recorder Flow meter with recorder
Effluent (pH) Neutralisation (to pH > 6.8)	Continuous	IBC level sensor Caustic soda dosing pump Condensate feed pump with low level protection
Urea dosing		IBC level sensor Urea dosing pump
Anoxic zone		Submersible mixer
Blowers		Pressure switch Temperature switch
MBR tank (membrane filtration)	Continuous	Level probe Level sensor Flow meter
Final permeate pumping		Submersible pump
Other <sup>Note 1</sup>		

**Note 1:** Additional parameters established as a result of the test programme referred to in Condition 6.

**Note 2:** The licensee shall maintain appropriate access to standby and/or spares to ensure the operation of the abatement system.



**C.3.2 Monitoring of Emissions to Sewer**

Emission Point Reference No.: SE1

Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous	On-line flow meter with recorder
Temperature	Weekly	Temperature probe
pH	Weekly	pH electrode/meter
Biochemical Oxygen Demand	Monthly <sup>Note 1</sup>	Standard Method
Chemical Oxygen Demand	Weekly <sup>Note 1</sup>	Standard Method
Suspended Solids	Weekly <sup>Note 1</sup>	Gravimetric
Total Nitrogen (as N)	Quarterly <sup>Note 1</sup>	Standard Method
Sulphate	Quarterly <sup>Note 1</sup>	Standard Method
Total Phosphate	Biannually <sup>Note 1</sup>	Standard Method
Cyanide	Biannually <sup>Note 1</sup>	Standard Method
Mercury	Biannually <sup>Note 1</sup>	Standard Method
VOC	Quarterly <sup>Note 1</sup>	Standard Method
Semi VOC	Quarterly <sup>Note 1</sup>	Standard Method
Metals (Pb, Zn, Cu, Cd, As, Cr, Ni)	Annually <sup>Note 1</sup>	Atomic Absorption/ICP
Faecal Coliforms	Quarterly <sup>Note 1</sup>	Standard Method
Toxicity <sup>Note 2</sup>	As may be required	To be agreed by the Agency

**Note 1:** The licensee shall install a composite sampler within one month of date of commencement of the licensed activities. All samples thereafter shall be collected on a 24 hour flow proportional composite sampling basis.

**Note 2:** The number of toxic units (Tu) = 100/x hour EC/LC<sub>50</sub> in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.



**C.4 Waste Monitoring**

Waste Class	Frequency	Parameter	Method
Boiler Ash	Per load Annual	Weight Metals analysis	Weighbridge Records Standard Method
Dried Sludge Granulate	Per load Annual	Weight Metals, N & P analysis	Weighbridge Records Standard Method
Other <sup>Note 1</sup>			

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



**C.5 Noise Monitoring**

Location	As per <i>Figure F.2: Noise Monitoring Locations</i> (submitted in Application Form, received 1/10/2004)
N1, N2 & N3	Three boundary points
NSR-1	Nearest noise sensitive location – dwelling house

Parameter	Monitoring Frequency	Analysis Method/Technique
L(A) <sub>EQ</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>10</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
L(A) <sub>90</sub> [30 minutes]	Annual	Standard <sup>Note 1</sup>
Frequency Analysis(1/3 Octave band analysis)	Annual	Standard <sup>Note 1</sup>

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



**C.6 Ambient Monitoring**

**Air Monitoring**

**Location:** D3 as shown in *Figure F.1 Proposed Dust Monitoring Locations* (submitted in Application Form, received 1/10/2004)

Parameter	Monitoring Frequency	Analysis Method/Technique
Dust deposition	Three times a year	Bergerhoff gauge/Gravimetric

**Location:** At entrance gate and all site boundaries

Parameter	Monitoring Frequency	Analysis Method/Technique
Odour	Daily	Sniff Test





**Groundwater Monitoring****Location:** <sup>Note 1</sup>

MW1 – E209704, 79731 (south-eastern boundary of site)

MW2 – E209589, 79778 (western boundary of site)

MW3 – At location of TP1 from Trial Pit Examination March/April 2005-site of previous location of a diesel storage unit)

Parameter	Monitoring Frequency	Analysis Method/Technique
pH	Biannually	pH electrode/meter
Conductivity	Biannually	Conductivity meter
COD	Biannually	Standard Method
Diesel Range Organics	Biannually	Standard Method
Petrol Range Organics	Biannually	Standard Method
Nitrate	Biannually	Standard Method
Total Ammonia	Biannually	Standard Method
Chloride	Biannually	Standard Method
Cadmium	Biannually	Standard Method
Cobalt	Biannually	Standard Method
Iron	Biannually	Standard Method
Manganese	Biannually	Standard Method
Arsenic	Biannually	Standard Method
Organohalogens <sup>Note 2</sup>	Biannually	GC-MS

**Note 1:** Locations shown on Drawing No. 2004\_121\_Emissions Points, dated 15/06/2006.**Note 2:** Screening for priority pollutant list substances (such as US EPA volatile and/or semi-volatile compounds).

## SCHEDULE D: Specified Engineering Works

### Specified Engineering Works

**Development of the facility including** installation of waste handling, storage, processing, recycling/recovery infrastructure and waste water treatment plant.

Installation of **drainage network including** silt traps and oil interceptors.

Installation of dust/odour **abatement** systems.

Any other works notified in writing by the Agency.

## SCHEDULE E: Annual Environmental Report

### Annual Environmental Report Content <sup>Note 1</sup>

Waste activities carried out at the facility.  
 Quantity and Composition of waste recovered, received and disposed of during the reporting period and each previous year (relevant EWC codes to be used).  
 Full title and a written summary of any procedures developed by the licensee in the year which relates to the facility operation.  
 Waste Recovery Report.  
 Review of Nuisance Controls.  
 Volume of trade effluent/leachate and/or contaminated stormwater produced and volume transported off-site.  
 Emissions from the facility.  
 Waste management record.  
 Resource consumption summary.  
 Complaints summary.  
 Schedule of Environmental Objectives and Targets.  
 Environmental management programme – report for previous year.  
 Environmental management programme – proposal for current year.  
 Noise monitoring report summary.  
 Ambient monitoring summary.  
 Tank and pipeline testing and inspection report.  
 Reported incidents summary.  
 Energy efficiency audit report summary.  
 Pollutant Release and Transfer Register – report for previous year.  
 Pollutant Release and Transfer Register - proposal for current year.  
 Report on the assessment of the efficiency of use of raw materials in processes and the reduction in waste generated.  
 Report on progress made and proposals being developed to minimise water demand and the volume of trade effluent discharge.  
 Development / Infrastructural works summary (completed in previous year or prepared for current year).  
 Reports on financial provision made under this licence, management and staffing structure of the facility, and a programme for public information.  
 Closure, restoration & aftercare management plan.  
 Statement of measures in relation to prevention of environmental damage and remedial actions (Environmental Liabilities).  
 Environmental Liabilities Risk Assessment Review (every three years or more frequently as dictated by relevant on site change including financial provisions).  
 Any other items specified by the Agency.

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

**Signed on behalf of the said Agency** \_\_\_\_\_

on the xx day of xxxxxx, 2006

xxxxxxxxx,

**Authorised Person**

