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WASTE LICENCE **Proposed Decision**

Licence Register Number:	W0089-02
Licensee:	Cork County Council
Location of Facility:	Derryconnell, Schull, County Cork

INTRODUCTION

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

"The landfill at Derryconnell has been operational since 1985 as an unlined landfill. It was licensed in 2000 to allow for the development of three new lined landfill cells accepting 14,000 tonnes per annum of waste. Having almost reached capacity with regard to waste acceptance at the landfill this reviewed licence allows Cork County Council to operate a waste transfer station also accepting 17,000 tonnes per annum of waste disposal and a new Civic Amenity Site at the facility".

The operational landfill facility is a Class 5.4 Activity under Annex I of the IPPC Directive 96/61/EC.

The licence sets out in detail the conditions under which Cork County Council 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 to 2007 / Waste Management Acts 1996 to 2008, unless otherwise defined in the section.

Adequate lighting	20 lux measured at ground level.
AER	Annual Environmental Report.
Aerosol	A suspension of solid or liquid particles in a gaseous medium.
Agreement	Agreement in writing.
Annually	At approximately twelve-monthly intervals.
Application	The application by the licensee for this licence.
Appropriate Facility	A waste management facility, duly authorised under relevant law and technically suitable.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of this licence application.
BAT	Best Available Techniques.
Biannually	All or part of a period of six consecutive months.
Biennially	Once every two years.
Biodegradable waste	Any waste that is capable of undergoing anaerobic or aerobic decomposition, such as food, garden waste, sewage sludge, paper and paperboard.
BOD	5 day Biochemical Oxygen Demand.
CEN	Comité Européen De Normalisation – European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Commercial Waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2008.

Containment boom	A boom that can contain spillages and prevent them from entering drains or watercourses or from further contaminating watercourses.
Daily	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.
Day	Any 24 hour period.
Daytime	0800 hrs to 2200 hrs.
dB(A)	Decibels (A weighted).
DO	Dissolved oxygen.
Documentation	Any report, record, results, data, drawing, proposal, interpretation or other document in written or electronic form which is required by this licence.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
EMP	Environmental Management Programme.
Emission limits	Those limits, including concentration limits and deposition rates, established in <i>Schedule B: Emission Limits</i> of this licence.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
European Waste Catalogue (EWC)	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.
Facility	Any site or premises used for the purpose of the recovery of disposal of waste.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
GC/MS	Gas chromatography/mass spectroscopy.
Green Waste	Waste wood (excluding timber), plant matter such as grass cuttings, and other vegetation.
ha	hectare
Heavy metals	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-

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Hours of operation	The hours during which the facility is authorised to be operational.
Hours of waste acceptance	The hours during which the facility is authorised to accept waste.
ICP	Inductively coupled plasma spectroscopy.
Incident	The following shall constitute as incident for the purposes of this licence:
	(i) an emergency;
	(ii) any emission which does not comply with the requirements of this licence;
	(iii) any exceedance of the daily duty capacity of the waste handling equipment;
	(iv) any trigger level specified in this licence which is attained or exceeded; and,
	 (v) any indication that environmental pollution has, or may have, taken place.
Inert waste	Waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular must not endanger the quality of surface water and/or groundwater.
Industrial waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2008.
IPPC	Integrated Pollution Prevention & Control.
к	Kelvin.
kPa	Kilopascals.
Landfill Directive	Council Directive 1999/31/EC.
Landfill Footprint	The area of the landfill facility where waste is deposited.
\mathbf{L}_{eq}	Equivalent continuous sound level.
Licensee	Cork County Council Western Division, Hume House, Wolfe Tone Street, Clonakilty, County Cork.
Liquid waste	Any waste in liquid form and containing less than 2% dry matter.

List I	sted in the EC Directives 76/464/EEC and 80/68/EEC and amendments.	
List II	As listed in the EC Directives 76/464/EEC and 80/68/EEC and amendments	
Local Authority	Cork County Council.	
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function adequately.	
Mass flow limit	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.	
Mass flow threshold	A mass flow rate above which a concentration limit applies.	
Monthly	A minimum of 12 times per year, at intervals of approximately one month.	
Municipal waste	As defined in Section 5(1) of the Waste Management Acts 1996 to 2008.	
Night-time	2200 hrs to 0800 hrs.	
Noise-sensitive location (NSL)	Any dwelling house, hotel or hostel, health building, educational establishment, place of worship or entertainment, or any other facility or area of high amenity which for its proper enjoyment requires the absence of noise at nuisance levels.	
Oil separator	Device installed according to the International Standard I.S. EN 858-2:2003 (Separator system for light liquids, (e.g. oil and petrol) – Part 2: Selection of normal size, installation, operation and maintenance).	
PRTR	Pollutant Release and Transfer Register.	
Quarterly	At approximately three – monthly intervals. All or part of a period of three consecutive months beginning on the first day of January, April, July or October.	
Regional Fisheries Board	South-western Regional Fisheries Board.	
Residual Waste	Is, in the context of this landfill, waste that has been subjected to pre-treatment (including, <i>inter alia</i> , source separation) to extract recyclable/reusable components in order to contribute to the objectives of the Landfill Directive.	
Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.	
Sanitary effluent	Wastewater from facility toilet, washroom and canteen facilities.	
SOP	Standard operating procedure.	

Source segregated waste	Waste which is separated at source; meaning that the waste is sorted at the point of generation into a recyclable fraction(s) for separate collection (e.g., paper, metal, glass, plastic, bulk dry recyclables, biodegradables, etc.,) and a residual fraction. The expression 'separate at source' shall be construed accordingly.
Specified emissions	Those emissions listed in Schedule B: Emission Limits of this licence.
Specified Engineering Works	Engineering works listed in <i>Schedule E: Specified Engineering Works</i> of this licence.
Standard method	A National, European or internationally recognised procedure (e.g. I.S. EN, ISO, CEN, BS or equivalent); or 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.
Storm water	Rain water run-off from roof and non-process areas.
The Agency	Environmental Protection Agency.
Temporary storage	In relation to waste is a period of less than six months as defined in the Waste Management Acts 1996 to 2008.
ТОС	Total organic carbon.
Trade effluent	Trade effluent has the meaning given in the Water Services Act, 2007.
Trigger level	A parameter value, the achievement or exceedance of which requires certain actions to be taken by the licensee.
Water Services Authority	Cork County Council.
WEEE	As defined in S.I. No. 340 of 2005.
Weekly	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.
WWTP	Waste water treatment plant.

Decision & Reasons for the Decision

The Environmental Protection 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 2008.

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

Part I Scheduled of Activities Licensed

In pursuance of the powers conferred on it by the Waste Management Acts 1996 to 2008, the Environmental Protection Agency (the Agency) proposes, under Section 46(8) of the said Acts to grant this Waste Licence to Cork County Council, Western Division, Hume House, Wolfe Tone Street, Clonakilty, County Cork to carry on the waste activities listed below at Derryconnell Landfill, Derryconnell, Schull, County Cork subject to conditions, with the reasons therefor and the associated schedules attached thereto set out in the licence. For the purpose of Article 48 of the Waste Management Licensing Regulations 2004 (S.I. No 395) this facility is classed as a non-hazardous waste landfill.

Licensed Waste Disposal Activities, in accordance with the Third Schedule of the Waste Management Acts 1996 to 2008

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Class 1.	Deposit on, in or under land (including landfill).
Class 4.	Surface impoundment, including placement of liquid or sludge discards into pits, ponds or lagoons.
Class 5.	Specially engineered landfill, including placement into lined discrete cells which are capped and isolated from one another and the environment.
Class 12.	Repacking prior to submission to any activity referred to in a preceding paragraph of this Schedule (Principal Activity).
Class 13.	Storage prior to submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.

Licensed Waste Recovery Activities, in accordance with the Fourth Schedule of the Waste Management Acts 1996 to 2008

Class 2.	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological processes).
Class 3.	Recycling or reclamation of metals and metal compounds.
Class 4.	Recycling or reclamation of other inorganic materials.
Class 13.	Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.

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 1* Schedule of Activities Licensed, and shall be as set out in the licence application or as modified under Condition 1.4 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* of this licence.
- 1.3 For the purposes of this licence, the facility authorised by this licence is the area of land outlined in a continuous red line on Drawing No. 2528-2611 Revision A of the application. Any reference in this licence to "Facility" shall mean the area thus outlined in the continuous red line. The licensed activities shall be carried on only within the area outlined.
- 1.4 No alteration to, or reconstruction in respect of, the activity, or any part thereof, that 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
 - any changes in:

(ii)

 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.

- 1.5 The Facility shall be controlled, operated and maintained and emissions shall take place as set out in the licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 Waste Acceptance Hours and Hours of Operation
 - 1.6.1 With the exception of emergencies or as may be agreed by the Agency, waste shall be accepted at or dispatched from the facility only between the hours of 8.00a.m. and 5.00p.m. Monday to Saturday inclusive.
 - 1.6.2 The facility shall be operated only between the hours of 8.00a.m. and 6.00p.m. Monday to Saturday inclusive.
 - 1.6.3 The facility shall not operate or accept/dispatch waste on Sundays or on Public Holidays without the agreement of the Agency.
- 1.7 This licence is for purposes of waste licensing under the Waste Management Acts 1996 to 2008 only and nothing in this licence shall be construed as negating the licensee's statutory obligations, or requirements under any other enactments or regulations.
- 1.8 This licence is being granted in substitution for the waste licence granted to the licensee on the 25th of October 2000 (Register No W0089-01). The previous waste licence (Register No: W0089-01) is superseded by this licence.

Reason: To clarify the scope of this licence.

Condition 2. Management of the Facility

- 2.1 Facility Management
 - 2.1.1 The licensee shall employ a suitable 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 by the Agency.
- 2.2 Environmental Management System (EMS)
 - 2.2.1 The licensee shall maintain an Environmental Management System (EMS). 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 maintain 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 maintain 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 maintained by the licensee. It shall include:

- designation of responsibility for targets;
- the means by which they may be achieved;
- 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).

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 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 persons 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 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 maintain a Public Awareness and Communications Programme to ensure that members of the public can obtain information at the Facility, at all reasonable times, concerning the environmental performance of the Facility.

2.2.2.8 Maintenance Programme

The licensee shall 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 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.

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 and maintain, for each component of the facility, all infrastructure referred to in this licence in advance of the commencement of the licensed activities in that component, or as required by the conditions of this licence. Infrastructure specified in the application which relates to the environmental performance of the installation and is not specified in the licence, shall be installed in accordance with the schedule submitted in the application.
- 3.2 Specified Engineering Works
 - 3.2.1 The licensee shall submit proposals for all Specified Engineering Works, as defined in *Schedule E: 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.
 - 3.2.2 All specified engineering works shall be supervised by a competent person(s) and that person, or persons, shall be present at all times during which relevant works are being undertaken.
 - 3.2.3 Following the completion of all specified engineering works, the licensee shall complete a construction quality assurance validation. The validation report shall be made available to the Agency on request. The report shall, 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.
- 3.3 Facility Notice Board
 - 3.3.1 The licensee shall, within four months of the date of grant of this licence, provide a Facility Notice Board at the facility so that it is legible to persons outside the main entrance to the facility. The minimum dimensions of the board shall be 1200 mm by 750 mm. The notice board shall be maintained thereafter.
 - 3.3.2 The board shall clearly show:
 - (i) the name and telephone number of the facility;
 - (ii) the normal hours of opening;
 - (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.
 - 3.3.3 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 is legible at all times. The plan shall be replaced as material changes to the facility are made.
- 3.4 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.

- 3.5 Facility Roads and Site Surfaces
 - 3.5.1 Effective site roads shall be provided and maintained to ensure the safe and nuisancefree movement of vehicles within the facility.
 - 3.5.2 The licensee shall provide and maintain an impermeable concrete surface in all areas of the facility to be used for the handling and temporary storage of waste. The surfaces shall be concreted and constructed to British Standard 8110 or an alternative as agreed by the Agency. The licensee shall remedy any defect in concrete surfaces within five working days.
- 3.6 Facility Office
 - 3.6.1 The licensee shall provide and maintain an office at the facility. The office shall be constructed and maintained in a manner suitable for the processing and storing of documentation.
 - 3.6.2 The licensee shall provide and maintain a working telephone and a method for electronic transfer of information at the facility.
- 3.7 Waste Inspection and Quarantine Areas
 - 3.7.1 A Waste Inspection Area and a Waste Quarantine Area shall be provided and maintained at the facility.
 - 3.7.2 These areas shall be constructed and maintained in a manner suitable, and be of a size appropriate, for the inspection of waste and subsequent quarantine if required. The waste inspection area and the waste quarantine area shall be clearly identified and segregated from each other.
 - 3.7.3 Drainage from these areas shall be directed to the leachate storage lagoon.
- 3.8 Weighbridge and Wheel Cleaners
 - 3.8.1 The licensee shall provide and maintain a weighbridge and wheel cleaners at the facility.
 - 3.8.2 The wheel cleaners shall be used by all vehicles leaving the facility as required to ensure that no trade effluent is carried off-site. All water from the wheel cleaning area shall be directed to the leachate storage lagoon.
 - 3.8.3 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.
- 3.9 Waste handling, ventilation and processing plant
 - 3.9.1 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 backup and spares in the case of breakdown of critical equipment.
 - 3.9.2 In advance of the commencement of waste activities at the waste transfer station, 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.
 - 3.9.3 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 exceedence of this intake shall be treated as an incident.

3.10 Wastewater Treatment

Unless treated on the facility, leachate, sanitary effluent, and other wastewater generated at the facility shall be stored in the on-site storage lagoon and shall be tankered off-site in fully enclosed road tankers to an agreed Wastewater Treatment Plant and disposed of there.

- 3.11 Civic Waste Facility
 - 3.11.1 The licensee shall establish and maintain the Civic Waste Facility infrastructure as shown in Drawing No. 2528-2613A of the application.
 - 3.11.2 Upon commencement of operation of the new Civic Waste Facility referred to in Condition 3.11.1 above, the existing Civic Waste Facility shall be decommissioned.
 - 3.11.3 All waste deposited in the Civic Waste Facility shall be placed:
 - (i) into a skip;
 - (ii) into the hopper of the compactor for disposal;
 - (iii) into a designated area or receptacle for recovery; or
 - (iv) in the case where inspection is required, into a designated inspection area.
 - 3.11.4 The licensee shall assign and clearly label each container/bay at the Civic Waste Facility to indicate its contents.
 - 3.11.5 At the end of the working day the floor of the Civic Waste Facility, the hopper and the compactor shall be cleared of waste.
 - 3.11.6 All putrescible waste accepted/deposited at the Civic Waste Facility (CWF) for onward disposal shall be removed from the CWF to approved disposal within fortyeight hours of deposit, with the exception of Public Holidays when waste shall be removed within seventy-two hours. No individual waste material deposited at the CWF shall be stored for longer than four months.
- 3.12 Facility Security
 - 3.12.1 2.5m high security and stockproof fencing and gates shall be installed and maintained around the boundary of the facility. The base of the fencing shall be set in the ground.
 - 3.12.2 The licensee shall install a CCTV system which records all truck movement into and out of the facility; the CCTV system shall be operated at all times and copies of recording kept on site for a period agreed by the Agency and made available to the Agency on request.
 - 3.12.3 Gates shall be locked shut when the facility is unsupervised.
 - 3.12.4 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.
- 3.13 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) shall be refrigerated immediately after collection and retained as required for EPA use.
- 3.14 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.
- 3.15 Tank, Container and Drum Storage Areas
 - 3.15.1 All tank, container and drum storage areas shall be rendered impervious to the materials stored therein. Bunds shall be designed having regard to Agency guidelines 'Storage and Transfer of Materials for Scheduled Activities' (2004).

- 3.15.2 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
 - (i) 25% of the total volume of substance which could be stored within the bunded area.
- 3.15.3 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.
- 3.15.4 All inlets, outlets, vent pipes, valves and gauges must be within the bunded area.
- 3.15.5 All tanks, containers and drums shall be labelled to clearly indicate their contents.
- 3.16 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.
- 3.17 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 separator shall be a Class I full retention separator and the silt traps and separator shall be in accordance with I.S. EN-858-2: 2008 (separator systems for light liquids).

- 3.18 Construction and Demolition Waste Recovery Area
 - 3.18.1 The licensee shall, in advance of the commencement of activities in this area, provide and maintain the following infrastructure:
 - (i) an impermeable concrete slab;
 - (ii) collection and disposal infrastructure for all run-off;
 - (iii) appropriate bunding to provide visual and noise screening;
 - (iv) All stockpiles shall be adequately contained to minimise dust generation;
 - (v) measures to minimise dust generation at this facility and shall as instructed by the Agency install a sprinkling irrigation system for the control of dust nuisance from the facility. Any remedial works necessary to control dust must be implemented within a time-scale to be agreed by the Agency.
 - 3.18.2 Only Construction and Demolition waste shall be accepted at this Area. Wastes that are capable of being recovered shall be separated and shall be stored temporarily in this area in advance of being subjected to other recovery activities at the facility or transport off the facility.
- 3.19 Fire-water Retention
 - 3.19.1 The licensee shall carry out a risk assessment to determine if the activity should have a fire-water 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 of the date of grant of this licence.
 - 3.19.2 In the event that a significant risk exists for the release of contaminated fire-water, 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 of date of notification by the Agency.
 - 3.19.3 In the event of a fire or a spillage to storm water, the site storm water shall be diverted to the containment pond. The licensee shall examine, as part of the response programme in Condition 3.19.2 above, the provision of automatic diversion of storm

water to the containment facility. The licenses shall have regard to any guidelines issued by the Agency with regard to firewater retention.

- 3.19.4 The licensee shall have regard to the Environmental Protection Agency Draft Guidance Note to Industry on the Requirements for Fire-Water Retention Facilities when implementing Conditions 3.19.1 and 3.19.2 above.
- 3.20 All pumps 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 separators, shall be fitted with high liquid level alarms (or oil detectors as appropriate) from the date of grant of this licence.
- 3.21 The provision of a catchment system to collect any leaks from flanges and valves of all overground pipes used to transport material other than water shall be examined. This shall be incorporated into a Schedule of Environmental Objectives and Targets set out in Condition 2. of this licence for the reduction in fugitive emissions.
- 3.22 The licensee shall, within three months of the date of grant of this licence, 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.
- 3.23 Dust/Odour Control

In advance of the date of commencement of the waste activities at the new Waste Transfer Station the licensee shall install and provide adequate measures for the control of odours and dust emissions, including fugitive dust emissions, from the facility. Installation of an odour/dust management system shall at a minimum include the following:

- 3.23.1 Dust curtains (or equivalent approved by the Agency) shall be maintained on the entry/exit points from the waste transfer building; all other doors in this building shall be kept closed where possible.
- 3.23.2 Unless otherwise agreed by the Agency, all buildings processing putrescible waste shall be maintained at negative air pressure with ventilated gases being subject to treatment as specified by the Agency.
- 3.23.3 Provision of 100% duty capacity and 20% standby capacity, backups and spares must be provided for the air handling, ventilation and abatement plant.
- 3.24 Leachate Management Infrastructure
 - 3.24.1 Leachate management infrastructure shall be provided and maintained at the facility as described in attachments C & D of the application documentation for this and corresponding attachments of previous licences as relevant, or as may be varied by a licence condition.
 - 3.24.2 All structures for the storage and/or treatment of leachate shall be fully enclosed except for inlet and outlet piping.
- 3.25 Landfill Gas Management
 - 3.25.1 Landfill gas management infrastructure shall be provided and maintained at the facility as described in attachments C & D of the application documentation for this and corresponding attachments of previous licences as relevant, or as may be varied by a licence condition.
 - 3.25.2 All buildings constructed on the facility shall have regard to the guidance given in the Department of Environment 1994 publication "Protection of New Buildings and Occupants from Landfill Gas" and any subsequent revisions.
- 3.26 Landfill Lining

Unless otherwise agreed in writing, the landfill lining system shall comprise:

3.26.1 A composite liner consisting of a 1m layer of clay with a hydraulic conductivity of less than or equal to 1×10^{-9} m³/m² per/s, overlain by a 2mm thick high-density polyethylene (HDPE) layer;

- 3.26.2 A geotextile protection layer placed over the HDPE layer (the choice of geotextile is to be proven in advance by an appropriate cylinder test, the results of which are to be submitted as part of the SEW identified in Condition 3.5);
- 3.26.3 A 500 mm thick drainage layer placed over the geotextile layer with a minimum hydraulic conductivity of 1x10⁻³m³/m² per/s, of pre-washed, uncrushed, granular, rounded stone (16-32mm grain size) incorporating leachate collection drains;
- 3.26.4 The lining system on the base of the facility shall be laid to a minimum slope of 1:50, and
- 3.26.5 The side walls shall be designed and constructed to achieve an equivalent protection.
- 3.27 Pending completion of construction work at the New Waste Transfer Station, the licensee is permitted to operate a Temporary Waste Transfer Station. The Temporary Waste Transfer Station shall be subject to the conditions of this licence as appropriate. Unless otherwise agreed by the Agency, the Temporary Waste Transfer Station shall be decommissioned within 6 months of commencement of operations at the New Waste Transfer Station.

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 Non-Continuous Monitoring
 - (iv) 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.
 - (v) For flow, no hourly or daily mean value, calculated on the basis of appropriate spot readings, shall exceed the relevant limit value.
 - (vi) 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 landfill gas flare:

Temperature 273 K, pressure 101.3 kPa, dry gas at 3% oxygen; and

4.2.2 In the case of landfill gas combustion plant:

Temperature 273 K, pressure 101.3 kPa, dry gas; 5% oxygen.

- 4.3 Emission limit values for emissions to sewer/waters in this licence shall be interpreted in the following way:
 - 4.3.1 Continuous Monitoring
 - (i) No flow value shall exceed the specific 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 results 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 Noise from the facility shall not give rise to sound pressure levels (Leq, T) measured at the boundary of the facility which exceed the limit value(s).
- 4.6 Dust and Particulate Matter Dust and particulate matters from the activity shall not give rise to deposition levels which exceed the limit value(s).

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 No emissions, including odours, from the activities carried on at the site shall result in an impairment of, or an interference with amenities or the environment beyond the facility boundary or any other legitimate uses of the environment beyond the facility boundary.
- 5.3 Emissions to Surface Water

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

- 5.4 There shall be no direct emissions to groundwater.
- 5.5 The licensee shall ensure that all or any of the following:
 - Vermin
 - Birds
 - Flies
 - Mud
 - Dust
 - Litter

associated with the activity do not result in an impairment of, or an interference with, amenities or the environment at the facility or beyond the facility boundary 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.

Reason: To provide for the protection of the environment by way of control and limitation of emissions.

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 Analyses 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 shall be 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 any analysis is sub-contracted it shall be to a competent laboratory.
- 6.2 The licensee shall ensure that:
 - (i) sampling and analysis for all parameters listed in the Schedules to this licence; and
 - (ii) any reference measurements for the calibration of automated measurement systems;

shall be carried out in accordance with CEN-standards. If CEN standards are not available, ISO, national or international standards that 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. The use of alternative equipment, other than in emergency situations, shall be as agreed by the Agency.
- 6.4 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the emission/discharge (or ambient conditions where that is the monitoring objective).
- 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 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.
- 6.8 The licensee shall prepare a programme, to the satisfaction of the Agency, for the identification and reduction of fugitive emissions using an appropriate combination of best available techniques. This programme shall be included in the Environmental Management Programme.
- 6.9 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. This testing shall be carried out by the licensee at least once every three years and reported to the Agency on each occasion. In the case of new structures this testing shall also be carried out prior to use. This testing shall be carried out in accordance with any guidance published by the Agency. A written record of all integrity tests and any maintenance or remedial work arising from them shall be maintained by the licensee.
- 6.10 The drainage system (i.e., gullies, manholes, any visible drainage conduits and such other aspects as may be agreed) and bunds, silt traps and oil separators shall be inspected weekly and desludged as necessary. All sludge and drainage from these operations shall be collected

for safe disposal. The drainage system, bunds, silt traps and oil interceptors shall be properly maintained at all times.

6.11 Storm Water

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

- 6.12 Operational Controls
 - 6.12.1 The floor of the waste transfer building shall be cleaned on a weekly basis and on a daily basis where putrescible waste is handled. 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.
 - 6.12.2 Scavenging shall not be permitted at the facility.
 - 6.12.3 All tanks and drums shall be labelled to clearly indicate their contents.
 - 6.12.4 There shall be no unauthorised public access to the facility.
- 6.13 Monitoring Locations

Within three months of the date of grant of this licence, 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.

6.14 Nuisance Monitoring

The licensee shall, at a minimum of one week intervals, 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.

- 6.15 Litter Control
 - 6.15.1 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 10.00 am of the next working day after such waste is discovered.
 - 6.15.2 The licensee shall ensure that all vehicles delivering waste to and removing waste and materials from the facility are appropriately covered.
- 6.16 Noise

The licensee shall carry out a noise survey of the site operations 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.

6.17 Pollutant Release and Transfer Register (PRTR)

The licence shall prepare and report a PRTR for the site. The substance and/or wastes to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulations 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.

- 6.18 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 6.19 Leachate Management
 - 6.19.1 Leachate levels in the waste shall not exceed a level of 1.0 m over the top of the liner at the base of the landfill.
 - 6.19.2 The frequency of leachate removal from the leachate holding tank shall be such that a minimum freeboard of 0.5 m shall be maintained in the tank at all times. The required freeboard shall be clearly indicated in the tank.

6.19.3 Recirculation of leachate or other contaminated water shall only be undertaken within cells which have been lined to the satisfaction of the Agency.

6.20 Landfill Gas

- 6.20.1 Flares shall be operated to ensure a burn chamber residence time of minimum 0.3 s and burn temperature of minimum 1000°C.
- 6.20.2 In relation to landfill derived gases the following shall constitute a trigger level:
 - (i) Methane greater than 1% v/v; or,
 - (ii) Carbon dioxide greater than 1.5% v/v,

measured in any monitoring borehole, service duct, manhole or other point as may be specified, located external to the body of waste.

6.21 Operational Controls

- 6.21.1 Only one working face shall exist at the landfill at any one time for the deposit of waste other than cover or restoration materials.
- 6.21.2 Unless otherwise agreed in advance by the Agency, the working face of the landfill shall be no more than 25 metres long and 25 wide (i.e. $<625m^2$ surface area), no more than 2.5 metres in height after compaction, and have a slope no greater than 1 in 3.
- 6.21.3 All waste deposited at the working face shall be compacted, using a steel wheeled compactor, and covered as soon as is practicable and at any rate in advance of the end of the working day.
- 6.21.4 The working face, or faces, shall each day at the end of the day be covered with suitable material.
- 6.21.5 All large hollow objects and other large articles deposited at the facility shall be crushed, broken up, flattened or otherwise treated.
- 6.21.6 Wastes once deposited and covered shall not be excavated, disturbed or otherwise picked over with the exception of works associated with the construction and installation of necessary infrastructure or otherwise only with the prior agreement of the Agency.
- 6.21.7 Any cover material at any location within the facility which is eroded, washed off or otherwise removed shall be replaced by the end of the working day.
- 6.21.8 Scavenging shall not be permitted at the facility.
- 6.21.9 Unless otherwise agreed by the Agency, all sludges shall be covered immediately with other waste.
- 6.21.10 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.
- 6.21.11 No smoking shall be allowed at the facility.
- 6.22 The licensee shall provide and use adequate lighting during the operation of the facility in hours of darkness.

Reason: To provide for the protection of the environment by way of treatment and monitoring of emissions.

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 date of grant of this licence. 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 practicable 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 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 from the site of the activity to the site of recovery/disposal only in a manner that will not adversely affect the environment and in accordance with the appropriate National and European legislation and protocols.
- 8.3 The licensee shall ensure that, in advance of transfer to another person, waste shall be classified, packaged and labelled in accordance with National, European and any other standards which are in force in relation to such labelling.
- 8.4 The loading and unloading of materials shall be carried out in designated areas protected against spillage and leachate run-off.
- 8.5 Waste shall be stored in designated areas, protected as may be appropriate against spillage and leachate run-off. The waste shall be clearly labelled and appropriately segregated.
- 8.6 No waste classified as green list waste in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be amended) shall be consigned for recovery without the agreement of the Agency.
- 8.7 Waste for disposal/recovery off-site shall be analysed in accordance with *Schedule C: Control & Monitoring* of this licence.
- 8.8 All waste processing shall be carried out inside the waste transfer building unless otherwise agreed by the Agency.
- 8.9 Waste Acceptance and Characterisation Procedures
 - 8.9.1 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 Acts 1996 to 2008. Copies of these waste collection permits must be maintained at the facility.

- 8.9.2 The licensee shall establish and maintain detailed written procedures for the acceptance and handling of wastes. In the case of the new Waste Transfer Station and Civic Waste Facility such procedures shall be established in advance of commencement of waste acceptance at such facility.
- 8.9.3 Waste arriving at the landfill or Waste Transfer Station shall be inspected at the point of entry to the facility and subject to this inspection, weighed, documented and directed to the Waste Transfer Building. Each load of waste arriving at the Waste Transfer Building shall be inspected upon tipping within this building. Only after such inspections shall the waste be processed for disposal or recovery.
- 8.9.4 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.
- 8.9.5 With the exception of the Civic Amenity Site, 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.
- 8.10 Additional Waste Acceptance and Characterisation Procedures for the on-site Landfill
 - 8.10.1 Only pre-treated wastes are acceptable for disposal as set out in Article 6 (a) of the Landfill Directive.
 - 8.10.2 Whole used tyres (other than bicycle tyres and tyres with an outside diameter greater than 1400mm) shall not be disposed of at the facility. Shredded tyres shall not be disposed of at the facility.
 - 8.10.3 No hazardous wastes or liquid wastes shall be disposed of at the facility.
 - 8.10.4 The licensee shall submit to the Agency for its agreement written procedures for the acceptance and handling of all wastes. These procedures shall include details of the pre-treatment of all waste to be carried out in advance of acceptance at the facility and shall also include methods for the characterisation of waste in order to distinguish between inert, non-hazardous and hazardous wastes. The procedures shall have regard to the EU Decision (2003/33/EC) on establishing the criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II of Directive (1999/31/EC) on the landfill of waste.
 - 8.10.5 Bulk gypsum wastes shall not be placed in any landfill cell accepting biodegradable waste.
- 8.11 Unless approved in writing, in advance, 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.

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

Condition 9. Accident Prevention and Emergency Response

- 9.1 The licensee shall, within six months of date of grant of this licence, ensure that a documented Accident Prevention Procedure is in place which addresses 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 ensure that a documented Emergency Response Procedure is in place, which addresses 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 Emergencies

- 9.3.1. In the event of a breakdown of equipment or any other occurrence which results in the closure of the transfer station building, 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 transfer station building is returned to a fully operational status. Such a breakdown event will be treated as an emergency and rectified as soon as possible.
- 9.3.2. 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.
- 9.3.3. No waste shall be burnt within the boundaries of the facility. A fire at the facility shall be treated as an emergency and immediate action shall be taken to extinguish it and notify the appropriate authorities.

9.4 Incidents

- 9.4.1 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;
 - (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 by the Agency, to:
 - (i) identify and put in place measures to avoid recurrence of the incident; and
 - (ii) identify and put in place any other appropriate remedial actions.

Reason: To provide for the protection of the environment.

Condition 10. Closure, Restoration and Aftercare Management

- 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, subsoil, 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 The licensee shall restore the facility on a phased basis. Unless otherwise agreed, filled cells shall be permanently capped within 24 months of the cells having been filled to the required level and the entire site shall be capped by 1st September 2010.
- 10.3 Finished Levels/Profile
 - 10.3.1 Unless otherwise agreed by the Agency, the finished (post settlement restored) levels of the landfill shall be as indicated in Drawing Reference G 1/1 Revision A, entitled "Landfill site cross sections including layout plan showing positions of sections (Dated February 1999).
 - 10.3.2 Completed areas of the landfill shall be profiled so that no depressions exist in which water may accumulate. Any depressions arising after profiling shall be rectified by the emplacement of suitable capping or restoration materials.
 - 10.3.3 Final contours and landscaping should be such that the finished slopes of the facility are structurally stable, resistant to erosion, and protective of pollution control and monitoring infrastructure.

10.4 Final Capping

Unless otherwise agreed by the Agency, the final capping shall consist of the following:

- (i) Top soil (150–300 mm);
- (ii) Subsoils, such that total thickness of top soil and subsoils is at least 1 m;
- (iii) Drainage layer of 0.5 m thickness having a minimum hydraulic conductivity of 1 x 10^{-4} m/s or a geosynthetic material that provides equivalent transmissivity;
- (iv) Compacted mineral layer of a minimum 0.6 m thickness with a permeability of less than 1×10^{-9} m/s or a geosynthetic material (e.g. GCL) or similar that provides equivalent protection; and
- (v) Gas collection layer of natural material (minimum 0.3 m) or a geosynthetic layer.
- 10.5 No material or object that is incompatible with the proposed restoration of the facility shall be present within 1m of the final soil surface levels.
- 10.6 All soils shall be stored to preserve the soil structure for future use.
- 10.7 Closure, Restoration and Aftercare Management Plan
 - 10.7.1 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 within six months of the date of grant of the licence and shall, as a minimum include the following:
 - (i) A scope statement for the plan.
 - (ii) The criteria, including those specified in this licence, which define the successful closure and restoration of the facility or part thereof, and which ensure minimum impact to the environment.
 - (iii) A programme to achieve the stated criteria.

- (iv) Where relevant, a test programme to demonstrate the successful implementation of the plan.
- (v) Details of the long-term supervision, monitoring, control, maintenance and reporting requirements for the restored facility.
- (vi) Details of the costings for the plan and the financial provisions to underwrite those costs.
- 10.7.2 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.
- 10.7.3 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Condition 10.7.1 above.

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

Condition 11. Notification, Records and Reports

- 11.1 The licensee shall notify the Agency, in writing, one month in advance of the intended date of commencement of acceptance of waste for Scheduled Disposal/Recovery activities at the waste transfer station and the new Civic Waste Facility (waste used in the facility construction excepted).
- 11.2 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 Wastewater 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.
- 11.3 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 the programme shall be prepared and submitted to the Agency as part of the AER.
- 11.4 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;
- (v) inert waste to be used for cover/restoration material at the facility.
- 11.5 The licence shall notify the Agency by both telephone and facsimile, 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:

- (i) any release of environmental significance to atmosphere from any potential emissions point;
- (ii) any emission which does not comply with the requirements of this licence;
- (iii) any malfunction or breakdown of key control equipment or monitoring equipment set out in *Schedule C: Control and Monitoring* of this licence which is likely to lead to loss of control of the abatement system; and
- (iv) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environment 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.

- 11.6 In the event of any incident which relates to discharges to sewer having taken place, the licensee shall notify the Local Authority and Water Services Authority as soon as practicable after such an incident.
- 11.7 In the case of any incident relating to discharges to water, the licensee shall notify the Local and Water Services Authority and the South-Western Regional Fisheries Board as soon as practicable after such an incident.
- 11.8 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.
- 11.9 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 (if provided), 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.
- 11.10 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.
- 11.11 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) 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
 - (viii) the current Landfill Environmental Management Plan (LEMP); and
 - (ix) any elements of the licence application referenced in this licence.

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

11.12 The licensee shall submit to the Agency, by the 31st 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 D: Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.

- 11.13 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) with the exception of waste accepted at the Civic Amenity Facility 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);
 - 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;
 - details of all waste consigned abroad for Recovery and classified as 'Green' in accordance with the EU Shipment of Waste Regulations (Council Regulation EEC No. 1013/2006, as may be 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: Control & Monitoring*, of this licence; and
 - (ix) the tonnage and EWC Code for the waste materials recovered/disposed on-site.
- 11.14 The licensee shall submit report(s) as required by the conditions of this licence to the Agency's Headquarters in Wexford, or to such other Agency office as may be specified by the Agency.
- 11.15 All reports shall be certified accurate and representative by the facility manager or a nominated, suitably qualified and experienced deputy.

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 €13,066, 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 2008. The first payment shall be a pro-rata amount for the period from the date of grant of this licence to the 31st day of December, and shall be paid to the Agency within one month from the date of grant of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency of its relevant functions under the Waste Management Acts 1996 to 2008, 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 defray its costs in regard to items not covered by the said annual contribution.

12.2 Environmental Liabilities

- 12.2.1 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.
- 12.2.2 The licensee shall arrange for the completion, by an independent and appropriate qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) to address the liabilities from past and present activities. The assessment shall include those liabilities and costs identified in Condition 10 for execution of the CRAMP. A report on this assessment shall be submitted to the Agency for agreement within twelve months of date of grant of this licence. The ELRA shall be reviewed as necessary to reflect any significant change on site, and in any case every three years following initial agreement. The results of the review shall be notified as part of the AER.
- 12.2.3 As part of the measures identified in Condition 12.2.1, 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.
- 12.2.4 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Decommissioning Management Plans and Financial Provision when implementing Conditions 12.2.2 and 12.2.3 above.
- 12.2.5 Unless otherwise agreed, any revision to that part of the indemnity dealing with restoration and aftercare liabilities (refer Condition 10.7.1) shall be computed using the following formula:

	$Cost = (ECOST \times WPI) + CiCC$
Where:	
Cost	= Revised restoration and aftercare cost
ECOST	= Existing restoration and aftercare cost
WPI	Appropriate Wholesale Price Index [Capital Goods, Building & Construction (i.e. Materials & Wages) Index], as published by the Central Statistics Office, for the year since last closure calculation/revision.
CiCC	= Change in compliance costs as a result of change in site conditions, changes in law, regulations, regulatory authority charges, or other significant changes

12.3 Cost of landfill of waste

In accordance with the provisions of Section 53A of the Waste Management Acts 1996 to 2008, the licensee shall ensure the costs in the setting up, operation of, provision of financial security and closure and after-care for a period of at least 30 years shall be covered by the price to be charged for the disposal of waste at the facility. The statement required under Section 53A(5) of said Acts is to be included as part of the AER.

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

SCHEDULE: A Limitations

A.1 Limitation on Temporary Waste Transfer Activities

The operation of the temporary Waste Transfer Station is limited to the period of time during the construction of the new Waste Transfer Station as proposed in the waste licence review application (See condition 3.27).

A.2 Waste Acceptance

Table A.1 Waste Categories and Quantities

	Waste Types	Maximum ^{Note 2} (Tonnes Per Annum)
	Residual Municipal Waste for disposal ^{Note 1}	17,000
Non-Hazardous Waste	Storage of Waste prior to Recovery Note 1	7,000
	(Including paper and cardboard, plastic, tetra packs, scrap metal. Timber, non-hazardous WEEE, furniture, drink and food cans, glass, Construction and Demolition)	7,000
	Storage of Waste prior to Recovery or Disposal	152
Hazardous Wastes ^{Note 3}	Including Waste Oil, Oil filters, paint and ink, batteries, fluorescent light bulbs, Hazardous WEEE, out of date medicines	
Total i	ncluding disposal and recovery	24,152

Following closure of the landfill, this waste shall be transferred to another licensed waste facility.

Note 2: The limitation on individual non-hazardous waste types may be varied with the agreement of the Agency subject to the total limit for non-hazardous waste staying the same.

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Note 3: Hazardous waste types as detailed, or as may otherwise be agreed in advance by the Agency.

SCHEDULE: B Emission Limits

B.1 Emissions to Air

Landfill Derived Gas Concentration Limits:

(Measured in any building on or adjacent to the facility and perimeter boreholes).

ide	Carbon Dioxide	Methane
	1.5 % v/v	20 % LEL (1% v/v)
<u></u>	1.5 /0 // /	
	.	L

Emission Limits Values for Landfill Gas Flare:

Emission Point Reference number: A1-1 Minimum discharge height: 8.5m

Parameter	Flare (enclosed) Emission Limit Value Note 1
Nitrogen oxides (NO _x)	150 mg/m ³

Note 1: Dry gas referenced to 5% oxygen by volume for utilisation plants and 3% oxygen by volume for flares.



Dust Deposition Limits:

Measured at the monitoring points D1, D3, D6, D8, D9, D10, D11 and D12 shown on Drawing No. 2528-2616 A of the application (or as may be amended under this licence).

	Level (mg/m ² per day) ^{Note 1}
	350
Note 1:	30 day composite sample with the results expressed as mg/m ² per day.

B.2 Emissions to Water

There shall be no emissions to water of environmental significance.

B.3 Noise Emissions

Daytime dB(A) L _{Aeg} (30 minutes)	Night-time dB(A) L _{Aeq} (30 minutes)
55 ^{Note 1}	45 ^{Note I}

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.

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SCHEDULE: C Control & Monitoring

C.1.1. Control of Emissions to Air

Emission Point Reference No: Description of Treatment: A1-1 Landfill gas enclosed flare

Cont	trol Parameter	Monitoring	Key Equipment ^{Note 1}
Continu	ious burn	Continuous with alarm/call-out	Flame detector or equivalent approved Pumps/engines
Extract	ion	Continuous with alarm/call-out	Pressure gauge or equivalent approved Pumps/engines
Note 1:	The licensee shall main system.	tain appropriate access to standby and/or s	pares to ensure the operation of the abatement
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C.1.2. Monitoring of Emissions to Air

Emission Point Reference No.: A1-1 Flare Stack

Parameter	Flare (enclosed) Monitoring Frequency	Analysis Method ^{Note 1} /Technique
Inlet		
Methane (CH ₄) % v/v	Continuous	Infrared analyser or equivalent approved
Carbon dioxide (CO ₂) % v/v	Continuous	Infrared analyser or equivalent approved
Oxygen (O ₂) % v/v	Continuous	Electrochemical or equivalent approved
Process Parameters		
Combustion temperature Residence time	Continuous Quarterly	Temperature probe/datalogger To be agreed.
Outlet		
Carbon monoxide (CO)	Continuous	Flue gas analyser/datalogger or equivalent approved
Nitrogen oxides (NOx)	Biannually	Flue gas analyser or equivalent approved
Sulphur dioxide (SO ₂)	Biannually	Flue gas analyser or equivalent approved

Note 1: All monitoring equipment used should be intrinsically safe.

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C.1.3. Monitoring of Landfill Gas Emissions

Perimeter landfill gas boreholes L1 - L8 as shown in Drawing 2528-2616 A of the Location: application

At least one monitoring point per cell (to be agreed) Note 1

Aonthly Infrared a Aonthly Infrared	analyser/FID
Aonthly Infrared	
minurea	
Aonthly Electroch	emical cell
Aonthly Standard	method

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Monitoring. Note 2: Or other method agreed.

C.2.1. Monitoring of Effluent Emissions to Water

There shall be no process effluent emissions to water.

C.2.2. Monitoring of Storm Water Emissions

Emission Point Reference No:

SW7, S9

Parameter	Monitoring Frequency	Analysis Method/Technique	
pH	Monthly	Standard method	
Temperature	Monthly	Standard method	
COD	Monthly	Standard method	
Total Ammonia	Monthly	Standard method	
Suspended Solids	Monthly	Standard method	
Chloride	Monthly	Standard Method	
Conductivity	Weekly	Standard method	
Visual Inspection	Weekly	Sample and examine for colour and odour.	

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C.3 Ambient Monitoring

C.3.1 Noise Monitoring

Measured at monitoring points N1, N2, N6, N7, N8, N10, N12 Note 1: as shown in Drawing 2528-2616 A of the application.

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

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

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C.3.2 Surface Water, Groundwater and Leachate Monitoring

SW1-SW9 Note 1	GW1 - GW8 Note 1	L1-L8 ^{Note 1}
Stations	Stations	Stations
Surface Water	Groundwater	Leachate

Surface Water Groundwater and Leachate Monitoring Locations

Note 1: As shown in Drawing 2528-2616 A of the application.

PARAMETER ^{Note 1}	SURFACE WATER Note 2 Monitoring Frequency	GROUNDWATER Monitoring Frequency	LEACHATE Note 3 Monitoring Frequency
Visual Inspection/Odour Note 2	Weekly	Quarterly	Not Applicable
Groundwater Level	Not Applicable	Quarterly	Not Applicable
Leachate Level	Not Applicable	Not Applicable	Continuous
Ammoniacal Nitrogen	Quarterly	Quarterly	Annually
BOD	Not Applicable	Not Applicable	Annually
COD	Not Applicable	Not Applicable	Annually
Chloride	Quarterly	Annually	Annually
Dissolved Oxygen	Annually	Not Applicable	Not Applicable
Electrical Conductivity	Quarterly	Quarterly	Annually
Ph	Not Applicable	Not Applicable	Annually
Metals / non metals Note 3	Annually	Annually	Annually
Cyanide (Total)	Not Applicable	Annually	Annually
Fluoride	Not Applicable	Annually	Annually
List I/II organic substances Note 4	Not Applicable	Annually	Not Applicable
Mercury	Annually	Annually	Annually
Sulphate	Annually	Annually	Annually
Total P	Annually	Annually	Annually
Biological Assessment Note 1: All the analysis shall be carried out by	Annually Note 5	Not Applicable	Not Applicable

Note 1: All the analysis shall be carried out by a competent laboratory using standard and internationally accepted procedures.

Note 2: Where there is evident gross contamination of leachate, additional samples should be analysed.

Note 3: Metals and elements to be analysed by AA/ICP should include as a minimum: boron, cadmium, calcium, chromium (total), copper, iron, lead, magnesium, manganese, nickel, potassium, sodium and zinc.
 Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or

Note 4: Samples screened for the presence of organic compounds using Gas Chromatography / Mass Spectrometry (GC/MS) or other appropriate techniques and using the list I/II Substances from EU Directive 76/464/EEC and 80/68/EEC as a guideline. Recommended analytical techniques include: volatiles (US Environmental Protection Agency method 524 or equivalent), semi-volatiles (USEPA method 525 or equivalent, and pesticides (USEPA method 608 or equivalent).
 Note 5: Appropriate biological methods (such as EPA Q-Rating System) to be used for the assessment of rivers and streams.

Locations to be agreed with the Agency.

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SCHEDULE: D Annual Environmental Report

Emissions from the facility. Waste management record. Resource consumption summary.	
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.	
Pollutant Release and Transfer Register – report for previous year.	
Pollutant Release and transfer Register - 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.	
Report on the assessment of the efficiency of use of raw materials in processes and the redugenerated.	action in waste
Report on progress made and proposals being developed to minimise water demand and the v effluent discharges.	olume of trade
Development/Infrastructural works summary (completed in previous year or prepared for current y	/ear).
Reports on financial provision made under this licence, management and staffing structure of the programme for public information.	e facility, and a
Closure, restoration & aftercare management Plan.	
Any other items specified by the Agency.	
Waste activities carried out at the facility.	
Quantity and composition of waste recovered, received and disposed of during the reporting period an year (relevant EWC codes to be used).	d each previous
Full title and a written summary of any procedures developed by the licensee in the year which relates operation.	to the facility
Waste Recovery Report.	
Review of nuisance controls.	
Volume of trade effluent/leachate and/or contaminated storm water produced and volume transported	off-site.

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SCHEDULE: E Specified Engineering Works

Specified Engineering Works

Development of the facility including installation of waste-handling, processing, recycling/recovery infrastructure and installation of increased waste processing capacity as well as any abatement system(s).

Installation drainage network including of silt traps and oil interceptors.

Installation of dust/odour system.

Installation of Construction and Demolition Waste Recovery Area.

Any other works notified in writing by the Agency.

Installation of capping and other closure and restoration works.

Signed on behalf of the said Agency On the 7th day of October, 2008

Marie Olanor

Authorised Person