

Waste Licence Applications,  
Office of Climate, Licensing & Resource Use,  
Environmental Protection Agency,  
Headquarters P.O. Box 3000,  
Johnstown Castle Estate,  
Co. Wexford

2<sup>nd</sup> April 2014

RE: Application for Licence Greenstar, Dock Road, Limerick (W0082-02)

Dear Sir / Madam,

On behalf of Starrus Eco Holding Limited, trading as Greenstar, I enclose one original and one hardcopy of the application for an Industrial Emission Directive (IED) Licence along with one original and one copy of the Environmental Impact Statement (EIS), which accompanies the application. I also enclose two CD-ROM discs containing two files of the IED application and two files of the EIS and one CD-ROM containing Attachment B2 in searchable PDF format. The content of the electronic files is a true copy of the original application form and supporting information.

The application includes: -

- Application Fee €30,000,
- Completed Application Form,
- Accompanying Document in Support of the Application, including Attachments A-M.
- Environmental Impact Statement.
- 3. No CD-ROM Discs.

Yours sincerely,

---

Jim O'Callaghan

1204802201/JOC/KC

Encl

CC: Mr. Malcolm Dowling



# Industrial Emissions Activities Licence

## Application Form

<p><b>EPA Reg. N<sup>o</sup>:</b> (Office use only)</p>	<input type="text"/>
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### Environmental Protection Agency

P.O. Box 3000, Johnstown Castle Estate, Co. Wexford

Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699

Web: [www.epa.ie](http://www.epa.ie) Email: [Industrial\\_Emissions\\_Licensing\\_Queries@epa.ie](mailto:Industrial_Emissions_Licensing_Queries@epa.ie)

**Tracking Amendments to Application Form**

<b>Version No.</b>	<b>Date</b>	<b>Amendment since previous version</b>	<b>Reason</b>
V.1.0	June 2013	N/A	Introduction of IE (Licensing) Regulations 2013
V.2.0	March 2014	Amendments to Section A, B and I.	Further clarification of IE (Licensing) Regulations 2013

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## ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for an Industrial Emissions Activity Licence under the Environmental Protection Agency Act, 1992, as amended. There is a separate application form for applicants who wish to apply for Classes 6.1 or 6.2 Intensive Agriculture.

The Application Form **must** be completed in accordance with the instructions included in this form and available on the EPA website. A valid application for an Industrial Emissions Activity (IEA) licence must contain the information prescribed in the Environmental Protection Agency (Industrial Emissions)(Licensing) Regulations, 2013. Regulation 9 of the Regulations sets out the statutory requirements for information to accompany a licence application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in Regulation 9. In order to ensure a legally valid application in respect of Regulation 9 requirements, please complete the Regulation 9 Checklist provided in Annex 2.

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Environmental Protection Agency Act, 1992, as amended, and the Environmental Protection Agency (Industrial Emissions)(Licensing) Regulation 2013. While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantees, undertakings and warranties concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation on the EPA website then the requirements in this Application Form shall take precedence. The requirements of the 2013 Regulations, referenced above, shall take precedence over any considerations mentioned in this Application Form or on the website.

## SECTION A: NON-TECHNICAL SUMMARY

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the carrying on of the activity/activities and describe mitigation measures proposed or existing to address these impacts. This description should also indicate the normal operating hours and days per week of the activity.

The following information must be included in the non-technical summary:

- The relevant class or classes of activity in the First Schedule of the EPA Act 1992 as amended,
- Indication of whether EIS and planning permission documents are included,
- Indicate relevant BAT guidance documents or BAT Conclusions decisions,
- The title of the relevant BREF document
- Information on how the emission levels have been determined,
- Indication if EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2006 apply,
- If a derogation under Section 86A(6) is being sought and the specific reasons for such derogation,
- A description of:
  - the installation (plant, methods, processes, abatement, recovery and treatment systems and operating procedures for the activity), with emphasis on the main measures to avoid, reduce and if possible offset the major adverse effects on the environment
  - the raw and auxiliary materials, substances, preparations, fuels and energy which will be produced by or utilized in the activity,
  - the sources of emissions from the installation,
  - the environmental conditions of the site of the installation (e.g. soil and groundwater, air, noise, surface water) including reference to a Baseline Report where applicable,
  - the nature and quantities of existing and proposed emissions from the installation into each medium as well as a summary of the assessment of the effects of the emissions on the environment as a whole,
  - the proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation,
  - summary of the quantity and nature of wastes which may be produced or accepted at the installation,
  - measures to ensure that waste production is avoided in accordance with the waste hierarchy in Council Directive 98/2008/EC on waste and section 21A of the Waste Management Act 1996, as amended; where waste is generated, it is prepared for re-use, recycled or recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment (applicants should provide this information in the context of the Waste Management Act 1996, as amended);

- all the appropriate preventive measures are taken against pollution, in particular through application of the Best Available Techniques (BAT) or BAT Conclusions Decision;
- the necessary measures are to be taken under abnormal operating conditions, including start up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages;
- the necessary measures to be taken on and following permanent cessation of activities to avoid any risk of environmental pollution and return the site of the activity to a satisfactory state or the state established in the baseline report if required;
- measures planned to monitor emissions into the environment,
- measures to comply with an environmental quality standard,
- measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater,
- measures to be taken for minimizing pollution over long distances or outside the territory of Ireland,
- the main alternatives to the proposed technology, techniques and measures studied by the applicant.

Supporting information should form **Attachment N° A.2**

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## NON-TECHNICAL SUMMARY

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Starrus Eco Holding Ltd trading as Greenstar, Dock Road, Limerick is applying to the Environmental Protection Agency (EPA) for a Licence for its existing Materials Recovery Facility at Dock Road, Limerick. It is intended to increase the amount of waste accepted at the facility from 90,000 tonnes annually to 130,000 tonnes. The classes and nature of the industrial emissions directive activities, in accordance with the First Schedule to the Act of 1992 as amended, are:

11.1 The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.

11.4.(b) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply):

(ii) pre-treatment of waste for incineration or co-incineration;

Greenstar had obtain planning permission from Limerick County Council for planning permission for the proposed change and a copy of the Notification to Grant Permission is included in this application. Greenstar prepared an Environmental Impact Statement (EIS) as part of the application and a copy of the EIS is included in the application.

The design and method of operation at both the existing facility and proposed development are based on the requirements of the Agency's Final Draft BAT Guidance on Best Available Techniques for the Waste Sector: Materials Recovery and Transfer and of the European Commission's Reference Document on Best Available Techniques for the Waste Treatment Industries 2006 (BREF), which specifies the Best Available Techniques (BAT) for Waste Management Facilities.

The emission limit values were determined by those set in the existing Waste Licence, which comply with BAT, and an assessment of the impacts of the new emission sources, which include odours and noise.

The EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations 2006 do not apply.

### The Installation

The site is located in the townland of Ballykeefe. The current Waste License area encompasses approximately 2.38 hectares (ha) and comprises two discrete parts. The first is controlled by GES and contains the facility (20,000 m<sup>2</sup>). The second (3,800m<sup>2</sup>) is controlled by CLIIB, the landowners of the entire licensed area and is not used for waste activities.



CLIIB, who were the original licensee, sold their waste business but retained control of a portion of the licence area for use as part of their crane hire business. There is a fence between the Greenstar and CLIIB controlled areas.

The facility is approximately 120m off the Dock Road and is accessed by a common access road serving the facility and other occupiers of the industrial lands. There are two adjoining waste handling buildings (Building 1 and 2). Building 1 is currently used for sorting and compacting recyclables (paper, cardboard, plastics etc.) recovered from the incoming wastes. Building 2 is currently used for compacting and wrapping the mixed municipal solid wastes.

There is a separate office building and adjoining vehicle and plant maintenance workshop near the site entrance. An electrical substation along the south-western boundary wall is owned by Electric Ireland.

The open yards are paved and are used for external waste storage bays (C&D, glass, metals, timber and baled waste), skip storage, truck parking and a vehicle wash area, which is to the north of Building 1.

Currently approximately 20 full time staff at the facility, including a Facility Manager, weighbridge clerk, machine operators and general operatives. The facility obtains water from the municipal water supply system. The electricity power supply is provided by Electric Ireland.

Surface water run-off is generated by rainfall on the roof of the offices and workshop building, the waste handling buildings and the paved open yard areas. The run-off from the paved yards and maintenance building is collected and discharged to a man-made drain at the north eastern site boundary. Run-off from the roofs of Buildings 1 and 2 discharges to a manmade perimeter drain along the western boundary. It is proposed to divert run-off from the yards to the north and east of the waste buildings to a new foul sewer, which will be installed by the landlord and will connect to the Bunlickey Wastewater Treatment Plant.

The only wastewater emission is sanitary wastewater from the toilets/canteen. This is collected and treated in an on-site Klargester Biodisc wastewater treatment plant, with the final effluent discharging to an onsite percolation area. Sanitary wastewater from the neighbouring CLIIB yard is also treated in the Klargester. It is proposed to divert the sanitary wastewater to the new foul sewer that will be installed by the landlord. Subsequently the Klargester will be decommissioned. It is also proposed to restart washing vehicles and bins at the facility and discharge the wastewater to the foul sewer.

### *Plant & Equipment*

The type and numbers of fixed and mobile plant used to handle and process the waste is shown in Table 1. The proposed increase in the amount of wastes accepted does not require the provision of any additional plant items

**Table 1 Plant**

No.	Plant	Operational Capacity Tonnes/day	Standby Capacity Tonnes/day
1	360° case Excavator	300	200
1	Volvo Loading Shovel	500	350
2	Doppstadt shredders	200	150
1	Cardboard baler	100	75
1	Waste Baler	350	200
3	New Holland teleporters	350	200
1	Hyster forklift	100	75
1	Scarab minor roadsweeper	n/a	n/a

In addition to the larger plant items, there are welding units and a compressor in the maintenance workshop. The skip lorries and rear end loaders (REL) based at the facility are neither refuelled nor serviced on-site.

Commercial and Industrial (C&I) Waste

The C&I wastes comprises mixed and segregated recyclables (paper, cardboard, glass, metal, green waste and wood). The mixed packaging is processed inside Building 1 to separate out the plastic, card and paper which are then baled and stored prior to transfer to a suitable permitted/licensed off-site recycling outlet. Biodegradable wastes that are suitable composting are bulked and sent to an offsite composting facility. The remaining non-recyclable material is bulked up and sent to appropriate licensed disposal facilities.

Construction and Demolition (C & D) Waste

The C&D waste comprises mixed wastes (rubble, stone, timber, metal etc) and soil and stone. The material arrives in skips of varying sizes. The loads are inspected, with any plasterboard removed and placed in a dedicated skip located inside the building, and the remainder off loaded into an external C&D bay. The majority of the incoming waste is recovered and sent off-site either for re-use or recycling. The non-recyclable materials are transferred to a licensed landfill.

Municipal Waste

The incoming waste is deposited on the floor of Building 2 and is then either bulked up for removal and disposal at an approved residual landfill facility or directed to the baler where it is compacted into bales and wrapped in plastic sheeting. The wrapped bales are then stored on the paved yard outside the building pending consignment to overseas waste to energy recovery plants. The bales are wrapped in eight layers of plastic sheeting that protects the wastes from rainfall and prevents the infiltration that could generate a leachate. The average storage time for a bale is 1 week.

In the future it is envisaged that further processing of the waste may be required to produce a higher quality product, for example Solid Recovered Fuel (SRF), that is suitable for use as a replacement for non-renewable fossil fuel. This will involve the removal of poorly combustible materials so as to increase the calorific value.

Timber Shredding

Up until 2012, untreated timber pallets and untreated construction timbers were shredded in the northern area of the yard and stored in a dedicated shredded timber bay before being sent for use as a compost bulking/aeration agent, or as raw material in chipboard/MDF manufacturer. This activity has ceased, but may restart in the future.

External Storage

A large portion of the open yard to the east of Buildings 1 and 2 is used for empty skip storage. There are open metals, glass and timber storage bays at the northeast corner of the yard and along the northern boundary. Bales of compacted mixed municipal solid waste are stored externally in the north east of the site. The bales are wrapped in eight layers of plastic sheeting that protects the wastes from rainfall and prevents the infiltration that could generate a leachate.

The remaining wastes that are stored externally comprise inert construction and demolition wastes in the designated C& D Bay to the north of Building 2 and baled clean cardboard, paper and plastics and scrap metal.

**Raw & Auxiliary Materials and Energy Usage**

Facility operations involve the consumption of water, oil and electricity. The estimated quantities used annually at full capacity are given in Table 2

**Table 2 : Resource Consumption**

Resources	Quantities 2012
Diesel (green)	60,000 litres
Electricity	113,567 kW
Hydraulic Oil	4500 litres
Engine Oil	1500 litres
Mains Water	8,200 m <sup>3</sup>

**Sources of Emissions**

The actual and potential emissions from the site are:

Noise from plant and equipment used to process the wastes and the delivery/collection vehicles.

Dust from waste processing and vehicle movements on yards during dry weather.

Rainwater run-off from the yards and building roofs.

Odours from the MSW

Vehicle exhaust gases from the delivery and collection vehicles.

Treated effluent from the on-site sanitary wastewater treatment plant

## **Environmental Conditions**

The facility is located in the northern section of an area developed for commercial and industrial uses. The lots to the south of the site are occupied by warehousing units, oil distribution centres, truck sales and repair facilities and Cussen Crane Hire.

The climate in the area is mild and wet, with the prevailing wind direction from the south west. The subsoil comprise 0.0-2.5m – Made Ground (gravely sand containing ash, wood, glass, metals, slates and plastics) underlain by natural approximately 1m of silty clay alluvium with sand and gravel lenses, which in turn is underlain by up to 4m of Silts overlying a minimum of 1.5m of sandy Clay. The bedrock is Visean Undifferentiated Limestone, which is a pure bedded limestone.

The available information on the aquifer indicates that the subsoils at the site are not significantly water bearing. The bedrock is classified as Locally Important Aquifer Generally Moderately Productive (Lm). The aquifer vulnerability rating for the site is Low.

The facility is in the catchment of the Ballinacloy River, which rises to the south east of the site and flows northwest to confluence with the River Shannon via the Ballinacloy Creek. Both the Ballinacloy Creek and the Shannon are tidally influenced.

Rainwater run-off from the site goes to perimeter man-made drains that discharge to Bunlickey Lake. The surface water monitoring carried out in accordance with the current licence conditions confirms that the run-off from the site meets the emission limit values set in the licence.

The ambient air quality is good and the routine dust monitoring carried out in accordance with the current licence conditions confirms dust is not an issue. The noise levels in the area are typical of an area zoned for industrial use. The annual noise monitoring confirms the site is not a source of noise nuisance.

Historic activities have caused soil and groundwater contamination at the site and a baseline report has been prepared.

## **Nature of the Emissions and Assessment of Impact**

### **Climate**

All new developments that give rise to extra greenhouse gases (GHG) emissions are considered to have a negative effect on climate. While the increase in the amount of waste accepted will result in additional GHG emissions from the handling equipment and transport vehicles the increase will be so small as to mean the development will have an imperceptible negative impact.

### **Soils and Geology**

The proposed changes do not involve any excavations or ground disturbance. At present sanitary wastewater is treated in an on-site wastewater treatment plant, with the treated effluent discharged to a percolation area. It is proposed to connect to the foul sewer, following which the on-site treatment plant will be

decommissioned and the discharge to the percolation area will stop. This will have a positive impact on soils.

### **Water**

The only emission to surface waters is run-off from the paved yards and building roofs. It is proposed to divert the run-off from the section of the yard that is crossed by transport vehicles and where waste is stored to the foul sewer. This will reduce the volume of surface water emissions and reduce the potential for contamination of the run-off and will have a perceptible positive impact.

The development will not have any impact on the rainfall contribution to groundwater and, as there will be no new emissions to ground, there will be no impact on groundwater.

### **Ecology**

As the entire site consists of open paved areas, with buildings, there are no sensitive ecological habitats within the site boundaries. Bunlickey Lake, which is 500m to the west of the site and the stretch of the River Shannon, which is 400m to the north are protected sites under the EU Habitats and Birds Directives (Special Protection Area (SPA) and Special Area of Conservation (SAC)).

A screening assessment of the impacts the proposed change would have on the SPA and SAC was carried out. It concluded that as the change does not require the construction of any new buildings, the use of any additional equipment that could be a cause of disturbance, or result in any new or changes to existing emissions from the facility, it will have no impact on either the SPA or the SAC and therefore mitigation measures are not required.

### **Air Quality**

The existing emissions to air from the site are dust and vehicle and plant exhaust emissions. The routine dust monitoring carried out as required by the Waste Licence has established that dust emissions are not a cause of nuisance. The proposed change will not result in any new sources of dust and therefore mitigation measures are not needed.

The increase in the amount of waste accepted will result in extra vehicle movements and an associated increase in the exhaust emissions; however these will be very small in the context of the site's location in a well established industrial area. The trucks used to transport the wastes to and from the site are fitted with catalytic converters to reduce the amount of nitrous oxides in the exhaust gas.

### **Noise**

The transport and processing of the wastes are sources of noise. However, the routine noise monitoring carried out at the facility has established that the current operations are not having any impacts on the closest noise sensitive locations. The proposed change will not result in any new sources of noise and therefore will have an imperceptible impact on noise and mitigation measures are not needed.

**Proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation**

The design and method of operation of both the existing facility and proposed development are based on the requirements of the European Commission's Reference Document on Best Available Techniques for the Waste Treatment Industries 2006 (BREF), which specifies the Best Available Techniques (BAT) for Waste Management Facilities and the Agency's Final Draft BAT Guidance on Best Available Techniques for the Waste Sector: Materials Recovery and Transfer.

The current waste licence specifies the manner in which the facility must operate so as to ensure that pollution and/or nuisance to neighbours and the general public is prevented. They require the site management team to have the appropriate training and qualifications; identify the types of wastes and processes that can be carried out; specify how wastes and raw materials that have the potential to cause pollution are handled and stored; the control measures that must be applied to prevent nuisance, for example dust suppression, and require appropriate emergency response procedures to be in place.

**Summary of the Quantity and Nature of the Waste**

The overall amount of waste accepted will increase from 90,000 tonnes to 130,000 tonnes annually. The wastes will be non-hazardous and will be generated by households, commercial and industrial operations and construction & demolition sites.

**Measures to Comply with Waste Management Hierarchy**

The existing facility is designed and operated to maximise the recovery of recyclables from the incoming wastes. The proposed changes are consistent with the Waste Hierarchy as the use of the MSA as a fuel gains the maximum value from the waste.

**BAT**

Condition 2 of the current Waste Licence requires Greenstar to develop and implement an Environmental Management System for the facility which is consistent with the requirements of both Agency's BAT Guidance Note and the BREF. GES has an accredited 14001 EMS in place.

The Licence conditions require the implementation of the control measures specified in the BREF in so far as they apply to non-hazardous solid waste processing and the prevention of soil contamination. The site location and licence conditions also incorporate the relevant control techniques referenced in the Agency's BAT Guidance in particular:

- The location of the facility with regard to sensitive off-site receptors to emissions to air, including odours and noise, and.
- The operational procedures applied to the waste types being accepted and the waste processing activities at the facility, including the wrapping of the baled MSW within 24 hour of receipt at the facility, that minimise the risk of odours.
- Surface water run-off from areas of the site not used for waste storage is directed into the surface water system. The surface water from

hardstanding areas passes through a silt trap and oil interceptor before final discharge and only roof water goes directly to the surface water system

The proposed changes take into consideration the requirements of Sections 5.2 and 4.6.22 of the BREF and Section 4.3.3.2 of the Agency's BAT Guidance. In particular;

- Waste handling and storage areas and vehicle washing areas will drain into the foul sewer. The run off from storage areas and vehicle washing areas will pass through a silt trap and oil interceptor prior to discharge to the foul sewer.

### **Abnormal Operating Conditions**

Greenstar has prepared a Health & Safety Statement for all waste facilities that requires the completion of hazard identification and risk assessments to minimise the occurrence to accidents. It includes for staff training on actions to be taken in abnormal conditions. Greenstar had prepared and adopted an Emergency Response Procedure (ERP). The ERP identifies all potential hazards at the site that may cause damage to the environment and also specifies roles, responsibilities and actions required to deal quickly and efficiently with all foreseeable major incidents and to minimise environmental impacts. This is currently being amended to update the fire prevention measures and personnel changes.

### **Avoidance of the Risk of Environmental Pollution due to Closure of the Facility**

Greenstar has prepared an Environmental Liability Risk Assessment (ELRA) and Decommissioning Management Plan (DMIP) for the facility and these, along with a proposal for Financial Provision, have been submitted to and approved by the Agency.

### **Environmental Monitorings**

Environmental monitoring is carried out in accordance with the licence conditions. The monitoring includes noise, dust, surface water, groundwater and odours.

### **Measures to Comply with an Environmental Quality Standard**

The emission limit values proposed in the application and those that will be set by the EPA in the new licence are and will be based on achieving compliance with the relevant EQS.

### **Measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater.**

After the decommissioning of the on-site wastewater treatment plant, there will be no discharge to ground. The site is designed to prevent accidental emissions to ground.

## **The Main Alternatives to the Proposed Technology, Techniques and Measures**

### *Alternative Sites*

The alternative to not increasing amount of wastes accepted would be to develop a new facility at another location. This would involve either the acquisition/leasing of a suitable building, or the construction of a new facility and the provision of new processing equipment. Given the relatively small amount of wastes involved (40,000 tonnes/annum), the development of a new facility by Greenstar at another location is not economically viable.

Site activities are not a source of significant adverse environmental impacts and do not result in the impairment of the amenities in the surrounding area. The proposed changes will not result in any new emissions and will not require the provision of any new or additional emission control and mitigation measures, other than the diversion of surface water run-off to the foul sewer, which was requested by Limerick County Council. Therefore, relocation to an alternative site is not necessary from an environmental viewpoint.

The facility is close to Limerick Docks, which is the shipping point for the municipal solid waste exported to overseas waste to energy recovery facilities. Relocating to another site would result in an increase in emissions from transport vehicles and transport costs. Therefore, continuing to use the Ballykeeffe facility is the best environmental and economic option.

### *Alternative Site Layout & Processes*

The existing site layout, buildings, plant and equipment can readily accommodate the proposed increase in waste inputs. Therefore, there is no need for alternative configurations or technologies.

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<b>SECTION B: GENERAL</b>
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**B.1. Owner/Operator**

<b>Name*:</b>	Starrus Eco Holding Ltd
<b>Address:</b>	Fassaroe
	Bray
	County Wicklow
<b>Tel:</b>	01 2746236
<b>Fax:</b>	
<b>e-mail:</b>	

\* This should be the name of the applicant which is current on the date this Licence Application is lodged with the Agency. It should be the name of the legal entity (which can be a limited company or a sole trader). A trading/business name is **not acceptable**.

**Name and Address for Correspondence**

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

<b>Name:</b>	Malcolm Dowling
<b>Address:</b>	Greenstar
	Unit 6, Ballyogan Business Park
	Ballyogan Road
	Sandyford, Dublin 18
<b>Tel:</b>	01-2947990
<b>Fax:</b>	
<b>e-mail:</b>	Malcolm.dowling@greenstar.ie

**CRO No. and address of registered or principal office of Body Corporate**

<b>CRO No.</b>	527552
<b>Address:</b>	Fassaroe
	Bray
	County Wicklow
<b>Tel:</b>	
<b>Fax:</b>	
<b>e-mail:</b>	

If the applicant is a body corporate, the following information must be attached as **Attachment B1**:

- a) a Certified Copy of the Certificate of Incorporation under the Companies Act.
- b) the Company's Registration Number from the Companies Registration Office.
- c) Particulars of Registered Office of the Company.

A copy of the Certificated of Incorporation is in Attachment B1. The address of the company's registered office is provided above.

**Name and address of the proprietor(s) of the land on which the activity is situated (if different from applicant named above):**

<b>Proprietor's Name:</b>	CLIIB Holdings
<b>Address:</b>	Dock Road Limerick
<b>Tel:</b>	061-228855
<b>Fax:</b>	061-229762
<b>e-mail:</b>	

A letter from the landowner consenting to Greenstar's application for the licence is in Attachment B 1.

**Name and address of the owner(s) of the building and ancillary plant in which the activity is situated (if different from applicant named above):**

<b>Name:</b>	
<b>Address:</b>	
<b>Tel:</b>	
<b>Fax:</b>	
<b>e-mail:</b>	

**Name and address of the primary installation contact for enforcement purposes, where a licence is granted (if different from applicant named above):**

<b>Name:</b>	Malcolm Dowling
<b>Position in organisation:</b>	Group Compliance Manager
<b>Address:</b>	Unit 6 Ballyogan Business Park Ballyogan Road Sandyford Dublin 18
<b>Tel:</b>	01 2947969
<b>Fax:</b>	
<b>e-mail:</b>	Malcolm.dowling@greenstar.ie

**B.2. Location of Activity**

<b>Name:</b>	Greenstar
<b>Address*:</b>	Ballykeefe Dock Road Limerick
<b>Tel:</b>	061 226401
<b>Fax:</b>	
<b>Contact Name:</b>	Emma Pierce
<b>Position:</b>	Facility Manager
<b>e-mail:</b>	

\* Include any townland.

<b>National Grid Reference (12 digit 6E,6N)</b>	E 154925 N155660
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Location maps ( $\leq A3$ ), appropriately scaled, with legible grid references should be enclosed in **Attachment B.2**. The site boundary must be outlined on the map in colour.

Geo-referenced digital drawing files (e.g. AutoCAD files) in Irish Grid projection of the site boundary and overall site plan, including labelled emission, monitoring and sampling points, are also required. This data should be provided to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

<b>Name of geo-referenced digital drawing files</b>	Greenstar Lim Sampling and Monitoring Loc RevA
<b>Name of CD-Rom with digital drawing files</b>	CD ROM B2

### B.3. Class of Activity

Identify the relevant activities in the First Schedule of the EPA Act 1992, as amended, to which the activity relates:

Class	Description
11.1	The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.
11.4	Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply: (ii) pre-treatment of waste for incineration or co-incineration;

### B.3A Classes of Waste Activity

If a waste activity is proposed, i.e. if any First Schedule of the EPA Act 1992, as amended class 11 activity is specified in section B.3 above, identify the relevant activities as listed in Annex I and Annex II of the Waste Framework Directive (2008/98/EC). Complete table B.3A provided in Annex 1 of this application form.

**TABLE B.3A Classes of Waste Activity**

#### Waste Framework Directive 2008/98/EC

Annex I Disposal Operations		Y/N
D 1	Deposit into or on to land (e.g. including landfill, etc.).	

<b>Annex I Disposal Operations</b>		<b>Y/N</b>
D 2	Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.).	
D 3	Deep injection (e.g. injection of pumpable discards into wells, salt domes or naturally occurring repositories, etc.).	
D 4	Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.).	
D 5	Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.).	
D 6	Release into a water body except seas/oceans.	
D 7	Release to seas/oceans including sea-bed insertion.	
D 8	Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12.	
D 9	Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcinations, etc.).	
D 10	Incineration on land.	
D 11	Incineration at sea. <sup>1</sup>	
D 12	Permanent storage (e.g. emplacement of containers in a mine, etc).	
D 13	Blending or mixing prior to submission to any of the operations numbered D 1 to D 12. <sup>2</sup>	
D 14	Repackaging prior to submission to any of the operations numbered D 1 to D 13.	Y
D 15	Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced). <sup>7</sup>	Y

<sup>1</sup> This operation is prohibited by EU legislation and international conventions.

<sup>2</sup> If there is no other D code appropriate, this can include preliminary operations prior to disposal including pre-processing such as, inter alia, sorting, crushing, compacting, pelletising, drying, shredding, conditioning or separating prior to submission to any of the operations numbered D1 to D12.

Annex II Recovery Operations		Y/N
R 1	Use principally as a fuel or other means to generate energy. <sup>3</sup>	
R 2	Solvent reclamation/regeneration.	
R 3	Recycling /reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes). <sup>4</sup>	Y
R 4	Recycling/reclamation of metals and metal compounds.	Y
R 5	Recycling/reclamation of other inorganic materials. <sup>5</sup>	Y
R 6	Regeneration of acids or bases.	
R 7	Recovery of components used for pollution abatement.	
R 8	Recovery of components from catalysts.	
R 9	Oil re-refining or other reuses of oil.	
R 10	Land treatment resulting in benefit to agriculture or ecological improvement.	
R 11	Use of waste obtained from any of the operations numbered R 1 to R 10.	
R 12	Exchange of waste for submission to any of the operations numbered R 1 to R 11. <sup>6</sup>	
R 13	Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced). <sup>7</sup>	Y

<sup>3</sup> This includes incineration facilities dedicated to the processing of municipal solid waste only where their energy efficiency is equal to or above:

- 0.60 for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009,

- 0.65 for installations permitted after 31 December 2008,

using the following formula:

$$\text{Energy efficiency} = (E_p - (E_f + E_i)) / (0.97 \times (E_w + E_f))$$

In which:

'E<sub>p</sub>' means annual energy produced as heat or electricity and is calculated with energy in the form of electricity being multiplied by 2.6 and heat produced for commercial use multiplied by 1.1 (GJ/year),

'E<sub>f</sub>' means annual energy input to the system from fuels contributing to the production of steam (GJ/year),

'E<sub>w</sub>' means annual energy contained in the treated waste calculated using the net calorific value of the waste (GJ/year),

'E<sub>i</sub>' means annual energy imported excluding E<sub>w</sub> and E<sub>f</sub> (GJ/year),

'0.97' is a factor accounting for energy losses due to bottom ash and radiation.

This formula shall be applied in accordance with the reference document on Best Available Techniques for waste incineration.

<sup>4</sup> This includes gasification and pyrolysis using the components as chemicals.

<sup>5</sup> This includes soil cleaning resulting in recovery of the soil and recycling of inorganic construction materials.

<sup>6</sup> If there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as, inter alia, dismantling, sorting, crushing, compacting, pelletising, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11.

### B.4 Industrial Emissions Directive

Specify which category/categories of industrial activity referred to in Annex I of the Industrial Emissions Directive (2010/75/EU) is/are to be carried out at the installation.

Category	Description
5.3 (b)(ii)	Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC: (i) biological treatment; (ii) pre-treatment of waste for incineration or co-incineration;

State whether the installation falls under the scope of Chapters III, IV , V and/or VI of the Industrial Emissions Directive (2010/75/EU) and if yes specify the relevant sections and Annex.

The installation does not fall under the scope of Chapters III, IV, V and or/VI do not apply.

IED Chapter(s) and relevant Annex(es)

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Supporting information should be included in **Attachment N° B.4.**

### B.5. Employees/ Capital Cost

Give-

(i) In the case of an established activity, the number of employees and other persons working or engaged in connection with the activity on the date after which a licence is required and during normal levels of operation, or

(ii) In any other case, the gross capital cost of the activity to which the application relates.

<b>Number of Employees (existing facilities):</b>	20 Full time staff
<b>Gross Capital Cost (new proposals) €</b>	

<sup>7</sup> Temporary storage means preliminary storage according to point (1) of Article 3 [of the Waste Framework Directive 2008/98/EC].

**B.6. Relevant Planning Authority and/or Public Authority**

Give the name of the planning authority in whose functional area the activity is or will be carried out.

<b>Name:</b>	Limerick County Council
<b>Address:</b>	County Hall
	Dooradoyle
	County Limerick
<b>Tel:</b>	061 496000
<b>Fax:</b>	061 496001

Planning Permission relating to this application:

<b>B.6.(a) is not required</b>	
<b>B.6.(b) has been obtained</b>	✓
<b>B.6.(c) is being processed</b>	

<b>Local Authority Planning File Reference No:</b>	13A/300
<b>An Bord Pleanála Planning File Reference No:</b>	

The following should be addressed in **Attachment B.6.**

**B.6(a) Planning permission not required**

Where **the new activity or changes to the existing activity which require this licence/review application** does not require a grant of planning permission, the following should be included in **Attachment N° B.6:**

- Confirmation in writing from the planning authority or An Bord Pleanála, as the case may be, that a grant of permission is not required,

**AND**

- Details of previous planning permissions granted for the development comprising the activity, including a copy of the grant of permission and a copy of all conditions.

**AND EITHER**

- Where the planning authority or An Bord Pleanála accepted or required the submission of a copy of an EIS under the Planning and Development Act 2000, as amended, for a previous planning permission application, the required number of copies of the most recent EIS should be submitted. A copy of the planning inspector's report associated with that EIS should also be submitted.

**OR**

- Where an EIS was not required for any previous planning permissions granted for the development comprising the activity, submit confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment was not required for the development by or under the Planning and Development Act 2000, as amended.

- Where a grant of planning permission has never been required for the site of the activity, submit confirmation in writing from the planning authority or An Bord Pleanála, as the case may be, of same.

B.6(b) Planning permission already granted

Where **the new activity or changes to the existing activity which require this licence/review application** has already been granted planning permission by a planning authority or An Bord Pleanála, the following should be included in **Attachment Nº B.6**:

- a copy of the grant of permission and either:
  - (a) where the planning authority or An Bord Pleanála accepted or required the submission of a copy of an EIS under the Planning and Development Act 2000, as amended, the required number of copies of that EIS;

**OR**

- (b) confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment was not required for the development by or under the Planning and Development Act 2000, as amended.
- A summary of all previous planning permissions granted for the site of the activity should be provided.

A copy of the Notification of Decision to Grant Permission is in **Attachment No B6**. An original and one copy of the EIS that was submitted with the planning application is in **Attachment No B6**. A summary of the planning permissions for the site is provided in **Attachment B 6**.

B.6(c) Planning permission under consideration

Where **the new activity or changes to the existing activity which require this licence/review application** involves development or proposed development that requires a grant of planning permission, and the relevant planning application is under consideration by the planning authority or An Bord Pleanála, the following should be included in **Attachment Nº B.6**:

- confirmation in writing from a planning authority or An Bord Pleanála, as the case may be, that an application for permission comprising or for the purposes of the activity to which the application for a licence relates, is currently under consideration, and either:
  - (a) the required number of copies of the EIS relating to that application for permission, where one is required by or under the Planning and Development Act 2000, as amended;

**OR**

- (b) confirmation in writing from the planning authority or An Bord Pleanála that an environmental impact assessment is not required by or under the Planning and Development Act 2000, as amended.
- A summary of all previous planning permissions granted for the site of the activity should be provided.



For B.6(b) and B.6(c) above, please note that in accordance with Section 87(1C) of the EPA Act 1992, as amended, the Agency shall **refuse to consider** the licence application if the applicant does not comply with the requirements of Section 87(1B).

Appropriate Assessment

Where applicable, provide a copy of any screening for Appropriate Assessment report and Natura Impact Statement (NIS) that was prepared for consideration by any planning/public authority as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) in relation to the activity. Where a determination that an Appropriate Assessment is required has been made by any planning/public authority in relation to the activity, a copy of that determination and any screening report and Natura Impact Statement (NIS), and any supplemental information furnished in relation to any such report or statement, which has been provided to the planning/public authority for the purposes of the Appropriate Assessment shall be included in **Attachment N° B.6**.

A copy of a screening for Appropriate Assessment report is included in **Attachment No B6**.

Licences and permits

For existing activities, **Attachment N° B.6** should also contain a table of references to all licences and permits past and present, including those in force at the time of submission. This should include, but is not limited to, any permits/licenses or registration under GHG Emissions Trading Regulations and GMO Regulations.

Details of the Permits and Licences that applied to the site are in **Attachment No. B6**

**B.7. Relevant Water Services Authority**

In the case of a discharge of any trade effluent or other matter to a sewer of a Water Services Authority, give the name of the Water Services Authority in which the sewer is vested or by which it is controlled.

Not applicable. Trade effluent will discharge to a sewer not vested in a Water Services Authority, but which will connect to the Bunlickey Wastewater Treatment Plant via a sewer owned by CLIIB Holdings.

<b>Name:</b>
<b>Address:</b>
<b>Tel:</b>
<b>Fax:</b>

In the case of a discharge of any trade effluent or other matter to a sewer not vested by a Water Services Authority, the applicant must supply as **Attachment N° B.7**;

- (a) the name and address of the owner(s) of the sewer and the waste water treatment plant to which the sewer discharges (e.g. IDA, SFADCo or private undertaker) and who are responsible for the quality of the treated effluent discharging to waters and
- (b) a copy of the effluent regulations and the agreement between the applicant and the aforementioned.

**Details of owner(s) of a sewer and waste water treatment plant not vested in a Water Services Authority**

<b>Name:</b>	CLIIB Holdings
<b>Address:</b>	Dock Road
	Limerick
<b>Tel:</b>	
<b>Fax:</b>	

**B.8. Relevant Regional Health Service Executive**

The applicant should indicate the Regional Health Service Executive where the activity is or will be located.

<b>Name:</b>	HSE West
<b>Address:</b>	31/33 Catherine Street
	Limerick
<b>Tel:</b>	1850341850
<b>Fax:</b>	061-483350

**B.9 Site Notice, Newspaper Advertisement and Planning Authority Notice.**

**Attachment N<sup>o</sup> B.9** should contain a copy of the text of the site notice, a map (no larger than A3) showing its location on site (in accordance with Article 6 of the Regulations) and a copy of the newspaper advertisement. A copy of the notice given to the Planning Authority should also be included.

The site notice, newspaper advertisement and planning authority notice are in **Attachment No B9**.

**B.10 Seveso II Regulations**

State whether the activity is an establishment to which the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations (S.I. No. 74 of 2006) apply.

If yes, outline how the process comes under these regulations.

Supporting information should be included in **Attachment N<sup>o</sup> B.10**.

The activity is not an establishment to which the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations (S.I. No. 74 of 2006) apply.

**B.11 Mercury Regulation**

State whether the activity is one to which the following apply:

- European Communities Mercury (Export Ban and Safe Storage) Regulations (S.I. No. 27 of 2012),

- Regulation (EC) No 1102/2008 of the European Parliament and of the Council of 22 October 2008 on the banning of exports or metallic mercury and certain mercury compounds and mixtures and the safe storage of metallic mercury.

Yes                     No

If yes, outline in **Attachment N<sup>o</sup> B.11** how the activity comes under these Regulations.

### **B.12 Regulations Controlling Fluorinated Greenhouse Gases and Ozone Depleting Substances**

State whether the installation is one to which the following apply:

- Operator of equipment and systems containing ozone depleting substances, in accordance with Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer.

Yes                     No

- Operator of equipment and systems containing fluorinated greenhouse gases, in accordance with Regulation (EC) No. 842/2006 on certain fluorinated greenhouse gases.

Yes                     No

If yes, outline in **Attachment N<sup>o</sup> B.12** how the activity comes under these regulations.

More information and guidance is available on the EPA website:

<http://www.epa.ie/air/airenforcement/ozone/guidanceanddownloads/>

### **B.13 Review of a licence Not Applicable**

State the grounds on which an application for a review of a licence is being made and give the reference number to the relevant licence in the register.

Provide, where appropriate, a copy of the Office of Environmental Enforcement (OEE) correspondence that indicates that the reason for the review cannot be accommodated within the scope of the existing licence.

Include results of emission monitoring and other data, that enables a comparison of the operation of the installation with the best available techniques described in the applicable BAT conclusions and with the emission levels associated with the best available techniques in accordance with Section 86A(9) of the Act of 1992 as amended.

Where the OEE has agreed any variations or adjustments to the conditions or schedules of the existing licence, the licensee must provide details of these agreed variations and adjustments to the existing licence conditions. An updated, scaled drawing of the site layout (no larger than A3) providing visual information on such adjustments or variations where appropriate should be included.

In the case of once-off assessments/ reports required under conditions/ schedules of the existing licence the licensee must provide details of those assessments/ reports that have been completed and agreed with the OEE or as otherwise agreed.

**Attachment N<sup>o</sup> B.13** shall include the schedule of variations and/or adjustments together with the updated drawing.

Condition/ Schedule No.	Existing Condition	OEE Agreement Reference	Description

Supporting information should be included in **Attachment N° B.13**.

## SECTION C: MANAGEMENT OF THE INSTALLATION

### C.1 Site Management & Control

Details should be provided on the management structures for the activity. Organisational charts and all relevant environmental management policy statements, including provisions for on-going assessment of environmental performance, are required.

Details are in **Attachment No C1**

### C.2 Environmental Management System (EMS)

Indicate whether an Environmental Management System has been developed for the installation. If yes, specify which standard and include a copy of the accreditation certificate.

Greenstar has implemented an Integrated Management System (IMS) at the facility in accordance with the requirements of Occupational Health and Safety Assessment Series (OHSAS) 18001:2007 and International Standard Organisation (ISO) 14001:2004. Following successful accreditation to both standards in November 2011, two internal surveillance audits were performed during 2012 and found the IMS to be well maintained. Copies of the ISO 14001 and OHSAS 18001 Certificates are in **Attachment No C2**.

### C.3 Hours of Operation

Provide details of the hours of operation for the installation, including:

- (a) Proposed hours of operation.
- (b) Proposed hours of construction and development works and timeframes.
- (c) For waste activities, the proposed hours of waste acceptance.
- (d) Any other relevant hours of operation expected.

The facility is authorised to operate seven days per week twenty four hours per day. At present, there are two eight hour shifts operating from 06:00 – 14:00 and 14:00 to 22:00.

#### C.4 Fit and Proper Person

The EPA Act in Section 83(5)(xi) specifies that the Agency shall not grant a licence unless it is satisfied that the applicant or licensee or transferee as the case may be is a fit and proper person. Section 84(4) of the EPA Act specifies the information required to enable a determination to be made by the Agency.

- Indicate whether the applicant or other relevant person has been convicted under the Environmental Protection Agency Act 1992, as amended, the Waste Management Act 1996, as amended, the Local Government (Water Pollution) Acts 1997 and 1990, the Air Pollution Act 1987 and the Air Pollution Act 1987 (Environmental Specifications for Petrol and Diesel Fuels)(Amendment) Regulations 2004.
- Provide details of the applicant's technical knowledge and/or qualifications, along with that of other relevant employees.
- Provide information to show that the person is likely to be in a position to meet any financial commitments or liabilities that may have been or will be entered into or incurred in carrying on the activity to which the application relates or in consequence of ceasing to carry out that activity.

This information should form **Attachment N° C**.

The requested information is in **Attachment No C 4**

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**SECTION D: INFRASTRUCTURE & OPERATION**

**D.1. Operational Information Requirements**

Describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems, and operating procedures for the activity, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the activity. Maps and drawings must be no larger than A3 size.

A development and operational history of the site should be included here.

**Attachment N° D** should contain a list of all unit operations (processes) to be carried out, including flow diagrams of each with any relevant additional information.

The operational information requirements and a development and operational history are in **Attachment No D1**. A flow diagram is included in the Waste Processing Procedure in **Attachment No D1**.

**D.2 Additional requirements for waste Activities (not covered above or elsewhere) (All Class 11 of the First Schedule of the EPA Act 1992, as amended)**

This section D.2 of the application form should be completed only by applicants applying for classes 11.1, 11.2, 11.3, 11.4, 11.5, 11.6 and 11.7 (i.e. waste activities) of the First Schedule to the EPA Acts 1992, as amended.

**D.2.1 Wastes to be accepted**

State what wastes will be accepted at the installation for recovery or disposal. Complete table Table D.2(i) and include in **Attachment No. D.2** of the application. The following general guidelines may assist in containing the size of Table D.2(i) where there is a long list of EWC codes proposed.

- For any individual waste stream, described by EWC code or main waste description (e.g. municipal solid waste, mixed recyclables, C&D waste), comprising more than 5% of total intake, complete a single row in table D.2(i).
- For every hazardous waste stream, describe by EWC code, complete a single row in table D.2(i).
- Other waste streams, where the list of waste is long, may be aggregated, according to a waste category, with each relevant EWC code provided.

An EWC code should be provided for every waste proposed for acceptance at the installation.

State whether any wastes to be accepted are classified as animal by-products in accordance with Regulation 1069/2009 and identify the relevant wastes.

The maximum annual tonnage of waste to be handled at the site should be indicated and the year to which the quantity relates indicated.

<b>Maximum Annual Tonnage (tonnes)</b>	130,000
<b>Year</b>	Year 1 of grant of Licence

It should be noted that an applicant may be issued with a licence which restricts the type and quantity of wastes which may be accepted.

### **D.2.2 Waste Acceptance Procedures**

Provide a copy of the waste acceptance procedures employed or to be employed. Describe procedures for checking waste loads as they arrive at the installation. Describe procedures to be implemented in the event of a load of waste arriving at the installation that does not conform to waste acceptance procedures. The location of a quarantine area for handling suspect or non-compliant loads should be described and illustrated on a suitable site drawing.

For landfills and relevant incineration activities, describe how the requirements of *Municipal Solid Waste – Pre-treatment and Residuals Management: An EPA Technical Guidance Document* (EPA, 2009) will be implemented.

For landfills, the applicant should ensure that the requirements of Council Decision 2003/33/EC are addressed in waste acceptance procedures.

The waste acceptance procedures that are and will be employed at the site are described in **Attachment No D2.2**. They are based on the requirements of the current Licence.

### **D.2.3 Waste and material outputs from waste activities**

Describe the waste and material outputs from the installation resulting from the treatment of waste. If no treatment is carried out on the waste, the waste outputs will be the same as the inputs.

If waste is treated, describe the nature and quantity of the treated waste and its onward fate/destination, and in particular whether it is sent for onward recovery or disposal operations.

If waste is treated and a material is produced that is no longer a waste, provide the rationale for such classification. The requirements of article 28 of the European Communities (Waste Directive) Regulations 2011 should be addressed in any such rationale.

Details of the waste and materials outputs from waste activities are in **Attachment No D.2.3**.

### **D.2.4 Principles of self-sufficiency and proximity**

Describe how the proposed waste activities will contribute to the State's obligation to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers. Describe how the proposed waste activities will enable the State to move towards being more self-sufficient in the management of these wastes.

Supporting information should form **Attachment N° D**.

Details on how the proposed waste activities will contribute to the State's waste management obligations are in **Attachment No D.2.4**.

### **D.3 Additional Requirements for landfills (not covered above or elsewhere) (Class 11.5 of the First Schedule of the EPA Act 1992, as amended)**

This section D.3 of the application form should be completed only by applicants applying for classes 11.5 and 11.7 (landfills and underground storage facilities) of the First

Schedule to the EPA Acts 1992, as amended. This includes landfills that are associated with other industrial activities.

All landfills must comply with the requirements of the Landfill Directive (1999/31/EC). It is the applicant’s responsibility to ensure that all relevant requirements of the Directive are addressed and information provided in **Attachment D.3** of the application.

For wastes to be disposed of by landfilling on-site at industrial installations, full details of the disposal site should be submitted (to include *inter alia*, site selection procedures, location maps, (no larger than A3) geology, hydrogeology, operational plan, containment, gas and leachate management, post-closure care).

Applicants should have regard to the requirements of the Landfill Manuals published by the Environmental Protection Agency.

**D.3.1 Class of landfill**

Complete Table D.3(i) and include in Attachment D.3 of the application. State which of the categories in Table D.3(i) is relevant to the current application.

**Table D.3(i) Class of landfill**

(a) landfill for hazardous waste	<input type="checkbox"/>
(b) landfill for non-hazardous waste	<input type="checkbox"/>
(c) landfill for inert waste	<input type="checkbox"/>

**D.3.2 Scale of waste deposition**

Complete Table D.3(ii) and include in Attachment D.3 of the application. State the total quantity of waste for which authorisation is sought to be deposited in the landfill.

**Table D.3(ii) Scale of waste deposition at the landfill**

Total quantity of waste to be deposited at the landfill	Tonnes*	Void in cubic metres (m <sup>3</sup> )
(a) Waste deposited to date		
(b) Total waste to be deposited over the lifetime of the development (including deposited to date)		

\* Explain any conversion/density factors used in calculating the tonnage from the void, or vice versa.

**D.3.3 Liner System**

Complete Table D.3(iii) and include in Attachment D.3 of the application. Table D.3(iii) provides a checklist of items that should be described in greater detail in Attachment D.3.



#### **D.3.4 Leachate Management**

Complete Table D.3(iv) and include in Attachment D.3 of the application. Table D.3(iv) provides a checklist of items that should be described in greater detail in Attachment D.3. Provide a list and illustrate on a site drawing the location of all leachate monitoring, extraction and lead detection boreholes or installations.

#### **D.3.5 Landfill Gas Management**

Complete Tables D.3(v)a to D.3(v)d and include in Attachment D.3 of the application. The tables provide a checklist of items that should be described in greater detail in Attachment D.3. Provide an estimate of the volume of landfill gas which will be produced by the waste for the next 20 years.

#### **D.3.6 Capping System**

Complete Table D.3(vi) and include in Attachment D.3 of the application. Table D.3(vi) provides a checklist of items that should be described in greater detail in Attachment D.3.

#### **D.3.7 Meteorological Data**

State in Attachment D.3 what arrangements are proposed for the measurement of meteorological data at the landfill installation, or for the collation of relevant meteorological information from nearby facilities.

#### **D.3.8 Cost of the landfill of waste**

Describe in Attachment D.3 how all of the costs involved in the setting up and operation of the landfill, including the cost of financial provision, and the estimated cost of the closure and aftercare of the site for a period of at least 30 years will be covered by the gate fee to be charged for the disposal of waste.

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## SECTION E: EMISSIONS

### E.1. Emissions to Atmosphere

#### E.1.A. Details of all point emissions to atmosphere

Details of all point emissions to atmosphere should be supplied. Complete Table E.1(i) for Boiler Emissions and Table E.1(ii) and E.1(iii) for all other main emission points. Complete Table E.1(iv) for minor emission points and provide results of emission monitoring where available.

A summary list of the emission points, together with maps and/or drawings (no larger than A3), and supporting documentation should be included as **Attachment N° E.1**. Plans of emission elevations, relevant roof heights, etc., should also be included, as should detailed descriptions and schematics of all abatement systems.

The applicant should address in particular any emission point where the substances listed in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013, are emitted.

For emissions outside the BAT guidance limit or BAT Conclusions levels, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s). These notes can be found on the EPA website at [www.epa.ie](http://www.epa.ie).

There are no existing point emissions to air and the proposed changes will not give rise to any new point emissions.

#### E.1.B. Fugitive and Potential emissions

Give summary details of fugitive and potential emissions in Table E.1(v).

In relation to activities listed in the Schedule of Council Directive 2010/75/EU (on Industrial Emissions) S.I. No.565 of 2012 on installations and activities using organic solvents;

- specify the relevant category of activity in the Schedule
- specify how the requirements in relation to fugitive emissions will be met.

For waste activities, dust and odour emissions should be described under the headings in this section.

Full details and any supporting information should form **Attachment E.1**.

Details of the fugitive and potential emissions to air are presented in **Attachment E.1**.

### E.2 Emissions to Surface Waters

Tables E.2(i) and E.2(ii) should be completed and provide results of emission monitoring where available.

A summary list of the emission points, together with maps/drawings (no larger than A3) and supporting documentation should be included as **Attachment N° E.2**.

The applicant should address in particular any emission point where the substances listed in the Schedule of EPA (Industrial Emissions) (Licensing) Regulations 2013 S.I. No. 137 of 2013, are emitted.

Details of all substances listed in the European Communities Environmental Objectives (Surface Waters) Regulations 2009, contained in any emission must be presented. All surface water runoff and storm water drains discharging to surface water bodies must be included. A National Grid Reference (12 digit, 6E, 6N) must be given for all discharge points the identity and type of receiving water (river, ditch, estuary, lake, etc.) must be stated.

Where relevant, describe proposed measures or controls that have been identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the EC Environmental Objectives (Surface Waters) Regulations 2009 for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

For emissions outside the BAT guidance limit or BAT Conclusions levels, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

The requested information in relation to emission to surface waters is presented in **Attachment E2.**

### **E.3 Emissions to Sewer**

Tables E.3(i) and E.3(ii) should be completed and provide results of emission monitoring where available.

A summary list of the emission points, together with maps and/or drawings (no larger than A3) and supporting documentation should be included as **Attachment N° E.3.** Details of all List I and List II substances listed in the Annex to EU Directive 2006/11/EC (as amended), contained in any emission must be presented. All relevant information on the receiving sewer, including any effluent treatment/abatement systems, not already described, with schematics as appropriate should also be included in **Attachment N°E.3.**

For emissions outside BAT guidance limit (where given), a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within any limits set out in the BAT guidance note(s).

There are no existing emissions to sewer, but a new emission is proposed. Details are provided in **Attachment E3.**

### **E.4 Emissions to Ground**

Describe in **Attachment N° E.4** the existing or proposed arrangements necessary to give effect to Council Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Council Directive 80/68/EEC on the protection of groundwater against pollution by certain dangerous substances.

The applicant should supply details of the nature and quality of any substance (agricultural and non-agricultural waste) to be landspread (slurry, effluent, sludges etc)

as well as the proposed application rates, periods of application and mode of application (e.g., pipe discharge, tanker) having regard to the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2010, S.I. No 610 of 2010.

For emissions outside the BAT guidance limit, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits as set out in the BAT guidance note(s).

The only emission to ground is the treated effluent from the on-site sanitary wastewater treatment plant, which is discharged to a percolation area. This emission will cease when a connection to the foul sewer is made. The measures necessary to give effect to Council Directive 2006/118/EC on the protection of groundwater against pollution and deterioration and Council Directive 80/68/EEC on the protection of groundwater against pollution by certain dangerous substances are described in **Attachment E4.**

### E.5 Noise Emissions

Give particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made.

Table E.5 (i) should be completed, as relevant, for each source.

Supporting information should form **Attachment N<sup>o</sup> E.5.**

The Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012) should be consulted (available on [www.epa.ie](http://www.epa.ie)) where a noise impact assessment is required. A planned programme of improvement towards meeting upgraded standards is required and should have due regard to the noise control and mitigation measures outlined in section 8 and appendix (IX) of the *Guidance Note*. This programme should highlight specific goals and a time scale, together with options for modification, upgrading or replacement, as required, to bring the emissions within the limits as set out in the *Guidance Note*.

The particulars of the source, location, nature, level, and the period or periods during which the noise emissions are made or are to be made are presented in **Attachment E5.** Based on the type of the noise sources, it is considered that the information requested in Table E.5 (i) is not relevant to the assessment of noise impacts.

### E.6 Tabular Data on Emission Points

Applicants should submit the following information for each emission point:

Point Code	Point Type	Easting	Northing	Verified	Emission
Provide label ID's assigned in section E	A=Atmospheric SW=Surface Water SE = Sewer GW=Groundwater N = Noise SL=Soil/Ground WS=Waste	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. SO <sub>2</sub> , HCl, NH <sub>3</sub>

An individual record (i.e. row) is required for each emission point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel

template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

An Excel spreadsheet showing the requested information is in in **Attachment E6**.

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## SECTION F: CONTROL & MONITORING

**Describe the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the installation.**

Describe the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages.

The measure that will be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages are described in **Attachment F**.

Describe the measures to be taken to prevent or eliminate emissions and/or avoid pollution.

The measures taken to prevent and eliminate emissions are described in Attachment F

Describe what appropriate measures are to be taken where an Environmental Quality Standard requires stricter conditions than would be determined with reference to BAT

An EQS does not require stricter conditions than would be determined by BAT.

### **F.1: Treatment, Abatement and Control Systems**

Details of treatment/abatement systems (air and effluent emissions) should be included, together with schematics as appropriate.

For each Emission Point identified complete Table F.1(i) and include detailed descriptions and schematics of all abatement systems.

**Attachment N<sup>o</sup> F.1** should contain any supporting information.

Details of the treatment, abatement and control systems relating to emissions are in **Attachment No F.1**.

### **F.2: Emissions Monitoring and Sampling Points**

Identify monitoring and sampling points and outline proposals for monitoring **emissions**. Table F.2(i) should be completed (where relevant) for air emissions, emissions to surface waters, emissions to sewer, emissions to ground and waste emissions. Where **ambient** environment monitoring is carried out or proposed, Table F.2 (ii) should be completed as relevant for each environmental medium.

Include details of monitoring/sampling locations and methods.

**Attachment N<sup>o</sup> F.2** should contain any supporting information.

Details of the monitoring/sampling locations are in **Attachment No F.2**

**F.3: Tabular Data on Monitoring and Sampling Points**

Applicants should submit the following information for each monitoring and sampling point:

Point Code	Point Type	Easting	Northing	Verified	Pollutant
Provide label ID's assigned in section F3	M=Monitoring S=Sampling	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used	e.g. SO <sub>2</sub> , HCl, NH <sub>3</sub>

An individual record (i.e. row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.2, E.6 and F.3.

Point source monitoring/sampling refers to monitoring from specific emission points (e.g. from a boiler stack or outlet from a wastewater treatment plant). Examples of ambient monitoring includes monitoring of ambient air quality (e.g. boundary or off-site) or monitoring of river quality upstream/downstream of an effluent discharge.

An Excel spreadsheet showing the requested information is in **Attachment No F3**.

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## SECTION G: RESOURCE USE AND ENERGY EFFICIENCY

### **G.1 Give a list of the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity.**

The list(s) given should be very comprehensive, all materials used, fuels, intermediates, laboratory chemicals and product should be included.

Particular attention should be paid to materials and product consisting of, or containing, dangerous substances as described in the EU (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 2003 [SI 116/2003] and Regulation (EC) No. 1272/2008. The list must classify these materials in accordance with both of these Regulations, and must specify the designated Risk Phrases (R-Phrases) and Hazard Statements. R-Phrases for each substance should be in accordance with Article 21 of the S.I 1272/2008.

Tables G.1 (i) and G.1(ii) must be completed. Copy as required.

Supporting information should be given in **Attachment N° G**.

Details of the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity are given in **Attachment No. G**

For waste activities (class 11 of the First Schedule to the EPA Acts 1992, as amended), do not include here the list of wastes to be accepted for recovery and disposal. This should be described in section D.2 of the application.

### **G.2 Energy Efficiency**

A description of the energy used in or generated by the activity must be provided in **Attachment N° G**. Outline the measures taken to ensure that energy is used efficiently having regard to the relevant decision on BAT conclusions and/or BAT guidance and where appropriate, an energy audit with reference to the EPA Guidance document on Energy Audits should be carried out.

A description of the energy used at the activity is presented in **Attachment No G**.



## SECTION H: MATERIALS HANDLING

### H.1 Raw Materials, Intermediates and Product Handling

All materials will have been listed in Tables G.1 (i) and G.(ii) of **Section G**.

Details of the storage conditions, location within the site, segregation system used and transport systems within the site should be outlined here in **Attachment N° H.1**. In addition, information relating to the integrity, impermeability and recent testing of pipes, tanks and bund areas should be outlined.

Details of the storage conditions and locations within the site are provided in **Attachment No H.1**. The Attachment also includes a report on the integrity testing of the bunds and underground sanitary wastewater storage tank, which was carried out in 2012.

### H.2 Waste Prevention

Describe in **Attachment N° H.2** the arrangements for the prevention of waste in accordance with Part III of the Waste Management Acts 1996 to 2013. Describe what measures will be taken to prevent the generation of waste to the extent possible. State whether the installation has participated in any projects under the National Waste Prevention Programme.

The waste prevention measures taken at the site are described in **Attachment No H2**.

### H.3 Describe the arrangements for the recovery or disposal of solid and liquid wastes generated at the installation.

Applicants should ensure that information is provided for each waste generated at the installation under each of the following headings:

- (a) Description & nature of waste
- (b) Source
- (c) European Waste Catalogue Code (Commission Decision 2000/532/EC, as amended)
- (d) Animal by-product category per EC Reg. 1069/2009 where relevant
- (e) Amount in tonnes per month
- (f) Location and method of disposal or recovery (on-site or off-site)

The following information should also be provided where appropriate:

- (g) Analysis of the waste (include test methods and Q.C.)
- (h) Its location of storage and the manner by which the integrity/impermeability of storage areas is maintained
- (i) Period or periods of generation of the waste

Where any waste would be classified as Hazardous Waste as defined in the Waste Management Act, 1996, as amended, this should be made clear in the information provided.

The Table H.3(i) should be completed with a single row for each waste generated at the installation. The table should be provided as part of **Attachment N° H.3**.

For waste activities (class 11 of the First Schedule to the EPA Acts 1992, as amended), do not repeat the information already sought in section D.2.3 of the application form and presented in Attachment D.2 of the application.

The arrangements for the recovery or disposal of solid and liquid wastes generated at the installation are in **Attachment No H.3**.

#### H.4 Waste hierarchy

Where waste is generated by the installation, describe in **Attachment N° H.4** how it will be in order of priority in accordance with section 21A of the Waste Management Acts 1996 to 2013, prepared for re-use, recycling, recovery or where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment.

Section 29(2A) of the Waste Management Acts 1996 to 2013 states that it shall be the duty of waste producers and holders to ensure that waste undergoes recovery operations in accordance with sections 21A and 32(1) of the Acts.

Describe how the waste hierarchy specified in article 21A of the Waste Management Acts 1996 to 2013 will be implemented at the installation. Describe how the waste generated at the installation will be managed in accordance with the waste hierarchy.

For waste whose generation cannot be prevented, describe what measures will be in place to ensure that waste is collected separately (if technically, environmentally and economically practicable) and will not be mixed with other waste or other material with different properties.

A description of how the waste hierarchy specified in article 21A of the Waste Management Acts 1996 to 2013 is and will be implemented at the installation and how waste is and will be managed accordingly is presented in **Attachment No H4**.

#### H.5 Waste recycling and recovery

Describe how the activities at the installation contribute to national targets for the recycling and recovery of waste, not least:

- the preparing for reuse and the recycling of paper, metal, plastic and glass; and
- the preparing for reuse, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste.

State whether and describe how food waste will be managed in accordance with the requirements, as may be relevant, of the Waste Management (Food Waste) Regulations 2009.

Supporting information should form **Attachment N° H.5**.

A description of how the activities at the installation contribute to national targets for the recovery and recycling of wastes and how food waste will be managed is presented in **Attachment No. H5**.

## SECTION I: EXISTING ENVIRONMENT & IMPACT OF THE ACTIVITY

**Describe the conditions of the site of the installation.**

**Provide an assessment of the effects of any emissions on the environment, including on an environmental medium other than that into which the emissions are made.**

**Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.**

### I.1. Assessment of atmospheric emissions

Describe the existing environment in terms of air quality with particular reference to ambient air quality standards.

Provide a statement as to whether or not emissions of main polluting substances (as defined in the Schedule of EPA (Industrial Emissions)(Licensing) Regulations 2013, S.I. No. 137 of 2013) to the atmosphere are likely to impair the environment.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

**Attachment N<sup>o</sup> I.1** should also contain full details of any dispersion modelling of atmospheric emissions from the activity, where required. When carrying out dispersion modelling, regard should be had to the EPA "Air Dispersion Modelling from Industrial installations Guidance Note (AG4)" or similar guidelines from a recognised authority.

Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.

A description of the existing air quality, a statement on the likelihood of the emissions to air of the main polluting substances to impair the environment and an assessment of the impacts of existing and proposed emissions on the environment is presented in **Attachment I.1**. The information in the Attachment is derived from Chapter 10 of the EIS.

### I.2. Assessment of Impact on Receiving Surface Water

Describe the existing environment in terms of water quality with particular reference to environmental quality objectives and standards and any objectives and standards laid down for protected areas. Table I.2(i) should be completed

Provide a statement whether or not emissions of main polluting substances (as defined in the Schedule of EPA (Licensing)(Amendment) Regulations 2004, S.I. No. 394 of 2004) to water are likely to impair the environment.

Indicate whether or not the activity complies with the requirements of the EC Environmental Objectives (Surface Waters) Regulations 2009, S.I. No. 272 of 2009.

If the discharge is to water body that is already achieving high status, or if the discharge is to waters draining to the surface water bodies identified under the First Schedule of the

EC Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009, compliance must be with the 95<sup>th</sup>ile **high** status limits.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment N° I.2.**

For emissions outside emission limit established according to the combined approach, a full evaluation of the existing abatement/treatment system must be provided. A planned programme of improvement towards meeting the upgraded standards is required. This should highlight specific goals and a time scale, together with options for modification, upgrading or replacement as required to bring the emissions within the limits established in accordance with the combined approach.

A description of the existing environment in terms of water quality, a statement on the likelihood of the emissions to water to impair the environment and an assessment of the impacts of on the environment, is presented in **Attachment I. 2.** The information in the Attachment is derived from Sections 8.2, 8.5, 8.6 and 8.7 of the EIS.

### I.3. Assessment of Impact of Sewage Discharge.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.

With regard to Article 15 of the Industrial Emissions Directive (or Section 86A(8) of the EPA Act 1992, as amended), describe how the environment as a whole is provided an equivalent level of protection and will not lead to higher levels of pollution in the environment.

Full details of the assessment and any other supporting information should form **Attachment N° I.3.**

Summary details and an assessment of the impacts on the environment of sewage discharge and a description how the environment as a whole is provided with an equivalent level of protection and will not lead to higher levels of pollution in the environment are presented in **Attachment 1.3.**

### I.4 Assessment of Impact of Ground/Groundwater Emissions

#### Baseline Report

In the case of an activity that involves the use, production or release of relevant hazardous substances (as defined in section 3 of the EPA Act 1992 as amended), and having regard to the possibility of soil and groundwater contamination at the site of the installation, provide a baseline report in accordance with section 86B of the EPA Act 1992 as amended. Has the Agency indicated in pre-application discussions that a baseline report is required?

A baseline report shall contain the information necessary to determine the state of contamination of soil and groundwater at the time the report is drawn up in order that a quantified comparison may be made to the state of the site upon the permanent cessation of the industrial emissions directive activity.

Guidance in relation to baseline reports is available on the EPA website at [www.epa.ie](http://www.epa.ie).

The Baseline Report should be included in **Attachment I.4** and clearly labelled as such.

Describe the existing groundwater quality. Tables I.4 (i) should be completed.

Give summary details and an assessment of the impacts of any existing or proposed emissions on the ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made. This includes landspreading, land injection etc.

Land on which material may be landspread shall be identified on a suitable scaled map (1:10,560 and 1:50,000) and submitted as no greater than A3 size. All vulnerable (as a result of ground emissions) surface water bodies must be identified on these maps. Additional information should be included in **Attachment N° I.4**.

**Attachment N° I.4** should also contain full details of any modelling carried out of the potential impact of emissions from the activity on groundwater.

Landspreading of Agricultural/Non Agricultural Wastes

Tables I.4(ii) and I.4.(iii) should be complete where applicable. Further information is available in the Application Guidance Document.

A description of the existing environment in terms of groundwater quality and an assessment of the impacts of on the environment are presented in **Attachment I. 4**. The information in the Attachment is derived from Sections 8.3, 8.5, 8.6 and 8.7 of the EIS. A Baseline Report in accordance with Section 80B of the EPA Act 1992, as amended is also in the Attachment.

#### I.5 Ground and/or Groundwater Contamination

Summary details of known ground and/or groundwater contamination, historical or current, on or under the site must be given.

Indicate whether or not compliance with the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, S.I. No. 9 of 2010 can be achieved.

Full details including all relevant investigative studies, assessments, or reports, monitoring results, location and design of monitoring installations, plans, drawings, documentation, including containment engineering, remedial works, and any other supporting information should be included in **Attachment N° I.5**.

Summary details of the know ground and groundwater contamination, which are associated with historical activities, are presented in Section 4 of the Baseline Report that is in **Attachment I.4**

#### Compliance with EC Environmental Objectives (Groundwater) Regulations 2009, S.I. No. 9 of 2010.

The activity will not give rise to any direct or indirect discharge to ground or groundwater and will comply with the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, S.I. No. 9 of 2010.

### I.6 Assessment of the Environmental Impact of On-site Waste Recovery and/or Disposal.

Describe the arrangements for any on-site recovery and disposal of waste generated by the activity.

Give details and an assessment of the impact of any existing or proposed on-site waste recovery or disposal activities on the environment, including environmental media other than those into which the emissions are to be made.

This information should form **Attachment N° I.6.**

The details are presented in **Attachment No1.6.**

### I.7 Noise Impact

Give details and an assessment of the impacts of any existing or proposed noise emissions on the environment, including environmental media other than those into which the emissions are to be made.

Ambient noise measurements

Complete Table I.7 (i) in relation to the information required below:

- (i) State the maximum Sound Pressure Levels which will be experienced at typical points on the boundary of the operation. (State sampling interval and duration)
- (ii) State the maximum Sound Pressure Levels which will be experienced at typical noise sensitive locations, outside the boundary of the operation.
- (iii) Give details of the background (or residual) noise levels experienced at the site in the absence of noise from this operation.

Prediction models, maps (no larger than A3), diagrams and supporting documents, including details of noise attenuation and noise proposed control measures to be employed, should form **Attachment N° I.7.**

Details and an assessment of the impacts the existing and proposed noise emissions on the environment are presented in **Attachment No 1.7.** The information in the Attachment is derived from Chapter 11 of the EIS.

### **I.8 Environmental Considerations, Main alternatives and BAT**

I.8a Describe in outline the main alternatives to the proposed technology, techniques and measures which were studied having regard to the reference document on Economic and Cross-media Effects.

I.8b Identify all relevant decisions on BAT Conclusions, BAT reference document(s) (BREFs) and BAT guidance document(s).

<b>Title of Document</b>
European Commission's Reference Document on Best Available Techniques for the Waste Treatment Industries 2006 (BREF).
Final Draft BAT Guidance on Best Available Techniques for the Waste Sector: Materials Recovery and Transfer (Environmental Protection Agency).

1.8c Identify the BAT measures proposed or in place having regard to the relevant decision on BAT Conclusions or where this has not been published the conclusions on BAT from the relevant BAT reference documents (BREF). Where BAT is not being proposed, provide reasons and a justification. The conclusions on BAT from all relevant TAB reference documents (BREF) should be tabulated in table I.8(i). These documents are available on the European IPPC bureau website at <http://eippcb.jrc.ec.europa.eu/reference/>.

Please note that other reference documents may be relevant such as:

- (a) BREF on Common waste water and waste gas treatment/management systems in the Chemical Sector;
- (b) BREF on Emissions from Storage;
- (c) BREF on Energy Efficiency;
- (d) BREF on Industrial Cooling Systems;

Other documents that may be relevant:

- (a) REF on Economic and Cross-media Effects;
- (b) REF on Monitoring of Emissions from IED installations;
- (c) Landfill Directive 1999/31/EC etc.

I.8d Describe any proposal to test and use an 'emerging technique'.

I.8e Describe any environmental considerations which have been made with respect to the use of cleaner technologies, waste minimisation and raw material substitution.

I.8f Describe the measures proposed or in place to ensure that:

- (a) The best available techniques are or will be used to prevent or eliminate or, where that is not practicable, generally reduce an emission from the activity;
- (b) no significant pollution is caused;
- (c) waste production is avoided in accordance with the waste hierarchy in Council Directive 98/2008/EC on waste and section 21A of the Waste Management Act 1996, as amended; where waste is produced, it is prepared for re-use, recycled or recovered or, where that is technically and economically impossible, it is disposed of while avoiding or reducing any impact on the environment (applicants should provide this information in the context of sections 29(2A), 32 and 38(5A) of the Waste Management Act 1996, as amended);
- (d) energy and other resources are used efficiently;
- (e) the necessary measures are taken to prevent accidents and limit their consequences;
- (f) the necessary measures are taken upon definitive cessation of activities to avoid any pollution risk and return the site of operation to a satisfactory state.

Supporting information should form **Attachment N° I.8.**

The main alternatives to the proposed technology, techniques and measures studied; the BAT measures proposed or in place having regard to the relevant BAT Conclusions and the measures to comply with items (a) to (f) are described in **Attachment No 1.8.** It is not proposed to test and use an 'emerging technique'.

**Table I.8 (i) CONCLUSIONS ON BAT** (One table for each relevant BAT reference document)

<b>Title of Document</b>			
<b>BAT reference Number</b>	<b>BAT Statement</b>	<b>Applicability to installation</b>	<b>Proposed/ in place</b>
<i>e.g. BAT 1</i>	<i>BAT is to implement and adhere to an environmental management system (EMS) that incorporates all of the following features.</i>	<i>Applicable</i>	<i>Standardised EMS in place</i>
<b>Title of Document</b> <i>e.g Emissions from storage BREF</i>			
<i>5.1.1.2</i>	<i>BAT is to cover open top tank by applying a floating cover, flexible or tent cover or a rigid cover</i>	<i>One open top tank on-site</i>	<i>Proposed to cover with floating cover in 2015</i>

Table 1.8 is in **Attachment No 1.8**. As the Agency's BAT Guidance is derived from the BREF, the Table only references the BAT Conclusions from the BREF. Given the nature of the waste activities carried out, it was concluded that the Waste Industries Treatment BREF was the only one directly applicable to the site.

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## SECTION J: ACCIDENT PREVENTION & EMERGENCY RESPONSE

Describe the existing or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage.

Also outline what provisions have been made for response to emergency situations outside of normal working hours, i.e., during night-time, weekends and holiday periods.

Supporting information should form **Attachment N° J**.

Details of the existing and accident prevention and emergency response measures, including fire prevention are provided in **Attachment No J**.

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## **SECTION K: REMEDIATION, DECOMMISSIONING, RESTORATION & AFTERCARE**

Describe the existing or proposed measures to minimise the impact on the environment after the activity or part of the activity ceases operation, including provision for post-closure care of any potentially polluting residuals.

There is an explicit requirement in EU and Irish law for financial provision for landfills and extractive waste facilities. For new activities subject to the requirements of the Landfill Directive (1999/31/EC) and the Extractive Waste Directive (2006/21/EC) that are not already licensed by the Agency, state whether the following have been prepared:

- an Environmental Liabilities Risk Assessment (ELRA);
- a Closure, Restoration and Aftercare Management Plan (CRAMP); and
- a proposal for Financial Provision that covers all liabilities identified in the ELRA and CRAMP.

Regard should be had by applicants to relevant Agency guidance on these matters.

Copies of any relevant documents and any supporting information should be included as Attachment No. K.

The Agency may prioritise other sectors (e.g. contaminated land, risk of waste facility closure liabilities, risk based on Seveso classification) and require the preparation of a proposal for financial provision before making a decision on a licence application. Applicants are advised to discuss the requirement for financial provision with the Agency prior to making an application.

Supporting information should be included as **Attachment No. K.**

Copies of the ELRA and DMP and confirmation of the Agency approval of the Financial Provision are in **Attachment No. K.**

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## SECTION L: STATUTORY REQUIREMENTS

Indicate how the requirements of Section 83(5)(a)(i) to (v) and (vii) to (x) of the EPA Act 1992, as amended, shall be met, having regard, where appropriate, to any relevant specification issued by the Agency under section 5 (3) of the Act and the reasons for the selection of the arrangements proposed.

Indicate whether or not the activity is carried out, or may be carried out, or is located such that it is liable to have an adverse effect on -

- (a) a site placed on a list in accordance with Part 3 of S.I. 477 of 2011, or
- (b) a site where consultation has been initiated in accordance with Article 5 of the EU Habitats Directive (92/43/EEC).

Undertake a screening for Appropriate Assessment and state whether the activity, individually or in combination with other plans or projects, is likely to have a significant effect on a European Site(s), in view of best scientific knowledge and the conservation objectives of the site(s). Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that an activity, either individually or in combination with other plans or projects, will have a significant effect on a European Site, provide a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011). Where based on the screening it is considered that an Appropriate Assessment is not required, provide a reasoned response.

Indicate whether or not the activity is liable to have an adverse effect on water quality in light of the European Communities Environmental Objectives (Surface Water) Regulations 2009 (S.I. No. 272 of 2009).

Indicate whether or not the activity is liable to have an adverse effect on water quality in light of the European Communities Environmental Objectives (Ground Water) Regulations 2010 (S.I. No. 9 of 2010).

Indicate whether any of the substances specified in the Schedule of the EPA (Industrial Emissions)(Licensing) 2013, S.I. No. 137 of 2013, are discharged by the activity to the relevant medium.

Indicate if the best environmental practices are in place for control of diffuse emissions from the installation as set out in the following legislation:

- (a) a BAT Conclusions Implementing Decision published by the EC.

- (b) a specification prepared by the Agency in accordance with Section 5 of the *Environmental Protection Agency Act 1992* as amended;
- (c) the *Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)* as amended by the *Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004)* or any future amendment thereof;
- (d) the *European Communities (Good Agricultural Practice for Protection of Waters) Regulations 20 (S.I. No. 610 of 2010)* or any future amendment thereof;
- (e) the *Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations 1985 (S.I. No. 294 of 1985)*;
- (f) the *Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations 1986 (S.I. No. 55 of 1986)*;
- (g) the *Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations 1994 (S.I. No. 43 of 1994)*; and,
- (h) measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of the *EC Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009)* for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

Supporting information should be included as **Attachment N° L** with reference to where the information can be found in the application.

---

**SECTION M: DECLARATION**

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**Declaration**

I hereby make application for a licence / revised licence, pursuant to the provisions of the Environmental Protection Agency Act, 1992, as amended, and Regulations made thereunder.

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website. This consent relates to this application itself and to any further information, submission, objection, or submission to an objection whether provided by me as Applicant or any person acting on the Applicant's behalf.

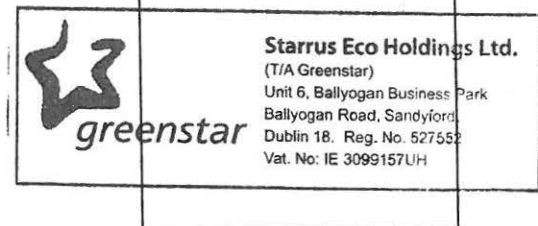
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Signed by: Donal Monahan Date: 28/3/14  
(on behalf of the organisation)

Print signature name: DONAL MONAHAN

Position in organisation: DIRECTOR OF RESOURCE AND RECOVERY

Company stamp or seal:



## **ANNEX 1: TABLES/ATTACHMENTS**

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**TABLE D.2(i) Waste Acceptance (type and quantities)**

Rows should be added to the table as necessary.

EWC Code	Waste description (the <u>actual</u> description of the waste, not the text accompanying the EWC code)	Tonnes per annum (existing)	Tonnes per annum (proposed)
02 03 04			
02 06 01			
15 01 01	Cardboard Packaging	4720	5000
15 01 02	Plastic Packaging	212	500
15 01 03			
15 01 04			
15 01 05			
15 01 06	Mixed Packaging	1544	2300
15 01 07	Glass Packaging		200
15 01 09			
16 01 03			
16 03 06			
16 05 04			
16 05 05			
17 01 01			
17 01 02			
17 01 03			
17 01 07	C&D waste – concrete, bricks, tiles and ceramics	4000	2000
17 01 11			
17 02 01			
17 02 02			
17 02 03			
17 03 02			
17 04 01			
17 04 02			
17 04 03			

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EW C Code	Waste description (the <u>actual</u> description of the waste, not the text accompanying the EW C code)	Tonnes per annum (existing)	Tonnes per annum (proposed)
17 04 04			
17 04 05			
17 04 06			
17 04 07			
17 05 03			
17 05 04			
17 06 01			
17 06 03			
17 06 04			
17 08 01			
17 08 02			
17 09 01			
17 09 02			
17 09 03			
17 09 04	Mixed C&D Waste	50	3000
18 01 04			
19 08 01			
19 09 02			
19 12 01			
19 12 02			
19 12 03			
19 12 04			
19 12 05			
19 12 07			
19 12 08			
19 12 09			
19 12 10			
19 12 11			
19 12 12	Other wastes (pre-treated)	1600	500
20 01 01	Paper and Cardboard	526	500
20 01 02	Glass	180	

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EWC Code	Waste description (the <u>actual</u> description of the waste, not the text accompanying the EWC code)	Tonnes per annum (existing)	Tonnes per annum (proposed)
20 01 08	biodegradable kitchen and canteen waste (brown bin)	2042	5000
20 01 11			
20 01 21			
20 01 23			
20 01 33			
20 01 34			
20 01 35			
20 01 36			
20 01 37			
20 01 38			
20 01 39			
20 01 40	Metals	312	500
20 02 01			
20 02 02			
20 02 03			
20 03 01	MSW Municipal Waste (Commercial and Household)	65,800	110,000
20 03 02			
20 03 03	Street sweepings	500	500
20 03 07			
20 03 99			

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**TABLE D.3(III) LINER SYSTEM NOT APPLICABLE**

	y/n
Provide information in Attachment D.3 to fulfil Annex 1 of the Landfill Directive	
Is the type of liner system specified?	
Has a Quality Control Plan been specified?	
Has a Quality Assurance Plan been specified?	
Has independent, third-party supervision, testing and controls been specified?	
Have basal gradients for all cells and access ramps to the cells been designed?	
Has a leak detection system been specified?	

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**TABLE D.3(IV) LEACHATE MANAGEMENT ARRANGEMENTS NOT APPLICABLE**

	y/n
Is there a Leachate Management Plan?	
Have annual quantities of leachate been calculated?	
Has the total quantity of leachate been calculated?	
Has the size of the cells been specified taking account of the water balance calculations?	
Has a leachate collection system been specified?	
Has a leachate storage system been specified?	
Has a system for monitoring the level of leachate in the waste been designed?	
Is leachate recirculation proposed/practised?	
Has leachate treatment on-site been specified?	
Has leachate removal been specified?	

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**Table D.3(v)a. Landfill Gas Management Not Applicable**

	y/n
Is there a Landfill Gas Management Plan?	
Is there a passive venting system?	
Does the passive system cover all of the filled area?	
Have gas alarm systems been installed in the site buildings?	
Have measures been installed to prevent landfill gas migration (e.g. barriers)?	
Has a time-scale been proposed for the installation of landfill gas infrastructure?	
Is gas flaring undertaken at the site?	
Is there an active (i.e., pumped) landfill gas extraction system?	
Does the active system cover all of the filled area?	
Is landfill gas used to generate energy at the site?	
Have emissions from the flarestack and utilisation plant been assessed for source, composition, quantity and level and rate? See section F of the application form for requirements.	
Has a maintenance programme for the control system been specified?	
Has a condensate removal system been designed?	

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**Table D.3(v)b Landfill Gas Monitoring for existing landfill gas flares and utilisation plants **Not Applicable****

Parameter	Concentration (mg/Nm <sup>3</sup> )	Frequency of Analysis	Method of Analysis
<b>Inlet</b>			
Methane (CH <sub>4</sub> ) % v/v			
Carbon dioxide (CO <sub>2</sub> ) %v/v			
Oxygen (O <sub>2</sub> ) % v/v			
<b>Outlet</b>			
Volumetric Flow Rate			
SO <sub>2</sub>			
Nox			
CO			
Particulates			
TA Luft Class I, II, III organics			
Hydrochloric acid			
Hydrogen Fluoride			

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**Table D.3(v)c Landfill Gas Monitoring Not Applicable**

Parameter	Proposed Frequency of Analysis		Method of Analysis
	Gas boreholes, vents, wells and perimeter locations	Installation Office	
Methane (CH <sub>4</sub> ) % v/v			
Carbon Dioxide (CO <sub>2</sub> ) % v/v			
Oxygen (O <sub>2</sub> ) % v/v			
Atmospheric Pressure			
Temperature			

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**Table D.3(v)d Landfill Gas Infrastructure Not Applicable**

Equipment	Monitoring Frequency	Monitoring Action
Gas Collection System		
Gas Control System		

**Table D.3(vi) Capping System Not Applicable**

	y/n
Has the daily cover been specified?	
Has the intermediate cover been specified?	
Has the temporary capping been specified?	
Has the Capping System been designed and does it meet the requirements of the Landfill Directive Annex 1 (3.3)?	
Does the Capping System include a flexible membrane liner?	
Have all capping materials been specified?	
Has a Method Statement for construction been produced?	
Has a Quality Control Plan been produced?	
Has a Quality Assurance Plan been produced?	
Has a programme for monitoring landfill stability been developed?	
Has a programme for monitoring landfill settlement been developed?	

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**Table E.1 (i) BOILER EMISSIONS TO ATMOSPHERE NOT APPLICABLE**

**Emission Point:**

Emission Point Ref. N°:		
Location:		
Grid Ref. (12 digit, 6E,6N):		
<b>Vent Details</b>	Diameter:	Height above Ground(m):
Date of commencement of emission:		

**Characteristics of Emission:**

<b>Boiler rating</b>			
Steam Output:			kg/hr
Thermal Input:			MW
<b>Boiler fuel</b>			
Type:			
Maximum rate at which fuel is burned			kg/hr
% sulphur content:			
NOx			mg/Nm <sup>3</sup>
		0°C. 3% O <sub>2</sub> (Liquid or Gas), 6% O <sub>2</sub> (Solid Fuel)	
Maximum volume* of emission			m <sup>3</sup> /hr
		0°C, 3 % O <sub>2</sub> (liquid or gas), 6 % O <sub>2</sub> (solid fuel)	
Minimum efflux velocity			m.sec <sup>-1</sup>
Temperature	°C(max)	°C(min)	°C(avg)

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\* Volume flow limits for emissions to atmosphere shall be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa), dry gas; 3% oxygen for liquid and gas fuels; 6% oxygen for solid fuels.

(i) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up/shutdown to be included*):

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr
---------------------------	-------------------------------------



**TABLE E.1(ii) MAIN EMISSIONS TO ATMOSPHERE Not Applicable**

Emission Point Ref. N <sup>o</sup> :	
Source of Emission:	
Location:	
Grid Ref. (12 digit, 6E,6N):	
Vent Details Diameter:	
Height above Ground(m):	
Date of commencement:	

**Characteristics of Emission:**

(i) Volume to be emitted:			
Average/day	Nm <sup>3</sup> /d	Maximum/day	Nm <sup>3</sup> /d
Maximum rate/hour	Nm <sup>3</sup> /h	Min efflux velocity	m.sec <sup>-1</sup>
(ii) Other factors			
Temperature	°C(max)	°C(min)	°C(avg)
For Combustion Sources: Volume terms expressed as : <input type="checkbox"/> wet. <input type="checkbox"/> dry. _____ %O <sub>2</sub>			

(iii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	_____min/hr _____hr/day _____day/yr
---------------------------	-------------------------------------

**TABLE E.1(iii): MAIN EMISSIONS TO ATMOSPHERE - Chemical characteristics of the emission** Not Applicable

**Emission Point Reference Number:** \_\_\_\_\_

Parameter	Prior to treatment <sup>(1)</sup>				Brief description of treatment	As discharged <sup>(1)</sup>					
	mg/Nm <sup>3</sup>		kg/h			mg/Nm <sup>3</sup>		kg/h.		kg/year	
	Avg	Max	Avg	Max		Avg	Max	Avg	Max	Avg	Max

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1. Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C,101.3kPa). Wet/dry should be the same as given in Table E.1(ii) unless clearly stated otherwise.

**TABLE E.1(iv): EMISSIONS TO ATMOSPHERE - Minor atmospheric emissions Not applicable**

Emission point Reference Numbers	Description	Emission details <sup>1</sup>				Abatement system employed
		material	mg/Nm <sub>3(2)</sub>	kg/h.	kg/year	

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1 The maximum emission should be stated for each material emitted, the concentration should be based on the maximum 30 minute mean.

2 Concentrations should be based on Normal conditions of temperature and pressure, (i.e. 0°C/101.3kPa). Wet/dry should be clearly stated. Include reference oxygen conditions for combustion sources.

**TABLE E.1(v): EMISSIONS TO ATMOSPHERE – Fugitive and Potential atmospheric emissions **Not Applicable****

Emission point ref. no. (as per flow diagram)	Description	Malfunction which could cause an emission	Emission details (Potential max. emissions) <sup>1</sup>		
			Material	mg/Nm <sup>3</sup>	kg/hour

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<sup>1</sup> Estimate the potential maximum emission for each malfunction identified.

**TABLE E.2(i): EMISSIONS TO SURFACE WATERS**

(One page for each emission)

**Emission Point:**

Emission Point Ref. Nº:	FE1A		
Source of Emission:	Run-off from yards discharging via oil interceptor		
Location of discharge :	North-eastern site boundary		
Grid Ref. (12 digit, 6E,6N):	154974E 155769N		
Name of receiving waters and water body code:	Man-made drain that connects to Bunlickey Lake :Limerick Dock Water Body		
Flow rate in receiving waters:	Not known _____ m <sup>3</sup> .sec <sup>-1</sup> Dry Weather Flow _____ m <sup>3</sup> .sec <sup>-1</sup> 95%ile flow		
Available assimilative capacity:	_____ kg/day		

**Emission Details:**

(i) Volume to be emitted Rainfall dependent			
Normal/day	m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	Rainfall dependent _____ min/hr _____ hr/day _____ day/yr		
---------------------------	---	--	--

**TABLE E.2(ii): EMISSIONS TO SURFACE WATERS - Characteristics of the emission** (1 table per emission point)

Monitoring is not carried out upstream of the oil interceptor and as the flow is rainfall dependent it is not possible to quantify loadings

**Emission point reference number:** FEIA

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	

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**TABLE E.3(i): EMISSIONS TO SEWER** Not possible to provide details of emission point as connection to foul sewer not yet in place. Details will be provided when connection is made.

**Emission Point:**

Emission Point Ref. N <sup>o</sup> :	
Location of connection to sewer:	
Grid Ref. (12 digit, 6E,6N):	
Name of sewage undertaker:	

**Emission Details:**

(i) Volume to be emitted			
Normal/day	25m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	During operational hours _____min/hr _____hr/day _____day/yr
---------------------------	--

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**TABLE E.3(ii): EMISSIONS TO SEWER - Characteristics of the emission** (1 table per emission point)

**Emission point reference number:** \_\_\_\_\_

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
pH		6-9							
Temperature		Ambient							
BOD		2000 mg/l							
COD		4000mg/l							
Suspended solids		2000mg/l							
Sulphate		500mg/l							
Total nitrogen		100mg/l							
Ammoniacal nitrogen		50mg/l							
Total Phosphorous		20mg/l							
Orthophosphate		10mg/l							
Oils, Fats, greases		100mg/l							

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**TABLE E.4(i): EMISSIONS TO GROUND** (1 Page for each emission point)

**Emission Point or Area:**

Emission Point/Area Ref. N°:	FE2A
Emission Pathway: (borehole, well, percolation area, soakaway, landspreading, etc.)	Percolation Area
Location :	At on-site wastewater treatment plant in north-west of the site
Grid Ref. (12 digit, 6E,6N):	154858E 155720N
Elevation of discharge: (relative to Ordnance Datum)	
Aquifer classification for receiving groundwater body:	Locally Important Aquifer Generally Moderately Productive ( <b>Lm</b> )
Groundwater vulnerability assessment (including vulnerability rating):	Low
Identity and proximity of groundwater sources at risk (wells, springs, etc):	There are two wells within 2km of the site. The first is in Mungret to the south west and side gradient of the site and has a reported yield of 80m <sup>3</sup> /day. The second in to the south and up-gradient of the site and has a reported yield of 22m <sup>3</sup> /day
Identity and proximity of surface water bodies at risk:	Limerick Dock Water Body, immediately north of the site

**Emission Details:**

(i) Volume to be emitted			
Normal/day	0.5m <sup>3</sup>	Maximum/day	m <sup>3</sup>
Maximum rate/hour	m <sup>3</sup>		

(ii) Period or periods during which emissions are made, or are to be made, including daily or seasonal variations (*start-up /shutdown to be included*):

Periods of Emission (avg)	Operational Hours _____min/hr _____hr/day _____day/yr
---------------------------	---

**TABLE E.4(ii): EMISSIONS TO GROUND - Characteristics of the emission** (1 table per emission point)

**Emission point/area reference number:** FE2A

Parameter	Prior to treatment				As discharged				% Efficiency
	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	Max. hourly average (mg/l)	Max. daily average (mg/l)	kg/day	kg/year	
pH		7.78							
BOD		8							
Total Suspended Solids		29							
Ammonia Nitrogen		13.8							
Fats Oils Grease		<1							
Sulphate		171.24							
Total Phosphorous		2.434							
Total Nitrogen		46.6							
Nitrate		<0.2							
Nitrite		0.44							
COD		9							

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**Table E.5(i): NOISE EMISSIONS - Noise sources summary sheet**

**No information available on sound pressure at reference point**

Source	Emission point Ref. No	Equipment Ref. No	Sound Pressure <sup>1</sup> dBA at reference distance	Octave bands (Hz) Sound Pressure <sup>1</sup> Levels dB(unweighted) per band								Impulsive or tonal qualities	Periods of Emission <sup>2</sup>	
				31.5	63	125	250	500	1K	2K	4K			8K
360° case Excavator														Intermittent
Volvo Loading Shovel														Intermittent
Doppstadt shredders														Intermittent
Cardboard baler														Intermittent
Waste Baler														Intermittent
New Holland teleporters														Intermittent
Hyster forklift														Intermittent
Scarab minor roadsweeper														Intermittent

1. For items of plant, sound power levels may be used.
2. Periods of emission should state if the plant item in question operates on a continuous or intermittent basis. If intermittent then further details of the hours of operation and any potential impulsive components associated with the source should be clearly identified.

**TABLE F.1(i): ABATEMENT / TREATMENT CONTROL NOT APPLICABLE**

**Emission point reference number:** \_\_\_\_\_

Control <sup>1</sup> parameter	Monitoring to be carried out <sup>2</sup>	Equipment <sup>3</sup>	Equipment back-up

- <sup>1</sup> List the operating parameters of the treatment / abatement system which control its function.
- <sup>2</sup> List the monitoring of the control parameter to be carried out.
- <sup>3</sup> List the equipment necessary for the proper function of the abatement / treatment system.

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**TABLE F.2(i) : EMISSIONS MONITORING AND SAMPLING POINTS**

( 1 table per monitoring point)

**Emission Point Reference No. :** WS-9

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
pH	Quarterly	Safe	Grab	Standard Methods
BOD	Quarterly	Safe	Grab	Standard Methods
Total Suspended Solids	Quarterly	Safe	Grab	Standard Methods
Ammonia Nitrogen	Quarterly	Safe	Grab	Standard Methods
Fats Oils Grease	Quarterly	Safe	Grab	Standard Methods
Mineral Oils	Quarterly	Safe	Grab	Standard Methods
TOC	Quarterly	Safe	Grab	Standard Methods
Arsenic - dissolved	Quarterly	Safe	Grab	Standard Methods
Cadmium - dissolved	Quarterly	Safe	Grab	Standard Methods
Chromium - dissolved	Quarterly	Safe	Grab	Standard Methods
Copper - dissolved	Quarterly	Safe	Grab	Standard Methods
Mercury - dissolved	Quarterly	Safe	Grab	Standard Methods
Nickel - dissolved	Quarterly	Safe	Grab	Standard Methods
Lead - dissolved	Quarterly	Safe	Grab	Standard Mehods
Zinc - dissolved	Quarterly	Safe	Grab	Standard Methods

**TABLE F.2(i) : EMISSIONS MONITORING AND SAMPLING POINTS**

( 1 table per monitoring point)

**Emission Point Reference No. :**                     WS-10                    

Parameter	Monitoring frequency	Accessibility of Sampling Points	Sampling method	Analysis method/ technique
pH	Quarterly	Safe	Grab	Standard Methods
BOD	Quarterly	Safe	Grab	Standard Methods
Total Suspended Solids	Quarterly	Safe	Grab	Standard Methods
Ammonia Nitrogen	Quarterly	Safe	Grab	Standard Methods
Fats Oils Grease	Quarterly	Safe	Grab	Standard Methods
Mineral Oils	Quarterly	Safe	Grab	Standard Methods
TOC	Quarterly	Safe	Grab	Standard Methods
Arsenic - dissolved	Quarterly	Safe	Grab	Standard Methods
Cadmium - dissolved	Quarterly	Safe	Grab	Standard Methods
Chromium - dissolved	Quarterly	Safe	Grab	Standard Methods
Copper - dissolved	Quarterly	Safe	Grab	Standard Methods
Mercury - dissolved	Quarterly	Safe	Grab	Standard Methods
Nickel - dissolved	Quarterly	Safe	Grab	Standard Methods
Lead - dissolved	Quarterly	Safe	Grab	Standard Mehods
Zinc - dissolved	Quarterly	Safe	Grab	Standard Methods

**TABLE F.2(ii): AMBIENT ENVIRONMENT MONITORING AND SAMPLING POINTS** ( 1 table per monitoring point)

**Monitoring Point Reference No:** DM1

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Dust	Bi-annually	Safe	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute

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**TABLE F.2(ii): AMBIENT ENVIRONMENT MONITORING AND SAMPLING POINTS** ( 1 table per monitoring point)

**Monitoring Point Reference No:** DM2

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Dust	Bi-annually	Safe	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute

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**TABLE F.2(ii): AMBIENT ENVIRONMENT MONITORING AND SAMPLING POINTS** ( 1 table per monitoring point)

**Monitoring Point Reference No:** DM3

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Dust	Bi-annually	Safe	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute	VDI 2119 ' <i>Measurement of Dustfall, Determination of Dustfall using Bergerhoff Instrument (Standard Method)</i> ', German Engineering Institute

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**Monitoring Point Reference No:** \_\_\_\_\_ Ni1

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Noise – As per NG4 Guidance Document	Annually	Accessible	NG4	Standard

**Monitoring Point Reference No:** \_\_\_\_\_ Ni2

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Noise – As per NG4 Guidance Document	Annually	Accessible	NG4	Standard

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**Monitoring Point Reference No:** \_\_\_\_\_ Ni3

Parameter	Monitoring frequency	Accessibility of Sampling point	Sampling method	Analysis method / technique
Noise – As per NG4 Guidance Document	Annually	Accessible	NG4	Standard

**Table G.1(i) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site**

Ref. N <sup>o</sup> or Code	Material/ Substance <sup>(1)</sup>	CAS Number	Danger <sup>(2)</sup> Category	Amount Stored	Annual Usage	Nature of Use	R <sup>(3)</sup> - Phrase	S <sup>(3)</sup> - Phrase	Hazard Statement <sup>(4)</sup>
				(tonnes)	(tonnes)				
1	Diesel	68334-30-5	Carcinogenic, Dangerous for the environment	3,200	69	Mobile plant	R40/R65/R66 /R51/R53		

- Notes:
1. In cases where a material comprises a number of distinct and available dangerous substances, please give details for each component substance.
  2. Article 2(2) of S.I. No. 116/2003
  3. Schedules 9 and 10 of S.I. No. 62/2004 (as amended by S.I. No. 271/2008)
  4. EC Regulation 1272/2008 (Chemicals Act 2008 (13 of 2008) and 2010)

**Table G.1(ii) Details of Process related Raw Materials, Intermediates, Products, etc., used or generated on the site**

Ref. N <sup>o</sup> or Code	Material/ Substance <sup>(1)</sup>	Odour			Pollutants (Tick and specify Group/Family Number)			
		Odourous Yes/No	Description	Threshold $\mu\text{g}/\text{m}^3$	EC EO (Surface Waters) Regulations 2009		EC EO Groundwater Regulations 2010	
					Specific pollutants	Priority (hazardous) substances	Hazardous <sup>1</sup>	Non-hazardous <sup>1</sup>

Note 1: The EPA Classification of Hazardous and Non-Hazardous Substances in Groundwater, December 2010

**TABLE H.3(i): Generation of waste at the installation and its management**

Waste description	EWC Code (use asterisk to indicate whether hazardous waste or not)	Category per Animal By-products Regulation 1069/2009	Source of waste	Quantity generated (tonnes per month)	Location of recovery or disposal (on-site, off-site, exported)	Method of recovery or disposal (e.g. recycling, energy recovery, other incineration, landfill)
Canteen waste	20 01 08		Canteen		Off-site	Recycling
Office waste	20 03 01		Office		Off-site	Energy Recovery
Paper and Packaging	15 01 01		Office		Off-site	Recycling
Waste Oils	13 02 04		Plant maintenance		Off-site	Recycling

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**Table I.2(i) SURFACE WATER QUALITY**

(Sheet 1 of 1) Monitoring Point/ Grid Reference: SW-9 155005E 155750N

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Feb 2012	April 2012	July 2012	October 2012			
pH	8.28	8.16	7.44	7.24	Grab		Standard Method
BOD	1	1	2	7	Grab		Standard Method
Total Suspended Solids	12	40	<2	9	Grab		Standard Method
Ammonia Nitrogen	0.45	0.20	<1	0.51	Grab		Standard Method
Fats Oils Grease	<0.01	<0.01	<1	<1	Grab		Standard Method
Mineral Oils	<0.01	<0.01	<0.001	<1	Grab		Standard Method
TOC	6	18	<7	4	Grab		Standard Method
Arsenic - dissolved	<0.9	<2.5	3	1	Grab		Standard Method
Cadmium - dissolved	<0.03	<0.5	<0.2	0.2	Grab		Standard Method
Chromium - dissolved	<0.2	<1.5	<1	<0.6	Grab		Standard Method
Copper - dissolved	3	<7	<0.2	13	Grab		Standard Method
Mercury - dissolved	<0.5	<1	0.1	0.1	Grab		Standard Method
Nickel - dissolved	1.2	<2	<0.2	<2	Grab		Standard Method
Lead - dissolved	1.9	<5	<0.2	<0.8	Grab		Standard Method
Zinc - dissolved	1.7	8	<0.2	11	Grab		Standard Method

(Sheet 1 of 1) Monitoring Point/ Grid Reference: SW-10 154922E 155776N

Parameter	Results (mg/l)				Sampling method <sup>2</sup> (grab, drift etc.)	Normal Analytical Range <sup>2</sup>	Analysis method / technique
	Feb 2012	April 2012	July 2012	October 2012			
pH	8.21	8.24	7.50	6.82	Grab		Standard Method
BOD	2	4	2	89	Grab		Standard Method
Total Suspended Solids	<10	<10	2	51	Grab		Standard Method
Ammonia Nitrogen	0.93	0.27	<1	0.04	Grab		Standard Method
Fats Oils Grease	<0.01	<0.01	<1	3.3	Grab		Standard Method
Mineral Oils	<0.01	<0.01	<0.001	<1	Grab		Standard Method
TOC	15	20	<7	19.27	Grab		Standard Method
Arsenic - dissolved	2	<2.5	3	1	Grab		Standard Method
Cadmium - dissolved	<0.03	<0.5	<0.2	0.2	Grab		Standard Method
Chromium - dissolved	<0.2	<1.5	<1		Grab		Standard Method
Copper - dissolved	<3	<7	<0.2	3	Grab		Standard Method
Mercury - dissolved	<0.5	<1	<0.01	0.1	Grab		Standard Method
Nickel - dissolved	<0.2	<2	<0.2	2.4	Grab		Standard Method
Lead - dissolved	0.7	<5	<0.2	1.4	Grab		Standard Method
Zinc - dissolved	<1.5	5	<0.2	13	Grab		Standard Method

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**Table I.4(i) GROUNDWATER QUALITY**

(Sheet 1 of 1) Monitoring Point/ Grid Reference: GW-M1 154923E 155667 N

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Feb 2012	August 2012	May 2013	Date			
BOD	6	<1	25	6	Grab		Standard Method
TSS	6316	6066	2748	648	Grab		Standard Method
Dissolved Oxygen	7	5	4.47	8	Grab		Standard Method
Oils, Fats & Greases	<0.01	<0.01	2	<0.1	Grab		Standard Method
Total Phosphorus	4.643	1.755	2.8	1.8	Grab		Standard Method
Ammoniacal Nitrogen	10.51	9.77	7.45	12.57	Grab		Standard Method
Conductivity	0.955	0.747	0.868	1.291	Grab		Standard Method
DRO	<0.01	<0.01	0.66	<0.01	Grab		Standard Method
Aliphatic Hydrocarbons	<0.01	<0.01	0.861	0.730	Grab		Standard Method
Undecane	<0.01	<0.01	<0.01	<0.01	Grab		Standard Method

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**Table I.4(i) GROUNDWATER QUALITY**

**(Sheet 1 of 1)** Monitoring Point/ Grid Reference: GW-M2 154920E 155770N

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Feb 2012	August 2012	May 2013	Dec 2013			
BOD	1	2	2	<1	Grab		Standard Method
TSS	310	2188	2708	247	Grab		Standard Method
Dissolved Oxygen	10	7	6.09	6	Grab		Standard Method
Oils, Fats & Greases	<0.01	<0.01	<1	<0.1	Grab		Standard Method
Total Phosphorus	0.635	0.705	0.52	0.618	Grab		Standard Method
Ammoniacal Nitrogen	2.66	3.90	0.89	3.79	Grab		Standard Method
Conductivity	0.882	0.965	0.935	1.004	Grab		Standard Method
DRO	<0.01	<0.01	<0.01	<0.01	Grab		Standard Method
Aliphatic Hydrocarbons	<0.01	<0.01	<0.01	<0.01	Grab		Standard Method
Undecane	<0.01	<0.01	<0.01	<0.01	Grab		Standard Method

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**Table I.4(i) GROUNDWATER QUALITY**

**(Sheet 1 of 1)** Monitoring Point/ Grid Reference: GW-M3 155049E 155604N

Parameter	Results (mg/l)				Sampling method (composite etc.)	Normal Analytical Range	Analysis method / technique
	Feb 2012	August 2012	May 2013	Dec 2013			
BOD	<1	<1	7	2	Grab		Standard Method
TSS	94	345	420	920	Grab		Standard Method
Dissolved Oxygen	8	7	4.98	4	Grab		Standard Method
Oils, Fats & Greases	<0.01	<0.01	<1	<0.1	Grab		Standard Method
Total Phosphorus	0.100	0.184	0.41	0.456	Grab		Standard Method
Ammoniacal Nitrogen	0.68	1.11	0.66	1.04	Grab		Standard Method
Conductivity	0.696	0.855	0.815	0.903	Grab		Standard Method
DRO	<0.01	<0.01	1.88	<0.01	Grab		Standard Method
Aliphatic Hydrocarbons	<0.01	<0.01	3.37	<0.01	Grab		Standard Method
Undecane	<0.01	<0.01	<0.01	<0.01	Grab		Standard Method

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TABLE I.4(II): LIST OF OWNERS/FARMERS OF LAND **NOT APPLICABLE**

Land Owner	Townlands where landspreading	Map Reference	Fertiliser P requirement for each farm
			*NMP must take account of on-farm slurry

Total P requirement of the client List \_\_\_\_\_

**TABLE I.4(ii): LANDSPREADING**

Land Owner/Farmer \_\_\_\_\_

Map Reference \_\_\_\_\_

Field ID	Total Area (ha)	(a) Usable Area (ha)	Soil P Test Mg/l	Date of P test	Crop	P Required (kg P/ha)	Volume of On-Farm Slurry Returned (m <sup>3</sup> /ha)	Estimated P in On-Farm Slurry (kg P/ha)	(b) Volume to be Applied (m <sup>3</sup> /ha)	P Applied (kg P/ha)	Total Volume of imported slurry per plot (m <sup>3</sup> )

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**TOTAL VOLUME THAT CAN BE IMPORTED ON TO THE FARM:**

Concentration of P in landspread material	- kg P/m <sup>3</sup>
Concentration of N in landspread material	- kg N/m <sup>3</sup>

**Table I.7(i): AMBIENT & BACKGROUND NOISE ASSESSMENT**

**Need to carry out an assessment for tonal and impulsive noise<sup>1</sup>**

	National Grid Reference (6N, 6E)	Sound Pressure Levels (dB)					
		L <sub>Aeq</sub>		L <sub>A10</sub>		L <sub>A90</sub>	
		Ambient	Background <sup>2</sup>	Ambient	Background <sup>2</sup>	Ambient	Background <sup>2</sup>
<b>1. SITE BOUNDARY<sup>3</sup></b>							
<b>Location 1:</b>							
<b>Location 2:</b>							
<b>Location 3:</b>							
<b>Location 4:</b>							
<b>2. NOISE SENSITIVE LOCATIONS<sup>3</sup></b>							
<b>Location 1:</b>							
<b>Location 2:</b>							
<b>Location 3:</b>							
<b>Location 4:</b>							

1. Refer to section 5 of the Agency's *Guidance Note for Noise: Licence Applications, Surveys and Assessments in Relation to Scheduled Activities (NG4)* (2012).
2. Background noise levels should be determined in the absence of site specific noise. Where an installation is operational on a 24hr basis, estimates may be given for background noise levels, but this should be noted.
3. All locations should be identified on accompanying drawings.

## ANNEX 2: CHECKLIST FOR Regulation 9 COMPLIANCE

Regulation 9 of the Environmental Protection Agency (Industrial Emissions)(Licensing) Regulations, 2013 sets out the statutory requirements for information to accompany a licence application. The Application Form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in Regulation 9. In order to ensure a legally valid application in respect of Regulation 9 requirements, all Applicants should complete the following checklist and submit it with the completed Application Form.

Regulation 9(2)		Section in Application	Checked by Applicant ✓
(a)	Give:		
	(i) the name, address and telephone number of the applicant and, if different, any address to which correspondence relating to the application should be sent and, if the applicant is a body corporate, the address of its registered or principal office,	B1	✓
	(ii) The location or postal address (including, where appropriate, the name of the relevant townland or townlands) of the premises to which the activity relates,	B2	✓
	(iii) The name of the planning authority in whose functional area the activity is or will be carried on, and	B6	✓
(iv) In the case of a discharge of any trade effluent or other matter (other than domestic sewage or storm water) to a sewer of a sanitary authority, give the name of the sanitary authority in which the sewer is vested or b which it is controlled	B7	✓	
(b)	give -		
(i) in the case of an established activity, the number of employees and other persons working or engaged in connection with the activity on the date after which a licence is required and during normal levels of operation, or	B5	✓	
(ii) in any other case, the gross capital cost of the activity to which the application relates,			

<b>Regulation 9(2)</b>		<b>Section in Application</b>	<b>Checked by Applicant ✓</b>
(c)	specify the relevant class or classes in the First Schedule to the Act to which the industrial emissions directive activity relates,	<i>B3</i>	✓
(d)	In accordance with Section 87(1B)(a) of the EPA Acts of 1992 to 2013 in the case where an application for permission for the development comprising or for the purposes of the industrial emissions directive activity to which the application for the licence relates is currently under consideration by the planning authority concerned or An Bord Pleanála, a written confirmation from the planning authority or An Bord Pleanála, as appropriate, of that fact together with either:  (i) a copy of the environmental impact statement, 2 hard copies and 2 electronic copies or in such form as may be specified by the Agency, that was required to be submitted with the application for planning permission, or  (ii) a written confirmation from the planning authority or An Bord Pleanála that an environmental impact assessment is not required by or under the Act of 2000,		
(e)	In accordance with section 87(1B)(b) of the EPA Acts of 1992 to 2013 in the case where permission for the development comprising or for the purposes of the industrial emissions directive activity to which the application for the licence relates has been granted, a copy of the grant of permission together with either:  (i) a copy of the environmental impact statement, 2 hard copies and 2 electronic copies or in such form as may be specified by the Agency, that was required to be submitted with the application for permission, or  (ii) a written confirmation from the planning authority or An Bord Pleanála that an environmental impact assessment was not required by or under the Act of 2000,	<i>B6(b)</i>	✓
(f)	specify the raw and ancillary materials, substances, preparations, fuels and energy which will be produced by or utilised in the activity,	<i>G1</i>	✓
(g)	describe the plant, methods, processes, ancillary processes, abatement, recovery and treatment systems, and operating procedures for the activity,	<i>D</i>	✓

<b>Regulation 9(2)</b>		<b>Section in Application</b>	<b>Checked by Applicant ✓</b>
(h)	indicate how the requirements of section 83(5)(a)(i) to (v) and (vii) to (xa) of the Act shall be met, having regard, where appropriate, to any relevant specification issued by the Agency under section 5(3)(b) of that Act or any applicable best available techniques (BAT) conclusions adopted in accordance with Article 13(5) of the Industrial Emissions Directive and the reasons for the selection of the arrangements proposed,	<i>I.8</i>	✓
(i)	give particulars of the source, nature, composition, temperature, volume, level, rate, method of treatment and location of emissions, and the period or periods during which the emissions are, or are to be, made,	<i>E</i>	✓
(j)	identify monitoring and sampling points and outline proposals for monitoring emissions and the environmental consequences of any such emissions,	<i>F</i>	✓
(k)	provide: (i) details, and an assessment, of the impacts of any existing or proposed emissions on the environment as a whole, including on an environmental medium other than that or those into which the emissions are, or are to be, made, and (ii) details of the proposed measures to prevent or eliminate, or where that is not practicable, to limit, reduce or abate emissions,	<i>I</i>	✓ ✓
(l)	describe in outline the main alternatives to the proposed technology, techniques and measures which were studied by the applicant,	<i>I.8</i>	✓
(m)	describe the condition of the site of the installation,	<i>I</i>	✓

<b>Regulation 9(2)</b>		<b>Section in Application</b>	<b>Checked by Applicant ✓</b>
(n)	Provide, when requested by the Agency, in the case of an activity that involves the use, production or release of relevant hazardous substances (as defined in section 3 of the Act of 1992) and having regard to the possibility of soil and groundwater contamination at the site of the installation, a baseline report in accordance with section 86B of the Act of 1992,	I.4	✓
(o)	specify the measures to be taken to comply with an environmental quality standard where such a standard requires stricter conditions to be attached to a licence than would otherwise be determined by reference to best available techniques,	I	✓
(p)	describe the measures to be taken for minimising pollution over long distances or in the territory of other states,	I	✓
(q)	describe the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages,	F	✓
(r)	describe the measures to be taken on and following the permanent cessation of the activity or part of the activity to avoid any risk of environmental pollution and to return the site of the activity to a satisfactory state or the state established in the baseline report if such is required under section 86B of the Act of 1992,	K	✓
(s)	describe the arrangements for the prevention of waste in accordance with Part III of the Act of 1996, and where waste is generated by the installation, how it will be in order of priority in accordance with section 21A the Act of 1996, prepared for re-use, recycling, recovery or where that is not technically or economically possible, disposed of in a manner which will prevent or minimise any impact on the environment,	D.2.3	✓

<b>Regulation 9(2)</b>		<b>Section in Application</b>	<b>Checked by Applicant ✓</b>
(t)	specify, by reference to the relevant European Waste Catalogue codes as prescribed by Commission Decision 2000/532/EC of 3 May 2000, the quantity and nature of the waste or wastes produced or to be produced by the activity, or the quantity and nature of waste or waste accepted or to be accepted at the installation,	<i>D.2.1</i>	✓
(u)	state whether the activity consists of, comprises, or is for the purposes of an establishment to which the European Communities (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2006(S.I. No. 74 of 2006) apply,	<i>B10</i>	✓
(v)	describe, in the case of an activity which gives rise, or could give rise, to an emission containing a hazardous substance which is discharged to an aquifer and is specified in the Annex to Council Directive 80/68/EEC of 17 December 1979 on the protection of groundwater against pollution caused by certain dangerous substances, the arrangements necessary to comply with said Council Directive,	<i>I.5</i>	✓
(w)	include a non-technical summary of information provided in relation to the matters specified in subparagraphs (c) to (x) of this paragraph ,	<i>A</i>	✓
(x)	include any other information required under Article 11 of the Industrial Emissions Directive.		



<b>Regulation 9(4)</b> An application for a licence shall be accompanied by -		<b>Section in Application</b>	<b>Checked by Applicant ✓</b>
(a)	a copy of the relevant page of the newspaper in which the notice in accordance with Regulation 5 has been published,	B9	✓
(b)	a copy of the text of the site notice erected or fixed on the land or structure in accordance with Regulation 6,	B9	✓
(c)	a copy of the notice given to the planning authority under section 87(1)(a) of the EPA Acts of 1992 to 2013,	B9	✓
(d)	a copy of such plans, including a site plan and location map, and such other particulars, reports and supporting documentation as are necessary to identify and describe -		
	(i) the activity	B2	✓
	(ii) the position of the site notice in accordance with Regulation 6,	B2	✓
	(iii) the point or points from which emissions are made or are to be made, and	F.2	✓

	(iv) monitoring and sampling points, and		
(e)	a fee specified in accordance with section 99A of the EPA Acts of 1992 to 2013.		✓

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<b>Regulation 9(5)</b>		<b>Checked by Applicant ✓</b>
	A signed original and 1 hardcopy and 2 electronic copies of the application as required under paragraphs (1) and (2) or under paragraphs (1) and (3), where the application concerns a review of a licence, and the accompanying documents and particulars as required under paragraph (4) shall be submitted to the headquarters of the Agency. The 2 electronic copies of all application documentation and particulars must be in searchable PDF format on CD Rom.	
	Hardcopies submitted.	
	CD version submitted.	

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