

EPA Application Form

9.1 - Environmental Management Techniques - Attachment

Organisation Name: *

Starrus Eco Holdings Limited

Application I.D.: *

LA010880

Authorisation Application Form

Amendments to this Application Form Attachment

Version No.	Date	Amendment since previous version	Reason
V.1.0	July 2017	N/A	Online application form attachment
As above	Mar 2018	Identification of required fields	Assist correct completion of attachment

9 Environmental Management Techniques ¹

9.1. Accident Prevention Measures

Measures to prevent accidental emissions and liabilities

Incidents and accidents are unplanned events. Emissions from incidents and (major) accidents usually occur within a relatively short time frame but with greater intensity than under normal operating conditions. Incidents such as fire or fuel spillages can result in liabilities such as contaminated soil and groundwater. Proactive risk management reduces the potential for an incident.

Abnormal operating conditions must be managed without endangering human health and harming the environment, and in particular without risk to water, air, soil, plants or animals, without causing a nuisance through noise or odours, and without adversely affecting the countryside or places of special interest.

The applicant must firstly undertake a risk assessment in accordance with EPA guidance on assessing and costing environmental liabilities. Having identified the key risks, the applicant should populate the following table with the measures to be taken to treat the key risks, e.g., bunding, integrity testing, fire prevention, etc.

The range of measures is dependent on the complexity of the site. Pollution prevention measures may, inter alia, include the following information:

- Conclusions on BAT set out in the EU Reference document on BAT on emissions from storage such as a safety management system; corrosion prevention measures on tanks, etc.
- Details of storage of all raw materials, products and wastes such as segregation, labelling, designation and impervious surface;
- Details of spill or emergency containment measures and structures such as bunds, high level alarms, absorbent materials;
- Details of fire detection and fire-water retention facilities in the event of emergencies or other measures to contain fire-water;
- Details of transport of material within the site, solid, liquid or sludge transported by pipe, vehicle or conveyor; etc.,
- The Agency has published a guidance document on Fire-Water Retention Facilities and on the Storage and transfer of materials.

¹ This part of the form collects information on environmental management at the installation/ facility. It seeks to understand the maturity of the management system in terms of knowledge of abnormal operating conditions, prevention and early detection measures and emergency response procedures. The level of detail required in this part of form relates to the environmental risk posed.

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Describe in the table below existing and/or proposed measures, including emergency procedures, to minimise the impact on the environment of an accidental emission or spillage. (This table should include the measures to be taken under abnormal operating conditions, including start-up, shutdown, leaks, malfunctions, breakdowns and momentary stoppages that will demonstrate that any emission arising will not cause significant environmental pollution)².

Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
Material Storage	Materials are stored in accordance with an OEE approved Waste and Materials Storage Plan. All tank, drum and container storage areas meet the requirements of Condition 3.11 of the current licence and in conjunction with the underground pipes are subject to regular integrity testing as required by Condition 3.11.5. Impermeable concrete surfaces are provided in operational areas, as required by Condition 3.6.3 of the current licence.	On-going	Industry best practice and BAT Conclusions on Storage
Emergency Response Procedure	SEHL has prepared an Emergency Response plan (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.	On-going	Industry best practice, licence conditions and BAT Conclusions on Waste Treatment.
Fire Detection & Suppression	SEHL has completed a site specific fire risk assessment and prepared a Procedure on Fire Prevention and Detection. Fixed plant are the highest risk of ignition in the installation, including the plastic granulator, high	On-going	EPA Guidance Note on Fire Safety at Non Hazardous Waste Sites and the UK Environment Agency's Technical Guidance Note TGN7-01 Reducing Fire Risk at Sites Storing Combustible Materials.

² Information relating to the integrity, impermeability and recent testing of pipes, tanks and bund areas should be included.

* indicates required field

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Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	<p>speed “linder” shredder and MSW processing line. Smoke detectors are located in all indoor areas. 24 hour, thermal imaging CCTV are located in MP-1 and MP-2.</p> <p>Fire extinguishers are placed a regular intervals and are readily accessible. Hose reels are placed at adequate intervals throughout the site. There are seven hydrants located on site for the fire services to tap into.</p>		
Firewater Retention	A Firewater Retention Assessment has been completed.		EPA Guidance on Retention Requirements for Firewater Run-Off (2019)
Environmental Liability Risk Assessment	SEHL has prepared an Environmental Liability Risk Assessment for the licensed installation. This has been approved by the Agency and an agreed financial provision put in place.	As required by OEEI	EPA Guidance on Assessing and Costing Environmental Liabilities’ (March 2014)
Decommissioning Management Plan	SEHL has prepared a Decommissioning Management Plan for the licensed installation. This has been approved by the Agency and an agreed financial provision put in place.	As required by OEE	EPA Guidance on Assessing and Costing Environmental Liabilities’ (March 2014)
Accident Prevention Policy & Safety Statement	SEHL has adopted an Accident Prevention Policy and has prepared a Safety Statement for the installation that makes provision for hazard identification and risk assessment. All personnel and visitors are obliged to comply with site guidelines regarding access to and from the facility and on-site traffic movement. All site personnel are provided with and are obliged to wear, personal	On-going	Industry Best Practice and Health & Safety Regulations

* indicates required field

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Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	protective equipment (PPE) appropriate for their particular functions. PPE includes facemasks, gloves, safety glasses, steel-toed footwear, overalls, reflective jackets and helmets		
Odour Management Plan	SEHL has prepared an Odour Management Plan (OMP) that specifies the control measures that are implemented to ensure operations do not cause off-site odour nuisance.	Plan amended as required in response to operational changes	Industry best practice and BAT Conclusions on Waste Treatment

*add rows to the table as necessary



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Outline what provisions have been made to ensure an adequate response to emergency situations outside of normal working hours, i.e., during night-time, weekends and holiday periods (attach additional pages to this document if required): *

SEHL has adopted an ERP that identifies potential hazards at the site that may cause damage to the environment and also specifies the roles, responsibilities and actions required to deal quickly and efficiently with all foreseeable major incidents and to minimise environmental impacts.

Soil Monitoring Points

Periodic monitoring of soil and groundwater is required having regard to the possibility of soil and groundwater contamination of the site³.

Complete the table below with details of soil monitoring locations and in particular where a baseline report has been/is required in accordance with Section 86B of the EPA Act 1992 as amended.

Is periodic soil monitoring proposed at the installation/facility? (Yes/No): *

Soil Monitoring Point Code	Monitoring Point Grid Ref.	
	Easting ⁴	Northing ⁵

*add rows to the table as necessary

Soil Parameters

-
- 3 Inherent in the monitoring of soil and groundwater is accepting the possible necessity for remediation of the soil / groundwater. Regular monitoring of soil and groundwater provides an early detection of any contaminations.
 - 4 Six Digit GPS Irish National Grid Reference
 - 5 Six Digit GPS Irish National Grid Reference

* indicates required field



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Complete the table below with details of soil monitoring parameters (where a baseline report is required in accordance with Section 86B of the EPA Act 1992 as amended). (If different parameters are associated with different monitoring points this should also be identified in the table below.)

Parameter	Unit	Trigger Level	How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique

*add rows to the table as necessary



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Groundwater Monitoring Points – Not Applicable

Based on the assessment(s) carried out previously or as part of this licence application, complete the table below with summary details of the groundwater monitoring points.

Is groundwater monitoring proposed at the installation/facility? (Yes/No): *

No

Monitoring Point Code	Monitoring Point Grid Ref.	
	Easting ⁶	Northing ⁷

*add rows to the table as necessary

⁶ Six Digit GPS Irish National Grid Reference

⁷ Six Digit GPS Irish National Grid Reference

* indicates required field

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Costed Environmental Liabilities Risk Assessment (ELRA)

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to submit a costed ELRA⁸ as part of the licence, or licence review application.

Costed Environmental Liabilities Risk Assessment (ELRA) required to be submitted? (Yes/No): *

If 'Yes', upload a costed Environmental Liabilities Risk Assessment (ELRA), prepared in accordance with the *Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities* (2014) (select Document Type: 'ELRA' in the application form).

Costed **ELRA** document filename:

Indicate your preferred form of financial provision instrument to meet ELRA costings have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015), e.g., Environmental Liability Insurance:

Upload a financial provision proposal have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) (where required at application /review application stage) (select Document Type: 'Financial Provision Proposal' in the application form)

Financial Provision Proposal filename:

⁸ There is an explicit requirement in EU and Irish law for financial provision for certain activities. The following categories of activities have an ELRA/CRAMP/FP requirement:

1. Landfills (excl. closed L.A. Landfills closed before 16th July 2009)
2. CAT A Extractive Waste Facilities
3. High Risk Contaminated Land Facilities
4. All Haz-Waste Transfer Stations
5. Non-Haz WTS (Accepting >50,000 tons/annum)
6. Incineration (incl. co-incineration of hazardous waste)
7. Upper & Lower Tier Seveso Sites
8. Exceptional circumstances associated with the site, e.g., significant ground/groundwater contamination.

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

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Closure, Restoration and Aftercare Management Plan (CRAMP)

A restoration/aftercare period will be required where there are on-going environmental liabilities following closure. Applicants are required to describe the existing or proposed measures to avoid any risk of environmental pollution and to return the site to a satisfactory state or the state established in the baseline report where applicable, after the activity or part of the activity ceases operation.

A key measure is the preparation of a Closure, Restoration and Aftercare Management Plan (CRAMP) by the operator, for certain activities⁹. Notwithstanding the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, S.I. No. 9 of 2010, the closure and restoration/ aftercare target is the site condition at the time of the original application or the baseline report. The applicant shall have regard to the Environmental Protection Agency's Guidance on Assessing and Costing Environmental Liabilities (2014) in the preparation of the CRAMP.

Upload a CRAMP, where applicable (select Document Type: '**Site Closure**' in the application form).

CRAMP filename:

Costed CRAMP

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to have a CRAMP⁹ submitted as part of the licence, or licence review application.

CRAMP required to be submitted at application/licence review application stage? (Yes/No): *

⁹ There is an explicit requirement in EU and Irish law for financial provision for certain activities. The applicant shall have regard to the Environmental Protection Agency's Guidance in determining CRAMP requirements and on Financial Provision (2015) in making financial provision to cover any liabilities.

The following categories of activities have an ELRA/CRAMP/FP requirement:

1. Landfills (excl. closed L.A. Landfills closed before 16th July 2009)
2. CAT A Extractive Waste Facilities
3. High Risk Contaminated Land Facilities
4. All Haz-Waste Transfer Stations
5. Non-Haz WTS (Accepting >50,000 tons/annum)
6. Incineration (incl. co-incineration of hazardous waste)
7. Upper & Lower Tier Seveso Sites
8. Exceptional circumstances associated with the site e.g. significant ground/groundwater contamination.



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Indicate your preferred form of financial provision instrument to meet CRAMP costings (where appropriate), e.g., Secured fund, On-demand performance Bond, Parent Company Guarantee, Charge on Property (have regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) on the Agency's website):

State preferred form of financial provision instrument?

Upload a financial provision proposal (where required) having regard to the Environmental Protection Agency's Guidance on Financial Provision (2015) in making financial provision to cover any liabilities (select Document Type: **Financial Provision Proposal** in the application form)

Financial Provision Proposal filename:

Cessation of Activity

Where a CRAMP is not required, 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. (Input your response in the text box below or attach the information in to this attachment).

Emergency Response Procedure

Do you have an emergency response procedure (ERP)? (Yes/No) *

Is the ERP compliant with the EPA guidance? (Yes/No) *

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9.2. Nuisance

Complete the table below in relation to each potential nuisance. Identify if the activity may cause or contribute to the type of nuisance in the area of the installation/facility and, where applicable, identify the techniques used to prevent/minimise the nuisance.

Type of Nuisance	Applicable to the activity? * (Yes/No/ Not Applicable)	Techniques to prevent nuisances *	Where nuisances cannot be prevented, techniques to be used to minimise and reduce nuisances
Odour	Yes		<p>The only wastes accepted at the facility that are a significant source of malodours are the mixed solid waste and brown bin waste, which are handled and stored in MP1. SEHL has prepared an Odour Management Plan (OMP) that specifies the control measures that are implemented to ensure operations do not cause off-site odour nuisance. The control measures include:</p> <ul style="list-style-type: none"> • Fast turn-around times for the wastes prevents the accumulation of large volumes of odour generating waste. Condition 6.5.1 of the EPA licence requires that “all waste for disposal to be removed from the facility within forty eight hours of its arrival at the facility”; • All ‘brown bin’ waste is bulked up and transferred as soon as possible to designated facilities for processing. The segregated fractions from the MSW processing line are sent off-site to their destinations as soon as possible after processing; • At any one time there is a maximum of 200 tonnes of MSW and 100 tonnes of ‘brown bin’ waste inside the building; • Weekly cleaning of all bays where MSW and ‘brown bin’ waste is stored; • Fast acting doors on the entrances to MP2 that minimise the door opening times when vehicles enter and leave the building, and

* indicates required field

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Type of Nuisance	Applicable to the activity? * (Yes/No/ Not Applicable)	Techniques to prevent nuisances *	Where nuisances cannot be prevented, techniques to be used to minimise and reduce nuisances
			<ul style="list-style-type: none"> A mobile odour neutralising atomiser is maintained at the site and deployed in the event of extended periods of warm weather or if a particularly odorous load is delivered. <p>Although current operations are not causing off-site odour nuisance, as a precautionary measure due to the proposed increased in the volume of odorous waste accepted, an odour control system will be installed.</p> <p>The system will comprise a negative air extraction system and an odour control unit (OCU) consisting of a dust filter to remove dusts and a carbon filter to reduce odour levels.</p>
Fire Control	Yes	<p>General fire detection and warning measures are maintained throughout the site. There are smoke detectors located in all indoor areas. MP 1 and MP2 are monitored by 24-hour Thermal Imaging cameras</p> <p>There are 7 No on site fire hydrants located around the site. Fire extinguishers and hose reels are positioned at strategic locations recorded in Fire Register. The extinguishers are subject to annual inspection and replenishment/replacement as required by a fire safety contractor. There are seven fire hydrants located around that site in areas accessible by the Fire Service.</p> <p>Site staff are trained to extinguish small fires with appropriate hand held fire extinguishers as per the site Fire Explosion Procedure. If staff members cannot tackle a fire safely and effectively, the evacuation of all personnel will be the primary priority. Emergency exit doors are provided in all of the buildings and fitted with emergency exit signs with back-up lighting.</p>	

* indicates required field

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Type of Nuisance	Applicable to the activity? * (Yes/No/ Not Applicable)	Techniques to prevent nuisances *	Where nuisances cannot be prevented, techniques to be used to minimise and reduce nuisances
Dust	Yes		Waste processing is and will continue to be located inside the buildings. The granulator is fitted with two dust cyclone collection units, installed in compliance with Condition 3.15.3 (iii) of the licence, that effectively control the dust emissions. SEHL cleans the paved yards and building floors regularly using a road sweeper and damps down the yard using hoses in dry periods.
Litter	Yes		The site and immediate surroundings are inspected on a daily basis for litter inside and outside the installation boundary and if present it is removed.
Birds	Yes		The site and immediate surroundings are inspected on a daily basis for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. The fast acting doors on the entrances to MP2 deter birds from entering the building.
Mud	Yes		The site and immediate surroundings are inspected on a daily basis for nuisances caused by litter, vermin, birds, flies, mud, dust and odours.
Flies	Yes		The site and immediate surroundings are inspected on a daily basis for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. SEHL have contracted a specialist pest controller who visits the site monthly to replenish vermin station bait boxes and will also call out to deal with insect infestation if they occur.
Vermin	Yes		The site and immediate surroundings are inspected on a daily basis for nuisances caused by litter, vermin, birds, flies, mud, dust and odours. SEHL have contracted a specialist pest controller who visits the site monthly to replenish vermin station bait boxes and will also call out to deal with insect infestation if they occur.
Other	No		

If 'Other' is selected define the other nuisance(s):

Note: Odour must also be addressed in the fugitive emissions section of the '7.4 Emissions to Atmosphere – Main and Fugitive' template, where applicable.



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9.3. Environmental Management System (EMS)

Do you have an environmental management system? (Yes/No) *

If 'Yes', is the environmental management system accredited? (Yes/No) *

State the date accreditation was achieved or is expected to be achieved, where applicable:

State the standard of accreditation achieved:

Energy Efficiency

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 Audit should be carried out. *

SEHL is committed to complying with the requirements of the European Commission's Reference Document on Best Available Techniques (BAT) for Energy Efficiency.
Diesel fuelled plant engines are only turned on when wastes are being processed and SEHL has a policy of not allowing mobile plant engine idling. This also applies to waste transport vehicles serving the facility.

Has an energy audit been carried out? (Yes/No) *

Do you have an energy efficiency management system? (Yes/No) *

If 'Yes', is the energy efficiency management system accredited? (Yes/No)

State the date accreditation was achieved or is expected to be achieved, where applicable:

State the standard of accreditation achieved:

* indicates required field

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9.4. Hours of Operation

Provide details of the hours of operation for the installation/facility * (hours and days per week, etc.), 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 (e.g., waste handling, etc.).

The waste acceptance and operational hours are 24 hours a day 7 days a week.

9.5. Review of a Licence. NOT APPLICABLE

Where the Office of Environmental Enforcement (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 in the table that follows.

An updated, scaled drawing of the site layout (no larger than A3) providing visual information on such adjustments or variations where appropriate should be uploaded in the **site tab** – ‘site plan(s)’ upload.

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, in the table below.

Condition/ Schedule No.	Existing Condition	OEE Agreement Reference	Description
Not Applicable			

*add rows to the table as necessary

9.6 Environmental Management Techniques – Upload Files

State the number of ‘upload files’ referred to and named in this attachment document? *

* indicates required field