

EPA Application Form

9.1 - Environmental Management Techniques -Attachment

Organisation Name: *

Application I.D.: *

Starrus Eco Holdings Ltd.

LA001415

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 Techniques¹

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.

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.

	Surveillan	ice Measures		
Measure *	Description *	Frequency of Surveillance *	Method / Standard *	
Fire Risk Assessment	Fire Risk Assessment has been prepared and submitted to the Agency			
Emergency Response Procedure	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. SEHL has documented procedure on the handling and storage of potentially polluting substances used at the facility, e.g. oils and the filling of tanks and mobile plant. The procedure describes how filling the fuel storage tanks and refuelling/servicing the mobile plant should be carried out to minimise the risk of accidental spills and ensure that if these occur there is a rapid and effective response.			
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			

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



	Surveilla	Surveillance Measures						
Measure *	Description *	Frequency of Surveillance *						
	provision put in place.							
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.							
Accident Prevention Policy & Safety Statement	SEHL has adopted an Accident Prevention Policy and has prepared a Safety Statement for the site 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 protective equipment (PPE) appropriate for their particular functions. PPE includes facemasks, gloves, safety glasses, steel-toed footwear, overalls, reflective jackets and helmets							



	Surveillance Measures				
Measure *	Description *	Frequency of Surveillance *	Method / Standard *		



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 Emergency Response Procedure (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. There is a fire alarm and detection system including smoke detectors in the office building. Break glass units can also be used to manually raise the alarm by anyone discovering fire. The main processing building is provided with a 'Vesda' smoke aspiration system. This consists of a network of pipes with openings drawing air into a smoke sampling system. The sampling system includes filtration to remove particulates so that the laser smoke detectors are not compromised. Both alarm systems are linked to a remote monitoring station. Activation of an alarm will cause site management to be alerted to respond, or, if necessary, the emergency services to be called directly.

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): *

No

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

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



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

*add rows to the table as necessary

Soil Parameters

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





Groundwater Monitoring Points

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): *

Yes

Manitanina Daint Cada	Monitoring Poi	nt Grid Ref.
Monitoring Point Code	172048 07	Northing ⁷
W-1	172048	078972
W-2	172146	079065

⁶ Six Digit GPS Irish National Grid Reference

⁷ Six Digit GPS Irish National Grid Reference

^{*} indicates required field



Groundwater Parameters

Complete the table below with summary details of the groundwater parameters. (If different parameters are associated with different monitoring points this should be identified in the table below.)

Parameter	Unit	Trigger Level	How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique
рН	pH units	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Conductivity	mS/cm	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Ammoniacal Nitrogen	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Nitrate	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Nitrite	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Mineral Oils	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
BOD	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
COD	mg/l	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Total Coliforms	cfu/100ml	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
Faecal Coliforms	cfu/100ml	To be set	In accordance with EPA guidance	Bi annually	Pumped sample	To be agreed
*						



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): * Yes

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: '<u>ELRA</u>' in the application form).

Costed **ELRA** document filename:

9-1 ELRA.pdf

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:

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:

9-1 Financial Provision.pdf

1. Landfills (excl. closed L.A. Landfills closed before 16th July 2009)

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

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:

^{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.



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:

9-1 CRAMP.pdf

Costed CRAMP

Indicate if the activity, through pre-application meeting with the Agency or other means, is required to have a CRAMP ⁹ submitted as part of the licence, or licence review application.

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

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.



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



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	Loading and unloading of waste internally, closure of doors except on access and egress	Odour Abatement system
Fire Control	Yes		Removal of dry waste from site as soon as practicable
Dust	Yes		Damping of paved areas, use of road sweepers
Litter	Yes	Loading and unloading of waste internally	Daily litter picks especially at civic amenity area
Birds	Yes		Bird deterrent system
Mud	No		
Flies	Yes		Pest management controls
Vermin	Yes		Pest management controls
Other			

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.

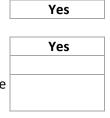


9.3. Environmental Management System (EMS)

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:



ISO 14001:2004

State the standard of accreditation achieved:

Energy Efficiency

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. *

Outline the measures taken to ensure that energy is used efficiently having 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.

> SEHL have permission to install solar panels on the roof of the building which will reduce their reliance on fossil fuel created electricity.

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:

* indicates required field



State the standard of accreditation achieved:



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. The installation is currently licenced to operate 24 hours. It is not proposed to amend the hours of operation
- (b) Proposed hours of construction and development works and timeframes. Zero
- (c) For waste activities, the proposed hours of waste acceptance. The majority of waste is accepted between 08.00 and 18.00 with a small amount accepted between 18.00 and 00.00.
- (d) Any other relevant hours of operation expected (e.g., waste handling, etc.). ??



9.5. Review of a Licence

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

*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? *

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