

EPA Application Form

9.1 - Environmental Management Techniques - Attachment

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Organisation Name: *

Noel Lawler Sand & Gravel Ltd.

Application I.D.: *

LA007210

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

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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 *
Accident Prevention Procedure	<p>Noel Lawler Sand & Gravel Ltd. (the site operator) have in place a Health & Safety System (H&SS) and an Environmental Management System (EMS) which assesses potential hazards specific to the site.</p> <p>The H&SS covers procedures for response to fire and emergencies, including spill response. This document includes method statements, registers of inductions, training, personal protective equipment (PPE) and accident investigation forms.</p> <p>The Accident Prevention Procedures in place address potential hazards on site, in particular those which may give rise to potential negative environmental impacts.</p>	Continuous	N/A
Fire and Emergency Response Procedure	<p>The site operator has in place a H&SS and an EMS which addresses such matters as Emergency Preparedness & Response in dealing with accident and emergency situations, including those which may result in effects on the environment (e.g. fuel spill).</p> <p>The Spill Response Procedure sets out a series of measures to contain and manage spillages of liquids</p>	Continuous	Visual

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>including fuels and oils on the site. Staff will receive regular training in this regard.</p> <p>Emergency spill kits with absorbent pads and containment mats/berms will be kept on site for use in the event of an accidental release.</p> <p>An emergency contact number for out of hours will be prominently displayed at the site entrance and staff members will be available in the event of an emergency callout.</p>		
Dust Suppression	<p>Use of a mobile bowser on access road and within the infill void area/deposition areas.</p> <p>Use of vehicle wheel wash for all trucks prior to leaving the site.</p>	Continuous	Visual
Management of Vehicle Refuelling	<p>No fuels, oils or potentially hazardous chemicals will be stored on the site. All refuelling operations will be carried out in a designated hardstand area where surface water drains and passes through an oil/water separator. Refuelling will only take place from a mobile double-skinned fuel bowser/truck operated by a competent person.</p>	Continuous	N/A
Maintenance and Inspection of Plant	<p>All plant and machinery will be serviced off-site, with regular inspections for leaks completed during day-to-day works.</p>	Continuous	Visual
Quality Control of Imported Material (Inert Soil and Stone EWC 17 05 04)	<p>A stringent set of procedures will be in place to ensure that the facility only accepts suitable material to be deposited in the quarry void. These procedures may be updated based on any</p>	Ongoing inspection of all loads	Visual

* indicates required field

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Measure *	Surveillance Measures		
	Description *	Frequency of Surveillance *	Method / Standard *
	<p>applicable licence conditions or changes to accepted guidance and best practice.</p> <p>The current material acceptance procedure is detailed in full in Section 3.5.5 of the attached EIA Report and includes:</p> <ul style="list-style-type: none"> • Waste Site Pre-Approval • Waste Intake Sampling • Waste Inspection Procedure • Waste Acceptance and Rejection Procedure • Waste Intake Log <p>Ensuring that only acceptable material (clean and inert soil/stone) is deposited at the site is of primary concern and will serve to mitigate environmental risk posed by potential contaminants.</p>	Varies	Approved/accredited laboratory testing methods for variety of parameters.

*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): *

Emergency contact numbers for out of hours will be prominently displayed at the site entrance and staff members will be available in the event of an emergency callout. Local emergency services will be informed of the typical site operations and provided with emergency contact details. CCTV security cameras will be positioned at key locations to remotely monitor site activity. The main site access road via the R747 shall provide direct passage for emergency response vehicles.

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.	
	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

* indicates required field



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Soil Monitoring Point Code	Monitoring Point Grid Ref.	
	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

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*add rows to the table as necessary

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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

Monitoring Point Code	Monitoring Point Grid Ref.	
	Easting ⁶	Northing ⁷
MW1	280888	195314
MW2	281059	195467
MW3	281546	195313
MW4	281124	195064

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*add rows to the table as necessary

⁶ Six Digit GPS Irish National Grid Reference

⁷ Six Digit GPS Irish National Grid Reference

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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.)

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Parameter	Unit	Trigger Level	How was the trigger level determined?	Proposed Monitoring Frequency	Sample Method	Analysis Method / Technique		
Alkalinity	mg/l CaCO ₃	NAC	EPA Interim Guideline Values	Quarterly	Purge 3 x well volume prior to sampling, ensure stable field chemistry readings, sample with submersible pump or waterra tubing and non-return valve.	Titration		
Electrical Conductivity	Us/cm	1875	Groundwater Regulations					
pH	pH Units	6.5-9.5	EPA Interim Guideline Values					
Ammoniacal Nitrogen (as N)	mg/l	0.175	Groundwater Regulations			Soluble ion analysis using discrete analyser		
Chloride	mg/l	187.5	Groundwater Regulations					
Nitrate (as NO ₃)	mg/l	37.5	Groundwater Regulations					
Nitrite (as NO ₂)	mg/l	0.375	Groundwater Regulations					
Sulphate (as SO ₄)	mg/l	187.5	Groundwater Regulations					
Ortho Phosphate (as P)	mg/l	0.375	Groundwater Regulations					
Total Dissolved Solids	mg/l	1000	EPA Interim Guideline Values				Gravimetric determination	
Total Organic Nitrogen	mg/l	NAC	EPA Interim Guideline Values				Calculation	
Potassium (Dissolved)	mg/l	5	EPA Interim Guideline Values				ICPMS	
Sodium (Dissolved)	mg/l	150	Groundwater Regulations					
Calcium	mg/l	200	EPA Interim Guideline Values					
Iron (Dissolved)	mg/l	0.2	EPA Interim Guideline Values					
Magnesium (Dissolved)	mg/l	50	EPA Interim Guideline Values					
Manganese (Dissolved)	mg/l	0.05	EPA Interim Guideline Values					
Nickel (Dissolved)	ug/l	15	Groundwater Regulations					
Total Petroleum Hydrocarbons (TPH)	ug/l	10	EPA Interim Guideline Values					GCMS

*add rows to the table as necessary

* indicates required field



Authorisation Application Form

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.

* indicates required field

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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:

N/A

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.

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

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).

The quarry void will be backfilled to original land contours and restored for agricultural use.

Following completion of the infilling works, topsoil will be placed (approximate 300 mm depth) and the soils will be rolled and reseeded with grasses. The final landform will be profiled to ensure surface water run-off over the ground surface is directed to boundary ditches/swales and site drainage infrastructure.

The weighbridge, wheel-wash facility, office, inspection shed and associated infrastructure at the site will be decommissioned and removed off-site.

Following completion of the restoration and site decommissioning works, provision will be made for further, short-term (1 year) environmental monitoring of groundwater, or as per planning and licence requirements.

* indicates required field

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Emergency Response Procedure

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

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

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	No	Only clean inert soils and stone shall be accepted for infill at the facility. These materials are not likely to emit odours.	Any non-admissible material will be placed in the soil quarantine area pending immediate removal from site to an appropriately authorised facility.
Fire Control	No	Only clean inert soils and stone shall be accepted for infill at the facility. This inert material is by its nature not flammable.	A revised fire and emergency response procedure will be in place prior to start of infill operations which will address measures to be taken in event of a fire.
Dust	Yes	Use of a mobile bowser on access road and within the infill void area/deposition areas. Use of vehicle wheel wash for all trucks prior to leaving the site. Restored areas will be planted with grasses/suitable vegetation.	Restrict use of certain routes/areas during periods of prolonged dry weather.
Litter	No	Only clean inert soils and stone shall be accepted for infill at the facility.	Any non-admissible material will be placed in the soil quarantine area pending immediate removal from site to an appropriately authorised facility.
Birds	No	Only clean inert soils and stone shall be accepted for infill at the facility.	N/A

* 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
Mud	Yes	Use of a wheelwash to clean vehicles leaving the site.	Provision for road sweeping of access and public road.
Flies	No	Only clean inert soils and stone shall be accepted for infill at the facility.	N/A
Vermin	No	Only clean inert soils and stone shall be accepted for infill at the facility.	N/A
Other – Noise	Yes	<ul style="list-style-type: none"> • All plant on-site will be maintained in accordance with manufacturer’s recommendations. In particular, exhaust and silencer systems will be maintained in a satisfactory condition. • All restoration plant and equipment to be used on-site will be modern equipment and will comply with the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations. • Any plant introduced to the site will not be excessively noisy. Where possible, noise data provided by suppliers will be consulted. • Keeping site access and haul roads level and in good repair to reduce the potential for vibration from lorries. • Tailgate slap during tipping events will be prevented by using rubber stops or powered tailgates. • Communication through plant horns will be prohibited. • Unnecessary revving of truck engines will be prohibited. 	Temporary screening banks.

* 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"> Monitoring of noise may form part of the restoration environmental management system, as per planning/licence conditions. 	

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

Noise

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) *

Yes

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

No

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

N/A

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. *

Electricity use on site mainly for site office and staff welfare facilities, site lighting, weighbridge and wheelwash, and pump for groundwater abstraction. Diesel fuel to be used for mobile plant and other vehicles as required. Regular maintenance of all plant and machinery, engines turned off when not in use. Energy efficient retrofit planned for site office. Staff to be trained in energy and resource efficiency.

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

No

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

No

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

N/A

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

State the standard of accreditation achieved:

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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.

- 07:00 – 18:00 Monday to Friday; and 07:00 - 14:00 Saturdays.
- Closed Sundays, Bank Holidays and other Public Holidays.

(b) Proposed hours of construction and development works and timeframes.

- 07:00 – 18:00 Monday to Friday; and 07:00 - 14:00 Saturdays.
- No works on Sundays, Bank Holidays and other Public Holidays.

(c) For waste activities, the proposed hours of waste acceptance.

- As per (a) above.

(d) Any other relevant hours of operation expected (e.g., waste handling, etc.).

- N/A

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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

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*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