



Accident and Environmental Management Plan

Ref ELL-022

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1. Introduction

As part of the environmental permit consolidation application for Ellgia Scunthorpe waste and recycling facility the permit holder must assess the risk and determine if accident or emergency situations may impact on any receptors located within proximity of the facility boundary. This Accident Management Plan (AMP) has been undertaken in accordance with the online Environment Agency Guidance for undertaking environmental risk assessments.

The accident management plan will be regularly reviewed and updated, as required.

Incidents and near misses will be recorded and investigated with any remedial and preventative measures undertaken in accordance with this plan and the site management plan.

If an accident occurs which has the potential to cause an adverse environmental impact, the permit holder will:

- Immediately follow the requirements of the Accident Management Plan
- Undertake all actions necessary to minimise the environmental consequences
- Take all precautions to ensure that health and safety of employees, contractors, customers and other third parties.
- Investigate the reasons and circumstances as to why the accident happened and implement actions to prevent reoccurrence.
- Review the accident management plan at regular intervals (at least every two years).

The assessment of risks associated with potential accident or emergency situations has been undertaken in accordance with the Environment Agency Guidance. The guidance document requires that the Accident Management Plan must fulfil the following four key requirements:

- Identifies events or failures that could damage the environment
- Assesses how likely they are to happen and the potential environmental consequences
- Actions to minimise the potential causes and consequences of accidents
- The actions that are required to be carried out if an accident happens.

The AMP aims to fulfil these requirements.

2. Scope and Purpose

This report assesses the risks that could result in accidents and incidents. This assessment identifies control measures to reduce the risk.

The following key aspects have been evaluated as part of this process:

- Uncontrolled releases
- Unforeseen damage
- Plant failure – breakdown
- Fire
- Flooding

This accident management plan also includes details of the following aspects:

- Information on preventing accidents which could occur on site and what to do if an accident or incident occurs
- A list of key contacts and contact numbers (Appendix 1)
- Accident/incident reporting form (Appendix 2)

3. Roles and Responsibility

The Operations Manager (or nominated deputy) is designated as the responsible person for the management of incidents and emergencies, including coordination of actions, reporting to senior management and regulators, and liaising with the emergency services.

All personnel will be trained in emergency response, and the necessary plant, equipment, and consumables for dealing with incidents & emergencies will be available on site to ensure that all the required measures can be implemented without delay.

All managers have read and must comply with all actions relevant to their role and implement all operational instructions for response to incidents & emergencies and subsequent investigations.

4. Training and Equipment

4.1 Training

All staff members should receive appropriate and relevant training (including refresher training) in accordance with the company role specific training matrix to correctly respond to any emergency, for example:

- How to raise the alarm
- How to use any emergency equipment
- Respond to requests from senior managers, emergency services and third parties.

4.2 Safety and Emergency Equipment

All appropriate safety and emergency equipment is available adjacent to the processing areas and will include the following:

- First aid equipment
- Firefighting equipment (including extinguishers, hose reels etc.)
- Spill kits

All equipment required by the Health and Safety at Work Act, its implementing regulations and the relevant accompanying guidance will be provided.

4.3 Personal Protective Equipment (PPE)

Each employee is provided with and required to wear the following personal protective equipment at all times while on site. This includes:

- Safety boots
- Gloves
- High visibility clothing
- Safety helmet
- Safety glasses
- Eye protection (where required)
- Ear protection (where required)

Specific tasks which require additional PPE (for example respiratory protection) will be provided in accordance with risk assessments and permits to work.

4.4 Site Rules

All site personal, contractors and visitors will receive instruction and comply with the following at all times:

- Contractors Site Rules
- Visitor Safety Instructions

5 Site Operations

5.1 Regulated Activities

Schedule 1 listed activities							
	Installation name	Schedule 1 references	Description of the Activity	Activity capacity	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity	Non-hazardous waste treatment capacity
AR1	Elgia Scunthorpe	Section 5.4 Part A(1)b(ii)	Recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes per day involving pre-treatment of waste for incineration or co-incineration.	400.00	<p>R3: Recycling/reclamation of organic substances which are not used as solvents.</p> <p>D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12.</p>		400
AR2	Elgia Scunthorpe	Section 5.4 Part A(1)(a)(iii)	Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day involving pre-treatment of waste for incineration or co-incineration.	400.00	<p>R3: Recycling/reclamation of organic substances which are not used as solvents.</p> <p>D9: Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12.</p>		400
Directly associated activities							
Name of DAA		Description of the activity					
AR 3	Storage of non-hazardous waste prior to treatment.	Storage of non-hazardous waste prior to submission to activity AR1 and AR2. Storage within a building or on impermeable concrete surface with contained drainage. Waste types as specified in section 3.					

		<p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced).</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).</p>	
AR 4	Storage of non-hazardous waste following treatment.	<p>Storage of SRF and RDF produced from activity AR1 and AR2 prior to dispatch off site. Storage within a building (except for wrapped bales of waste). Waste types as specified in section 3.</p> <p>R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced).</p> <p>D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where the waste is produced).</p>	
AR5	Drying SRF feedstock material	Includes 1 x 999kW biomass boiler used to heat hot air type drying floor. System is used to dry certain SRF feedstock material prior to being transferred to installation activity: AR1	
	For installations that take waste	Total storage capacity	40,000
		Annual throughput (tonnes each year)	400,000

6 Risk Assessment for Accident/Incident Scenarios

6.1 Risk Assessment

The potential for environmental accidents or incidents to occur has been evaluated and recorded in the Environment Risk Assessment submitted with the Environmental Permit Application. The assessment is based on a source-pathway-receptor model. The model focuses on the key environmental risk sources and assesses the potential for them to move via a defined pathway and to impact upon an identified receptor. The probability of exposure and consequence of a hazard occurring are assessed assuming that the identified risk management technique has been effectively implemented.

The following processes were employed in producing the Environmental Risk Assessment:

- Identify the source of the hazard/accident scenario
- Identify the relevant receptors
- Identify pathways
- Assess the hazard
- State methods and management techniques
- Determine the probability of occurrence
- Evaluate the consequence
- Determine if any immediate actions will be required.

Identified Accident / Incident Scenarios

The scenarios below describe events that meet one of the following definitions and would require actions and mitigation.

i. Hazard

Anything (object, event, process) that has the potential to cause damage or loss to the organisation, patient, staff, visitor or other

ii. Incident

An event that may cause harm or potential harm to a person or environmental receptor e.g. air, water, land, wildlife or local habitat. This can include uncontrolled leaks and spillages of any materials or non-compliance to any permitted condition or consent limit.

iii. Near Miss

Any event or omission where an incident almost occurred which had the potential to cause harm, injury, damage or loss but failed to develop, whether or not as a result of compensation action.

iv. Accident

Is a specific event that results in the injury, death, or ill health of an employee or has the potential for harming the ecosystem or natural resources.

Risk Assessment for Permit Consolidation / Variation ELL/012

Introduction

The following risk assessment has been undertaken by Ellgia Ltd based the SRP Risk assessment in line with pre-planning advice ELL/001 paragraph 2. The risk assessment should be read in conjunction with the non-technical summary ELL/002, the description of activities and proposed variations ELL/003 and list of permitted wastes ELL/015.

The activities on site will not change because of the permit consolidation / variation. The primary reasons for the application are to simplify the permitting into a single modern style permit and add an installation due to the volumes of RDF and SRF being produced.

The key parameter of the existing permits

Permitted activities	The storage and repackaging of waste and treatment consisting of manual sorting, separation, screening, baling, shredding, crushing, or compaction see ELL/003
Permitted waste types	Non-hazardous Household, Commercial and Industrial Waste see ELL/015
Maximum quantity of waste accepted at the facility	237,000 tonnes per year across three permits see ELL/006a and ELL/015
Maximum quantities of waste stored on site	69,090 tonnes across three permits see ELL/006a and ELL/015

Coding

Levels	Probability of Exposure		Judgement	
	Consequence		Magnitude of Risk	
Very low				
Low				
Medium				
High				

Risk Assessment

Data and information				Judgement			Action (by permitting)		
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk management	Residual risk
What is at risk? What do I wish to protect?	What is the agent or process with potential to cause harm?	What are the harmful consequences if things go wrong?	How might the receptor come into contact with the source?	How likely is this contact?	How severe will the consequences be if this occurs?	What is the overall magnitude of the risk?	On what did we base our Judgement?	How can I best manage the risk to reduce the magnitude?	Magnitude of the risk after management ¹
Local human population	Releases of particulate matter (dusts) and or micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Medium	Medium	Site does not generally accept dusts, powders, or loose fibres but the treatment activities will produce particulate matter, there is potential for exposure if anyone is living or working close to the site (apart from the operator and employees) however there are no residential receptors in the immediate vicinity of the site and the prevailing wind is westerly and land to the East is unoccupied, therefore a medium magnitude risk is estimated.	Site is not located within an AQMA. All shredding takes place inside buildings. Compliance with site Environmental Management System (EMS) including emissions management plan. Long term increases in particulate levels are restricted by permit - treatment of specified wastes shall be carried out inside a building.	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Medium	Low	Low	Residents could be sensitive to dust, but prevailing wind is away from occupied receptors	Site is not located within an AQMA SR. Implementation of fugitive emissions management plan (FEMP). Long term increases in particulate levels are restricted by permit.	Low

¹ This residual risk will be controlled by Compliance Assessment).

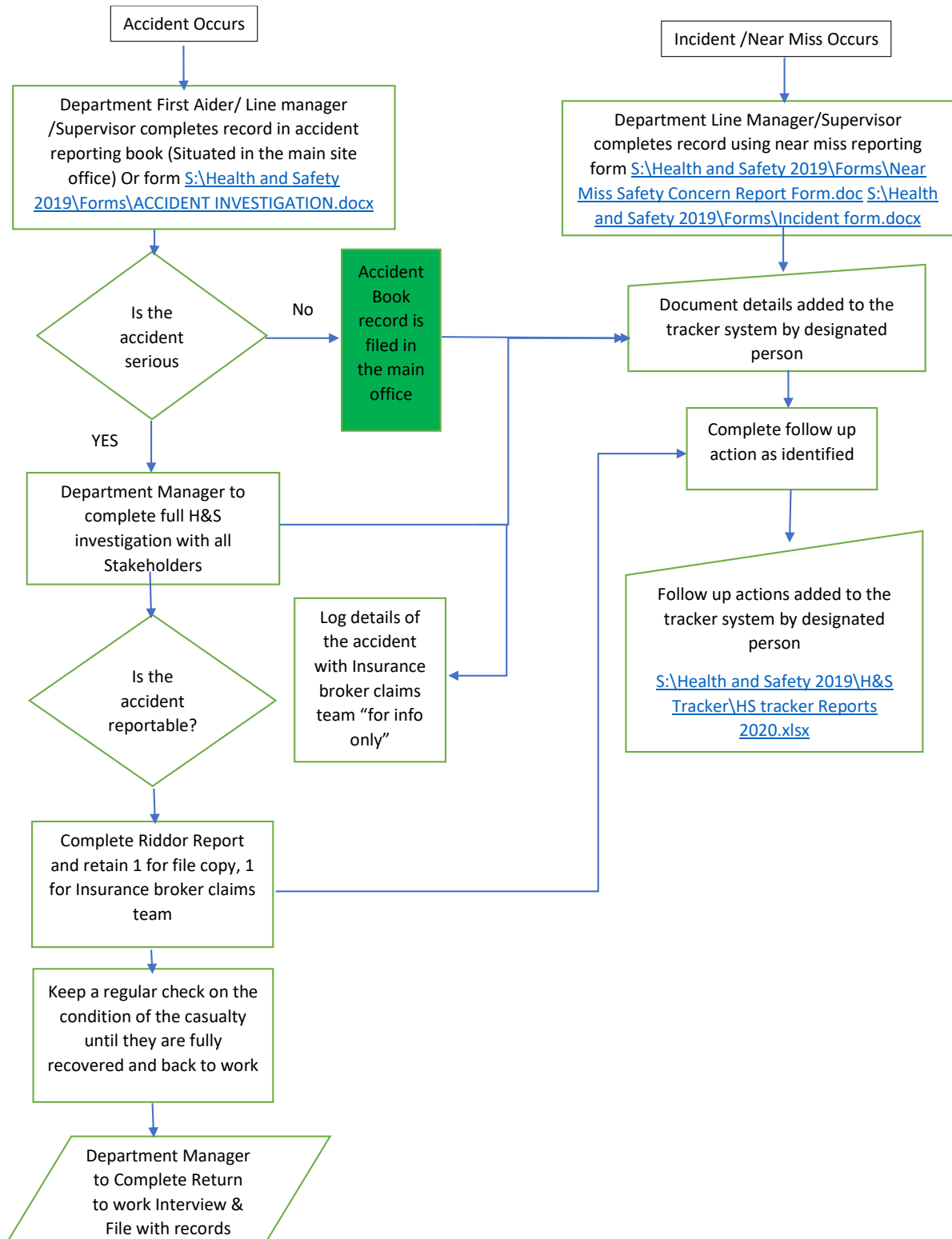
Local human population and local environment	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff or firefighters. Pollution of water or land.	As above.	Medium	Medium	Medium	Risk of accidental combustion of waste is moderate.	As above, permitted activities do not include the burning of waste.	Low
All surface waters close to and downstream of site.	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g., containing suspended solids.	Acute effects: oxygen depletion, fish kill and algal blooms	Direct run-off from site across ground surface, via surface water drains, ditches etc.	low	Medium	Medium	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain.	All liquids shall be provided with secondary containment.... (Applies to non-wastes such as fuels). Run-off restricted by emissions of substances not controlled by emission limits – buildings. All run off enters the drain age system via interceptors which can be isolated in the event of a spillage incident.	Very low
All surface waters close to and downstream of site.	As above	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Medium	Low	Low	As above, harm is likely to be temporary and reversible.	As above	Low
Abstraction from watercourse downstream of facility (for agricultural or potable use).	As above	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Medium	Medium	Medium	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above. Also the activities shall not be carried out within 50m of any well, spring or borehole used for the supply of water for human consumption.	Low
Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Medium	Medium	Medium	There is a potential for contaminated rainwater run-off or leachate from permitted waste types.	As above, or within 50m of any well, spring or borehole used for the supply of water for human consumption.	Low
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastrointestinal illness.	Direct contact or ingestion	Low	Medium	Low	Unlikely to occur but might restrict recreational use.	Permit (emissions of substances not controlled by emission limits - buildings). Emissions management plan will be implemented if required.	Very low
Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	Medium	Waste operations may cause harm to and deterioration of nature conservation sites.	Permit (emissions of substances not controlled by emission limits - buildings). Activities shall not be carried out within 500m of a European Site or SSSI. (Distance criteria as agreed with Natural England/Countryside Council for Wales).	Low

Local human population, livestock, and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Medium	Low	Residents could be sensitive to litter, but prevailing wind is away from occupied receptors	As above. Appropriate measures include clearing litter arising from the activities from affected areas outside the site and implementation of the Severe Weather Procedure EM-02-15	Low
Local human population	Waste, litter, and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Medium	Medium	Medium	Road safety, residents could be sensitive to mud on roads. Site is located in industrial area.	As above. Appropriate measures include clearing waste, litter and mud arising from the activities from affected areas outside the site. The site has a dedicated road sweeper which is employed daily to clean site roads and impermeable surfaces thereby minimising the potential for vehicles to leave site with mud on wheels.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Medium	Medium	Medium	Local residents often sensitive to odour.	Emissions shall be free from odour. Odour will be restricted by permit. An odour monitoring plan is included in the EMS, EM-03-003. If odour emissions are detected an odour management plan will be implemented.	Low
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Medium	Medium	Medium	Local residents often sensitive to noise and vibration	Emissions shall be free from noise and vibrations. Noise and Vibrations will be restricted by permit. A noise and vibration monitoring plan are included in the EMS, EM-03-004. If noise or vibrations are detected a noise and vibration management plan will be implemented.	Low
Local human population	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity.	Air transport and over land	Medium	Medium	Medium	Permitted wastes may attract scavenging animals and birds. Specified low-risk wastes stored outside may become nesting / breeding sites.	Emissions of substances not controlled by emission limits (including those from scavenging animals, scavenging birds and other pests) shall not cause pollution. Access to waste is restricted by containment in buildings. The site employs regular vermin control contractors	low
Local human population	Pests (e.g., flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Medium	Medium	Medium	Insect pests can multiply on permitted wastes, particularly in summer months	Emissions of substances not controlled by emission limits (including those from scavenging animals, scavenging birds and other pests) shall not cause pollution. Access to waste is restricted by containment in buildings. The site employs regular vermin control contractors	Low
Local human population and local environment	Flooding of site	If waste is washed off site it may contaminate buildings / gardens / natural habitats downstream.	Flood waters	Very low	Medium	Low	The location, topography and drainage system of the site would make it almost impossible for waste to be washed off site. Permitted waste types largely non-hazardous so any waste washed off site will add to the volume of the local post-flood clean-up workload, rather than the hazard.	Management system will include flood risk management. Waste washed off site restricted by permit (emissions of substances not controlled by emission limits - buildings).	Very low
Local human population and / or livestock after gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury	Direct physical contact	Medium	Medium	Medium	Permitted waste types are overwhelmingly non-hazardous so only a medium magnitude risk is estimated.	Activities shall be managed and operated in accordance with the Environmental Management System (EMS) including 24/7 site security measures to prevent unauthorised access). Access to waste restricted. All personnel, visitors and contractors must wear appropriate PPE.	Low
Local human population and local environment.	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighters or arsonists/vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Medium	Medium	Medium	Permitted waste types do not include sludges or liquids and are overwhelming non-hazardous so only a medium magnitude risk is estimated.	As above, and site will be covered by FPP, including drainage system which allows all firewater runoff to be captured in interceptors and or drainage pond which can be isolated by penstock valve.	Low

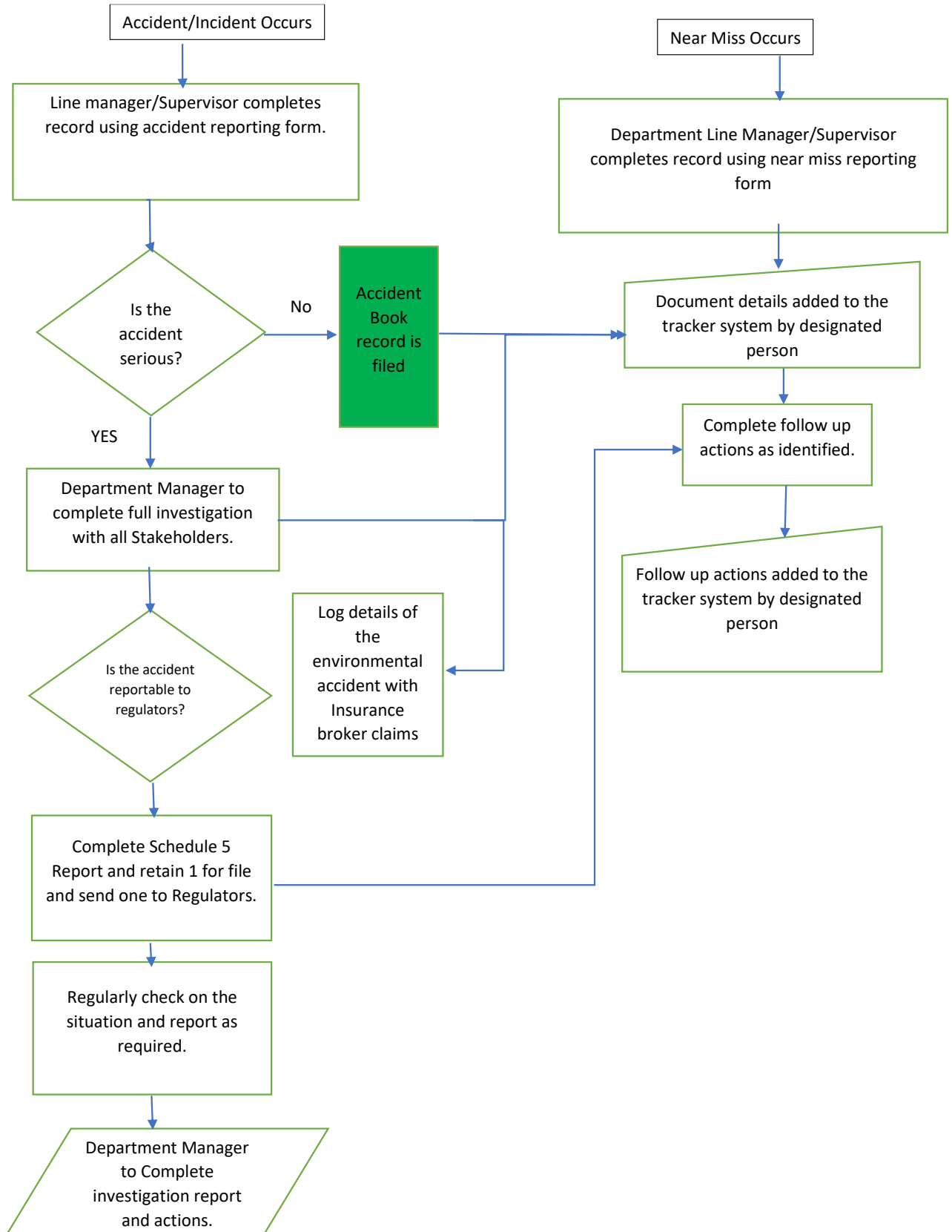
Local human population and all surface waters close to and downstream of site.	Serious Fire	Nuisance, harm to human health, loss of amenity, deterioration of water quality	Air transport then inhalation or deposition. Direct run off of fire water across site to surface waters.	Low	High	Medium	Waste fires are not common but approximately 300 fires pa linked to waste activities. Impact on health and amenity can be significant for many days or weeks.	Fire Prevention plan, including firewater run of containment procedures.	Low
All surface waters close to and downstream of site.	Serious Fire	Loss of amenity, deterioration of water quality	Direct run off of fire water across site to surface waters.	Low	High	Medium	Waste fires are not common but approximately 300 fires pa linked to waste activities. In event of fire, fire water can be produced for days/ weeks. Contaminated firewater run-off can kill fish and aquatic life.	Fire Prevention plan, including firewater run of containment procedures.	Low

7 Accident and Incident Response Procedures

7.1 Health & Safety Accident/Incident Reporting



7.2 Environmental Accident/Incident Reporting



7.3 Major Emergency Response Procedure

In the event of a major emergency the following actions will be taken:

1. Raise the alarm
2. Notify a senior member of staff
3. Senior member of staff to contact emergency services on 999, and the Environment Agency on 0800 807060
4. Carry out emergency response as per relevant procedure to minimise environmental consequences but only if:
 - Persons are trained to do so
 - There is access to appropriate equipment and PPE
 - It is safe to do so
5. Senior member of staff to account for all occupants and, if necessary, determine appropriate action for any unaccounted persons and subject to nature of emergency
6. Senior member of staff in conjunction with the emergency services determines and authorises when safe for personnel or contractors to return to the workplace.

7.4 Minor Emergency Response Procedure

In the event of a minor emergency the following actions will be taken:

1. Raise the alarm
2. Notify a senior member of staff
3. Carry out emergency response as per relevant procedure to minimise environmental consequences i.e., control of spills – but only if:
 - a. Persons are trained to do so
 - b. There is access to appropriate equipment and PPE
 - c. It is safe to do so
4. If necessary, evacuate the site
5. Notify the regulators.
6. Determine the cause of the accident and take actions to prevent recurrence
7. Review the AMP plan and inform the Environment Agency of the outcome of the review and any changes which are required.

7.5 Spillage Procedure

In the event of an accidental spillage the following actions will be taken:

Actions

1. Raise the alarm
2. Notify a senior member of staff
3. Assess the severity of the incident, i.e., if there is an immediate danger to site personnel.
4. Carry out emergency response as per relevant procedure to minimise environmental consequences i.e., control of spills by use of available spill kits to control the situation.
5. Assess whether emergency services and/or regulators need to be contracted..
6. Once the spillage has been controlled a suitable member of staff must complete the accident incident reporting form.
7. Once contained a clean-up will be completed by an appropriately trained member of staff.
8. All incidents will be recorded and a thorough investigation will be undertaken into the causes.

7.6 Fire Procedure

In the event of a major fire event a range of measures will be undertaken to ensure the site is safe to resume operations. The Fire and Rescue Service and Environment Agency will be notified by an appropriate member of staff and kept regularly updated thereafter.

Actions

In the event of a fire and as soon as the fire detection procedures have been enacted and it is safe to do so the following actions will be undertaken:

1. Contact emergency services
2. Shut off any fuel supply

The facility will not continue to operate if there is a fire event on site. Should firefighting water infiltrate into the underlying ground water or surface water, action will be taken to rectify the situation immediately. All remediation actions will be recorded, and advice sought from the EA if necessary.

Actions after a fire event

After a fire event, the following procedure will be implemented depending on the severity of the fire:

1. A small and containable fire that can be dealt with in-house using suitably trained staff and firefighting equipment located on site:

The fire will be recorded in the site log, including the causes of the fire and methods used to manage the fire. An assessment will be carried out to determine whether further mitigation measures could have prevented the fire. Any outcomes to be implemented onsite will be incorporated within the sites EMS as required.

2. A significant fire incident that requires the presence of the Fire and Rescue Services:

If the site has been evacuated by the EA and/or Fire and Rescue Service, the site personnel will wait until told it is safe to re-entre. The fire will be recorded in the site log, including the cause of the fire and methods used to manage the fire. An assessment will be carried out to determine whether further mitigation measures could have prevented the fire. Any outcomes to be implemented onsite will be incorporated within the sites EMS as required.

Appendix 1 – Contact / Emergency Contact List

Role	Head of Operations
Name	Michael Harvey
Telephone No	07494 047631

Role	General Manager - Operations
Name	Simon Roberts
Telephone No	07918 735815

Role	General Manager - Transport
Name	Steve Kent
Telephone No	07801 913670

Role	Managing Director
Name	Jack Lavington
Telephone No	07785 342803

Humberside Fire & Rescue	999
Environment Agency	0800 807060
Anglian Water	03457 145145
North Lincolnshire DC – Emergency Planning	01724 297000
BOC	01724 860434

Appendix 2 – Accident / Incident Report Form

IDENTIFY THE SEVERITY WITH AN "X"					
LOW		MEDIUM		HIGH	
Accident Book Report Number					
Name of Person					
Job Title					
Date of Incident		Time		am	
Location of Incident					
This Report Completed Name		Position		Date	

Full Details of Incident including weather conditions, visibility, work environment, lighting etc.:

List of Machinery, Tools and Materials Involved:

Persons Involved in Incident	Names	Relationship to Ellgia (Employee, Contractor, Visitor, etc.)
Witnesses to Incident		

Immediate Cause: What acts or conditions caused the event?

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To be completed by the Site Manager / Supervisor

Secondary Causes: What human, organisational or job factors caused the event

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Remedial actions: recommendations to prevent recurrence

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Manager / Supervisor Name		Manager / Supervisor Signature		Date	
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Now pass this form to Health and Safety

Was there Plant Damage	Yes/No	Describe	
Was there Environmental Damage	Yes/No	Describe	
Are Witness Statements / Pictures Attached	Yes/No	Describe	