

# Environmental Risk Assessment

Standard Facility:

Waste Operation: Metals Recycling Site

Location:

Albion Yard, Manor Road, Erith

Location of environmentally sensitive sites (km / m):

Greater than 2 kilometers

Risk assessment carried out by:

City Batteries Ltd

Date:

27-Mar-24

Risk				Judgement				Action	
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 I base my judgement?	How can I best manage the risk to reduce the magnitude?	What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).
Local human population	Releases of particulate matter (dusts). Litter Odour	Harm to human health - respiratory irritation and illness. Nuisance - dust on cars, clothing etc.	Air transport then inhalation.	Low	Low	Low	Permitted waste types do not include dusts, powders or loose fibres so only a Low magnitude risk is estimated. There is potential for exposure if anyone is living or working close to the site (apart from the operator and employees)	emissions of substances not controlled by emission limits BP (if required) - emissions management plan.	Low

Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Low	Low	Low	No previous complaints from local residents or other businesses	emissions shall be free from noise and vibration. BP (if required) - noise and vibration management plan.	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	Low	Low	Low	Permitted wastes unlikely to attract scavenging animals and birds but 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.	Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Low	Low	Permitted wastes unlikely to attract pests.	emissions of substances not controlled by emission limits (including those from scavenging animals, scavenging birds and other pests) shall not cause pollution.	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	Low	Medium	Low	Permitted waste types 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).	Low
Local human population and local environment	Storage of Lead Acid Batteries	harm to health from spillage or leakage from batteries stored.	Direct physical contact	Low	Low	Low	All batteries are stored on an impermeable surface with sealed drainage. Wet cell batteries are stored in un approved leak proof containers resitant to acid	management system (will include storage of materials).	Low

Local human population and local environment	Storage of Acid from Batteries	harm to health from spillage or leakage of acid stored	Direct physical contact	Low	Low	Low	Acid from the batteries is collected in a stainless steel tank and then pumped into to collection tanks with secondary conatainment	management system (will include storage of materials).	Low
Local human population and local environment	Storage of ABS Plastics from Battery breaking	harm to health from spillage	Direct physical contact	Low	Low	Low	The plastics are stored in bulk bags on pallets on an impermiable surface	management system (will include storage of materials).	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	Low	Medium	Medium	Site security measures at the facility are good to prevent theft. Apart from lead acid batteries, all permitted waste types are non hazardous, so only a medium magnitude risk is estimated.	activities shall be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access). SR - management system (will include fire and spillages).	Medium
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.	Low	Medium	Medium	Risk of accidental combustion of waste is low.	activities are managed and operated in accordance with a management system. Permitted activities do not include the burning of waste. Heat detection is fitted in the ware house areas and smoke detection in the offices and rest areas	Medium
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,	Low	Low	Low	Apart from lead acid batteries , all waste types are non hazardous solids so only a low 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 non- wastes such as fuels). Run-off restricted by Site Bund. No wate shall be stored outside	Low

All surface waters close to and downstream of site.	Spillage of liquids, contaminated rainwater run-off from waste e.g. containing suspended solids.	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Medium	Low	Medium	As above. Harm is likely to be temporary and reversible.	All liquids shall be provided with secondary containment (applies non- wastes such as fuels). Wet cell batteries are stored on an impermeable surface. The sie is bunded with a sealed drainage	Medium
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion	Low	Low	Low	Unlikely to occur, but might restrict recreational use.	Emissions of substances are controlled all liquid waste is stored in sealed containment units with secondary bunding	Low
Protected sites - European sites and SSSIs including SAC Ramsar & MZC	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Low	Low	Waste operations may cause harm to and deterioration of nature conservation sites.	activities shall not be carried out within 200 metres of a European Site or SSSI. SAC Ramsar or MZC sites	Low
Protected sites - National Parks & Wildlife sites	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Low	Low	Waste operations may cause harm to and deterioration of nature conservation sites.	activities shall not be carried out within 200 metres of any wildlife park or National Park	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. Direct run off of fire water across site to surface waters.	Low	Low	Low	Waste fires are not common however. In event of fire, fire water can be produced for days/ weeks. Contaminated firewater run-off can kill fish and aquatic life.	Limit in of annual tonnage to 30,000 tonnes. Site has bund all round to prevent escape of fire water	Low

High	
Medium	
Low	

9	6	3
6	4	2
3	2	1