

Generic risk assessment

Standard Facility:	Waste Operation: Metal Recovery <50,000tpa
Location:	Applies to all potential locations.
Location of environmentally sensitive sites (km / m):	Greater than 500 metres (see below)
Risk assessment carried out by:	Beaver Metals
Date:	07.05.2024

The scope of the permit and associated rules is defined by the following risk criteria:

Parameter 1	Permitted activities - The storage of metal prior to removal off site for re-use (R3)
Parameter 2	Permitted waste types - Metals, WEEE
Parameter 3	Quantity of waste accepted at the facility: <50,000 tonnes per annum.
Parameter 4	All waste shall be stored and treated on an impermeable surface with sealed drainage system.
Parameter 5	The only point source discharges to controlled waters are surface water from the roofs of buildings (Not applicable) and from areas of the facility not used for the storage or treatment of wastes.
Parameter 6	The activities shall not be carried out within Groundwater Source Protection Zone (SPZ) 1 or 2 .
Parameter 7	If a Source Protection Zone has not been defined then the activities should not take place within 250 metres of any well, spring or borehole used for the supply of water for human consumption. This must include Private Water Supplies.
Parameter 8	The activities shall not be carried out within 250 metres of the nearest sensitive receptor.
Parameter 9	The activities shall not be carried out within 500 metres of a European Site (candidate or Special Area of Conservation, proposed or Special Protection Area or Ramsar site) or a Site of Special Scientific Interest (SSSI).
Parameter 10	Activities shall not be carried out within 250 metres of Great Crested Newts where it is linked to the breeding ponds of the newts by good habitat, 50 metres of a Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument. 50 metres from BAP species/habitats

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 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).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	Low	Low	Permitted waste types do not include dusts, powders or loose fibres.	Activities shall not be carried out within 250 metres of the nearest sensitive receptor. Dust Management plan forms part of Working Plan	Low
Local human population	Releases of particulate matter (dusts).	Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Low	Low	Low	As above	As above	Low
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Low	Low	Local residents often sensitive to litter. Waste streams accepted does not include rubbish.	Daily checks undertaken for litter and regular housekeeping is in place. Appropriate measures could include clearing litter arising from the activities from affected areas outside the site.	Very 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	Local residents often sensitive to mud on roads. Checks of the public highway are undertaken, should debris be observed it is collected.	As above. Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site. Roads to be swept and damped down as necessary.	Low
Local human population	Odour	Nuisance, loss of amenity.	Air transport then inhalation	Low	Low	Low	Metal processing is unlikely to release odour. Local residents often sensitive to odour. Odour Management plan in place.	An odour management plan including appropriate measure to reduce odour problems.	Very Low
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep or harm.	Noise through the air and vibration through the ground.	Medium	Medium	Medium	Local residents often sensitive to noise and vibration. Noise Monitoring is undertaken.	Emissions shall be free from noise and vibration and a noise and vibration management plan is in place and revised as required.	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 are not likely to attract scavenging animals and birds. No putrescible wastes accepted.	Activities shall not be carried out within 250 metres of the nearest sensitive receptor. Appropriate measures for waste operations as set out in "How to comply with your environmental permit" .	Very Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity.	Air transport and over land.	Very low	Very low	Very Low	Insect pests not likely on permitted wastes. Pest control measures are undertaken daily as detailed in working plan.	As above	Very 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	Medium	Waste types are non-hazardous and therefore should not be a high risk. Site has impermeable surfaces and a contained drainage system.	Flood Risk Assessment has been undertaken. Site has impermeable surfaces that drain to storage tanks. The level in the tanks are monitored daily/ weekly and in times of heavy rainfall. Site has discharge consent to foul sewer.	Low
Local human population after gaining unauthorised access to the waste operation	All on-site hazards: wastes; machinery and vehicles.	Bodily injury.	Direct physical contact.	Low	Medium	Medium	Permitted waste types are non-hazardous therefore only a medium magnitude risk is estimated. The site has perimeter fencing and CCTV. Trespassers would be stopped on sight.	Activities shall be managed and operated in accordance with the working plan (includes site security measures to prevent unauthorised access). Emergency contact details will be displayed at the site entrance.	Low
Local human population and local environment	Fire risk from stockpiles, 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 air, water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches.	Low	Low	Low	Accepted wastes are non-flammable. Stockpiles and separation distances are detailed in the FPP.	As above. Working Plan and FPP include fire and spillages.	Low

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	Low	Low	As above	As above. Permitted activities do not include the burning of waste.	Low
All surface waters close to and downstream of site.	Spillage of liquids, contaminated rainwater run-off from waste.	Acute effects; oxygen depletion, fish kill and oil residues.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Low	Medium	Low	The site has impermeable surfaces and a sealed drainage system. All discharges go to foul sewer.	All operations must be more than 10 metres from a water course. All liquids in containers shall be provided with secondary containment. Permitted waste types do not include liquids.	Low
Abstraction from watercourse downstream of facility (for agricultural or potable use).	Spillage of liquids, contaminated rainwater run-off from waste.	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Low	Medium	Low	The site has impermeable surfaces and a sealed drainage system. All discharges go to foul sewer.	As above	Low
Groundwater	Spillage of liquids, contaminated rainwater run-off from waste.	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Low	Low	There is a very low potential potential for contaminated rainwater run-off waste operations. All waste is on impermeable surfaces. All discharges are contained on site / go to foul sewer.	The activities shall not be carried out within Groundwater Source Protection Zone 1 or 2 or if a Source Protection Zone has not been defined then within 250 metres of any well, spring or borehole used for the supply of water for human consumption. This must include Private Water Supplies.	Low

Local human population.	Contaminated waters used for recreational purposes.	Harm to human health - skin damage or gastrointestinal illness.	Direct contact or ingestion	Low	Low	Low	As above	As above	Low
Protected sites - European sites and SSSIs protected species/habitats and other nature conservation sites.	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Low	Low	There are no protected sites nearby.	Activities shall not be carried out within 500 metres of a European Site or SSSI 250 metres of Great Crested Newts where it is linked to the breeding ponds of the newts by good habitat, 50 metres of a site that has relevant species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity, 50 metres of a Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument.	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	Low	Low	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 in place, which will limit storage volumes and times of waste	Low
All surfaces 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	Low	Low	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. Contaminated firewater run-off can kill fish and aquatic life.	As above	Low