

Generic risk assessment for standard rules set number SR2011 No4

Standard Facility:

Waste Operation: Treatment of waste wood for recovery

Location:

Applies to all potential locations.

Location of environmentally sensitive sites (km / m):

Greater than 50m (see below)

Risk assessment carried out by:

Glamorgan Recycling Limited

Date:

02-Jun-22

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

- Parameter 1

Permitted activities - The storage of waste (R13) treatment of waste wood for recovery (R3).
- Parameter 2

Permitted waste types - Non Hazardous waste wood as listed in rules other than waste consisting solely or mainly of dusts, powders or loose fibres or waste in liquid form
- Parameter 3

Quantity of waste accepted at the facility: less than 75,000 tonnes per annum.
- Parameter 4

Waste shall be stored and treated on an impermeable surface with sealed drainage system when located within groundwater source protection zones 1 or 2. Outside groundwater source protection zones 1 and 2 wastes shall be stored and treated on an impermeable surface with sealed drainage system or hardstanding.
- Parameter 5
- Parameter 6

The only point source discharges to controlled waters or groundwater, are surface water from the roofs of buildings and from areas of the facility not used for the storage or treatment of wastes.
- Parameter 7

The activities shall not be carried out within 500m 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 8

The activities must be 10 metres from any watercourse and must not be within 50 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies;
- Parameter 9

The activities shall not be carried out within 200 metres of any workplace or residential dwelling.
- Parameter 10

The activities shall not be carried out within 250 metres of the presence 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 or 50 metres of a National Nature Reserve (NNR), Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument;
- Waste storage time limited to 3 months

Abbreviations: SR - Standard Rule

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).

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Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Medium	Medium	Permitted waste types are non hazardous and do not include dusts, powders or loose fibres (with the exception of sawdust) and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a medium magnitude risk is estimated. The permitted level of throughput and potential size of the facility means there is potential for exposure if anyone is living or working close to the site (apart from the operator and employees).	SR - Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. SR (if required) - emissions management plan.	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Medium	Low	Medium	As above. Local residents often sensitive to dust.	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, however permitted waste types have low litter potential.	As above. 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.	Low	Low	Medium	Road safety, local residents often sensitive to mud on roads.	As above. Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site.	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.	SR - Requirement for Fire Prevention Plan	Low

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Local Human Population	Serious Fire via spontaneous combustion of waste	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. In event of fire, fire water can be produced for days/ weeks. Contaminated firewater run-off can kill fish and aquatic life.	SR - Requirement for 3 month maximum duration of waste storage on site. SR - activities shall not be carried out within 200m of a workplace or residential dwelling. Waste quantity shall be limited to 85000 tonnes per year.	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	SR - emissions shall be free from noise and vibration. SR (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.	SR - Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. SR (if required) - emissions management plan.	Very 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 waste types unlikely to attract pests.	As above	Very low

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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	Low	Low	Permitted waste types are 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.	SR -requires a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will include flood risk management).	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	Low	Low	Permitted waste types are non-hazardous therefore only a low magnitude risk is estimated	SR - activities shall be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access).	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, fire fighters 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 include flammable materials so a medium magnitude risk is estimated. Wastes should be stored in accordance with Environment Agency Pollution Prevention Guidance (PPG29) on Safe Storage - Combustible materials, prevent and control fire.	SR -requires a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will 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 fire fighters. Pollution of water or land.	As above.	Medium	Medium	Medium	As above.	As above (excluding comments on access to waste). Permitted activities do not include the burning of waste.	Low

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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	Low	Low	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. No point source emissions to water are permitted, but there is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain.	SR - All liquids shall be provided with secondary containment.... (applies to non- wastes such as fuels). Run-off restricted by SR - Emissions of substances not controlled by emission limits , with appropriate measures.	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	Low	Low	Low	Waste types are non-hazardous so harm is likely to be temporary and reversible.	As above	Very 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.	Low	Low	Low	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above. Also the activities must be 10 metres from any watercourse and must not be within 50 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies;	Very low

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Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Low	Low	Permitted wastes unlikely to contaminate groundwater.	As above	Very low
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.	SR - Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. SR (if required) - emissions management plan.	Very low

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Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Medium	Medium	Medium	Waste operations may cause harm to and deterioration of nature conservation sites.	SR - Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. At 500 metres or above, the potential hazards from the permitted activities pose a low risk to the broad sensitivity of species and habitats groups. The standard permit only applies at this distance or more. It is also a requirement of SR.The activities shall not be carried out within 250 metres of the presence 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 or 50 metres of a National Nature Reserve (NNR), Local Nature Reserves(LNR), Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument.	Low

Notes: Red triangle indicates comment containing supporting information

Yellow columns contain drop down menus that allow automatic evaluation of risk in green column

