

**Standard Facility:**

Waste Operation: Composting in Open Systems &lt; 75,000tpa

**Location:**

Applies to all potential locations.

**Location of environmentally sensitive sites (km / m):**

Greater than 500 metres (see below)

**Risk assessment carried out by:**

Berkswell Recycling Limited

**Date:**

26/08/2025

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

Parameter 1 Permitted activities - The storage of waste prior to composting (R13) and composting including shredding etc. (R3)

Parameter 2 Permitted waste types - Non-hazardous biodegradable waste, including non-treated wood, vegetable matter and animal manure (excluding catering waste and other wastes covered by the Animal By-Products Regulations 2011)

Parameter 3 Quantity of waste accepted at the facility: <75,000 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 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 SR - 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 consequence s 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	Release of microorganisms (bio aerosols )	Harm to human health - respiratory irritation and illness.	Air transport then inhalation, ingestion or inoculation .	High	High	High	Composting activities produce and release bio aerosols e.g. microorganisms. There is potential for exposure if anyone living or working close to the site (excluding operator and employees).	SR - activities shall not be carried out within 250 metres of the nearest sensitive receptor. SR (emissions of substances not controlled by emission limits). SR (if required) - emissions management plan and risk assessment review.	Low
Local human population	Releases of particulate matter (dusts).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Medium	Medium	Permitted waste types do not include .... dusts, powders or loose fibres but composting produces and is likely to release particulates. There is potential for exposure if anyone living or working close to the site (excluding operator and employees).	As above	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	Releases of particulate matter (dusts) and microorganisms (bio aerosols).	Gastro-intestinal illness.	Air transport then deposition on garden fruit/vegetables and then ingestion.	Medium	Medium	Medium	Most dust will be washed off by rain or during food preparation for feedstocks. No loose powders and dusts are permitted. Waste moisture levels will be optimised. Dust Management plan being worked to.	As above	Very Low
Local and distant human population	Releases of particulate matter (dusts) and microorganisms (bio aerosols).	As above. Includes eating crops grown within 250 metres of the site.	Air transport then deposition on commercial/wild fruit/vegetables then ingestion.	Medium	Medium	Medium	As above. Proportion of dust from this source will be low.	SR (emissions of substances not controlled by emission limits). SR (if required) - emissions management plan.	Very 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.	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	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	High	High	High	Composting produces and is likely to release odour. There is potential for exposure if anyone living or working close to the site (excluding operator and employees). Local residents often sensitive to odour. Odour Management plan in place.	SR - activities shall not be carried out within 250 metres of the nearest sensitive receptor. SR - The storage, physical treatment and composting of wastes under anaerobic conditions shall be prevented. SR - emissions shall be free from odour at levels.... SR requires an odour management plan including appropriate measure to reduce odour problems e.g.. minimising storage times prior to processing, contingency arrangements for smelly wastes delivered to site.	Medium
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.	SR - emissions shall be free from noise and vibration and a noise and vibration management plan will be documented 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	Medium	Medium	Permitted wastes are not likely to attract scavenging animals and birds.	SR - activities shall not be carried out within 250 metres of the nearest sensitive receptor. SR - emissions of substances not controlled by emission limits. SR (if required) - emissions management plan and risk assessment review. Appropriate measures for waste operations as set out in "How to comply with your environmental permit" SR requires each composting batch to undergo sanitisation	Low

As above	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 when waste is odorous and attracts flies. Pest control measures are undertaken daily. Effective windrow management reduces odour generation.	As above	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. Leachate may be high in BOD but may be diluted with flood water and therefore be low risk should the system be breached.	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).	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.	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.	SR - activities shall be managed and operated in accordance with a management system (will include 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	Waste will be maintained with adequate moisture correction as per industry standard so that is not readily combustible. Permitted waste types are organic and non-hazardous therefore only a low magnitude risk is estimated. All stockpiled material will be stabilised and will be monitored for increased temperatures. Action will be taken to reduce any temperatures.	As above. SR - management system (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 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, leachate from waste, contaminated rainwater run-off from waste with high organic content.	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	Low	There is a high potential for contaminated rainwater run-off from waste operations outside especially during heavy rain. The site has impermeable surfaces and a sealed drainage system.	SR- all operations must be more than 10 metres from a water course. SR - all liquids in containers ....shall be provided with secondary containment.... Run-off restricted by SR on emissions of substances not controlled by emissions limits (exc. odour) shall not cause pollution, with appropriate measures - may include controls to prevent overfilling of storage systems. Permitted waste types do not include sludges or liquids.	Low

All surface waters close to and downstream of site.	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic content.	Chronic effects; deterioration of water quality.	As above. Indirect run-off via the soil layer.	Low	Low	Low	There is a high potential for contaminated rainwater run-off or leachate from waste operations outside. Consequence is low because pollution is likely to be detected quickly and effects are temporary and reversible. The site has impermeable surfaces and a sealed drainage system.	As above	Low
Abstraction from watercourse downstream of facility (for agricultural or potable use).	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic content.	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	There is a high potential for contaminated rainwater run-off from waste operations outside especially during heavy rain. The site has impermeable surfaces and a sealed drainage system.	As above	Low
Groundwater	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic content.	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	High	high	There is a high potential for contaminated rainwater run-off or leachate from waste operations outside. Consequence is high because pollution may continue for a long time before it is detected.	As above. SR - 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	Unlikely to occur but might restrict recreational use.	SR (emissions of substances not controlled by emission limits). SR (if required) - emissions management plan. Sanitisation temperatures will be reached to allow pasteurization of material.	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	Medium	Medium	Waste composting operations may cause harm to and deterioration of nature conservation sites. Including high rate air deposition. There are no protected sites	SR - 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	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	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	SR - Requirement for Fire Prevention Plan, which will detail prevention measures	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	SR - Requirement for Fire Prevention Plan, which will limit storage volumes and times of waste	Low

**Notes:** Red triangle indicates comment containing supporting information

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