

Generic risk assessment for standard rules set number SR2009No1 v2.0

Standard Facility:	Waste Operation: Pet cemetery
Location:	Applies to all potential locations.
Location of environmentally sensitive sites (km / m):	Greater than 200m (see below)
Risk assessment carried out by:	Environment Agency
Date:	16-Mar-10

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

- Parameter 1 Permitted activities - The storage and disposal of waste (D15, D1)
- Parameter 2 Permitted waste types - domestic pet carcasses and ash from their cremation
- Parameter 3 Maximum quantities 10 tonnes per day
- Parameter 4 All waste shall be stored in a building pending disposal.
- Parameter 5 All waste shall be stored on an impermeable surface with sealed drainage system.
- 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 of wastes.
- Parameter 7 The permitted activities shall not be carried out within 200m 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).

Abbreviations: SR - Standard Rule
 SR (emissions of substances not controlled by emission limits) - emissions of substances shall not cause pollution...., with appropriate measures:
 minimum of 1 metre unsaturated zone between the bottom of pet carcasses, cremated remains and packing material and the groundwater table;
 minimum of 0.5 metres of soil between pet carcasses, cremated remains and packing material and the ground surface;
 burial density shall not exceed an average of 20 kg of dead domestic pet carcase or cremated remains and packing material per m2;
 all storage within a building; all storage on an impermeable surface with sealed drainage system.

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) and infectious micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	Low	Low	Permitted waste types do not include infectious waste. No point source emissions to air are permitted. Overall, 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)	Particulate matter will be restricted by SR (emissions of substances not controlled by emission limits) SR (if required) - emissions management plan.	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Low	Low	Low	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.	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	Low	Road safety, local residents often sensitive to mud on roads.	As above (no appropriate measures defined). Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Medium	Medium	Medium	Local residents often sensitive to odour. Disposal of dead animals could give rise to odour.	Odour will be restricted by SR (emissions of substances not controlled by emission limits). SR - emissions shall be free from odour.... SR - The operator shall maintain and implement an odour 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	Local residents often sensitive to noise and vibration. Disposal unlikely to produce significant source of noise annoyance.	Noise will be restricted by SR (emissions of substances not controlled by emission limits). SR - emissions shall be free from noise and vibration..... SR (if required) - noise and vibration management plan.	Low

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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 may attract scavenging animals and birds.	SR - 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 SR (emissions of substances not controlled by emission limits).	Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Medium	Low	Low	Permitted wastes may to attract pests.	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	Low	Low	Permitted waste types washed off site will add to the volume and hazard of the local post-flood clean up workload.	SR - management system (will include flood risk management). Waste washed off site restricted by SR (emissions of substances not controlled by emission limits).	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 non hazardous, so only a medium 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). Access to waste restricted by SR (emissions of substances not controlled by emission limits).	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 are non-hazardous, so only a medium magnitude risk is estimated.	As above. SR - management system (will include fire and spillages).	Low

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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	Risk of accidental combustion of waste is medium.	As above (excluding comments on access to waste).	Low
All surface waters close to and downstream of site.	Spillage of liquids, 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 are non hazardous solids so only a low magnitude risk is estimated. No point source emissions to water are permitted.	SR - All liquids shall be provided with secondary containment.... (applies to wastes and non-wastes such as fuels). Run-off restricted by SR (emissions of substances not controlled by emission limits).	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	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.	Low	Low	Low	As above. Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above	Very low
Groundwater	Leaching from burial of animal carcasses	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Medium	Low	Pet carcasses are generally small and any leaching from the carcase will be minimal.	SR (emissions of substances not controlled by emission limits)... SR (if required) - emissions management plan.	Low
Local human population and local environment	Gas from the break down of animal carcasses	Asphyxiation, explosion and vegetation distress	Transport through ground or underground services.	Low	Medium	Low	Gas generation from pet carcasses will be minimal	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	Medium	Low	Unlikely to occur, but might restrict recreational use.	As above	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	Low	Waste operations may cause harm to and deterioration of nature conservation sites.	SR - emissions of substances not controlled by emission limits. At 200 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 an SR.	Low
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Notes: Red triangle indicates comment containing supporting information
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