

Risk assessment for Herbert Road, Tier 2 bespoke permit based on standard rule set SR2010No8

Standard Facility:	Waste Operation: Use of waste in construction (up to 100,000 tonnes of waste)
Location:	Herbert Road, Newport
Location of environmentally sensitive sites (km / m):	Greater than 500m (see below)
Risk assessment carried out by:	Riversee Ltd
Date:	29-Mar-15

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

Parameter 1	Permitted activities - storage and use of waste in construction (R13, R3 and R5).
Parameter 2	Permitted waste types - Non Hazardous 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: <100,000 tonnes
Parameter 4	The only point source discharges to controlled waters or groundwater, are surface water from the roofs of buildings
Parameter 5	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); 50 metres of a site that has species or habitats protected under the Biodiversity Action Plan that the
Parameter 6	The activities must also be outside groundwater source protection zones 1 (inner) or 2 (outer) and be 50 metres from any spring or well or any borehole not used to supply water for domestic or food production purposes.
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)
Local residents /businesses within close proximity of Herbert rd/All operators on site	Releases of particulate matter (dusts and fibres) and micro-organisms (bioaerosols), during tipping activities and excavation movements	Harm to human health - respiratory irritation and illness.	Air transport then inhalation during movement of material	Medium	Medium	Medium	Permitted waste types are predominantly inert and have a low potential to produce bioaerosols, but the activities will produce some particulate matter so a medium magnitude risk is estimated. There is potential for increased dust generation from permitted activities during prolonged dry periods e.g. summer months. However asbestos fibres have been identified within the proposed source stockpile necessitating the need to minimise airborne transmission	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. Airborne transmission will be limited by the use of moisture introduced into the atmosphere during the excavation and filling works, by way of water spray cannons to ensure fibres and dust release to the atmosphere is minimised.	Medium

Local residents /persons walking by	As above	Nuisance - dust on cars, clothing etc.	Air transport during material movement	Medium	Low	Medium	As above. Local residents often sensitive to dust.	As above	Low
Local human population, pets, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition during material movement	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. Daily Active monitoring	Very low
Local residents, businesses /site operators	Waste, litter and mud on local roads from site transportation	Nuisance, loss of amenity, road traffic accidents.	material delivery vehicles entering and leaving site.	Medium	Medium	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. Regular monitoring road	Low
Local residents /business population	Odour during operational movement of the material	Nuisance, loss of amenity	Air transport from material movements then inhalation.	Low	Low	Low	Local residents often sensitive to odour, however permitted waste types have low odour potential.	SR - emissions shall be free from odour.... SR (if required) - odour management	Very low
Local human population/site operators	Noise and vibration	Nuisance, loss of amenity, loss of sleep possible residents who work shifts	Noise through the air and vibration through the ground during activities	Medium	Medium	Medium	Local residents often sensitive to noise and vibration	SR - emissions shall be free from noise and vibration Where practicable SR (if required) - noise and vibration management plan.	Low
Local resident 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	Low	SR - activities shall be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access).	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	Very low
Local resident population	Pests (e.g. flies) hot climate	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Medium	Low	Permitted waste types unlikely to attract pests.	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	Low	Low	Permitted waste types are predominately inert 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 residential /business population and / or pets ,livestock after gaining unauthorised access to the waste operation	All on-site hazards: wastes; movment of machinery and vehicles.	Bodily injury	Direct physical contact	Medium	Low	Low	Permitted waste types are predominantly inert 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 residential/buisne ss 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	Low	Low	Permitted waste types are predominantly inert so 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 residential/buisne ss population/site operators 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.	Low	Low	Low	As above.	As above (excluding comments on access to waste). 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 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	No point source emissions to water are permitted, but there is potential for contaminated rainwater run-off from wastes stored outside especially during heavy rain.	SR - All liquids shall be provided with secondary containment.... (applies to non-wastes such as fuels). Run-off is controlled restricted by SR through the use of a SR controls on emissions SR... 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	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 predominantly inert 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. activities must be 50 metres from any spring or well, or from any borehole not used to supply water for domestic or food production purposes or 50 metres from any spring or well, or 250m from any borehole not used to supply water for domestic or food	Very low
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 . The activities must also be outside groundwater source protection zones 1 (inner) or 2 outer. Excavated wastes from potentially contaminated sites require analysis. Total quantity limited to	Very low
Local human population/site operatives	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.	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	Very low

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 must not be carried out within 250m of the presence of the great crested newts where it is linked to the breeding ponds of the newts by good habitat or 50 metres of a site that has 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 Reserve.	Low
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