

Appendix VI – Environmental Risk Assessment

Environmental risk assessment for waste treatment and storage activities at World Care Wales Ltd

**Bespoke
Facility:**

Waste Operation: Waste Transfer Station with treatment (no
building)

Location:

World Care Wales. LLANDUDNO JUNCTION, LL31 9NF
LL31 9NF

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

Site treatment and storage operations are not within 500m of any
sensitive areas.

**Risk assessment carried
out by:**

TRG Environmental Services - www.thereadegroup.com

Date:

14-Feb-14

The scope of the permit and associated rules is defined by the

following risk criteria:

Parameter 1	Permitted activities - The storage and repackaging of waste (D15, R13, D14) and treatment consisting only of Manual sorting, separation, screening, baling, shredding, crushing or compaction (D9, R3, R4, R5).
Parameter 2	Permitted waste types - Non hazardous Household, Commercial and Industrial Waste
Parameter 3	Quantity of waste accepted at the facility: less than 15,000 tonnes per annum.
Parameter 4	The quantity of tyres stored at the facility shall not be more than 50 tonnes
Parameter 5	All waste will be stored and treated on an impermeable surface with sealed drainage system, except for specified Low-risk waste, which may be stored and treated on hard standing.
Parameter 6	The activities shall not be carried out within an Air Quality Management Area (AQMA) designated for Particulate matter in the form of PM10.
Parameter 7	The only point source discharges to controlled waters or groundwater, are surface water from the roofs of buildings
Parameter 8	The activities will not be carried out within 100m of any residential property of workplace.

Parameter 9

The activities will 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 10

The activities will not be within 50m of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies

Parameter 11

The activities are not carried out predominantly using a limited number of the permitted waste types

In a manner which significantly increases any of the risks compared to the generic operation of this type of facility,

For example predominantly storing wastes that present a significant increase in fire risk.

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 level of the remaining residual risk
Local human population	Releases of particulate matter (dusts) and micro-organisms (bio aerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	High	Medium	High	Permitted waste onsite types do not include. Dusts, powders or loose fibres but the treatment activities will produce particulate matter so a high magnitude risk is estimated. There is potential for exposure if anyone is living or working close to the site (apart from the operator and	Damp down materials being treated. Do not carry out treatment activities in breezy or windy conditions. Ensure that waste containing mainly dusts are not accepted onsite	Low

Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Medium	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	Medium	Medium	Medium	Local residents often sensitive to litter.	Control measures include clearing litter arising from the activities from affected areas outside the site.	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	Road safety, local residents often sensitive to mud on roads.	Control measures 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.	No putrescible wastes to be accepted onsite. Green waste to be treated and removed as soon as is practicably possible.	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	Noise and vibration monitoring to be carried out at site boundary. Control measures to be used on plant equipment to reduce the potential for noise and vibration	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	Medium	Medium	Medium	Permitted wastes may attract scavenging animals and birds. Wastes may become nesting / breeding sites.	No potential food sources kept on site. Pest control contractors to be employed if scavenging pests are detected onsite.	Low
Local human population	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	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	Low	Hazardous waste is not permitted. Wastes are not stored in buildings or inside secure containers so they could be washed off-site, which will add to the volume of the post-flood clean up workload, rather than the hazard.	Site is not located in a known flood area. Site has interceptor and inflatable booms to be deployed in case of excess water being detected escaping site.	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 therefore only a medium magnitude risk is estimated.	Treatment activities onsite will be managed and operated according to the sites working plan, which includes 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	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface	Medium	Medium	Medium	Permitted waste types do not include sludge's or liquids and are non-hazardous therefore only a medium magnitude risk is estimated.	As above.	Low

[illegible]

[illegible]

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	Medium	Medium	Medium	Waste operations may cause harm to and deterioration of nature conservation sites.	Waste treatment activities are not be carried out within 500m of a European Site or SSSI.	Low