ENTYRE GROUP LTD - 005

Environmental Risk Assessment

Standard Facility:	Waste Operation: Materials Recycling Facility - Waste Tyres 16 01 03
Location:	4 WINDS Industrial Estate, Bedford Road, Haynes West End, Bedfordshire, MK45 3QT
Location of environmentally sensitive sites (km / m):	Approximately 200m across the A6 Trunk Road
Risk assessment carried out by:	Michael Wilson
Date:	01-Feb-21

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

Parameter 1 Permitted activities - The storage of waste (R13,) and treatment consisting only of manual sorting.
Parameter 2 Permitted waste types - Waste Tyres 16 01 03
Parameter 3 Quantity of waste accepted at the facility: Approximately 60 tonnes per week.
Parameter 4 All wastes shall be stored and sorted outside.
Parameter 5 All waste shall be stored and treated 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 or treatment 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).
Parameter 8 The activities are carried out using a single permitted waste type in a manner which does not increase any of the risks compared to the generic operation of this type of facility, eg storing waste that significantly increases the risk of fire
Parameter 9 The permitted activities shall not be carried out within 50m of any well, spring or borehole used for the supply of water for human consumption. This includes private water supplies.

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	Release of dust from the surface of the site during dry weather	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Low	Low	**Very low**	Local businesses often sensitive to dust.	Introduce dousing down with water during particular dry spells of weather	Very low
Local human population and wildlife.	Litter arriving inside worn tyres	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low	Low	**Very low**	Local businesses often sensitive to litter.	All staff are instructed to remove and dispose of any litter found in incomming waste tyres. Also 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 businesses often sensitive to mud on roads.	Appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site. Althought the approaches to the site are generally clean	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Very low	Very low	**Very Low**	Local businesses often sensitive to odour.	Waste Tyres (whole) do not cause odour, dust or contamination to water. The site surface being constructed of impermeable concrete serves to mitigate any of the above contaminations.	Very low
Local human population	Insects living in worn tyres stored outside and filled with water	Harm to human health, nuisance, loss of amenity	Air transport and over land	Low	Low	**Low**	Insect pests can multiply on permitted wastes, particularly in summer months	Water is removed when waste tyres are received. The stock is rotated every 3 months if not removed from the site when water is also removed.	Very low

Local human population and local environment	Flooding of site	Run off water	Flood waters	Very low	Low	**Low**	Permitted waste types are non-hazardous and have an average weight of 50+kg. The likelyhood of the waste being washed off site is extremely unlikely. There are no major sources of water in the locality that could cause such a flood	managemnet of local staff to monitor any flood situation	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	Low	Medium	**Medium**	Permitted waste types are non-hazardous so only a medium magnitude risk is estimated.	Activities are 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, firefighters 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.	Low	High	**Medium**	Permitted waste types (EOL rubber tyres) have a flash point of 400 deg C and several minutes to flame.	Site security measures in place to prevent unauthorised access. Camera's installed to identify a) intruders and b) Flame/temp change of the waste storage piles. Further information contained in the FPP	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	High	**Medium**	Risk of accidental combustion of waste is moderate. See Above	Camera's installed to identify flame/temp change of the waste storage piles. Further information contained in the FPP	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	Medium	**Low**	Permitted waste types (EOL tyres), a low magnitude risk is estimated.	The site surface is impeamable concrete and contained within a bund/retaining wall. All drains are passed through a receptor tank prior to discharge to the watercourse	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.	Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer	Low	Medium	**Low**	Waste types are non-hazardous so harm is likely to be temporary and reversible.	The site surface is impeamable concrete and contained within a bund/retaining wall. All drains are passed through a receptor tank prior to discharge to the watercourse	Low

Abstraction from watercourse downstream of facility (for agricultural or potable use).	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	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**	The site surface is impeamable concrete and contained within a bund/retaining wall	The site surface is impeamable concrete and contained within a bund/retaining wall. All drains are passed through a receptor tank prior to discharge to the watercourse	Very low
Groundwater	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Low	Medium	**Low**	There is a virtually no potential for contaminated rainwater run-off or leachate from permitted waste types.	The site surface is impeamable concrete and contained within a bund/retaining wall Activities shall not be carried out within 50m of any well, spring or borehole used for the supply of water for human consumption.	Very 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 lorry tyre fires are not common but can happen particularly due to arson. Impact on health and amenity can be significant for many days or weeks.	Limited weekly intake tonnage to 60 tonnes (maximum on site storage at any point in time = 500 Tonnes) of EOL lorry & bus tyres. Fire Prevention Plan which defines storage requirements for the waste type	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 lorry tyre fires are not common but can happen particularly due to arson. Impact on health and amenity from run off water can be significant.	The site surface is impeamable concrete and contained within a bund/retaining wall. All drains are passed through a receptor tank prior to discharge to the watercourse	Low
Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	High	**Low**	Waste operations unlikely to cause harm to nature conservation sites. The site operation is tactile inspection and storage of whole waste lorry & bus tyres. There is little risk of noise, odour or dust and no risk of water contamination to any of the sites	Activities are located approximately 200m from a European Site or SSSI. (Distance criteria as agreed with Natural England/Countryside Council for Wales).	Very low