

Risk Assessment -Paperback Collection & Recycling Ltd

Facility:	Waste Operation: Waste Transfer Station - storage only no treatment
Location:	Paperback , Penrhos Storage
Location of environmentally sensitive sites (km / m):	SSSI of Beddmanarch - Cymyran at 950m
Risk assessment carried out by:	Clare Walters
Date:	01-May-17

The scope of the risk assessment is defined by the following risk criteria:

- Parameter 1 Permitted activities - The storage of waste (R13)
- Parameter 2 Permitted waste types - Non hazardous Specially selected & specified Commercial and Industrial Waste - baled plastics
- Parameter 3 Quantity of waste accepted at the facility: 45000 tonnes per annum
- Parameter 4 The quantity of waste stored at the facility shall not be more than 15000 tonnes
- Parameter 5 All waste shall be stored in a building
- Parameter 6 All waste shall be stored on an impermeable surface with sealed drainage system
- Parameter 7 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)
- Parameter 8 The activities will not be carried out within 50m of any well, spring or borehole used for the supply of water for human consumption.
- Parameter 9 The activities are carried out using a limited number of the permitted waste types in a manner which significantly decreases any of the risks compared to the usual operation of this type of facility.

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?
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Very Low	Very Low	Very Low	All waste accepted will be baled plastics. The permitted waste types do not include dusts, powders, putrescible's, loose fibres. The permitted activity is storage and so no dust will be produced from any activities on site. Storage will take place within a building.	Dust control not needed	Very Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Very Low	Very Low	Very Low	As above	As above	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	All waste accepted will be baled plastics. Baling will help prevent the escape of litter. The permitted activity is storage and so no litter will be produced from any activities on site. Storage will take place within a building. Litter could potentially result if wrapping and/or bale split.	The site will be operated in accordance with an EMS. Appropriate measures within the EMS include inspection of baled before acceptance and the monitoring of the site for litter and clearing of any litter arising from the activities from any affected areas inside or 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.	Low	Low	Low	Waste accepted at the site will be baled plastic so waste should be well contained and there should be no release of waste during transport. Site haul roads are good quality and tarmaced with long, on site, access road so the production of mud is very unlikely.	As above for litter. Appropriate measures could include road sweeping, litter and debris arising from the activities from affected areas outside the site if needed.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Very Low	Very Low	Very Low	Local residents often sensitive to odour but as the waste type to be accepted is only wrapped and baled plastic there will be no odour potential. In addition all storage is within a building.	Odour control not needed.	Very Low

Local human population	Noise and vibration	Nuisance, disturbance loss of amenity.	Noise through the air and vibration through the ground.	Low	Low	Low	The facility will just be for the storage of waste so only noise will come from the unloading and loading of the baled plastic and from vehicle movements.	There is a road between the facility and the nearest residential property which will produce noise so limiting the impact of any noise from the facility. In addition, the loading and unloading operations will be infrequent and limited in time	Low
Local human population	Scavenging animals and scavenging birds	Nuisance and loss of amenity.	Air transport and over land	Very Low	Very Low	Very Low	Material accepted at the site will only be baled plastic. The bales will be stored within a building. The waste type is unlikely to attract pests due to its nature ie non biodegradable and storage conditions.	The site operations are controlled by an EMS. This system will require inspections of the site for pests and if evidence of pests is found pest control measures will be put in place.	Very Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Very Low	Very Low	Very Low	As above	As above.	Very Low
Local human population and local environment	Flooding of site	Waste adding to debris within flood waters	Flood waters	Very low	Very Low	Very Low	Site is not within a flood risk area. Permitted waste types are baled and non-hazardous and contained within a building so no waste should be washed off site if there was an exceptional flood event.	No action needed	Very 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	High	Risk of fire low due to site security and storage within building but impact of fire could be high if no mitigation.	See Fire Prevention Plan	Low with fire plan implementation
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.	Very Low	High	High	As above	See Fire prevention Plan	Low with fire plan implementation
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. Chronic effects : deterioration of water quality.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Very Low	Very Low	Very Low	Permitted waste types do not include sludges or liquids and wastes are of a non putrescible nature so only a very low magnitude risk is estimated. There is very limited potential for rainwater run-off from wastes as they will be stored within a building. Note site is not within a SPZ. Only potential spillage could come from vehicles or equipment whilst they are outside site.No storage of fuels on site.	Plant equipment and maintenance will be undertaken in accordance with EMS.	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.	Very Low	Very Low	Very Low	As above	As above. Also the 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
Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Very Low	Very Low	Very Low	There is very limited potential for contaminated rainwater run-off from baled plastic waste types. As above	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	Very Low	Very Low	Very Low	Unlikely to occur. As above	As above	Very Low
Protected sites - European sites and SSSIs	Beddmanarch-Cymyran SSSI at approximately 950m	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Low	Low	Waste operations may cause harm to and deterioration of nature conservation sites, however the type of facility (ie storage of plastic bales) , the distance (0.95 km) and transport effects are limiting factors in this instance. There should be no run off from site under normal circumstances which could potentially result in toxic contamination or nutrient enrichment. The only potential run off would be from fire water - see Fire Prevention Plan for fire water management. There will be no dust and particulates which could potentially cause smothering as these are not considered to be a significant hazard. There could be polluting aerial emission from a fire but these will be short lived and unlikely. Scavengers and pests which could result in predation are not a significant hazard due to waste types . As the site is at a significant distance from the receptor it will not cause disturbance at the receptor site.	Fire Prevention Plan in place and EMS in place to monitor site for pests etc.	Low