



Environment Agency Permit Application Environmental Risk Assessment

Norwich RDF & Transfer Facility
KB3105FM



January 2024_v1.0

Data and information				Judgement				Action (by permitting)	
Receptor	Source	Harm	Pathway	Probability	Consequence	Magnitude	Justification for	Risk management	Residual risk
<i>What is at risk? What do I wish to protect?</i>	<i>What is the agent or process with potential to cause harm?</i>	<i>What are the harmful consequences if things go wrong?</i>	<i>How might the receptor come into contact with the source?</i>	<i>How likely is this contact?</i>	<i>How severe will the consequences be if this occurs?</i>	<i>What is the overall magnitude of the risk?</i>	<i>On what did I base my judgement?</i>	<i>How can I best manage the risk to reduce the magnitude?</i>	<i>What is the magnitude of the risk after management?</i>
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	Low	Low	Permitted waste types do not include dusts, powders or loose fibres so only a low magnitude risk is estimated.	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside. DEMP in place for more detail.	Very low
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols)	Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Low	Low	Low	Staff and property at adjacent units could be sensitive to or impacted by dust.	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside. DEMP in place for more detail.	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	Nearby industrial premises often sensitive to litter.	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside.	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, nearby industrial premises could be affected by mud on roads.	Waste types not likely to create mud, all waste reception and processing contained within a building with fast acting doors. All trafficked areas are hardstanding. Roadsweeping equipment maintained on site.	Very low

Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Medium	Medium	Medium	Nearby industrial premises often sensitive to odour.	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside. OMP in place for more detail.	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	Nearby industrial premises often sensitive to noise and vibration	The subject site is in an industrial/commercial location which is less sensitive to noise and is not the dominant local noise source. Noise sources such as pumps and motors associated with processing activities are located within a building. All equipment is subject to planned preventative maintenance.	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	Low	Low	Low	Permitted wastes may attract scavenging animals and birds.	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside in covered bays.	Very 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	All reception and processing of waste is contained within a building. Only plastic wrapped baled wastes stored outside in covered bays. There is a pest control contract in place with routine inspections and trapping.	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	Medium	Medium	Low	Permitted waste types are non-hazardous so any waste washed off site will add to the volume of the local post-flood clean up workload, rather than the hazard. The site is of low risk of flooding.	No history of flooding on the site and not in a flood risk area.	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.	Medium	Medium	Medium	Permitted waste types are low volume but are combustible.	Activities are managed and operated in accordance with a management system which includes site security measures to prevent unauthorised access. CCTV surveillance systems are installed which are remotely monitored out of hours.	Low

Local human population and all surface waters close to and downstream of site.	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.	Medium	Medium	Medium	Risk of accidental combustion of waste is moderate.	See FPP for full details including automatic fire detection and suppression systems.	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.	Medium	Medium	Medium	Permitted waste types are solids but may have residual liquid contamination. There is storage of process chemicals on site.	All bulk storage of fuel oil are provided with secondary containment. Outside bale storage area connected to sealed tank for off-site disposal. A penstock valve in place which can be closed in the event of loss of containment.	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	Medium	Low	Low	Permitted waste types are solids but may have residual liquid contamination. There is storage of process chemicals on site.	All bulk storage of fuel oil are provided with secondary containment. The building and yard area are hardstanding. Outside bale storage area connected to sealed tank for off-site disposal. A penstock valve in place which can be closed in the event of loss of containment.	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.	Medium	Medium	Medium	Permitted waste types are solids but may have residual liquid contamination. There is storage of process chemicals on site.	All bulk storage of fuel oil are provided with secondary containment. The building and yard area are hardstanding and form a sealed drainage system which is diverted to foul sewer. A penstock valve in place which can be closed in the event of loss of containment.	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	Low	Low	There is a potential for contaminated rainwater run-off or leachate from permitted waste types.	All bulk storage of fuel oil are provided with secondary containment. The building and external bale storage area are hardstanding and connected to a sealed tank for off-site disposal. A penstock valve in place which can be closed in the event of loss of containment.	Low

All surface waters close to and downstream of site.	Uncontrolled release of process effluent	Harm to the functioning of downstream sewage treatment works.	Transport through the sewer system to a treatment works	Medium	Low	Low	Emissions from foul sewer could disrupt operation of the recieving sewage treatment works	All waste activities carried out on sealed drainage connected to a sealed tank for off-site disposal. There is also penstock valve which can be closed to prevent discharge from the site into the local surface water.	Low
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