Berth 31 Barry DockPermit Risk Assessment

Facility:	Waste Operation: Treatment of waste wood
Location:	Berth 31, Barry Docks, Wimborne Road, Barry.
Risk assessment carried out for:	South West Woods Ltd
Location of environmentally senstive sites (m)	Greater than 500m - see parameter 6
Date:	06 05 2024

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

Parameter 1	Permitted activities - The storage of waste (R13), recycling/reclamation of organic material (R3) and recycling/reclamation of metals and metal compounds (R4)
Parameter 2	Permitted waste types - Non Hazardous other than waste consisting solely or mainly of dusts, powders or loose fibres or waste in liquid form.
Parameter 3	Quantity of waste accepted at the facility: <250,000 tonnes per annum.
Parameter 4	The site is not located within groundwater source protection zones 1 or 2.
Parameter 5	There are no wells, springs or boreholes used for the supply of water for human consumption, including private water supplies within 50 metres of the site.
Parameter 6	Hayes Point to Benrick Rock, Geological SSSI 850m to the south. Barry Island Geological SSSI 1.7km to the south west Cogs Moor SSSI 2.7km to the east. Barry Woodlands 2.0km to the north Severn Estuary SPA, Sully Island 3.5km to east, south east. Severn Estuary SAC 5.9km to the east.
Parameter 7	There are no sites identified as having present great crested newts, or links to breeding ponds of the newts by good habitat within 250m of the site; nor are there any sites withing 50 metres of the facility that have relevant species or habitats protected under a Biodiversity Action Plan that could be at risk to this activity. Ther are no Ancient woodland or Scheduled Ancient Monuments within 50m of the site.

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Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Medium	**Medium**	Permitted waste types are non hazardous and do not include dusts, powders or loose fibres (with the exception of sawdust) and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a medium magnitude risk is estimated. The permitted level of throughput and potential size of the facility means there is potential for exposure if anyone is living or working close to the site (apart from the operator and employees).	The site shall operate to a dust management plan.	Low
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	High	Low	**Medium**	As above. 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	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.	Very 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.	As above. Appropriate measures could 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.	Low	Low	**Low**	Local residents often sensitive to odour, however permitted waste types have low odour potential.	Emissions shall be free from odour and if required an emission plan to prevent and minimise odours will be prepared	Very low

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Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Low	Medium	**Low**	Local residents often sensitive to noise and vibration, the location of the site is remote from any residential properties in an established industrial / dock location.	Noise and vibration shall be minimised and not cause nuisance. A noise management plan has been prepared following a noise impact assessment.	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	Medium	**Low**	Permitted wastes unlikely to attract scavenging animals and birds but may become nesting / breeding sites.	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. If appropriate measures, including, but not limited to, the preparation of an emissions management plan, to prevent or where that is not practicable, to minimise, those emissions.	Very low
Local human population	Pests (e.g. flies)	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	Medium	Low	**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 planning proposals include adequate flood measures including an upstand on the dock to protect the site from flooding.	The site will operate to an environmetal management system that identifies and minimises risks of pollution. The planning proposals include adequate flood protection measures including an upstand on the dock to protect the site from flooding.	Very low

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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	Low	**Low**	Permitted waste types are non-hazardous therefore only a low magnitude risk is estimated	Activities shall be managed and operated in accordance with a management system which 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, 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	Medium	**Medium**	Permitted waste types do include flammable materials so a medium magnitude risk is estimated.	The site will operate to a Fire Prevention and Mitigation Plan that sets out measures to prevent combustion events and, in the event of an incident, the measures to minimises risks of pollution.	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 fire fighters. Pollution of water or land.	As above.	Medium	Medium	**Medium**	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**	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. No point source emissions to water are permitted, but there is potential for contaminated rainwater run-off from wastes during heavy rain.	All liquids shall be provided with secondary containment (applies to non- wastes such as fuels). The Management System will employ appropriate measures to address emissions not controlled by emission limits and ensure site drainage remains intact.	Very low

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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 non-hazardous 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. Only water in prximity likley to be subject to abstraction is the docks.	As above.	Very low

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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	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	Low	Medium	**Low**	Unlikely to occur, but might restrict recreational use.	The site has contained drainage for waste management areas with water retained on site. The Management System provides for regular inspections to ensure the site drainage remains intact.	Very low
Protected sites - European sites and SSSIs, see Parameter 6.	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	**Low**	Waste operations may cause harm to and deterioration of nature conservation sites.	The site shall operate with an environmental management system and take appropriate measures which will ensure emissions of substances not controlled by emission limits shall not cause pollution. The measures will prevent or where that is not practicable, minimise those emissions. The permitted activities pose a low risk to the broad sensitivity of species and habitats groups.	Low

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Locally Protected sites - Cadoxton Wetlands & Cadoxton River SINC	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	**Low**	Waste operations may cause harm to and deterioration of nature conservation sites.	The site shall operate with an environmental management system and take appropriate measures which will ensure emissions of substances not controlled by emission limits shall not cause pollution. The measures will prevent or where that is not practicable, minimise those emissions. The permitted activities pose a low risk to the broad sensitivity of species and habitats groups.	Low