

## Risk assessment for variation of permit from standard rules to Bespoke Permit

<b>Location:</b>	Waste Operation: Treatment of waste wood for recovery
<b>Document Reference:</b>	Eclipse Works, Ashcott Road, Meare, Somerset, BA6 9SU
<b>Risk assessment carried out by:</b>	2060A/RA
<b>Date:</b>	Lucy Binnie
	24-Feb-16

### The assessment has been defined by the following risk criteria:

Parameter 1	Permitted activities - The storage of waste (R13) treatment of waste wood for recovery (R3) - no change to processing operations or site conditions.
Parameter 2	Permitted waste types - Non Hazardous as listed in permit, no changes to waste types
Parameter 3	Quantity of waste accepted at the facility: 150,000 tonnes per annum.
Parameter 4	The site does not lie in groundwater source protection zone
Parameter 5	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 6	The site is over 10 metres from any watercourse and 50 metres of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies;
Parameter 7	The site is not in a groundwater source protection area

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	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 site has a relatively remote location in open countryside and processing operations are located in such a manner to be screened from any nearby properties. Additional tree planting has recently been undertaken on some of the site boundaries	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator has a dust management plan and undertakes operations in accordance with the DMP including monitoring of dust levels. This minimises emissions	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

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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 however the operations and site layout do not result on issues of mud on the public highway.	If required appropriate actions would be undertaken to 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. The permit conditions provide for an approved odour management plan if required, which would prevent or where that is not practicable, minimise, those emissions.	Very 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	The operations will that place under a noise management plans which prevents or where that is not practicable, minimises, those emissions.	Low

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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. There are provisions for further appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken 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	Low	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.	A written management system identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances.	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	Medium	Low	Low	Permitted waste types are non-hazardous therefore only a low magnitude risk is estimated	The activities are be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access).	Low

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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. Wastes will be stored in accordance bespoke Fire Prevention Plan fire which includes details of storage limits adn durations, provision for fire prevention, fire fighting and minimising the environmental impact of a fire.	The site has a written management system and fire prevention plan that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances.	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 or fire fighting residues.	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. There are no point source emissions to water. The FPP details measures to control any fire fighting water run off	All liquids shall be provided with secondary containment (applies to non- wastes such as fuels). Run-off restricted. Operation fo FPP	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	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.	As above. The activities are 10 metres from any watercourse and not be within 50 metres of any well, spring or borehole used for the supply of water for human consumption, including private water supplies.	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.	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. There are provisions for further appropriate measures if required, including, but not limited to, those specified in any approved emissions management plan, to prevent or where that is not practicable, to minimise, those emissions.	Very low
Protected sites - European sites and SSSIs including Ham Wall NNR, Shapwick Heath SSSI & NNR and Somerset Levels & Moors SPA & RAMSAR	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.	Emissions from the site do not cause pollution. The site operates with a Dust Management Plan and Noise Management Plan, to prevent or where that is not practicable, to minimise, those emissions. The nearby conservation sites are physically separate from the site operations and have not experienced any adverse impacts since operations commenced at the	Low

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