

H1 Risk Assessment (H1)

April 2023

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Table 1. Assessment of odour risks

Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Fugitive emissions from: <ul style="list-style-type: none"> Treatment and recovery activities. Storage of material or waste stockpiles. 	Workers and visitors at Nursery and commercial units. Residential properties on Wendover Road 230 m east,	Nuisance and loss of amenity value.	Atmospheric (fugitive). Air transport then inhalation.	Medium	low	low	Permitted material will have a low odour potential. HCl waste is treated within a building. The site is well enclosed and well screened.	Controls on types of wastes accepted and treated. Site works will be in accordance with the DEMP and OP. Reduction of drop height. Recording of any complaints and implementation of controls as set out in the DEMP/OP.	Low.

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Table 2. Assessment of noise and vibration risks

Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Noise and vibration emissions from haulage (8-wheel delivery lorries) and machinery onsite (crusher/screener, front loader, excavator/ Fixed plant within Building A).	Workers and visitors at Nursery and commercial units. Residential properties on Wendover Road 230 m east,	Levels of noise that cause loss of amenity and nuisance to businesses and residents.	Airborne	Medium	Possible	Low	Adherence to agreed site operation hours.	3.6 m high concrete wall along the boundaries of the site. The site is well enclosed and fixed plant operate within buildings. Recording of any complaints and implementation of controls as set out in the OP.	Low

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Table 3. Assessment of fugitive emissions (other than odour)

Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
To Air									
<p>Dust from haulage and site operations. Exhaust emissions and fugitive dust from vehicle loads.</p> <p>Dust from internal and external processing of waste streams.</p> <p>Storage of waste and recovered aggregate. Potential wind entrainment of waste and litter.</p>	<p>Site personnel.</p> <p>Workers and visitors at Nursery and commercial units.</p>	<p>Harm to human health, respiratory irritation and illness.</p>	<p>Air then inhalation.</p>	<p>High</p>	<p>Possible</p>	<p>Medium-High</p>	<p>External treatment is for aggregate and soil substitutes only.</p> <p>Minor segregation of non-hazardous only.</p>	<p>Dust suppression controls and monitoring as outlined in the DEMP.</p> <p>Site has a 3.6 m high block barrier along the boundaries to reduce wind erosion with a further 1.5m high dust net in the south east.</p> <p>Plant to be operated in accordance with operators' instructions and good practice of dust minimisation (e.g. reducing drop heights and mist control for the crusher).</p>	<p>Medium</p>
	<p>Residential properties on Wendover Road 230 m east,</p>	<p>Friable dust types (<PM₁₀) easily inhaled and can be produced from the external processing of crushed aggregate waste.</p>	<p>Air then inhalation.</p>	<p>High</p>	<p>Possible</p>	<p>Medium-high</p>			
		<p>Potential irritant, landing on nearby cars and buildings.</p>	<p>Air then deposition in industrial / residential area.</p>	<p>Mild</p>	<p>Possible</p>	<p>Medium</p>			

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To Controlled Waters									
Run-off from site surfaces or spillages.	Existing drainage system. Land drain ditch along northern boundary of site and attenuation pond in north west of the site.	Where surface water does not drain, then the site surface can become muddy, which can cause excessive emissions when dry. Infiltration of contaminants into surface water.	Land and drainage systems	Low	Unlikely	Medium	Spillages of oils onto surface could enter the drainage network causing pollution. Hazardous wastes or wastes in liquid form are not permitted. All mixed non hazardous waste is stored under cover. The majority of site is under cover with suitable soil and inert waste streams stored externally. The surface water from the concrete will be stored in a lagoon via interceptor and settlement tank.	Spill kits will be located within the site office and a manual shut off valve can be installed. Clean roof runoff is kept separate from site surfacing runoff to reduce spill risk.	Low

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Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Run-off and infiltration from site surfaces or spillages.	<p>Bedrock underlying site (unproductive strata).</p> <p>Surface water (ditch) along northern boundary.</p> <p>Attenuation pond in north west of site.</p>	<p>Pollution to aquifer which may be in hydro-continuity with surface drains.</p> <p>Pollution due to sediment entrainment into waters, loss of habitat and damage to species.</p>	Land infiltration surfacing	low	Very unlikely	Medium	<p>Permitted waste types do not include liquids, leachates or sludges and are unlikely to contaminate groundwater/surface waters.</p> <p>Site is covered with buildings and impermeable hard standing.</p> <p>All mixed non hazardous waste is stored under cover.</p> <p>The majority of site is under cover with suitable soil and inert waste streams stored externally. The surface water from the concrete will be stored in a lagoon via interceptor and settlement tank.</p>	<p>Controls as set out detailing on the types of wastes accepted in the OP.</p> <p>Hazardous wastes or wastes in liquid form are not permitted.</p> <p>Acceptable wastes are non-hazardous and inert only.</p> <p>All storage and processing of waste will be undertaken on impermeable surfacing.</p> <p>Spill kits will be located within the site office and a manual stop plug can be installed.</p>	Low
Mud and Litter									
Litter from storage areas and mud from site operation.	Humans (local businesses, users of nearby properties and car parks) and controlled waters.	<p>Nuisance, loss of amenity and reduced safety.</p> <p>Mud on surfaces may increase odour levels when dry.</p>	Air, land, mud on vehicles, runoff into the existing drainage network.	low	Possible	low	<p>Permitted wastes have low litter potential. No municipal wastes accepted.</p> <p>Site accessed from a hard-standing road.</p>	<p>Haulage routes will be inspected and maintained to keep free of mud. Road sweepers will be operated on internal roads, where necessary. All visible litter on site boundaries will be cleared as soon as practicable.</p> <p>Inspection and corrective action regime will be undertaken in line with site management system.</p>	Low

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Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Pest and Vermin									
Storage of waste attracting pests and vermin.	Local human population (as per odour).	Can cause increased populations and infestations of rats, mice, flies and other vermin. Result is harm to health, loss of amenity and nuisance.	Air transport and overland.	low	Unlikely	Low	Permitted wastes have low organic content. No municipal waste. Very low potential to attract pests and vermin.	Management and control on wastes accepted. Inspection of site by Site Manager on frequent basis. Implementation of controls as required. Ensure any municipal waste is sealed and correctly disposed.	Low
Ecological									
Damage to ecology (flora and fauna).	Flora, fauna and human health. Priority Habitats (traditional orchards) 600 m south and 630 m south east of the site. GCN 630 and 990 m south of the site.	Destruction and/or damage to flora / fauna. Disturbance of invasive species leading to human health exposure.	Direct contact, over land and airborne.	Medium	Unlikely	Very Low	The site is of low ecological value. No SSSI, AONB, SAC, SPA, LNR or RAMSAR sites within 1km of the site. No Scheduled Monuments within 1 km of the site.	All control measures and mitigation will be in accordance with the OP.	Very Low

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Table 4. Accident risk assessment and management

Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Fire (accidental, arson) and smoke.	Local human population Flora and fauna	Damage and loss of amenity, property, nuisance and carcinogenic particulates.	Direct contact, airborne.	Severe	Unlikely	High	No fire or burning on-site is permitted. Permitted wastes have combustion potential.	No wastes will be burned on-site. Site will operate in line with the FPP. Site will always be secured. Access controlled during operational hours. In event of fire, controls specified in site FPP and Fire Brigade notified, as necessary. Incidents recorded in the Site Diary.	Low
Spillage of fuels, oils or polluting material. Fugitive release of VOC from storage activities.	Soil, surface water and groundwater.	Pollution and/or contamination	Land and drainage systems	Moderate	Unlikely	Medium	Only small-scale storage of fuel and oils for plant and machinery. No hazardous or liquid wastes will be accepted on site.	Site procedures include Accident Management Plan and spillage controls. Spill kits stored with tanks and plant, and in the office compound.	Low
Spillage of waste or recovered material.	Human health (as per odour), surface water drainage.	Loss of amenity, nuisance, pollution and / or contamination.	Land drain and air	Moderate	Possible	Medium	Uncontrolled release could cause health or pollution issues. No hazardous or liquid wastes will be accepted on site.	All vehicles accessing the site will be sheeted or fully enclosed. Unloading and loading will be controlled at all times. The Accident Management Plan will incorporate spillage of waste from vehicles in the event of a Road Traffic Accident. Incidents recorded in the Site Diary.	Medium

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Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Direct physical contact between humans and wastes, machinery and vehicles.	Human health (site operatives and local population).	Bodily harm	Direct contact	Moderate	Likely	High	Permitted wastes do not have potential to cause risk to human health (no hazardous materials). No public access during works.	Activities to be managed in accordance with site health and safety management system. Access to wastes to be restricted to trained and competent personnel. Demarcation of activities and personnel.	Medium