

Data and information				Judgement				Action (by permitting)
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Justification for magnitude	Risk management
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?
Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	Releases of particulate matter (dust) .	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Medium	Medium	Permitted waste types are non hazardous soils and have a low potential to produce bioaerosols. The activities may produce dust from movement of vehicles and tipping operations especially in dry and also windy weather.	Prevailing wind direction for the area is predominantly west throughout the year so reduces the probability of exposure to schools and restaurant. Delay tipping of soil if very windy. Clean vehicle wheels at the end of the working day to reduce dust.
Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	Releases of particulate matter (dust) .	Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Medium	Low	Medium	As above. Local residents often sensitive to dust.	As above.

Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	Litter.	Nuisance, loss of amenity and harm to animal health.	Air transport then deposition.	Low	Low	Very low	Local residents often sensitive to litter, however permitted waste types have low litter potential. Windy weather could increase probability of litter spreading but still very low risk as the soils will only be accepted if uncontaminated.	Waste inspection and waste acceptance procedures to ensure soils are uncontaminated. Litter collection around site if required or quarantine area if soils are found to be contaminated with litter.
Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	Mud and waste on road.	Nuisance, loss of amenity, road traffic accidents.	Tracked on tyres of vehicles entering and leaving the site and from loads which are not properly contained.	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. Clean vehicles wheels at end of working day.
Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	Odour .	Nuisance, loss of amenity.	Air transport.	Very low	Very low	Very low	Local residents often sensitive to odour, however permitted waste types have low odour potential.	Controlled by waste acceptance procedures. Check to see if soils look to be contaminated and check for any odour. Prevailing wind direction for the area is predominantly west throughout the year so reduces the probability of exposure to schools and restaurant.
Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S	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.	Vehicle movements limited to a maximum of 10 loads per day in accordance to planning conditions and Transport Assessment. Vehicle movements closely monitored with log of movements.

<p>Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S</p>	<p>Scavenging animals and scavenging birds.</p>	<p>Harm to human health from waste carried off site and faeces. Nuisance and loss of amenity .</p>	<p>Air transport and over land.</p>	<p>Low</p>	<p>Low</p>	<p>Very low</p>	<p>Permitted wastes unlikely to attract scavenging animals and birds but may become nesting / breeding sites.</p>	<p>Controlled by waste acceptance procedures. Soils will be uncontaminated and will be not accepted onsite if found otherwise.</p>
<p>Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S Local Environment: Liley Wood, 100m North & Protected Habitat-Deciduous Woodland Up to 50m from site</p>	<p>Pests (e.g.) flies.</p>	<p>Harm to human health. Nuisance, loss of amenity.</p>	<p>Air transport and overland.</p>	<p>Low</p>	<p>Medium</p>	<p>Low</p>	<p>Permitted waste types unlikely to attract pests.</p>	<p>Controlled by waste acceptance procedures. Risk to human health and environment very low as only uncontaminated soils will be accepted on site.</p>
<p>Local human population. Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N. Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S Local Environment: Liley Wood, 100m N & Protected Habitat-Deciduous Woodland Up to 50m from site</p>	<p>Flooding of site.</p>	<p>If waste contaminated water is washed off site it may contaminate buildings, gardens, watercourses and natural habitats.</p>	<p>Flood waters .</p>	<p>Low</p>	<p>Low</p>	<p>Low</p>	<p>Permitted waste types are soils so any waste washed off site will add to the volume of the local post-flood clean up workload, rather than the hazard.</p>	<p>The written management system will identify and minimise risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will include flood risk management). Flood risk assessment completed (2019) identifying site in flood zone 1- low probability of flooding and low risk of groundwater and surface water flooding on and off site.</p>

<p>Local human population and /or livestock gaining unauthorised access to the waste operation.</p> <p>Local human population.</p> <p>Commercial premises- Windy Bank Farm 180m NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N.</p> <p>Residential- 142m NE, 183m W, 570m NW, 740m NW.</p> <p>Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S</p>	<p>All on-site hazards, wastes, machinery and vehicles.</p>	<p>Bodily injury.</p>	<p>Direct physical contact .</p>	<p>Medium</p>	<p>Medium</p>	<p>Medium</p>	<p>Permitted waste types are soils therefore only a low risk from the actual waste. However there could be stockpiles that people could climb or void spaces that people could fall into and wastes have a higher risk in wet conditions where deep mud could form.</p>	<p>The written management system will identify and minimise risks from unauthorised access and site security measures identified to prevent such access. Soil will be spread as soon as it arrives on site (whilst adhering to waste acceptance procedures) which reduces the risk of direct contact with stockpiles. Machinery will have contingency plans in place for maintenance.</p>
<p>Local human population.</p> <p>Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N.</p> <p>Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m NW, Grange Moor Primary 1330m S</p> <p>Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S</p> <p>Local Environment: Liley Wood, 100m N & Protected Habitat-Deciduous Woodland Up to 50m from site</p>	<p>Arson and/ or vandalism causing the release of polluting materials to air (smoke or fumes) and firewater or spillage of polluting liquids to water or land.</p>	<p>Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters or arsonists/ vandals. Pollution of water or land.</p>	<p>Air transport of smoke. Spillages and contaminated firewater by direct run-off from and via surface water drains and ditches.</p>	<p>Low</p>	<p>Medium</p>	<p>Low</p>	<p>Permitted waste types are uncontaminated soils only so only a low magnitude risk is estimated.</p>	<p>The written management system identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will include fire and spillages). Soil accepted will only be uncontaminated so release of polluting materials to air is low.</p>
<p>Local human population.</p> <p>Commercial premises- NW, Mone Bros Temple Quarry 280m SW, Restaurant 780m N.</p> <p>Residential- 142m NE, 183m W, 570m NW, 740m NW, Windy Bank Farm 180m NW, Grange Moor Primary 1330m S</p> <p>Schools- Happy Hounds HQ 850m S, Grange Moor Primary 1330m S</p> <p>Local Environment: Liley Wood, 100m N & Protected Habitat-Deciduous Woodland Up to 50m from site</p>	<p>Accidental fire causing release of polluting materials to air (smoke or fumes), water or land.</p>	<p>Respiratory irritation, illness and nuisance to local population. Injury to staff, fire fighters. Pollution of water or land.</p>	<p>Air transport of smoke. Spillages and contaminated firewater by direct run-off from and via surface water drains and ditches.</p>	<p>Low</p>	<p>Medium</p>	<p>Low</p>	<p>As above.</p>	<p>As above.</p>

<p>All surface waters close to and downstream of site. Liley Clough- small stream 180m North of site leading to the River Calder 2,160m North of site</p>	<p>Spillage of liquids.</p>	<p>Acute effects: fish and invertebrate kill</p>	<p>Direct run-off from site across ground surface, via surface water drains, ditches etc.</p>	<p>Low</p>	<p>Low</p>	<p>Low</p>	<p>Waste types are non-hazardous and inert so harm is likely to be temporary and reversible.</p>	<p>No liquids on site - all waste is solid and inert. Controlled by waste acceptance procedures, only uncontaminated soils. No liquids accepted on site. Flood Risk Assessment identifies the development will not increase the run-off rate from site and may reduce it.</p>
<p>All surface waters close to and downstream of site. Liley Clough- small stream 180m North of site leading to the River Calder 2,160m North of site</p>	<p>Leachate from waste and contaminated rainwater run-off from waste e.g. suspended solids.</p>	<p>If waste contaminated water is washed off site it may contaminate watercourses and natural habitats leading to chronic effects: and deterioration of water quality.</p>	<p>Surface waters, leachate from infiltration through the waste</p>	<p>Low</p>	<p>Low</p>	<p>Low</p>	<p>No point source emissions to water are permitted.</p>	<p>No liquids accepted on site. Soil will be uncontaminated and controlled as per the waste acceptance procedures. Visual checks, detailed in the written management system will check to ensure rain water run off from site does not cause solids to be discharged from the site to any water courses.</p>
<p>Groundwater Liley Clough- small stream 180m North of site leading to the River Calder 2,160m North of site</p>	<p>Leachate from waste and contaminated rainwater run-off from waste e.g. Suspended solids.</p>	<p>Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.</p>	<p>Transport through soil/groundwater then extraction at borehole.</p>	<p>Low</p>	<p>Low</p>	<p>Low</p>	<p>Permitted wastes unlikely to contaminate groundwater.</p>	<p>The Site Condition Report addresses condition of site. Soil unlikely to contaminate groundwater as only uncontaminated soils will be accepted on site as per the waste acceptance procedures.</p>

Protected habitat- deciduous woodland north of site, up to 50m from site	Any	Harm to protected sites through contamination, smothering, disturbance etc.	Any	Medium	Medium	Medium	Waste operations may cause harm to and deterioration of protected habitats.	The ecological appraisal addresses any concerns and identifies the presence of protected species and notable habitats within 2km of the site . The waste to be accepted are non-hazardous soils and as such pose no significant risk to habitats. In addition operations will be carried out taking the sensitive nature of the deciduous woodland into account.
Local Wildlife Site- Liley Wood 100m north of site	Any	Harm to protected sites through contamination, smothering, disturbance etc.	Any	Medium	Medium	Medium	Waste operations may cause harm to and deterioration of local wildlife site.	The ecological appraisal (Envirotech, 2018), did not identify any additional issues. It also addresses any concerns and identifies the presence of protected species and notable habitats within 2km of the site. The waste to be accepted are non-hazardous soils and as such pose no significant risk to habitats. In addition operations will be carried out taking the sensitive nature of the local wildlife site into account.

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Residual risk

**What is the magnitude of the risk after management?
(This residual risk will be controlled by Compliance Assessment).**

Low

Low

Very low

Low

Very Low

Low

Very low

Very low

Low

Low

Very Low

Very low

Low

Low

Low

Low

Low