

## MBT Risk Assessment

**Table A1 Odour Risk Assessment and Management Plan**

Hazard	Receptor/s	Pathway	Risk Management	Probability of exposure	Consequence	What is the overall risk
<p>Odours from:</p> <p>MBT stacks</p> <p>Feedstock materials</p> <p>Breaking down process</p> <p>Possible development of anaerobic conditions</p>	<p>Residential area and Pilgrims Way primary school (30m SE)</p> <p>Residential area, Varcoe Road, (30m N)</p> <p>Various Works/Depot/Warehouse (2-100m E)</p> <p>Ilderton primary school (150m S)</p> <p>Industrial Works (150mS)</p>	Air	<p>Operations will take place within an enclosed building which will be maintained under negative pressure to prevent fugitive emissions.</p> <p>All emissions to air will pass through emissions abatement equipment designed to reduce its odour potential.</p> <p>Waste arriving at the site will be processed in a timely fashion in accordance with the principles of good industry practice to ensure that any storage of untreated waste is maintained at a minimum level.</p> <p>Good housekeeping will be implemented across the site to minimise the risk of odours occurring.</p> <p>An annual odour audit will be undertaken to ensure all on-site odour sources have been identified and to allow the odour inventory to be maintained.</p> <p>Any complaints regarding odour will be investigated in line with exiting company procedures and appropriate action taken if the site activities are found to be the source of odour. All complaints will be recorded and the Environment Agency informed.</p> <p>Further details on odour control measures are included in the sites Odour Management Plan contained within Chapter 9 of this application</p>	Low	Nuisance, loss of amenity	Not significant.

**Table A2 Noise Risk Assessment and Management Plan**

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	What is the overall risk
<p>Noise and Vibration from: movement of vehicles</p> <p>MBT equipment</p>	<p>Residential area and Pilgrims way primary school (30m SE)</p> <p>Varcoe Road, Apartment blocks (30m N)</p> <p>Varcoe Road, Apartment blocks (30m N)</p> <p>Residential area and Pilgrims way primary school (30m SE)</p> <p>Various Works/Depot/Warehouse (2-100m E)</p> <p>Ilderton primary school (150m S)</p> <p>Industrial Works (150mS)</p>	<p>Noise through the air and vibration through the ground.</p>	<p>Buildings will be fully enclosed and will be insulated as specified with appropriate wall and roof systems providing attenuation of -35dB(A) (R<sub>w</sub>) or greater;</p> <p>The design of the site ensures certain wall/roof sections have an increased specification of cladding providing attenuation of -45dB(A) (R<sub>w</sub>) or greater</p> <p>All vehicle access and exit doors within the facility including rapid closing doors will be provided with attenuation of -23dB(A) (R<sub>w</sub>) or greater when closed. When not in use, these doors be closed at all times;</p> <p>All personnel doors, maintenance doors (including infrequently used access points for cleaning purposes) will be provided with acoustic attenuation equivalent to or better than the wall cladding specified around it. Doors will be appropriately fitted to maintain a constant barrier and will remain closed other than when in use.</p> <p>All main plant, equipment and operations associated with the MBT will be located, operated and undertaken within the confines of the proposed building and sheltered environments;</p> <p>The stacks to the northern end of the MBT will be mitigated at source to a sound pressure level of 45dB(A) at 10m or less in any lateral direction;</p> <p>The layout of the facility has been designed such that the majority of vehicle reversing actions will take place within the buildings/covered areas thereby reducing the impacts associated with reversing alarms.</p> <p>Vehicles will be subject to regular maintenance and service schedules.</p> <p>All plant and equipment will be subject to regular inspection and maintenance schedules to maintain its operational performance.</p> <p>A Noise Impact Assessment was undertaken in support of the EIA and contains further information on noise sensitive receptors and controls. The EIA is included in Chapter 15 of this application.</p> <p>Any complaints regarding noise or vibration will be investigated and appropriate action taken if the site is found to be the source. All complaints will be handled and recorded in line with existing company and the Environment Agency informed.</p>	<p>Continuous low level exposure</p>	<p>Nuisance, loss of amenity</p>	<p>Not significant if properly managed.</p>

**Table A3 Fugitive Emissions Risk Assessments and Management Plan**

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	What is the overall risk
<b>To Air</b>						
Release of dust and bioaerosols from MBT operations	Residential area and Pilgrims Way primary school (30m SE)  Residential area, Varcoe Road, (30m N)  Various Works/Depot/Warehouse (2-100m E)  Ilderton primary school (150m S)  Industrial Works (150mS)	Air	Operations carried out within a building maintained under negative air pressure to prevent fugitive releases.  Doors to all buildings will be kept closed when not in use.  Good housekeeping will be employed to reduce quantities of particulates and dust on the site.  Site staff will undertake regular inspections for dust and undertake remedial action eg dampening or covering of waste being dewatered if dust is identified as a problem.  A mechanical sweeper will be employed as necessary to prevent unacceptable emissions.	Low	Respiratory problems, nuisance, loss of amenity	Not Significant
<b>To Water</b>						
Run-off from site surfaces.	Underlying groundwater (minor aquifer), River Thames.	Peculation through soils, run off from site.	Operations within an enclosed building with impermeable pavement and sealed drainage system.  Potentially polluting substances stored in bunded containers with secondary containment capable of holding more than 110% of the tank capacity.  Regular inspection and maintenance programme for pollution control infrastructure.  All appropriate personnel trained on Pollution Prevention and Control.  A number of spill kits will be sited at strategic locations around the site.  Accident Management Plan includes documented procedures for handling spillages to minimise impacts.	Low	Contamination of groundwater or Surface water.	Not Significant.

Environmental Risk Assessments

<b>Pests</b>						
Pests, vermin in waste stored/processed in MBT.	Human Population	Air/Ground	Wastes stored within designated containers, within an enclosed building. Waste arriving at the site shall be processed in a timely fashion in accordance with the principles of good industry practice to ensure that any storage of untreated waste is maintained at a minimum level.	Low	Annoyance, health risk.	Not significant
<b>Mud/Litter</b>						
Litter from any wastes received, stored processed in MBT.	Human Population	Air transport	All incoming waste types will be stored in designated containers or stored/treated/processed within enclosed buildings.  Site will be regularly inspected for litter in accordance with good industry practice.	Low	Nuisance, loss of amenity	Not Significant

**Table A4 Accident Risk Assessment and Management Plan**

Hazard	Receptor	Pathway	Risk Management	Probability of exposure	Consequence	What is the overall risk
Spillages of liquids/contaminated run-off from waste.	Groundwater/Surface water	Surface water run off, percolation of contaminants through soil.	Potentially polluting substances stored in bunded containers, on impermeable pavement. Design of containment and control of fugitive emissions in line with EA guidance 'Getting the Basics Right'.	Low	Contamination of groundwater/local water course.	Not Significant
Fire in material/waste storage areas causing emissions to air and firewater discharge.	Local water course	Surface water drainage system, site run off.	Impermeable pavement with sealed drainage system will prevent fire-water runoff. Written procedures for clean up/containment of firewater in place.	Low	Contamination of surface water/groundwater.	Not significant as long as management procedures are adhered to.
	Human health/Air Quality	Air	No wastes or other materials will be burnt on the site. Stockpiles will be appropriately managed. The site will maintain an Accident Management Plan in accordance with 'Getting the Basics Right'. The AMP contains emergency response procedures in relation to fire events.	Low	Smoke, Local nuisance, risk of fire spreading to other areas or premises.	
On-site machinery and vehicles	Personnel on site	Direct physical contact from unauthorised use	The site will be enclosed with suitable fencing to deter unauthorised access	Low	Bodily injury	Not significant
Waste spillages from vehicles transporting waste	Land	Direct contamination	Loading/unloading of vehicles will be supervised to ensure that they are not overfilled. Vehicles will be sheeted as necessary to prevent spillages.	Low	Land contamination	Not significant