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**	There is potential for exposure if anyone is living or working close to the site (apart from the operator and employees)	Prevailing wind direction is south west predominantly throughout the year. Reduces probability of exposure to sensitive receptors as majority of receptors are to the east of the site. Delay of decanting waste from vessels/tankers when very windy and follow dust emissions management plan. The site is not located within an AQMA designated for PM10.	Low

Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	Medium	Low	**Low**	Local residents often sensitive to dust. Majority of waste is stored inside buildings- Units 1-4. The waste stored outside is undercover surrounded on three sides by a waterproof cover, fencing and buildings. There is potential for increased dust generation from the decanting of waste from one container to another during prolonged dry periods e.g. summer months and windy weather.	Prevailing wind direction is south west predominantly throughout the year. Reduces probability of exposure to identified sensitive receptors. Delay decanting of material when very windy and follow dust emissions management plan. The site is not located within an AQMA designated for PM10.	Low
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Medium	Medium	**Medium**	Local residents often sensitive to litter.	Appropriate measures could include clearing litter arising from the activities from affected areas outside the site. Permitted waste types have low litter potential. Daily checks on 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. Permitted waste types have low litter potential. Daily checks on site.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Medium	Medium	**Medium**	Local residents often sensitive to odour.	Located within industrial estate, residential areas are not in close proximity to the site. Controlled by waste acceptance procedures, checks for odour. Prevailing wind is SW predominantly throughout the year so reduces the probability of exposure to sensitive receptors which are not located SW to the site.	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.	Appropriate measures include storage of majority of the waste in cladded buildings.Vehicle movements closely monitored. Site working hours during daytime only.	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	Medium	Medium	**Medium**	Permitted wastes is unlikely to attract scavenging animals and birds. Majority of waste is inorganic.	Access to waste restricted, waste stored in bags on site. Controlled by waste acceptance procedures and visual daily checks. Quarterly checks by independent pest control, onsite drains not connected to main sewers so less pathways for vermin.	Very low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Medium	Medium	**Medium**	Permitted wastes is unlikely to attract Insect pests.	As above.	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	High	**Medium**	Permitted waste types include hazardous wastes, so any waste washed off site will add to the volume and hazard of the local post-flood clean up workload.	Management system identifies and minimises the risk of pollution including those arising from operations, maintenance, accidents, incidents, non-conformances. Flood risk assessment identifies flooding on site as very low. Majority of waste including hazardous waste stored inside buildings.	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	Medium	**Medium**	Although permitted waste types include hazardous wastes so a medium magnitude risk is estimated.	Activities shall be managed and operated in accordance with the management system (will include site security measures to prevent unauthorised access). Access to waste restricted with the majority of waste stored inside buildings. Contained drains, designated fire resistant storage bays, no smoking on site, entire site is floored in concrete, compatibility test prior to mixing, vehicle daily checks and cleaning, vast majority of waste is inorganic, fire extinguishers.	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, firefighters 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**	Although permitted waste types include hazardous wastes a medium magnitude risk is estimated.	As above.	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 firefighters. Pollution of water or land.	As above.	Low	Medium	**Medium**	Risk of accidental combustion of waste is low due to nature of waste. Waste is inorganic.	As above.	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.	Medium	High	**Medium**	Permitted waste types include sludges e.g. groundwater remediation although in low volumes so a medium magnitude risk is estimated. There is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain.	Run-off restricted with appropriate measures: storage & treatment on hard standing with contained drains and interceptors. Majority of waste stored inside buildings in bags. No surface water in close proximity to the site, nearest watercourse is 600m south to the site.	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	Medium	High	**High**	As above. Some permitted wastes are hazardous so harm may not be temporary and reversible.	As above.	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.	Medium	High	**High**	As above. Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above.	Low

Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/ground water then extraction at borehole.	Medium	High	**High**	As above, excluding comments about watercourses.	As above.	Low
Protected site - SSSI	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Low	Medium	**Low**	Waste operations unlikely to cause harm to and deterioration of nature conservation sites.	SSSI located 1.9km south from the site. Site has contained drains with interceptors for any potential contaminated run-off.	Low
All surface waters close to and downstream of site.	Serious Fire	Loss of amenity, deterioration of water quality	Direct run off of fire water across site to surface waters.	Low	High	**Medium**	Waste fires are not common but approximately 300 fires pa linked to waste activities. In event of fire, fire water can be produced for days/ weeks. Contaminated firewater run-off can kill fish and aquatic life.	Site has a Fire Prevention Plan. Contained drains, designated fire resistant storage bays, no smoking on site, entire site is floored in concrete, compatibility test prior to mixing, vehicle daily checks and cleaning, vast majority of waste is inorganic, fire extinguishers, emergency management plan.	Low