H1 Risk Assessment (H1)

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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: • Treatment and recovery activities. • Storage of material or waste stockpiles.	Workers and visitors at adjacent industrial/commercial park and railway. Residential properties located 100 m north at Park Avenue and beyond. Twinkletotz Nursery286 m north east. Users of Glade Lane Canalside Park (175 m south east).	Nuisance and loss of amenity value.	Atmospheric (fugitive). Air transport then inhalation.	Medium	Medium	Medium	Permitted material may include biodegradable and municipal wastes. Accepted waste materials will be stored within a fully enclosed building reducing wind exposure and therefore potential entrainment. The throughput is a standard rules volume. Waste is processed rapidly, with most waste processed on the day on receipt, limiting odour potential.	Recording of any complaints and implementation of controls as set out in the OP. Acceptance of wastes will be governed by the Waste Acceptance Procedures. Potentially and/or odorous wastes will be rejected in line with quarantine procedures.	Low.

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 (6+8-wheel delivery lorries, train), and processing equipment onsite (trommel, picking line, potential crusher/ mobile screener use, front loader, excavator).	Workers and visitors at adjacent industrial/commercial park and railway. Residential properties located 100 m north at Park Avenue and beyond. Twinkletotz Nursery286 m north east. Users of Glade Lane Canalside Park (175 m south east).	Levels of noise that cause loss of amenity and nuisance to businesses and residents. Disturbance to ecological species.	Airborne	Medium	Possible	Low	Operational noise levels are likely to be comparable to existing ambient daytime noise levels based on the surrounding industrial/commercial land uses and directly adjacent railway. Adherence to agreed site operation hours.	Operations will be in accordance with the Noise Management Plan. Reduction of drop heights of materials, to reduce impacts. All waste processing will take place within a building. Processing predominantly uses fixed equipment, driven by electric motors powered by mains electricity rather than generators. Recording of any complaints and implementation of controls. All equipment, plant and vehicles used on the site will be maintained such that no excessive noise is produced as part of site operations.	Low

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									
Dust from haulage and site operations. Exhaust emissions and fugitive dust from vehicle loads. Dust from processing of waste streams within the building. Storage of waste and recovered aggregate. Potential wind entrainment of waste and litter.	Workers and visitors at adjacent industrial/commercial park and railway. Residential properties located 100 m north at Park Avenue and beyond. Twinkletotz Nursery286 m north east. Users of Glade Lane Canalside Park (175 m south east). Users of Great Western Industrial Park, Collett Way and the railway line to the north and south.	Harm to human health, respiratory irritation and illness.	Air then inhalation.	High	Possible	Medium-High	Treatment and processing of waste will only occur within the building. Unloading, loading and storage of wastes will be within the building, except for specified wastes which may be stored outside. Any storage of non-hazardous waste externally will be within a sealed container.	Dust suppression controls and monitoring as outlined in the OP. All treatment and processing activities will take place within a building to reduce dust entrainment. Plant to be operated in accordance with operators' instructions and good practice of dust minimisation (e.g. reducing drop heights and deployment of misting system).	Low
		Friable dust types (<PM_{10}) easily inhaled and can be produced from the external processing of crushed aggregate waste.	Air then inhalation.	High	Possible	Medium-high			
		Potential irritant, landing on nearby cars and buildings.	Air then deposition in industrial/ residential area.	Mild	Possible	Medium			

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Odour generation from storage, import and processing of bio-degradeable waste types	Workers and visitors at adjacent industrial/commercial park and railway. Residential properties located 100 m north at Park Avenue and beyond. Twinkletotz Nursery286 m north east. Users of Glade Lane Canalside Park (175 m south east). Users of Great Western Industrial Park, Collett Way and the railway line to the north and south.	Nuisance to local community	Air then olfactory	High	Possible	Medium-High	Some of the waste types are organic/bio-degradeable therefore exhibit odour potential.	All works will be undertaken in line with the Odour Management Plan.	Low
To Controlled Waters									
Run-off from site surfaces or spillages.	Wider surface water drainage system Tributary of the Grand Union Canal circa 200 m south of the boundary.	Where surface water does not drain, then the site surface can become muddy, which can cause excessive emissions when dry. Infiltration of contaminants into groundwater sources.	Land and drainage systems	Low	Unlikely	Medium	Spillages of oils onto surface could contaminate waters removed from site for treatment/disposal elsewhere. Failure of the impermeable containment system could result in discharge and potential contamination to the local drainage network Acceptable wastes are non-hazardous and inert only. Hazardous wastes (other	Acceptable wastes are hazardous wastes (asbestos only), non-hazardous and inert. Wastes in liquid form are not permitted. Waste will be deposited, processed and predominantly stored within a building, with an impermeable surface. Staff are trained in spill prevention and	Very Low

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							than asbestos) or wastes in liquid form are not permitted. No point source emissions to surface water or the local drainage network. All non-hazardous waste stored within sealed container and/or within the buildings. No pathway between wastes and receptors. The site is covered by impermeable concrete surfacing. Rainwater harvesting is promoted through 3 x tanks and is attenuated before any overflow draining to Thames Water infrastructure.	control. Spill kits are located within the workshop building. Rainwater will be harvested from the clean surface water from roof runoff for use as outlined in the OP and FPP. Concrete surfaces are regularly cleaned by mechanical or manual means to prevent the build up of mud and debris. All features of the sealed containment system are inspected on weekly basis. Any damage will be temporarily repaired as soon as practicably possible and permanently repaired within seven days.	

Run-off and infiltration from site surfaces or spillages.	Bedrock underlying site (Unproductive Strata). Tributary of the Grand Union Canal circa 200 m south of the boundary.	Pollution to aquifer which may be in hydro-continuity with surface drains. Pollution due to sediment entrainment into waters, loss of habitat and damage to species.	Land infiltration surfacing	Low	Very unlikely	Medium	Permitted waste types do not include liquids, leachates or sludges and are unlikely to contaminate groundwater/surface waters. There will be no point source emissions to surface water or groundwater. Site is covered with impermeable concrete surfacing. All wastes will be under cover or within containers.	Acceptable wastes are hazardous wastes (asbestos only), non-hazardous and inert. Wastes in liquid form are not permitted. Waste will be deposited, processed and predominantly stored within a building, with an impermeable surface. Controls as set out detailing on the types of wastes accepted in the OP. Staff are trained in spill prevention and control. Spill kits are located within the workshop building.	Very Low

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Mud and Litter									
Litter from storage areas and mud from site operation.	Humans (local businesses, users of nearby industrial estate and car parks) and controlled waters.	Nuisance, loss of amenity and reduced safety. Mud on surfaces may increase odour levels when dry.	Air, land, mud on vehicles, contamination of adjacent sites and runoff onto the existing drainage network.	Low	Possible	Low	All wastes (other than asbestos) are disposed and processed within a building, thereby reducing potential for wind entrainment of light weight wastes. Site accessed from a concrete surfaced road. The site is surface is formed of impermeable concrete.	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. Inspection and corrective action regime will be undertaken in line with site management	Low
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	Medium	Low	Municipal wastes will be accepted at site however throughput is capped under the Standard Rules. Wastes will have low organic potential to attract pests and vermin.	Inspection of site by Site Manager on frequent basis. Implementation of controls as required. Ensure any municipal waste is sealed and correctly disposed.	Low

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Ecological									
Damage to ecology (flora and fauna).	Flora, fauna and human health. No SSSI, AONB, SAC, SPA, LNR or RAMSAR sites within 1km 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. The site is 840 m from the Scheduled Monument at Northolt Manor There are no other Scheduled Monuments within 1 km of the site.	All control measures and mitigation will be in accordance with the OP.	Very Low

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	Damage and loss of amenity, property, nuisance and carcinogenic particulates.	Direct contact, airborne.	Severe	Unlikely	High	No fire or burning on-site is permitted.	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. The site is covered by impermeable concrete surfacing and all run-off is collected for disposal at a suitable facility.	Site procedures include Accident Management Plan and spillage controls. Spill kits stored with tanks and plant, and in the office compound.	Low

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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. The site is covered by impermeable concrete surfacing and all run-off is collected for disposal at a suitable facility.	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 be adhered to. Incidents recorded in the Site Diary.	Low
Direct physical contact between humans and wastes, machinery and vehicles.	Human health (site operatives and local population).	Bodily harm	Direct contact	Moderate	Likely	High	Asbestos wastes shall be double-bagged and stored in secure containers. 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	Low

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Table 5. Fugitive asbestos risk

Hazard	Receptors	Harm	Pathway	Hazard Receptor Significance	Likelihood of Hazard Receptor Linkage	Magnitude	Justification	Risk Management	Residual Risk
Airborne asbestos fibres	Workers and visitors at adjacent industrial/commercial park. Residential properties located 170 m south at Allington Close and beyond. Bellvue College approx 215 m north west.	Respiratory illness i.e. lung cancer and mesothelioma	Atmospheric (fugitive). Air transport then inhalation.	Medium	Medium	High	All asbestos waste will be double bagged and stored within a designated and clearly identified, secure, lockable container asbestos skip. The storage will be on an impermeable surface with a sealed drainage system.	There will be no treatment of asbestos waste, storage only. The quantity of asbestos stored at the facility per day shall not exceed 10 tonnes.	Low