Table 1. Assessment of odour risks

Hazard	Receptors	Harm	Pathway	Probability of Exposure	Consequence	Magnitude	Justification	Risk Management	Residual Risk
Odour from waste streams, their storage and handling on site. Fugitive emissions possible from haulage, waste acceptance, soil wash plant activities, crushing and screening.	Operatives at the directly adjacent Quarry and Landfill. Operatives at the site. Residential receptors - residents along Devils Lane (circa 800 m north east and east), Talbots Lane (circa 800 m north west) Users of the public highway (The Downs). Users of the environmental receptors – priority habitats, ancient woodlands.	Nuisance and loss of amenity value.	Atmospheric (fugitive). Air transport then inhalation.	Low	Medium	Very Low	Waste types being imported will predominantly be from construction and demolition sites and will not include odour generating wastes (putrescible waste). There are no permitted putrescible waste streams.	Controls on the type of waste streams accepted, and implementation of the waste acceptance procedures. Emissions should be free from odour. Recording any complaints and implementing odour management controls outlined in the Operational Plan (223212/OP).	Low

Table 2. Assessment of noise and vibration risks

Hazard	Receptors	Harm	Pathway	Probability of Exposure	Consequence	Magnitude	Justification	Risk Management	Residual Risk
Noise and vibration emissions from haulage and waste acceptance, and soil wash plant activities including crushing and screening.	Operatives at the directly adjacent Quarry and Landfill. Operatives at the site. Residential receptors - residents along Devils Lane (circa 800 m north east and east), Talbots Lane (circa 800 m northwest) Users of the public highway (The Downs). Users of the environmental receptors – priority habitats, ancient woodlands. Animals associated with nearby agricultural fields, or those used for natural maintenance of public open space.	Levels of noise that cause loss of amenity and nuisance to users and residents in the locale.	Airborne	Low	Low	Low	With context of the historic and neighbouring land use, it is anticipated that the work will not cause significant or adverse impact to the surrounding area. The site activities occur in an area of predominantly agricultural, and industrial land use. The nearest receptor is over 800 m away. The wider area historically and currently contains permitted landfill and quarry activities. The activity is on a platform of 55 m AOD and screen by a minimum of 10 m of quarry side wall offering screening.	Risk management is in line with the OP (223212/OP). Given the justifications, no noise impact assessment or NMP is deemed necessary.	Low

Table 3. Assessment of fugitive emissions (other than odour, noise and vibration)

Hazard	Receptors	Harm	Pathway	Probability of Exposure	Consequence	Magnitude	Justification	Risk Management	Residual Risk
To Air									
Dust release from • Haulage of waste on the public highways as well as on internal haul routes • Handling and storage of waste streams and materials • Processing of waste streams using the crusher and screening • Processing of waste streams using the soil wash plant	Operatives at the directly adjacent Quarry and Landfill. Operatives at the site. Residential receptors - residents along Devils Lane (circa 800 m north east and east), Talbots Lane (circa 800 m northwest) Users of the public highway (The Downs) and footpath OCR/19 that located south of the facility. Users of the environmental receptors – priority habitats, ancient woodlands. Animals associated with nearby agricultural fields, or those used for natural maintenance of public open space.	Harm to human and animal health, respiratory irritation and illness.	Airborne then inhalation.	Low	Medium	Low	The soil wash plant is a predominantly wet operation with a low dust risk. The dust risk arises during the loading of waste in the hopper, and from intermittent crushing and screening operations. The soil wash plant is located below the surrounding ground level within the quarry void. The soil wash plant operations will be ceased and the area surrendered prior to landfilling and restoration phases.	Operational controls for the management of dust and vibration outlined in the Dust and Emissions Management Plan (223212/DEMP) will be implemented.	Low
		Nuisance – deposit on cars, homes, clothing etc.	Airborne then deposit.	Low	Medium	Low			
To Controlled Waters									
Run-off from site surfaces or spillages.	On-site surface water lagoons which are re-used on-site.	Negative effects on the quality of surface waters.	Land then surface water drainage systems.	Medium	Medium	Medium	The activity operational area is lined with impermeable concrete hardstanding. Surface water runoff from the soil wash plant will be contained in a lined lagoon for re-use on site.	Implementation of the Waste Acceptance Procedure – only non-hazardous and inert waste streams are permitted.	Low

Hazard	Receptors	Harm	Pathway	Probability of Exposure	Consequence	Magnitude	Justification	Risk Management	Residual Risk
								The integrity of the impermeable hardstanding will be inspected and maintained in line with the OP. Permitted waste types do not include hazardous, sludge, liquid or leachate waste types. All fuel storage, areas will be bunded to 110 % capacity. Spill kits will be provided on site. All bund side walls and bases will be impermeable. All refuelling will be undertaken on impermeable surfaces. All staff and operatives will be trained as per pollution prevention requirements as per Spill Response Plan. Controls and procedure for spills are detailed in the Spill Response Plan.	
Run-off and infiltration from site surfaces or spillages.	Principal Aquifer in the Clifton Down Limestone underlying the site.	Pollution to aquifer.	Land infiltration through free draining hardstanding.	Medium	High	Low	Permitted wastes unlikely to contaminate groundwater. The activity area is on an impermeable concrete barrier, with surface waters being collected in lined ponds.		Low
Spillage of fuels, oils or polluting material.	Soil, surface waters and groundwater.	Pollution and/or contamination of water bodies and soil.	Land and drainage systems.	Low	High	Medium	Plant will be stored on impermeable hardstanding with a sealed drainage system when being re-fuelled or when not in use. Oils and fuels will be locked in a sealed container, when not in use. No hazardous or liquid wastes will be accepted on site.		Low
Mud and Litter									
Litter from storage areas and mud from site operation.	Humans (as per odour) and fauna.	Nuisance, loss of amenity and reduced safety.	Air and land.	Low	Medium	Low	Permitted wastes streams are of low litter potential - waste streams are inert and non-hazardous predominantly mineral based wastes. Site is accessed from a public highway.	The site will be inspected daily for litter. Litter picking and associated controlled implemented as necessary. Internal and external haulage routes will be maintained by mechanical sweeping to ensure mud is not generated.	Low

Hazard	Receptors	Harm	Pathway	Probability of Exposure	Consequence	Magnitude	Justification	Risk Management	Residual Risk
								Inspection and corrective action regime will be undertaken in line with site management system.	
Pests and Vermin									
Waste attracting pests and vermin.	Human receptors (as per odour)	Can cause increase 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	Low	Low	Permitted waste has low to negligible organic content. No putrescible waste. Very low potential to attract pests and vermin.	The waste acceptance procedure specifies the control on wastes accepted at the site. Operational controls for the management of litter and waste acceptance procedure outlined in the Operational Plan (223212/OP) will be implemented.	Low
Stability									
Destabilisation of platform within landfill	Site users Landfill users	Human health, loss of life	Land through placed inert material	Medium	High	High	The platform will be set at 55 mAOD. The platform will be made from mineral-based compacted inert subsoil materials only. These materials are compacted in line with good construction practices. Prior to platform construction, the platform will be assessed for stability and a standalone foundation assessment/design will be implemented for the wash plant infrastructure. The sidewalls will be brought up in line with CQA Plan and validation requirements/testing.	Inert waste materials are mineral-based subsoils and well compacted. The waste is compacted with established earthworks practices.	Low