Appendix 1 – General risk assessment schedule

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 and local environment – see receptors listed in Table 1.	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Medium	Low	**Low**	Permitted waste types are inert 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. The closest residential properties located downwind of the site are in Stanford in the Vale *c.* 100m southeast of the site (properties built at River Meadow (off Ware Road)). Other residential properties within 1km of the site are located 150m to the northwest (Quarry Cottage), 220m to the north (Laburnum Cottage) and 250m to the west (closest properties in Shellingford village). The White Horse Business Park is located adjacent to the east of the southern part of the western extension area of the site. The prevailing wind direction is from the southwest and therefore there is a low potential for residential properties to be impacted on by dust generated from the permitted activities. There is potential for the premises at the White Horse Business Park to be impacted upon by dust generated from the permitted activities unless appropriate mitigation and management measures are implemented. The potential for impact from dust will be minimised and managed in accordance with the mitigation measures set out in the Dust Emissions Management Plan	Activities will be managed and operated in accordance with a management system that includes measures to prevent and reduce risk of dust being produced and where it is produced from leaving the site boundaries. Implementation of Site Operation Procedures to minimise releases in accordance with Waste Acceptance Criteria (Appendix Hiii of Environmental Permit application), the Dust Emissions Management Plan (Appendix N of Environmental Permit application) and the Environmental Management System (Appendix G of Environmental Permit application).	Low

Appendix 1 – General risk assessment schedule

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).
							(Appendix N of Environmental Permit application).		
Local human population and local environment – see receptors listed in Table 1.	Releases of particulate matter (dust).	Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Medium	Low	**Low**	Permitted waste types are inert 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. The closest residential properties located downwind of the site are in Stanford in the Vale *c.* 100m southeast of the site (properties built at River Meadow (off Ware Road)). Other residential properties within 1km of the site are located 150m to the northwest (Quarry Cottage), 220m to the north (Laburnum Cottage) and 250m to the west (closest properties in Shellingford village). The White Horse Business Park is located adjacent to the east of the southern part of the western extension area of the site.	Activities will be managed and operated in accordance with a management system that includes measures to prevent and reduce risk of dust being produced and where it is produced from leaving the site boundaries. Implementation of Site Operation Procedures to minimise releases in accordance with Waste Acceptance Criteria (Appendix Hiii of Environmental Permit application), the Dust Emissions Management Plan (Appendix N of Environmental Permit application) and the Environmental Management System (Appendix G of Environmental Permit application).	Low

Appendix 1 – General risk assessment schedule

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).
							The prevailing wind direction is from the southwest and therefore there is a low potential for residential properties to be impacted on by dust generated from the permitted activities. There is potential for the premises at the White Horse Business Park to be impacted upon by dust generated from the permitted activities unless appropriate mitigation and management measures are implemented. The potential for impact from dust will be minimised and managed in accordance with the mitigation measures set out in the Dust Emissions Management Plan (Appendix N of Environmental Permit application).		
Local human population and local environment – see receptors listed in Table 1.	Litter.	Nuisance, loss of amenity and harm to animal health.	Air transport then deposition	Low	Very low	**Low**	Local residents often sensitive to litter, however permitted waste types are inert and have low litter potential. The closest residential properties located downwind of the site are in Stanford in the Vale *c.* 100m southeast of the site (properties built at River Meadow (off Ware Road)). Other residential properties within 1km of the site are located 150m to the northwest (Quarry Cottage), 220m to the north (Laburnum Cottage) and 250m to the west (closest properties in Shellingford village). The White Horse Business Park is located adjacent to the east of the southern part of the western extension area of the site.	Implementation of Site Operation Procedures to minimise litter in accordance with Waste Acceptance Criteria (Appendix Hiii of Environmental Permit application) and the Environmental Management System (Appendix G of Environmental Permit application).	Very low

Appendix 1 – General risk assessment schedule

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).
							The prevailing wind direction is from the southwest and therefore there is a low potential for residential properties to be impacted on by litter generated from the permitted activities. There is potential for the premises at the White Horse Business Park to be impacted upon by litter generated from the permitted activities unless appropriate mitigation and management measures are implemented.		
Local human population and local environment – see receptors listed in Table 1.	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	Low	**Low**	Permitted waste types are typically ones that will produce mud especially during wet weather.	Activities will be managed and operated in accordance with a management system that minimises the risk of mud and waste being tracked out onto the highway. This includes wheel-cleaning/washing facilities where appropriate and necessary. All vehicles will have adequate containment such as sheeting to prevent waste spillage. Implementation of Site Operation procedures in accordance with strict Waste Acceptance Criteria and Procedures (see Appendix Hiii of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	Very low

Appendix 1 – General risk assessment schedule

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 and local environment – see receptors listed in Table 1.	Odour.	Nuisance, loss of amenity.	Air transport then inhalation.	Very low	Very low	**Very low**	Local residents often sensitive to odour, however permitted waste types are inert and have low odour potential. The closest residential properties located to the site are in Stanford in the Vale *c.* 100m southeast of the site (properties built at River Meadow (off Ware Road)). Other residential properties within 1km of the site are located 150m to the northwest (Quarry Cottage), 220m to the north (Laburnum Cottage) and 250m to the west (closest properties in Shellingford village). The White Horse Business Park is located adjacent to the east of the southern part of the western extension area of the site. The prevailing wind direction is from the southwest and therefore there is a low potential for residential properties to be impacted on by odour from the permitted activities. Despite the low odour potential of the permitted waste types, there is potential for the premises at the White Horse Business Park to be impacted upon by odour from the permitted activities unless appropriate mitigation and management measures are implemented.	Activities will be managed and operated in accordance with a management system that minimises the potential for non-permitted wastes being deposited at site and deals with rogue loads if they do occur. Implementation of Site Operation procedures in accordance with Waste Acceptance Criteria and Procedures (see Appendix Hiii of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	Very low

Appendix 1 – General risk assessment schedule

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 and local environment – see receptors listed in Table 1.	Noise and vibration.	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Low	Low	**Low**	Local residents often sensitive to noise and vibration but there will be low potential for exposure. The closest residential properties located to the site are in Stanford in the Vale *c.* 100m southeast of the site (properties built at River Meadow (off Ware Road)). Other residential properties within 1km of the site are located 150m to the northwest (Quarry Cottage), 220m to the north (Laburnum Cottage) and 250m to the west (closest properties in Shellingford village). The White Horse Business Park is located adjacent to the east of the southern part of the western extension area of the site. The prevailing wind direction is from the southwest and therefore there is a low potential for residential properties to be impacted on by noise from the permitted activities. There is potential for the premises at the White Horse Business Park to be impacted upon by noise from the permitted activities unless appropriate mitigation and management measures are implemented. Hours/duration of working limited by extant Planning Permission.	Implementation of Site Operation procedures to reduce noise and vibration in accordance with Noise Impact Assessment and Management Plan (see Appendix O of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	Low

Appendix 1 – General risk assessment schedule

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 and local environment – see receptors listed in Table 1.	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.	Low	Low	**Low**	Permitted waste types are inert and are unlikely to attract scavenging animals and birds but may become nesting / breeding sites.	Implementation of Site Operation procedures in accordance with Waste Acceptance Criteria and Procedures (see Appendix Hiii of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	Very low
Local human population and local environment – see receptors listed in Table 1.	Pests (e.g. flies).	Harm to human health, nuisance, loss of amenity.	Air transport and over land.	Low	Low	**Low**	Permitted waste types are inert and are unlikely to attract pests.	Implementation of Site Operation procedures in accordance with Waste Acceptance Criteria and Procedures (see Appendix Hiii of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	Very low
Local human population and local environment – see receptors listed in Table 1.	Flooding of site.	If waste is washed off site it may contaminate buildings / gardens / natural habitats downstream.	Flood waters.	Very low	Low	**Low**	Permitted waste types are inert and have very low contamination potential. The site is located within fluvial flood risk Flood Zone 1 (annual exceedance probability for river flooding is equal to or less than 0.1% (*i.e.* less than 1 in 1000 years)) and mostly within a very low pluvial flood risk zone.	Implementation of Site Operation procedures in accordance with strict Waste Acceptance Criteria and Procedures (see Appendix Hiii of Environmental Permit application) and Environmental Management System (see Appendix G of Environmental Permit application).	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.	Low	Medium	**Low**	High standards of Health and Safety management.	Implementation of Site Operation and Health and Safety procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application).	Very low

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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 and local environment – see receptors listed in Table 1.	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, fire fighters 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.	Very low	Medium	**Low**	High standards of site security and management. Permitted waste types are inert.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Health and Safety and Accident, Incident and Emergency procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application).	Very low
Local human population and local environment – see receptors listed in Table 1.	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 fire fighters. Pollution of water or land.	As above.	Very low	Medium	**Low**	High standards of site management. Permitted waste types are inert.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Health and Safety and Accident, Incident and Emergency procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application). Permitted activities do not include the burning of waste.	Very low
All surface waters close to and downstream of site – see receptors listed in Table 1.	Spillage of liquids including oil, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids, contaminated groundwater. Surface water level changes/ derogation.	Acute effects: fish and invertebrate kill. If waste contaminated water is washed off site it may contaminate watercourses and natural habitats leading to chronic effects and deterioration of water quality.	Direct run-off from site across ground surface, via surface water drains, ditches etc. Surface waters, leachate from infiltration through the waste. Indirect pathway via soil/groundwater.	Very low	Medium	**Low**	High standards of site management. Permitted waste types are inert and have very low contamination potential. The Quantitative Hydrogeological Risk Assessment completed as part of the Hydrogeological Risk Assessment (see Hydrogeological Risk Assessment Report (Appendix Hiv of Environmental Permit application)) demonstrates that there will be no detrimental impact on the local hydrogeological or hydrological environment resulting from the activity.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Health and Safety and Accident, Incident and Emergency and Oil / Spill procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application). A basal and slope Artificial Geological Barrier will be constructed on a phased basis within the western extension area, as is currently	Very low

Appendix 1 – General risk assessment schedule

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).
								undertaken within the currently permitted site area, in order to provide protection to soil, groundwater and surface water at least equivalent to that resulting from an attenuation barrier/liner with a minimum thickness of 1.0m and a maximum permeability of 1 x 10^{-7}m/sec.	
Abstraction from watercourse downstream of site – see receptors listed in Table 1.	Spillage of liquids including oil, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids.	Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches, *etc*. Surface waters, leachate from infiltration through the waste. Indirect pathway via soil/groundwater. Then abstraction.	Very low	Medium	**Low**	High standards of site management. Permitted waste types are inert and have very low contamination potential. 1 No. abstraction is located *c.* 830m to the west of the site which is used for spray irrigation. The abstraction location is upstream of the site and the currently permitted activities are not having a detrimental impact on the local hydrological environment. No other surface water abstractions are located within 1km of the site. The Quantitative Hydrogeological Risk Assessment completed as part of the Hydrogeological Risk Assessment (see Hydrogeological Risk Assessment Report (Appendix Hiv of Environmental Permit application)) demonstrates that there will be no detrimental impact on the local hydrogeological or hydrological environment resulting from the activity.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Accident, Incident and Emergency and Oil / Spill procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application). A basal and slope Artificial Geological Barrier will be constructed on a phased basis within the western extension area, as is currently undertaken within the currently permitted site area, in order to provide protection to soil, groundwater and surface water at least equivalent to that resulting from an attenuation barrier/liner with a minimum thickness of 1.0m and a maximum permeability of 1 x 10^{-7}m/sec.	Very low

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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).
Groundwater. The bedrock stratum (Stanford Formation - Limestone) is designated by the Environment Agency as a Secondary A Aquifer. The site area is not located within a Groundwater Source Protection Zone.	Spillage of liquids including oil, leachate from waste, contaminated rainwater run-off from waste.	Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Very low	Medium	**Low**	High standards of site management. Permitted waste types are inert and have very low contamination potential. The site is not located within a Groundwater Source Protection Zone. The Quantitative Hydrogeological Risk Assessment completed as part of the Hydrogeological Risk Assessment (see Hydrogeological Risk Assessment Report (Appendix Hiv of Environmental Permit application)) demonstrates that there will be no detrimental impact on the local hydrogeological or hydrological environment resulting from the activity.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Accident, Incident and Emergency and Oil / Spill procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application). A basal and slope Artificial Geological Barrier will be constructed on a phased basis within the western extension area, as is currently undertaken within the currently permitted site area, in order to provide protection to soil, groundwater and surface water at least equivalent to that resulting from an attenuation barrier/liner with a minimum thickness of 1.0m and a maximum permeability of 1 x 10^{-7}m/sec.	Very low
Local human population – see receptors listed in Table 1.	Contaminated waters used for recreational purposes.	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion.	Very low	Low	**Low**	High standards of site management. Permitted waste types are inert and have very low contamination potential. The Quantitative Hydrogeological Risk Assessment completed as part of the Hydrogeological Risk Assessment (see Hydrogeological Risk Assessment Report (Appendix Hiv of Environmental Permit application)) demonstrates that there will be no detrimental impact on the local hydrogeological or hydrological environment resulting from the activity.	Implementation of Site Operation, Waste Acceptance Criteria (see Appendix Hiii of Environmental Permit application), Accident, Incident and Emergency and Oil / Spill procedures in accordance with Environmental Management System (see Appendix G of Environmental Permit application). A basal and slope Artificial Geological Barrier will be constructed on a phased basis within the western extension area, as is currently	Very low

Appendix 1 – General risk assessment schedule

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).
								undertaken within the currently permitted site area, in order to provide protection to soil, groundwater and surface water at least equivalent to that resulting from an attenuation barrier/liner with a minimum thickness of 1.0m and a maximum permeability of 1 x 10^{-7}m/sec.	