

## Generic risk assessment for Bespoke Environmental Permit Recovery of Waste Soils (Ref: EPR/GB3903KW/A001)

<b>Facility:</b>	Bespoke Environmental Permit: Use of clean greenfield soils in a deposit for recovery operation involving landscaping and reprofiling of land. <b>REF: EPR/GB3903KW/A001</b>
<b>Location:</b>	Golf World Stansted Limited
<b>Risk assessment carried out by:</b>	Discovery CE Limited
<b>Date:</b>	25th January 2019

The scope of the permit and associated rules is defined by the following risk criteria:

Parameter 1	Permitted activities - The storage and recovery of waste (R5, R10, R13)
Parameter 2	Permitted wastes - Inert wastes and specified non-hazardous wastes as listed in the table of wastes
Parameter 3	Maximum quantity of waste shall be limited to 58000 cubic metres or less
Parameter 4	The activities shall not be carried out within 500m of a European Site (candidate or Special Area of Conservation, proposed or Special Protection Area or Ramsar site) or a Site of Special
Parameter 5	The activities must not be carried out within groundwater Source Protection Zones 1 and 2 or if a source protection zone has not been defined then not within 250 metres of any well, spring or
Parameter 6	No point source discharges to controlled waters or groundwater
Parameter 7	The activities must not be carried out within 10 metres of any watercourse
Parameter 8	No waste may be deposited into a water body or sub-water table
Parameter 9	The activities shall not be carried out on historic, closed or operational landfills
Parameter 10	Activities must not be carried out in an air quality management area for PM10

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 (dust) .	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	Low	Low	Permitted waste types are mainly 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.	A dust management plan has been agreed with the LPA (Uttlesford DC) to discharge planning Condition 17.	VERY LOW
Local human population.	Releases of particulate matter (dust) .	Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Very low	Low	Low	Permitted waste types are mainly inert. The activities may produce dust from movement of vehicles and tipping operations especially in dry and also windy weather.	Activities shall 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. Rules can be invoked to require a particulate management plan.	VERY LOW
Local human population.	Litter.	Nuisance, loss of amenity and harm to animal health.	Air transport then deposition.	Very low	Low	Low	Waste types if compliant with the rules should have a low risk of litter from contraries in the waste. Non compliant materials will be rejected.	There are rules in place to control waste acceptance. Litter will not be accepted.	VERY LOW

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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.	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.	Low	Low	Low	Waste types are typically ones that will produce mud especially during wet weather. A wheel wash facility will be in use through out the site development works.	A dust management plan has been agreed with the LPA (Uttlesford DC) to discharge planning Condition 17.	VERY LOW
Local human population .	Odour .	Nuisance, loss of amenity.	Air transport.	Very low	Very low	Low	Permitted waste types are mainly inert and therefore should not be odorous.	There are rules in place to control waste acceptance. Odorous materials will not be accepted.	VERY LOW
Local human population.	Noise and vibration.	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Very low	Low	Low	Local residents often sensitive to noise and vibration but there is usually low potential for exposure. The site is a golf course and the nearest residents are remote from the site.	Noise and vibration shall be minimised and not cause nuisance. Work which might cause noise or vibration will only be undertaken during normal working hours and weekdays.	VERY 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.	Very low	Very low	Low	Wastes are limited to clean naturally sourced soils that are not normally attractive to animals and birds.	Risk limited by permitted waste types and good onsite management practices.	VERY LOW
Local human population and local environment.	Pests (e.g.) flies.	Harm to human health. Nuisance, loss of amenity.	Air transport and overland.	Very low	Very low	Low	Wastes are limited to clean naturally sourced soils that are not normally likely to encourage pest infestations.	Risk limited by permitted waste types and good onsite management practices.	VERY LOW
Local human population and local environment.	Flooding of site.	If waste contaminated water is washed off site it may contaminate buildings, gardens, watercourses and natural habitats.	Flood waters .	Very low	Very low	Low	The site is not liable to flooding.. Permitted waste types are mainly inert so any waste washed off site will add to the volume of local post-flood clean up workload rather than the hazard.	Activities are not permitted within 10 metres of a watercourse or to be deposited sub-water table. All deposited wastes will be onto the existing site surface and will not be used to fill voids, ponds, lakes, watercourses, etc.	VERY LOW
Local human population and /or livestock gaining unauthorised access to the waste operation.	All on-site hazards, wastes, machinery and vehicles.	Bodily injury.	Direct physical contact .	Low	High	Medium	Permitted waste types are inert therefore only a low risk from the actual waste. However there could be stockpiles that people could climb or possibility of being hit by site vehicles/plant.	The area where soils will be imported and reused will be isolated from the rest of the site with secure fencing/hoarding.	VERY LOW

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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 the environment.	Arson and/ or vandalism causing the release of polluting materials to air (smoke or fumes) and firewater or spillage of polluting liquids to 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 and via surface water drains and ditches.	Very low	Medium	Low	Permitted waste types are inert so very low-risk of combustion. Site machinery and fuels and oils are more of a risk but quantities would typically be low.	Vehicles will be diesel powered (diesel is less flammable than petrol). Fuels will be securely stored within the security fencing in bunded/double-skinned and locked containers away from buildings and flammable materials.	VERY LOW
Local human population and local environment.	Accidental fire causing 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. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from and via surface water drains and ditches.	Very low	Medium	Low	Permitted waste types are inert so very low-risk of combustion. Site machinery and fuels and oils are more of a risk but quantities would typically be low.	Vehicles will be diesel powered (diesel is less flammable than petrol). Fuels will be securely stored within the security fencing in bunded/double-skinned and locked containers away from buildings and flammable materials.	VERY LOW
Local human population and local environment.	Build up and emissions of gas from old waste deposits on the permitted site	Respiratory irritation, illness and nuisance to local population. Risk of explosion and injury to staff and local population.	Gas migrating laterally through waste deposit and building up in certain areas.	Very low	High	Low	Old waste deposits will not be disturbed. Some ground gases are generated by the old waste, but due to distance of the receptor from the site the probability of exposure is very low and any emission will be rapidly diluted with no opportunity to accumulate.	A site assessment of ground gases showed a low risk to the site currently and to the proposed development/soil import. This was agreed with Uttlesford District Council.	VERY LOW
All surface waters close to and downstream of site.	Spillage of liquids, including oil.	Acute effects: fish and invertebrate kill.	Direct run-off from site across ground surface, via surface water drains, ditches etc.	Low	Medium	Medium	Wastes are solid and mainly inert. Potential for spillage from any fuel and oil storage for machinery or directly from machinery operating on the site.	There are no surface water features near to the site. Any fuels/oil spillages will be cleaned up immediately.	LOW
All surface waters close to and downstream of site.	Leachate from waste and contaminated rainwater run-off from waste e.g. suspended solids.	If waste contaminated water is washed off site it may contaminate watercourses and natural habitats leading to chronic effects: and deterioration of water quality.	Surface waters, leachate from infiltration through the waste	Low	Medium	Medium	Permitted waste types are mainly inert so any waste washed off site will not be chemically hazardous.	Activity not permitted within 10m of a watercourse. There are no surface water features near the site.	LOW

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Groundwater	Leachate from waste and contaminated rainwater run-off from waste e.g. Suspended solids.	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	Permitted waste types are clean, greenfield soils. The soils will have a chemical quality equivalent to or cleaner than the existing ground at the site. The existing soils are not impacting groundwater or surface waters (DCE Report: 17090J-01).	All soils will be deposited on the site surface for reprofiling.	VERY LOW
Protected nature conservation sites - European sites and SSSIs.	Dust, noise, contaminated run-off leachate etc.	Harm to protected sites through contamination, smothering, disturbance etc.	Any	Low	Low	Low	Emissions to air may cause harm to and deterioration of nature conservation sites. Vehicles moving on and around site causing disturbance through noise. Potential for run-off and siltation of habitats etc.	Elsenham Wood (SSSI) is approximately 970m to the east. The site is remote and the likelihood of dust and noise emissions from the development having an impact is vanishingly small.	VERY LOW

**Notes:** Red triangle indicates comment containing supporting information

Yellow columns contain drop down menus that allow automatic evaluation of risk in green column