

Risk Assessment For Bespoke permit

Standard Facility:	Waste Operatic
Location:	Land south of
Location of environmentally sensitive sites (km / m):	Less than 250
Risk assessment carried out by:	Paul Downing
Date:	19-Feb-18

The scope of the permit and associated rules is defined by th

- Parameter 1 Permitted activities - The storage of waste (R13) and tr
- Parameter 2 Permitted waste types - Non Hazardous as listed in rul
- Parameter 3 Quantity of waste accepted at the facility: <75,000 ton
- Parameter 4 The activities shall not be carried out within an Air Qua
- Parameter 5 Specified waste shall be stored and treated on an imp
source protection zones 1 or 2 or on hard standing.
- Parameter 6 The only point source discharges to controlled waters (
- Parameter 7 Site is located <250m to Greenham & Crookham Comr

- Parameter 8 The activities must also be 10 metres from any watercc
production purposes or 50m from any spring or well or

Data and information				
Receptor	Source	Harm	Pathway	Probability of exposure
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?

Data and information				
Receptor	Source	Harm	Pathway	Probability of exposure
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?
Local human population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	High
Local human population	As above	Nuisance - dust on cars, clothing etc.	Air transport then deposition	High
Local human population, livestock and wildlife.	Litter	Nuisance, loss of amenity and harm to animal health	Air transport then deposition	Low
Local human population	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Medium
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Low

Data and information				
Receptor	Source	Harm	Pathway	Probability of exposure
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Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Medium
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	Low
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	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

Data and information				
Receptor	Source	Harm	Pathway	Probability of exposure
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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
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, 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.	Medium
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 fire fighters. Pollution of water	As above.	Medium
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.	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?
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	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.	Low

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Groundwater	As above	Chronic effects: contamination of groundwater, requiring treatment of water or closure of	Transport through soil/groundwater then extraction at borehole.	Low
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastrointestinal illness.	Direct contact or ingestion	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?
Protected sites - European sites and SSSIs Cookham and Greenham Common SSSI's	Any	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Any	Medium

Notes: Red triangle indicates comment containing supporting information
Yellow columns contain drop down menus that allow automatic evaluation

on: Treatment of waste to produce soil, soilsubstitutes and aggregate

Thornford Rd RG18 8EW

m (see below)

the following risk criteria:

treatment to produce soil, soil substitutes roadstone and aggregate(R3,R5).
 es other than waste consisting solely or mainly of dusts, powders or loose fibres or waste in liq
 nes per annum.
 lity Management Area (AQMA) designated for particulate matter in the form of PM10.
 permeable surface with sealed drainage system when located within groundwater
 or groundwater, are surface water from the roofs of buildings and from areas of the facility not
 nons SSSI

urse and be 50 metres from any spring or well, or of any borehole not used to supply water for
 any borehole used for the supply of water for human consumption. This must include private

Judgement			Action (by pe
Consequenc e	Magnitude of risk	Justification for magnitude	Risk management
How severe will the consequence s 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?

Judgement			Action (by pe
Consequenc e	Magnitude of risk	Justification for magnitude	Risk management
How severe will the consequence s 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?
Medium	High	Permitted waste types are inert and non hazardous and do not include dusts, powders or loose fibres and have a low potential to produce bioaerosols, but the treatment activities will produce particulate matter so a high magnitude risk is estimated. The permitted level of throughput and potential size of the facility means there is potential for exposure if anyone is living or working close to the site (apart from the operator and employees). There is potential for increased dust generation from permitted activities during prolonged dry periods e.g. summer months.	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. (if required)
Low	Medium	As above. Local residents often sensitive to dust.	As above
Low	Low	Local residents often sensitive to litter, however permitted waste types have low litter potential.	As above. Appropriate measures could include clearing litter arising from the activities from affected areas outside the site.
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.
Low	Low	Local residents often sensitive to odour, however permitted waste types have low odour potential.	emissions shall be free from odour.... (if required) - odour management plan.

Judgement			Action (by pe
Consequence	Magnitude of risk	Justification for magnitude	Risk management
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?
Medium	Medium	Local residents often sensitive to noise and vibration	emissions shall be free from noise and vibration..... (if required) - noise and vibration management plan.
Medium	Low	Permitted wastes unlikely to attract scavenging animals and birds but may become nesting / breeding sites.	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. (if required)
Medium	Low	Permitted waste types unlikely to attract pests.	As above
Low	Low	Permitted waste types are inert and non hazardous so any waste washed off site will add to the volume of the local post-flood clean up workload, rather than the hazard.	requires a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will include flood risk

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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?
Low	Low	Permitted waste types are inert therefore only a low magnitude risk is estimated	activities shall be managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access)
Low	Low	Permitted waste types do not include any flammable materials so a low magnitude risk is estimated.	requires a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (will include fire and spillages).
Low	Low	As above.	As above (excluding comments on access to waste). Permitted activities do not include the burning of waste.
Low	Low	Permitted waste types do not include sludges or liquids so only a medium magnitude risk is estimated. No point source emissions to water are permitted, but there is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain.	All liquids shall be provided with secondary containment.... (applies to non- wastes such as fuels). Run-off restricted by SR on emissions of substances , with appropriate measures. Wastes from potentially contaminated sites require analysis. Storage & spreading

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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?
Low	Low	Waste types are non-hazardous and inert so harm is likely to be temporary and reversible.	As above
Low	Low	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above. Also activities must be 50 metres from any spring or well, or from any borehole not used to supply water for domestic or food production purposes or 50m from any spring or well or any borehole used for the supply of water for human consumption. This must include

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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?
Low	Low	Permitted wastes unlikely to contaminate groundwater.	As above
Medium	Low	Unlikely to occur, but might restrict recreational use.	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions (if required).

Judgement			Action (by pe
Consequence	Magnitude of risk	Justification for magnitude	Risk management
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?
Medium	Medium	Waste operations may cause harm to and deterioration of nature conservation sites. See EMS procedures EP2 noise management & EP6 Dust & Mud management	Emissions of substances not controlled by emission limits (excluding odour and noise) shall not cause pollution. The operator shall not be taken to have breached this rule if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions. At 250 metres or above, the potential hazards from the permitted activities pose a medium risk to the broad sensitivity of species and habitats groups. Also activities should not be within 250 metres with the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat;. or 50 metres of a site that has relevant species

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What is the magnitude of the risk after management? (This residual risk will be controlled by Compliance Assessment).

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