

E02-02-10 Environmental Risk Assessment – Sensitive Receptors

Depot Name & No.:	Liverpool Gladstone S1
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Version:	1	Date	September 2020	Depot Manager:		(print & sign)
Activity:	Impact on sensitive receptors/environmental nuisance			SHE Specialist		(print & sign)
Next Review Due	September 2022			Reviewed By:		(print & sign)
Actual Review Date		Reason for Review	N/A – First Issue	Manager Sign off:		(print & sign)

Source	Hazard	Receptor	Physical Control Measures in Place	Relevant EPP's	Likelihood	Severity	Risk Level	NEW Control Measures Required (Actions required responsibility and target dates).
Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Local human population	<ol style="list-style-type: none"> Permitted waste types do not include dusts, powders or loose fibers. There is potential for exposure if anyone is living or working close to the site (apart from the operator and employees) Dust Emissions Management Plan (DEMP) in place. 	4.4, 4.11	2	2	4	
	Nuisance - dust on cars, clothing etc.	Local human population – sensitivity to dust						
Litter	Nuisance, loss of amenity and harm to animal health	Local human population (sensitivity to litter), livestock and wildlife.	<ol style="list-style-type: none"> Permit Conditions - emissions of substances not controlled by emission limits. General housekeeping General waste facilities provided on-site Regular inspection of site boundaries and clearing litter arising from the activities from affected areas outside the site. 	4.2, 4.11	2	2	4	
Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Local human population (sensitive to mud/litter on roads and	<ol style="list-style-type: none"> Permit Conditions - emissions of substances not controlled by emission limits. Regular inspection of site boundaries and clearing litter arising from the activities from 	4.2, 4.4, 4.11	2	2	4	

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	Vehicles entering and leaving site	road safety).	affected areas outside the site. 3. Road Sweeper deployed where necessary					
Odour	Nuisance, loss of amenity	Local human population (sensitivity to odour).	1. Permitted waste types have low odour potential. 2. Permit Conditions - emissions shall be free from odour.	4.5	1	2	2	
Noise and vibration	Nuisance, loss of amenity, loss of sleep. Noise through the air and vibration through the ground.	Local human population (sensitive to noise and vibration)	1. Permit conditions - emissions shall be free from noise and vibration. 2. Location of site situated away from local human population.	4.3b	3	2	6	
Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Local human population	1. Permit Conditions - emissions of substances not controlled by emission limits (including those from scavenging animals, scavenging birds and other pests) shall not cause pollution. 2. Permitted wastes unlikely to attract pests. 3. Pest control contractor available to attend site at short notice if required.	4.5, 4.8	1	2	2	
Flooding of site	Any waste/contaminates washed off site it may contaminate buildings / gardens / natural habitats downstream.	Local human population and local environment	1. Management system - Flood risk management procedures in place. 2. Containment of wastes on site.		3	3	9	
All on-site	Bodily injury – direct	Local human	1. Permitted activities - managed and operated		1	2	2	

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hazards: wastes; machinery and vehicles.	physical contact.	population and / or livestock after gaining unauthorised access to the waste operation	in accordance with a management system (will include site security measures to prevent unauthorised access). 2. Site does not accept hazardous wastes					
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, firefighters or arsonists/vandals.	Local human population, local environment and all surface waters close to and downstream of site	1. Environmental management system (will include response to fire and spillages). 2. Permitted activities - managed and operated in accordance with a management system (will include site security measures to prevent unauthorised access). 3. Permitted activities – do not include the burning of wastes. 4. Approved Fire Prevention Plan (FPP) operational. 5. Risk of accidental/self combustion extremely low 6. Site does not accept hazardous wastes 7. Fire fighting equipment available on-site.	5.1, 5.2	2	4	8	
Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Pollution of water or land. Nuisance, harm to human health, loss of amenity, deterioration of water quality							
Serious Fire	Loss of amenity, deterioration of water quality							

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Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste e.g. containing suspended solids – direct run-off from site.	Acute effects: oxygen depletion, fish kill and algal blooms Chronic effects: deterioration of water quality	All surface waters close to and downstream of site.	<ol style="list-style-type: none"> 1. Permit Conditions - emissions of substances not controlled by emission limits (including rain water run-off etc.) 2. Permit conditions - All liquids provided with secondary containment (also applies to wastes and non-wastes such as fuels). 3. Run-off restricted by permitted conditions (emissions of substances not controlled by emission limits). 4. Site does not accept hazardous wastes 5. Spill response equipment readily available across the site. 	5.2	2	3	6	
Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Local human population	<ol style="list-style-type: none"> 1. Permit Conditions - emissions of substances not controlled by emission limits (including rain water run-off etc.) 2. Unlikely to occur – no recreation use waters in area. 	5.2	1	1	1	
Permitted activities	Harm to protected site through toxic contamination, nutrient enrichment, smothering, disturbance, predation etc.	Protected sites - European sites and SSSIs	<ol style="list-style-type: none"> 1. Bespoke permitted activities – habitats assessment carried out. 2. Permit Conditions - emissions of substances not controlled by emission limits (including rain water run-off etc.) 	7.1	2	4	8	

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Key

Likelihood (with existing controls)	Index	Severity	Index
Highly unlikely to occur	1	The hazard can result in no detrimental impact on the environment.	1
Unlikely to occur	2	The hazard can result in minor impact on the environment (e.g. nuisance impact requiring small clean up)	2
May occur in time	3	The hazard can result in significant impact on the environment (e.g. potentially harmful requiring clean up operation)	3
Highly Likely to occur in the near future	4	The hazard can result in major impact on the environment (e.g. potentially fatal to organisms requiring major clean up operation)	4
Will occur	5	The hazard can result in catastrophic impacts on the environment (e.g. death of majority of living organisms in surrounding area)	5

Risk Rating	Risk Level	Risk Level (Likelihood x Severity) – Action & Timescale
1-4	TRIVIAL	No further action is required.
5-14	TOLERABLE	Further controls may not be required. Consideration may be given to a more cost effective solution or improvement that imposes no additional cost burden. Monitoring is required to ensure that existing controls are maintained.
15+	SUBSTANTIAL	Work must not be authorised until the risk is reduced to at least a moderate level.

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