



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for risk	Risk Management	Residual Risk
Local population	Releases of particulate matter (dusts) and micro-organisms (bioaerosols).	Harm to human health - respiratory irritation and illness.	Air transport then inhalation.	Low	Medium	<b>Low</b>	Permitted waste types will be co-mingled waste from kerbside collections and therefore have a low potential to produce bioaerosols. All waste sorting and treatment will take place within the MRF building.	The EMS includes appropriate measures, including measures to prevent or where that is not practicable, to minimise, any potential emissions, including regular visual inspection, good housekeeping, damping down of materials.	Low
		Nuisance - dust on cars, clothing etc.	Air transport then deposition.	Low	Low	<b>Low</b>	As above. Distance from properties. Local residents often sensitive to dust.		Low



Local population, livestock and wildlife	Litter	Nuisance, loss of amenity and harm to animal health		Low	Low	<b>Low</b>	Local residents often sensitive to litter, however permitted waste types will be processed inside the MRF building, with some lighter waste types being stored in the building also.	As above. Management System includes provision for clearing litter arising from the activities from affected areas outside the site. Visual assessment maintained throughout the working day. Any windblown material will be cleared as soon as is practicable.	Very low
Local human population	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents.	Vehicles entering and leaving site.	Medium	Medium	<b>Medium</b>	Road safety, local residents often sensitive to mud on roads.	As above. The whole site is hard surfaced, so there will be no mud on site / leaving site on vehicles.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation.	Low	Low	<b>Low</b>	Local residents often sensitive to odour, however	Materials are household kerbside co-mingled waste, which will be	Very low



							permitted waste types have low odour potential. Distance from properties.	sorted and processed within the MRF building. Kerbside clinical waste will be brought to site separately and stored in a covered bin located outside the MRF building. Therefore, odour is unlikely.	
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep.	Noise through the air and vibration through the ground.	Medium	Medium	<b>Medium</b>	Local residents often sensitive to noise and vibration. Distance from properties.	Waste operations take place predominantly within the MRF building, thus limiting noise. Working hours are restricted by planning consent.	Low
Local human population	Scavenging animals and	Harm to human health - from waste carried off	Air transport and over land	Low	Medium	<b>Low</b>	Permitted wastes unlikely to	Waste accepted unlikely to attract pests as	Very low



	scavenging birds	site and faeces. Nuisance and loss of amenity.					attract scavenging animals and birds.	it will comprise co-mingled kerbside waste and certain clinical wastes only (wastes whose collection and disposal is not subject to special requirements in order to prevent infection). Waste processing takes place inside MRF building, with storage of some wastes inside building also. The clinical waste will be stored outside in a covered bin. A pest control contractor will be employed to monitor pest control as a	
Local human population	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity.	Air transport and over land	Low	Medium	<b>Low</b>	Insect pests can multiply on permitted wastes particularly in summer months.		Very low



								preventative measure.	
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	Medium	<b>Low</b>	Permitted waste types are 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.	The Management System identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances. Surface run-off unlikely as the site has shut-off valve. A 150mm upstand around the site will also prevent run-off.	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	Medium	Medium	<b>Medium</b>	Permitted waste types are non-hazardous therefore only a medium magnitude	A security contractor will be employed to monitor alarms and undertake patrols of the site out of hours.	Low



							risk is estimated.		
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	Medium	<b>Medium</b>	Permitted waste types are non-hazardous household kerbside collection waste and small quantities of some clinical wastes. All are solids, so only a medium magnitude risk is estimated. No surface waters on site or connection to them.	As above. Fire Prevention Plan implemented and will be followed to prevent / reduce fire risk.	Low
Local human population and local environment	Accidental fire causing the release of polluting materials to air (smoke or	Respiratory irritation, illness and nuisance to local population. Injury to staff or fire fighters.	As above.	Medium	Medium	<b>Medium</b>	As above.	As above. Permitted activities do not include the burning of waste.	Low



	fumes), water or land.	Pollution of water or land.							
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.	Medium	Medium	<b>Medium</b>	No point source emissions to water, no surface waters across site. There is potential for contaminated rainwater run-off from wastes stored outside buildings especially during heavy rain, however, given the waste types, run-off unlikely to be contaminated. The site has shut-off valve on drainage system, so run-off from site is unlikely.	No liquid wastes at site, and non-wastes such as fuels, will have secondary containment. The MRF building has contained drainage while the surface water drainage system has a shut-off valve.	Low



All surface waters close to and downstream of site.		Chronic effects: deterioration of water quality	As above. Indirect run-off via the soil layer.	Medium	Low	<b>Low</b>	Waste types are non-hazardous so harm is likely to be temporary and reversible.		Very low
Abstraction from watercourse downstream of facility (for agricultural or potable use).		Acute effects, closure of abstraction intakes.	Direct run-off from site across ground surface, via surface water drains, ditches etc. then abstraction.	Medium	Medium	<b>Medium</b>	Watercourse must have medium / high flow for abstraction to be permitted, which will dilute contaminated run-off.	As above.	Low
Groundwater		Chronic effects: contamination of groundwater, requiring treatment of water or closure of borehole.	Transport through soil/groundwater then extraction at borehole.	Medium	Medium	<b>Medium</b>	Wastes accepted unlikely to contaminate groundwater as will comprise co-mingled kerbside recyclables and clinical wastes whose	As above. Site is not within a Groundwater Source Protection Zone.	Low





							collection and disposal is not subject to special requirements in order to prevent infection. Surface of MRF and yard is impermeable; contained drainage within MRF building and shut-off valve on surface water drainage system.		
Local human population	Contaminated waters used for recreational purposes	Harm to human health - skin damage or gastro-intestinal illness.	Direct contact or ingestion.	Low	Medium	<b>Low</b>	Unlikely to occur, but might restrict recreational use.		Very low
Protected sites - European sites and SSSIs	Any	Harm to protected site through toxic contamination,	Any	Medium	Medium	<b>Medium</b>	Waste operations may cause harm to and	No Protected Sites proximal to the site. All treatment /	Low



		nutrient enrichment, smothering, disturbance, predation etc.					deterioration of nature conservation sites.	processing of waste will take place within the MRF building. Storage of solid wastes only outside of building in bays or containers.	
Local human population and all surface waters close to and downstream of site.	Serious fire	Nuisance, harm to human health, loss of amenity, deterioration of water quality.	Air transport then inhalation or deposition. Direct run-off of fire water across site to surface waters.	Low	High	<b>Medium</b>	Waste fires are not common but approximately 300 fires per annum linked to waste activities. Impact on health and amenity can be significant for many days and weeks.	Fire Prevention Plan will be implemented at site which will limit storage times of waste and put measures in place to reduce risk of fire outbreak.	Low
All surface waters close to and downstream of site.	Serious fire	Loss of amenity, deterioration of water quality.	Direct run-off of fire water across site to surface waters.	Low	High	<b>Medium</b>	Waste fires are not common but approximately 300 fires per annum linked to waste	Fire Prevention Plan will be implemented at site which will limit storage times of waste and put	Low



							<p>activities. In event of fire, fire water can be produced for days / weeks. Contaminated firewater run-off can kill fish and aquatic life.</p>	<p>measures in place to reduce risk of fire outbreak. FPP demonstrates that any fire water can be adequately contained on site, thus not impacting any nearby surface waters.</p>	
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