



Appendix K. Hazard Assessment

RISK ASSESSMENT RECORD

			Inherent Risk			Residual Risk				
Item	Hazard	Unwanted event	Consequence	Probability	Rating	Existing Description and Controls	Consequence	Probability	Rating	Further Actions Required to Maintain or Reduce Rating
1	Inhalation of dust during waste deposition, sorting or from vehicle movements	Impacts to staff health	Major	Almost Certain	E - 3	Ventilation in sheds Use of water to wet down dust generating material and haul roads if required Machinery operators to keep cabin doors closed Dust control procedure implemented Workers on site to avoid standing close to dust generating activities and wear respiratory protection if required. Housekeeping of FERF	Minor	Unlikely	L - 21	Dust masks readily available Dust control procedure
2	Vehicle/machinery collisions	Personal injury or fatality	Catastrophic	Possible	E - 4	Traffic management plan including standard traffic rules, signage etc. to be implemented Site speed limits to be imposed and monitored Site layout to minimise vehicle reversing Designated pedestrian areas provided Training/evidence of driver competency required for staff Safe Work Method Statements (SWMS) for high-risk work on site Machine inductions/licencing Reverse alarms and fixed mirrors fitted to vehicles All persons to wear high visibility clothing when outside of vehicles, with the exception of general public.	Minor	Unlikely	L - 21	Traffic Management Plan SWMS for high-risk work
3	Waste - release of bio-aerosols when moving or turning waste	Impacts to staff health	Major	Likely	E - 5	Machinery operators to keep cabin doors closed, air conditioned cabin Workers on site to avoid standing near active tip face. Respiratory protection to be worn where longer term exposure to exposed waste may be required.	Minor	Unlikely	L - 21	Appropriate respiratory protection available
4	Waste - contact with unknown hazardous waste material `	Impacts to staff health Contamination of other recyclable materials	Moderate	Possible	H - 12	Waste drop off areas well ventilated Staff to wear PPE including overalls, boots, disposable and puncture resistant gloves, eye and respiratory protection as required Staff to wash hands frequently throughout the day Waste acceptance and monitoring procedures to be implemented Dedicated drop-off for hazardous household items provided Resource Recovery Area	Insignificant	Rare	L - 25	Waste Acceptance Procedure
5	Waste fire at FERF or RRA	Asset damage or personal injury	Major	Possible	E - 7	All fuel on site stored in purpose designed and appropriate facilities Fire protection systems installed Good housekeeping maintained Fire break surrounding site and cleared areas around buildings as far as practical Inspection and maintenance regime Emergency response and evacuation procedures implemented	Insignificant	Possible	L - 22	Emergency Response and Evacuation Procedure
6	Green waste fire from spontaneous combustion	Asset damage Personal injury	Moderate	Likely	H - 9	Control of size of processed green waste stockpiles Location of water tank near green waste stockpiles Firefighting equipment on site	Insignificant	Unlikely	L - 24	
7	Landfill Fire from incorrect disposal of batteries in MSW or spontaneous combustion	Asset damage Personal injury Environmental impact	Major	Almost Certain	E - 3	Soil stockpile maintained near tipping face for extinguishing fires Water truck available on site Emergency response procedure implemented Regular maintenance of gas extraction system Covering and compacting waste to minimise oxygen ingress	Insignificant	Possible	L - 22	

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8	Landfill Gas	Failure in gas management system leading to explosion	Catastrophic	Unlikely	E - 6	Compacting waste in thin lifts Minimising open tip face Daily, interim and final capping constructed and maintained to minimise fugitive gas emissions Gas management system to be installed Waste storage areas well ventilated	Moderate	Rare	L - 20	
9	Landfill Gas	Failure in gas management system leading to personal injury, e.g. asphyxiation from accumulation of methane	Catastrophic	Unlikely	E - 6	Staff training Landfill gas management plan to be prepared including regular gas monitoring conducted including inside buildings, across the landfill surface and in subsurface monitoring wells Lined landfill cells to prevent gas migration	Insignificant	Rare	L - 25	
10	Contact with leachate	Injury to personnel or fauna	Moderate	Likely	H - 9	Maintain leachate and stormwater collection systems to prevent ponding Fenced leachate pond with egress ladders for emergencies Staff training	Insignificant	Unlikely	L - 24	
11	Leachate outbreak	Contamination of soil or groundwater	Major	Likely	E - 5	Maintain leachate and stormwater collection systems Use markers to ensure adequate freeboard maintained in leachate ponds Use of tehcnical specification and construction quality control plans to ensure liner integrity Use of a suitably qualified and experience landfill design engineer to design cell Rehabilitate finished cells promptly and maintain cover and capping materials to reduce leachate generation Monitor and minimise leachate head within landfill cells	Insignificant	Unlikely	L - 24	Construction Quality Assurance Plan
12	Fuel storage accidental spill	Contamination of soil	Moderate	Almost Certain	H - 8	All fuel on site stored in purpose designed and appropriate facilities Fuel storages to be bunded and in hardstand area Spill kits available for immediate clean up Regular inspection and maintenance of fuel storage Good housekeeping	Insignificant	Unlikely	L - 24	