Topic	Environmental Risk Assessment
Location	Derwent Recycling Centre
Dated	12th March 2025
Revision	2.0

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk
Accidental fire causing the release of polluting materials.	Workforce, local businesses, users of the industrial estate, local residents and nearby natural habitats (Deciduous woodland on site border to the west)	Airborne.	The Site Management Plan will include procedures and actions required in the event of a fire (This will include periodic drills) Site is manned during the day and CCTV is monitored externally 24/7. All plant, equipment and electrical installations will be kept maintained and in good working condition and subject to routine inspection and maintenance. Mobile plant will be equipped with automatic extinguishing systems within the engine compartments. Thermal monitoring of combustible materials and site inspection. Active firefighting equipment in place across the site will be maintained in accordance with fire regulations (Fire extinguishers and MistTech firefighting system) Dedicated smoking area situated externally and well away from any storage areas. Good housekeeping measures employed across the site.	Smoke could potentially escape the site boundary if a fire was to escalate on site.	Adverse health impacts on vulnerable people and wildlife. Nuisance to local business and transportation.	Low if we use the management techniques.
Accidental fire causing the release of polluting materials.	Surface and foul water drainage system.	Water run-off.	***As above and;*** In the event of a fire on site fire water will be contained (i) on the upper level surface area adjacent to the workshop and weighbridge, (ii) on the upper level container storage area, (iii) on the lower level adjacent to the WTS building and (iv) within the surface water drain on site by closing a penstock valve.	Fire water run-off could escape off site if not contained.	Could result in harming to wildlife if leaving the industrial estate surface drainage system downstream. Could affect the quality of water at the treatment plant if entering the foul drainage system, ultimately this could potentially cause adverse health problems.	Low if we use the management techniques.

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Arson and / or vandalism causing fire; causing the release of polluting materials.	Workforce, local businesses, users of the industrial estate, local residents and nearby natural habitats.	Airborne.	The site Management System will include procedures and actions required in the event of a fire (This will include periodic drills) Site is manned during the day and the CCTV is monitored externally 24/7. All plant, equipment and electrical installations will be kept maintained and in good working condition and subject to routine inspection and maintenance. Mobile plant will be equipped with automatic extinguishing systems within the engine compartments. Active firefighting equipment in place across the site will be maintained in accordance with fire regulations (Fire extinguishers and MistTech firefighting system) Dedicated smoking area situated externally and well away from any storage areas. Good housekeeping measures employed across the site. Site perimeter is secured with security fencing (palisade and concrete / steel panel) around the perimeter and with large steel gates at access points to the site.	Smoke could potentially escape the site boundary if a fire was to escalate on site.	Adverse health impacts on vulnerable people and wildlife. Nuisance to local business and transportation.	Low if we use the management techniques.
Arson and / or vandalism causing fire; causing the release of polluting materials.	Surface and foul water drainage system.	Water run-off.	***As above and;*** In the event of a fire on site fire water will be contained (i) on the upper level surface area adjacent to the workshop and weighbridge, (ii) on the upper level container storage area, (iii) on the lower level adjacent to the WTS building and (iv)	Fire water run-off could escape off site if not contained.	Could result in harming to wildlife if leaving the industrial estate surface drainage system downstream. Could affect the quality of water at the treatment plant if entering the foul drainage system, ultimately this could	Low if we use the management techniques.

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			within the surface water drain on site by closing a penstock valve.		potentially cause adverse health problems.	
Arson and / or vandalism causing the release of chemicals; causing the release of polluting material.	Nearby natural habitats and drainage systems.	Percolation through soils and / or release into drains.	***As above and;*** The site Management System will include procedures and actions required in the event of a spillage (This will include periodic drills) Chemicals and oils are stored within the workshop building and will be bunded where necessary. Lockable and bunded fuel store, covered by CCTV which is monitored 24/7.	Harmful chemicals could be released from their containment.	Adverse health impacts on vulnerable people and wildlife. Could result in harming to wildlife if leaving the industrial estate surface drainage system downstream. Could affect the quality of water at the treatment plant if entering the foul drainage system, ultimately this could potentially cause adverse health problems.	Low if we use the management techniques.
Chemicals and oil stored on site being released.	Nearby natural habitats and drainage systems.	Percolation through soils and / or release into drains.	All chemicals stored securely within the building. Oils stored within buildings and all drums on bunds with 110% capacity. Regular inspections will identify leaks and spill clean-up procedure is in place to minimise the impact from spills and leaks. Lockable and bunded fuel store, covered by CCTV which is monitored 24/7. Drains and interceptors are also cleaned periodically to ensure they are in good working order. Spill containment media is available on site to use if required. Clean up procedures will be implemented to deal with fuel or other spillages or leaks of potentially polluting liquids. Emergency drills will include the deployment of spill / flood containment media and closing the on-site penstock	Harmful chemicals could be released from their containment.	Possible health issue for site users if slipping occurs. Adverse health impacts on vulnerable people and wildlife. Could result in harming to wildlife if leaving the industrial estate surface drainage system downstream. Could affect the quality of water at the treatment plant if entering the foul drainage system, ultimately this could potentially cause adverse health problems.	Low if we use the management techniques.

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			valve which is installed in the surface water drainage system.			
Contaminated run-off / rainwater from site surfaces.	Nearby natural habitats and drainage systems.	Percolation through soils and / or release into drains.	***As above and;*** Outside storage areas and the WTS building will be impermeable surface with sealed drainage. Due to the dry nature of the materials received it is not expected that this material will have any leaching potential, or there will be any contaminated run-off from the storage areas or the WTS building itself. All potentially polluting substances will be contained in tanks or on bunds with dedicated containment with a capacity of 110% of the volume of the container. Operational procedures will ensure the drainage system and the condition of the storage hard standing areas are inspected regularly by site staff and any damage is repaired and recorded.	Harmful chemicals could be released.	Possible health issue for site users if slipping occurs. Adverse health impacts on vulnerable people and wildlife. Could result in harming to wildlife if leaving the industrial estate surface drainage system downstream. Could affect the quality of water at the treatment plant if entering the foul drainage system, ultimately this could potentially cause adverse health problems.	Low if we use the management techniques.
Litter	Site users, users of the industrial estate and nearby natural habitats.	Airborne and over land.	All mixed and lightweight materials are tipped, processed, and stored within the WTS building or a covered and walled structure. The borders of the site are fenced off to help minimise the release of litter beyond the site boundary. The site will be carefully managed including good housekeeping procedures and regular checks will be made within and around the site for any litter / debris. In addition, the site access and highway directly outside our site will picked by site staff if required.	Litter could be released from site if not contained / managed.	Adverse health impacts on wildlife and natural habitats. Nuisance to local business and transportation.	Low if we use the management techniques.

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			Any issues identified will be recorded, investigated and appropriate remedial action will be taken as soon as practicable.			
Noise from vehicles.	Site users, industrial estate users, neighbouring businesses, nearby residential properties and nearby natural habitats.	Noise through the air and vibration through the ground.	Activities will be managed and operated in accordance with the management system (which will include site security measures to prevent unauthorised access) General traffic movements on site will be in accordance with site rules, with a 5mph speed limit in place. Vehicles tipping at or collecting waste materials from the site have to use the weighbridge just inside the site entrance, meaning that speed is again controlled. Predominantly the delivery of material to site and the loading of materials for onward movement will take place Monday through to Friday between 08:00 and 17:00. On the upper level of the permitted area (where we plan to store containers) we have 2.4m high panelled fencing at the rear adjacent to the industrial units around Century Business Centre and 2m concrete plinths on the side adjacent to the direct neighbouring business (Nu-Con) On the upper level and left hand side of the site we have 2.4m high panel fencing adjacent to the direct neighbouring business (Key Line Civils) The access point of the site and on the upper level of the site is off Derwent Way, is surrounded by other industrial units on the industrial Estate. We also have 2.4m high fencing either side of the entrance gate. This provides acoustic	Noise from vehicle movements on site.	Adverse health impacts on vulnerable people, wildlife, and natural habitats. Nuisance to local business and transportation.	Low if we use the management techniques.

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			protection and mitigates the risk of noise emissions from vehicle / container movements on the upper level of the permitted area. Mobile plant movements (such as the front end shovel loaders and the FLT) will be predominantly located within the WTS building, within a covered and walled structure all within the permitted area towards the rear of the site and will be subject to inspections, regular maintenance, and service schedules. All roadways and car park surfaces within the permitted area are maintained with no significant undulations. Appropriate signage and ramps on site will help reduce the speed of vehicles. Since taking over control of the site we have installed all new cladding on the roof, side walls and the rear of the WTS building. In addition to this we have also installed concrete panels at the rear and side walls and, from the floor of the WTS building up to a height of 5m. In between stored waste materials we have concrete 'lego' block walls, also at a height of 5m. This fabric of the WTS building and the internal bay walls provide acoustic protection and mitigates the risk of noise emissions from materials being tipped or loaded on the lower level of the permitted area. The closest residential receptors to the East of the site are on Hollowgate Avenue which is also beyond the neighbouring businesses on the industrial estate. This is			

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			150m away from the site entrance and permitted area on the upper level of the site. The closest residential receptors to the West of the site are across Pontefract Road and 205m away from the lower level permit boundary. This side of the permitted area has panelled fencing at 2.4m high which mitigates the risk of noise emissions from vehicle movements and materials being tipped and loaded on site. In between our lower level permitted area and our direct neighbouring business to the South-East of our site (Key Line Civils), we have a low level concrete wall. At the rear of their site yard they have formed a concrete wall using large concrete pillows. The difference in height is approximately 3m. This mititgates the risk of noise emissions between the x2 businesses. *NB: we have received no substantiated complaints of noise regarding our waste activities since taking over operational control of the site in August of 2023.*			
Noise from fixed plant.	Site users, industrial estate users, neighbouring businesses, nearby residential properties and nearby natural habitats.	Noise through the air and vibration through the ground.	All waste processing activities will take place within the WTS building or a covered and walled structure. *NB: there is currently no treatment / separating equipment installed on site within the permitting area.* Relevant fixed plant and equipment will be fitted with appropriate guarding which will help reduce noise emissions and will be subject to regular inspection and	Noise generated by mechanical equipment and moving parts.	Adverse health impacts on vulnerable people, wildlife, and natural habitats. Nuisance to local business and transportation.	Low if we use the management techniques.

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			maintenance schedules to maintain operational performance. Any fixed or mobile plant vibration issues will be resolved as soon as is practicable.			
Odour from failure of plant or equipment.	Site users, users of the industrial estate and nearby natural habitats.	Airborne.	Relevant fixed plant and equipment will be subject to regular inspection and maintenance schedules to maintain operational performance. All processed and unprocessed putrescible wastes will be stored inside the WTS building or a covered and walled structure.	Odour from build-up of unprocessed waste materials.	Adverse health impacts on vulnerable people, wildlife and natural habitats. Nuisance to local business.	Low if we use the management techniques.
Odour from waste materials.	Site users, users of the industrial estate and nearby natural habitats.	Airborne.	All delivery and collection vehicles on site are instructed to ensure that they are closed or fully sheeted when in transit. All processed and unprocessed putrescible wastes will be stored inside the main WTS building or within a covered and walled structure.	Odour from waste materials on site.	Adverse health impacts on vulnerable people, wildlife and natural habitats. Nuisance to local business.	Low if we use the management techniques.
Pests.	Workforce, local businesses, users of the industrial estate, local residents and nearby natural habitats.	Airborne and over land.	The site will be carefully managed including good housekeeping procedures and regular checks will be made within and around the site for any litter / debris to reduce the risk of vermin becoming excessive. In addition, the site access and highway directly outside will picked by site staff if required. Various insect controls will be used when required, these will include fly traps, fumigants, and insect baits. Details of such applications / treatments will be recorded by site staff. All processed and unprocessed putrescible wastes will be stored inside the main WTS building or within a covered and walled structure.	Flies, vermin and birds could be attracted to waste materials if unattended.	Adverse health impacts on vulnerable people, wildlife and natural habitats. Nuisance to local business and industrial estate users.	Low if we use the management techniques.

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			Third party contractor periodically attends site to assess effectiveness of baiting on site and agrees additional measures as required with the Site Manager / Foreman or deputy. Records of the third party contractor attending site together with any additional measures will be kept on site. When material storage bays are empty, they will be cleaned out fully and records of this cleaning will be kept on site. Use of the quarantine bay will help rotate bays when required so that they can be cleaned.			
Release of dust or particulate matter from incoming / outgoing vehicles.	Workforce, local businesses, users of the industrial estate, local residents and nearby natural habitats.	Wind-blown.	The site will be carefully managed including good housekeeping procedures and regular checks of the roads on site for the build-up of dirt / dust. A third party contractor will attend site at least fortnightly to undertake road-sweeping on all roads. All delivery and collection vehicles on site are instructed to ensure that they are closed or fully sheeted when in transit.	Dust could potentially leave the site with strong winds or if not managed around site.	Adverse health impacts on vulnerable people, wildlife and natural habitats. Nuisance to local business, industrial estate users and transportation.	Low if we use the management techniques.
Release of dust or particulate matter from waste reception and processing.	Workforce, local businesses, users of the industrial estate, local residents and nearby natural habitats.	Wind-blown.	***As above and;*** Dampening down of roads and / or surfaces both internally and externally can be done if and when required by use of a mobile bowser.	Dust could potentially leave the site with strong winds or if not managed around site.	Adverse health impacts on vulnerable people, wildlife, and natural habitats. Nuisance to local business, industrial estate users and transportation.	Low if we use the management techniques.
Flooding from surface waters due to intense rainfall.	Workforce and nearby natural habitats.	Over land	Housekeeping regime in place. Roads are swept by an external contractor and drains are maintained. Roads, walkways, and site surface drains are all expected daily, and any issues reported and actioned.	Litter or debris could cause an emission if present around the site. Stagnant water could cause health issues to people and could also have a	Adverse health impacts on vulnerable people, wildlife, and natural habitats. A potential nuisance to local business and industrial estate users.	Highly unlikely and low if we use the management techniques.

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			The topography of the site will assist in preventing the ingress of surface flood water to the WTS building or any covered and walled structures.	negative effect on biodiversity.		