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| Hazard | Receptor | Pathway | Risk Management Techniques | Probability of exposure | Consequence | Overall risk |
| Airborne lead dusts from the process | Workforce Nearby businesses Local flora/fauna | Air | Lead processing contained within the building. Operational process for cleaning to reduce build of internal dust. Annual air monitoring for Lead Pb.  PPE for workforce (Health & Safety Measure)  **Reference Documents:**  [**Halo Operational Contingency Plan V1**](https://www.dropbox.com/scl/fi/ctrhjn2o4ub0wauysctuv/Halo-Operational-Contingency-Plan-V1.docx?dl=0&rlkey=s545iifukcyxfsit7bjr0x2ah) | Very Low when control measures are applied | - Nuisance to local environment if dust is not contained. - In the long term, dust has the potential to cause respiratory issues in workforce or people at nearby businesses | **Very Low** |
| Flooding: waste washed off site because of a flood | Local area | Flood | Waste stored in secure containers | Low Local flood risk is 1 so it is an unlikely scenario. | If waste is washed off site  it may contaminate  buildings / gardens /  natural habitats  downstream. | **Low** |
| Spillage of Liquids | Land and surface water | Battery acid leaching from battery casing | Primary and secondary containment. Batteries delivered in Dolavs or IBC and inspected on receipt  Site and site substrate maintenance. | Battery acid could potentially seep into the ground if not correctly stored | Land and surface water contamination | **Low** |
| Release of Bulk Liquids from primary containment  Battery acid diluted with water and sodium hydroxide collected from the process and stored in primary containment | Land and surface water | Surface water drains and ground | Bulk liquids are stored within the operational plant which is bunded sufficient to contain >110% of the contents of the primary bunding.  Maintenance of plant and equipment and secondary containment | Very Low if control measures are adhered to and any escape from primary containment would be contained within secondary containment. | Liquid would spill into the secondary containment | **Very Low** |
| Noise & Vibration: The mechanical crushing process will generate some noise and vibrations as a result | Workforce Nearby Businesses | Air. Ground | Adhere to local noise constraints (decibels reading, frequency of activities)  Monitor noise levels with boundary assessments.  Maintain machinery so that no excess noise/vibration is produced  PPE for workforce (Health & Safety measures) | Certain – noise will be produced | Nuisance to local businesses if there is too much noise - Compromise workforce safety (ear damage) | **Low** |
| Fire: potential from fire from materials stored on site if proper handling is neglected, in the event of a fire the firewater run-off could be contaminated and cause harm to the environment if measures are not put in place | Workforce Nearby businesses Local flora/fauna Local watercourses | Air/wind & materials can spread fire, and firewater run-off can transport potentially contaminated water via watercourse | Separation of incompatible / combustible materials and ignition sources to remove potential ignition sources  Consultation with waste carriers to ensure that battery chemistries are packaged and transported correctly.  No smoking policy on-site  Minimise stockpile, incorporate fire-breaks in material storage  Fire training and emergency drills  Provision of fire extinguishers and fire safety equipment  Store materials on an impermeable surface within a bunded area in close proximity to foul drainage in order to prevent firewater run-off reaching the environment | Highly unlikely when control measures are applied. | Nuisance to local environment if dust is not contained. - In the long term, dust has the potential to cause respiratory issues in workforce or people at nearby businesses | **Very Low** |