|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Hazard | Receptor | Pathway | Risk Management Techniques | Probability of exposure | Consequence | Overall risk |
| Airborne respirable dusts from the process (PM10) | Workforce Nearby businesses Local flora/fauna | Air  | * All processing contained within the building.
* Operational process for cleaning to reduce build of internal dust.
* Annual air monitoring required as a minimum.
* PPE for workforce (Health & Safety Measure)

**Reference Documents:**[Libatt Hazardous Emissions Calculations Oct 2022](https://www.dropbox.com/scl/fi/umgxsgwo456no8w2azq0g/LiBatt-Hazardous-Emissions-Calculations-Oct-2022-V6.docx?dl=0&rlkey=godhw2rcxqf77hy1n85g0vztg)[Dust Emissions Management Plan LiBatt V8](https://www.dropbox.com/scl/fi/v8254d9cizo860bn4othv/Dust-Emissions-Management-Plan-LiBatt-V8.docx?dl=0&rlkey=n9lat2o9c9kwmo5bql7p5ua8b)[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[Lincoln Street Accident Management and Fire Prevention Plan V11](https://www.dropbox.com/scl/fi/pjidcx3ftvyn2op9tnugs/Lincoln-Street-Accident-Management-and-Fire-Prevention-Plan-V11.docx?dl=0&rlkey=881ukccuttg8zr0hslr1qpsll) | 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 inside buildings

**Reference Documents:**[Libatt Hazardous Emissions Calculations Oct 2022](https://www.dropbox.com/scl/fi/umgxsgwo456no8w2azq0g/LiBatt-Hazardous-Emissions-Calculations-Oct-2022-V6.docx?dl=0&rlkey=godhw2rcxqf77hy1n85g0vztg)[Dust Emissions Management Plan LiBatt V8](https://www.dropbox.com/scl/fi/v8254d9cizo860bn4othv/Dust-Emissions-Management-Plan-LiBatt-V8.docx?dl=0&rlkey=n9lat2o9c9kwmo5bql7p5ua8b)[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[Lincoln Street Accident Management and Fire Prevention Plan V11](https://www.dropbox.com/scl/fi/pjidcx3ftvyn2op9tnugs/Lincoln-Street-Accident-Management-and-Fire-Prevention-Plan-V11.docx?dl=0&rlkey=881ukccuttg8zr0hslr1qpsll) | 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 | Electrolyte Leaching from Casing | * Primary and secondary containment. Batteries delivered in transport boxes or other suitable ADR packaging and inspected on receipt
* Site and site substrate maintenance.

**Reference Documents:**[Libatt Hazardous Emissions Calculations Oct 2022](https://www.dropbox.com/scl/fi/umgxsgwo456no8w2azq0g/LiBatt-Hazardous-Emissions-Calculations-Oct-2022-V6.docx?dl=0&rlkey=godhw2rcxqf77hy1n85g0vztg)[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[Lincoln Street Accident Management and Fire Prevention Plan V11](https://www.dropbox.com/scl/fi/pjidcx3ftvyn2op9tnugs/Lincoln-Street-Accident-Management-and-Fire-Prevention-Plan-V11.docx?dl=0&rlkey=881ukccuttg8zr0hslr1qpsll) | Electrolyte could potentially seep into the ground if not correctly stored  | Land and surface water contamination  | **Low** |
| Release of Bulk Liquids from primary containment Oil stored as bulk liquid | 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

**Reference Documents:**[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[Lincoln Street Accident Management and Fire Prevention Plan V11](https://www.dropbox.com/scl/fi/pjidcx3ftvyn2op9tnugs/Lincoln-Street-Accident-Management-and-Fire-Prevention-Plan-V11.docx?dl=0&rlkey=881ukccuttg8zr0hslr1qpsll) | 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)

**Reference Documents:**[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[LiBatt Noise Vibration Management Plan](https://www.dropbox.com/s/73aovoblgzbback/LiBatt%20Noise%20Vibration%20Management%20Plan.pdf?dl=0) | 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

**Reference Documents:**[Operational Contingency Plan](https://www.dropbox.com/scl/fi/74ewtrw1dkzofxih2lwid/Operational-Contingency-Plan-V1.docx?dl=0&rlkey=gmxc0kp19cu7lhmyb8vb4ktif)[Lincoln Street Accident Management and Fire Prevention Plan V11](https://www.dropbox.com/scl/fi/pjidcx3ftvyn2op9tnugs/Lincoln-Street-Accident-Management-and-Fire-Prevention-Plan-V11.docx?dl=0&rlkey=881ukccuttg8zr0hslr1qpsll)[Libatt Hazardous Emissions Calculations Oct 2022](https://www.dropbox.com/scl/fi/umgxsgwo456no8w2azq0g/LiBatt-Hazardous-Emissions-Calculations-Oct-2022-V6.docx?dl=0&rlkey=godhw2rcxqf77hy1n85g0vztg) | 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 | **Low** |