# Environment Risk Assessment

| Hazard<br>*What has the potential to cause harm* | Process<br>*Source of the hazard* | Receptor(s)<br>*Who/what is at risk?* | Pathway(s)<br>*How can the hazard reach the receptor?* | Control Measures<br>*What measures will be taken to reduce the risk?* | Probability of exposure<br>*How likely is this to happen?* | Consequence<br>*What harm can be caused?* | Overall Risk<br>*What is the risk?* |
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| Metal dust and fumes from welding and hot cutting of mild steel and stainless steel. | Hot cutting of waste steel<br><br>Storage | • Site personnel /visitors<br>• Residents of Frederick Street<br>• Employees from neighbouring businesses<br>• Ground<br>• Surface water/ground water | Air, land, and groundwater. | Hot cutting to take place in enclosed segregated area inside the closed building.<br>Use of static (whole building) and mobile (localised) LEV.<br>The LEV's do not vent externally.<br>The LEV alarms when filters require cleaning or replacing.<br>Use of PPE/RPE.<br>Once commissioned and in use a third-party monitoring programme will be established to ensure the LEV is filtering as required and records maintained.<br>Vacuum settled dust after work ceases.<br>Waste metal stored internally in stillages sealed with plastic, larger items plastic wrapped. | Unlikely | Skin irritation/allergy<br><br>Dust nuisance<br><br>Contaminated ground<br><br>Water pollution | Low when the control measures are applied |

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| Hydrogen gas and HCl acidic vapours | Pickling of waste steel | • Site personnel /visitors<br>• Residents of Frederick Street<br>• Employees from neighbouring businesses<br>• Air | Air | Ambient temperature used in process (18-21°C).<br>Bespoke wet scrubber installed with custom made extraction hoods & automated dosing cabinet to neutralise acidic fumes.<br>We are currently looking into 2 options for monitoring emissions:<br>Option 1 - either a Gastec or Draeger sample tube system. A sample from the outlet of the stack would be checked each time the system was used (infrequently due to site acting as overspill for PGMT GmbH.) CSO can run a sample pipe down to ground level for access. In the event of a high discharge level the fan would be manually turned off.<br>Option 2 – fixed gas sensor in the outlet duct which is incorporated into the local control panel and would | Unlikely | Odour nuisance | Low when the control measures are applied |

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| | | | | trip/raise an alarm automatically. Given the consent limits of 750micrograms/$m^3$ which is equivalent to 0.502ppm and low frequency of use, CSO the company providing the system believe this option to be excessive. | | | |
| Hydrochloric acid | Spill of Hydrochloric acid during unloading / transfer | • Site personnel /visitors<br>• Delivery driver<br>• Neighbouring businesses and employees<br>• Ground<br>• Surface water/ground water | Land & groundwater | Acid stored in IBC's.<br>Forklift truck used to transfer IBC's.<br>Trained FLT operatives used.<br>Transfer distance minimised by using roller shutter entrance closest to storage area.<br>IBCs stored in secondary containment area while acid is pumped into pickling tank. Pre use visual inspection of pipes.<br>All pipes secured during pumping process.<br>Spill kits located in transfer areas including neutralising and containment agent. | Unlikely | Water pollution<br><br>Contaminated ground<br><br>Skin irritation / corrosion | Low when the control measures are applied |

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| | | | | Site perimeter has a raised curb and sandbags located by main gates providing protection for run off to neighbouring businesses.<br>SOP for transfer of chemicals read, understood, and signed by all employees.<br>Emergency spill procedure communicated to employees and routine drill performed.<br>Emergency showers located by secondary containment area.<br>Safe area provided for delivery drivers during unloading.<br>Filter press located in secondary containment area.<br>Approved third parties used to remove spent acid from site. | | | |
| | Spill of Hydrochloric acid during pickling process | • Site personnel /visitors | Land & groundwater | Secondary containment volume of +10% max volume used.<br>Scheduled maintenance routine for secondary containment.<br>Use of PPE. | Highly unlikely | Skin irritation / Corrosion<br><br>Contaminated ground<br><br>Water pollution | Low when the control measures are applied |

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| | | | | Limited access to secondary containment area during process.<br>Emergency showers located by secondary containment area.<br>Emergency spill procedure communicated to employees and routine drill performed. | | | |
| Spent wash waters (weakly acidic approx. pH 6) | Spill of wash waters during jetting | • Site personnel /visitors<br>• Ground<br>• Surface water/ground water | Land & groundwater | Process performed in secondary containment area.<br>Settled wash waters pumped directly through filter press and to storage tanks during jetting. | Highly unlikely | Contaminated ground<br><br>Polluted water | Low when the control measures are applied |
| | Spill of wash waters during transfer | • Site personnel /visitors<br>• Delivery driver<br>• Neighbouring businesses and employees<br>• Ground | Land & groundwater | Transfer distance minimised by locating wash booth close to storage area.<br>Pre use visual inspection of pipes.<br>All pipes secured during pumping process.<br>Filter press located in secondary containment area.<br>Spill kits located in transfer areas. | Unlikely | Contaminated ground<br><br>Polluted water<br><br>Skin irritation | |

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| | | • Surface water/ground water | | Site perimeter has a raised curb and sandbags located by main gates providing protection for run off to neighbouring businesses.<br>SOP for transfer of chemicals read, understood, and signed by all employees.<br>Emergency spill procedure communicated to employees and routine drill performed.<br>Emergency showers located by secondary containment area.<br>Safe area provided for delivery drivers during unloading.<br>Approved third parties used to remove spent wash waters from site.<br>Suitable PPE used. | | | |