

**Purpose**

This register is to specify items which are either prohibited from use or restricted in their use throughout the Borumba Pumped Hydro Project. Items are prohibited on the basis they have been deemed to pose an unacceptable risk to the health and safety of workers based on previous incidents which have occurred within the construction or wider industry; or pose an unacceptable risk to the environment.

Individual Principal Contractors may choose to include additional items to this register on worksites under their management and control. Where this occurs the Principal Contractor is to notify Queensland Hydro of the additional items included.

**Scope:**

The items listed below are prohibited from being brought to or used on the Borumba Pumped Hydro Project; or restricted as described in this document.

| Category                           | Reference Image   | Equipment / Activity Description                                    | Status     | Status Justification   | Alternate Tools / Methods & Comments  |
|------------------------------------|---|---|------------|--|---|
| Crane, Lifting and Load Management |    | Soft Slings connected directly to Rhino Hook                        | PROHIBITED | Risk of serious injury   | Synthetic slings connected to rhino hooks must have an intermediate connection of a shackle or bull ring.   |
|                                    |    | Lifting equipment fitted with hooks that do not have safety catches | PROHIBITED | Risk of dropping loads / sling or chain rolling out of hook  | All lifting equipment fitted with hooks must have safety catches fitted. For example, on a lifting hook, a spring loaded, or counterweighted catch is sufficient. On lifting slings, a clevis self-locking type hook is required. |
|                                    |   | Elasticised Strapping (e.g. Octopus "Ocky" Straps)                  | PROHIBITED | Risk of line of uncontrolled energy release and line of fire incident.   | Use non-elasticised tie down devices.   |
|                                    |  | Lever Action Load Binder (Dogs/ Twitches)                           | PROHIBITED | Risk of uncontrolled energy release from binder resulting in facial injuries.  | Use of ratchet type turnbuckle binder.  |
|                                    |  | Cheater bar/ lever extension bar                                    | PROHIBITED | Risk of extension bar rebounding quickly during tightening and releasing, causing impact injuries. The bar can also fly off the lever and become a projectile, posing a risk to persons in the vicinity. | Use of chains with non-rebounding tensioners.   |

| Document ID: BR-REG-0001 Rev 02 |               | Title: Borumba Pumped Hydro Project Emergency Response Plan |   |            |
|---------------------------------|---------------|---|---|------------|
|                                 | Name          | Title   | Signature   | Date       |
| <b>Author:</b>                  | Kelly Palmer  | Qld Hydro Head of Health and Safety                         |    | 03/21/2025 |
| <b>Reviewer:</b>                | Mannie Soares | Qld Hydro Project Health & Safety Manager                   | <br><small>Manuel Soares (Mar 21, 2025 15:21 GMT+10)</small> | 03/21/2025 |
| <b>Approver:</b>                | Geoff Scott   | Qld Hydro Executive General Manager                         |    | 03/26/2025 |

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|              |    | Use of Magnetic Lifters   | RESTRICTED | Risk known in industry of loads dropping when magnetic lifter fails.   | OEM magnetic lifters may be used for lifts where proper planning and controls are in place and documented within SWMS (i.e exclusion zones, remote operation of magnetic lifters, barricading for appropriately trained operator.)<br>And/or where rigging and slinging with tested and tagged chains is not practical.  |
|              |    | Re-use of single use slings   | PROHIBITED | Risk of Dropping Loads   | Once unloaded, single use slings must be disabled and discarded. Load to be re-slung with permanent use lifting equipment.   |
|              |    | Re-use of single lift bulka-bags                                      | PROHIBITED | Risk of Dropping Loads   | Once unloaded, using all four lifting points, single use Bulka Bags must be discarded. Load to be transported on pallets if further movement is required.  |
|              |    | Re-use of single use drums or drums without an approved lifting point | PROHIBITED | Failure of lifting points/ base leading to dropped loads   | Not to be used   |
|              |   | Industrial winch and control box operator in line of fire             | RESTRICTED | Number of incidents in industry involving operator control box stationed in line of fire   | Move the position of control box out from line of fire in the event there is a cable failure.  |
| Mobile Plant |  | Excavator/backhoe quick hitch devices without secondary safety device | PROHIBITED | Risk of serious injury - risk known in industry of numerous occasions when excavator buckets have detached unexpectedly.                       | Provide excavators and backhoes fitted with fully automatic quick hitches OR<br><br>Ensure that where fully automatic quick hitches are not provided, safety pins are always utilized to prevent the quick hitch releasing and implements from detaching. Ensure all quick hitch attachments have the original equipment manufacturers safety system   |
|              |  | Non-Compliant MEWP Control Panels                                     | PROHIBITED | Risk of serious injury   | All MEWP control panels must be compliant to AS 1418.10 and guarded to prevent inadvertent operation.<br><br>MEWP must be fitted with operator protective devices to the unit's platform or bucket e.g.: <ul style="list-style-type: none"> <li>• Physical barriers</li> <li>• Pressure sensing devices which can detect potential crush injuries and prevent further unit movement</li> </ul> |
|              |  | Franna Cranes/ Pick and Carry Cranes                                  | RESTRICTED | High number of incidents in industry involving rollovers, loads falling, mechanical failures as well as uncontrolled movements and collisions. | Franna Cranes may be used for specific lifts where proper planning and approval has been undertaken by the Principal Contractor.   |

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|                                |    | Semi-Trailer Tippers                                | PROHIBITED | Increased risk of overturning due to sloping sites and hang up of material in top of tipper body                  | Use of truck and dog, side tipper or ejector.  |
|                                |    | Telehandlers without a cab windscreen guard         | PROHIBITED | Incidents in industry where windscreen has shattered, causing injury to operator.                                 | Windscreen guard must be secured to the frame of the telehandler, per OEM requirements and well maintained.  |
|                                |    | Excavators without a cab windscreen guard           | RESTRICTED | Incidents in industry where windscreen has shattered, causing injury to operator.                                 | Windscreen front guards are compulsory for 13T and above only when operating a rock saw or hammer. The windscreen guard must be secured to the frame of the excavator, per OEM requirements and well maintained.   |
|                                |    | Earthmoving plant with open cabins                  | RESTRICTED | Risk of operator exposure to respirable dust  | Earth moving plant being used for activities which do not expose the operator to respirable dust can be used with open cabins. Earth moving plant used for activities which may involve operator exposure to respirable dust must have a fully enclosed cabin and be fitted with high efficiency particulate air (HEPA) filters. |
| Chemicals<br>/ Hazardous Goods |  | Unapproved Hazardous Substances and Dangerous Goods | PROHIBITED | Risk of serious injury, environmental damage  | Only hazardous substances and dangerous goods on the approved list are to be used.   |
|                                |  | Glyphosate & organophosphates herbicide             | PROHIBITED | Risk of environmental damage  | Only herbicides on the approved herbicide list are to be used.   |
|                                |  | Oxy Acetylene Systems without flash back arrestors  | PROHIBITED | A significant number of high potential incidents industry wide where the flame has burnt back onto the equipment. | All oxy acetylene / LPG systems must be fitted with flash back arrestors, fitted at both ends in accordance with AS 4839 and be subject to manufacturers maintenance (i.e. replaced minimum 12- monthly).  |
|                                |  | Petrol/unleaded fuel<br>Petrol Powered Equipment    | RESTRICTED | Highly flammable  | Electric or Diesel-powered equipment<br><br>If petrol equipment is to be used (above ground only) must be approved by the Principal Contractor following risk assessment   |

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|              |    | Homemade / unlabeled fuel/ chemical containers  | PROHIBITED | Risk of fire/ damage to plant<br>Risk of injury/ environmental damage  | All fuel cans/ chemical containers to have content clearly identified and must be transported, stored, and handled in accordance with the Safety Data Sheet.  |
|              |    | Flammable contact cleaner   | PROHIBITED | Workers have sustained serious burns when an ignition source has been introduced into the work area after flammable contact cleaner has been used. | Non-Flammable Contact Cleaner (NF).<br>CAUTION: NF cleaner can melt certain plastic such as relay bases etc.  |
|              |    | Asbestos-containing materials (including parts such as brakes, clutches, valve rings, packing and heat seals) | PROHIBITED | Risk of exposure to asbestos fibres and potential risk for developing asbestosis or asbestos-related cancer such as mesothelioma                   | N/A   |
|              |   | Lead based paint  | PROHIBITED | Potential health risks to workers  | Non-lead based paint  |
|              |  | Fireworks   | PROHIBITED | Illegal to purchase without licence and pose risk of injury and environmental damage   | Fireworks are prohibited on site  |
| Worker items |  | Pornographic/offensive or derogatory material   | PROHIBITED | Potential to promote discriminatory/ offensive workplace conditions  | Comply with the relevant Code of Conduct  |
|              |  | Alcohol and Illegal Drugs   | PROHIBITED | Negatively impacts on fitness for work   | All personnel must comply with the relevant Drug and Alcohol Policy.<br>Alcohol and illegal drugs are prohibited on site at all times.<br>Alcohol purchased from the designated wet mess is permitted within designated areas of accommodation camps. |
|              |  | Firearms/ weapons   | PROHIBITED | Illegal  | Weapons prohibited on site  |

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|                             |    | Elastic sided boots  | PROHIBITED | Risk of injury to ankle when walking on uneven surfaces   | Laced up/ side zip up safety capped boots. Exemption for welding boots  |
|                             |    | Personal / private vehicles  | PROHIBITED | Risk for interaction between light vehicles and mobile plant  | Only vehicles complying with Project light vehicle requirements permitted on site – flashing beacon, whip flag, fitted multi-channel radio, IVMS etc  |
|                             |    | Personal radios, MP3 players in ear /over audio devices in the field   | PROHIBITED | Reduced ability to hear or communicate leading to risk of injury  | Not permitted to be used in the field. Able to be used in crib/ office areas  |
| Metal Work                  |    | Welding Machines without voltage reduction devices   | PROHIBITED | Electric shock hazard   | All welding machines are to have a hazard reduction device (HRD) installed and operational.<br><br>HRD's may include: <ul style="list-style-type: none"> <li>• Voltage reduction device (VRD)</li> <li>• Combination VRD &amp; trigger switch</li> <li>• Trigger switch that reduces the open circuit voltage to safe level.</li> </ul>   |
|                             |   | Grinding disc without reinforcing, damaged or warped   | PROHIBITED | Risk of serious injury due to flying debris   | Discs must be undamaged and be the correct type for task and material.<br><br>Grinding disks must have reinforcing that complies with AS 1788:1 – 1987 and AS 1788:2 - 1987   |
|                             |  | 9-inch (230mm) Grinders.<br><br>All grinders without minimum safety features as outlined in operators manual | PROHIBITED | 9" grinders have high torque motors that generate significant rotating energy that becomes difficult to control should the disc catch or jam. This can result in kickback and the rotating blade can cause serious lacerations. | Only use 5" (125mm) or 7" (180mm) angle grinders with the minimum safety features below: <ul style="list-style-type: none"> <li>• Safety switch (dead-man), that can not be locked on</li> <li>• Electronic soft start</li> <li>• Automatic torque limiting clutch</li> <li>• Disc brake &lt; 3 seconds</li> <li>• Secondary safety handle</li> </ul>   |
|                             |  | 1mm Cutting discs  | RESTRICTED | Risk of serious injury due to flying debris   | Discs >1mm. 1mm discs may only be used for cutting tasks by qualified trades people (e.g. boilermaker / fitters)<br><br>1.0mm cutting discs are classified as restricted and only authorised for use on grinders <5".<br><br>Discs 2.5mm thickness or greater must be used on grinders >5" - 7"   |
| Ladders/ working at heights |  | Non-screw lock single or double action karabiners and lanyard hooks used when working at heights             | RESTRICTED | Previous incidents where latch type failed under certain circumstances, including the potential for dynamic roll out  | All attachments used must be triple locking Karabiners with a minimum breaking strength 22kN (unless approved by exemption following risk assessment)<br><br>Scaffold double action hooks used appropriately onto scaffolding tubes where roll out/ crush out cannot occur due to compatibility of component sizes<br><br>Double action "screw type" karabiners can be used for rope access activities. |

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|    | <p>Twin tailed fall arrest systems with a common loop webbing structure</p> | <p><b>PROHIBITED</b></p> | <p>Known fatality in industry; potential for splitting</p>   | <p>Twin tailed lanyards with a D for the 2 lanyards to be attached onto at one end; other end of the D attached onto the shock absorber.</p>  |
|    | <p>Sit harnesses</p>  | <p><b>PROHIBITED</b></p> | <p>Sit harnesses are not fall arrest rated and do not provide adequate load dissipation in the event of a fall.<br/><br/>Harness can potentially invert and suspend a person</p> | <p>Full body harness for working at height</p>  |
|    | <p>Domestic (Non Industrial Rated) ladders / Steps</p>                      | <p><b>PROHIBITED</b></p> | <p>Insufficient capacity leading to collapse or failure of ladder.</p>   | <p>Industrial rated ladder rated at a minimum &gt; 120kg as per AS 1892</p>   |
|   | <p>Rung ladders</p>   | <p><b>RESTRICTED</b></p> | <p>Risk of serious injury from falling</p>   | <p>Rung ladders only permitted for use access - ie. into a trench, onto scaffold and only where access stairs or ramps can't be used.<br/><br/>Scaffold, EWP's or access stairs / ramps should be used as an alternative where practicable</p>                                  |
|  | <p>Platform ladders</p>   | <p><b>RESTRICTED</b></p> | <p>Risk of serious injury from falling</p>   | <p>Platform ladders must only be used for short duration works and only when approved for use in the SWMS. Scaffold or EWP's should be used as an alternative.<br/><br/>Platform ladders must have a restraint bar that closes behind worker once standing on the platform.</p> |
|  | <p>Metal ladders within areas where electrical hazards exist</p>            | <p><b>RESTRICTED</b></p> | <p>Risk of serious injury from electric shock / flash .</p>  | <p>Fibreglass ladders must be used within areas where electrical hazards are present.</p>   |
|  | <p>Step Ladders</p>   | <p><b>PROHIBITED</b></p> | <p>Risk of serious injury from falling</p>   | <p>Industrial safety step</p>   |

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| Tools & Equipment |    | Use of any modified powered tool, hand tool or item of plant not certified by the manufacturer | PROHIBITED | Failure of non- certified device / tool resulting in injury  | Manufacturer certification prior to any change. Certified by qualified and experienced engineer<br><br>All powered tools, devices or items of plant must not be used if guards, screens, interlocks or any other feature has been tampered with or over-ridden without OEM approval.   |
|                   |    | Use of compressed air tools and supply without lock couplers and whip checks                   | PROHIBITED | Numerous incidents involving workers being struck by failing hose and fittings after inadvertent disconnection                             | All air hoses and air operated tools must be fitted with whip checks and locking couplers or safety pin couplers (with safety pin fitted).   |
|                   |    | Hardened Steel Hammers over 2kg used on hardened steel   | PROHIBITED | Hardened steel hammers have been known to produce projectile splinters when struck against hard surfaces.                                  | Soft steel sledgehammers used for striking metal or use copper headed or nylon dead blow hammers.  |
|                   |    | Knives   | RESTRICTED | Risk of serious laceration where people have left the blade exposed, particularly to hands.  | Scissors, folding blades and Stanley type knives (auto or manual retract) may be used where documented in approved SWMS. Suitable gloves with minimum cut resistance 5 must be worn for this task.<br><br>Fixed blades are prohibited at all times.  |
|                   |  | Domestic Electrical Power Boards / Double Adapters<br><br>Piggy backing of power leads         | PROHIBITED | Potential for electrocution  | All electrical equipment at a workplace must be compliant with the requirements of AS 3012 or 503D Minimum Requirements (whichever is higher) (excludes office equipment)  |
|                   |  | Generators not fitted with a Residual Current Device (RCD)                                     | PROHIBITED | Potential for electrocution  | General purpose outlets on generators must have Residual Current Devices (RCD) protection. Generators are to be fitted with a 30mA RCD unit wired to the supply of the GPO's.<br><br>All generators are to be tested prior to placing into operation.<br><br>If designed with an earth point the generator must have an earthing stake properly installed. |
|                   |  | Double ended crow bars/ pinch bars   | RESTRICTED | Injuries have resulted from the crowbar/pinch bar releasing under pressure or falling from height through grid mesh, work basket/man cage. | “Spud end” screwdriver handle pinch bar.<br><br>Personnel that are trained and authorised working from ground level may use double ended crowbar/pinch bar.  |
|                   |  | Scaling bar  | RESTRICTED | Scaling bars are prone to slipping and have caused injuries previously   | Scaling bars are restricted to the scaling down of rocks, in the underground working environment only.<br><br>They are not to be used as general pry bars and should not be used in workshops or located in workshop tooling bins.<br><br>NOTE: Scaling bars are classed as an unrestricted tool when used for manual scaling only.                        |

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|               |    | Explosive Power Tools e.g. Ramset guns  | RESTRICTED | High powered tool with dangerous risks for untrained operators.<br><br>Known to have caused fatalities in industry.  | Can be used only following a documented risk assessment and with approval of the Principal Contractor.<br><br>Low velocity / indirect tools or drill anchor bolts to be used as an alternative where practicable   |
|               |    | Handheld demolition saws- quick cut, or other concrete cutters.   | RESTRICTED | Potentially violent kickback, push-back or pull-in forces can occur suddenly and be difficult to control   | Safer alternatives available, i.e. including kickback protected models or road saws  |
|               |    | Laser (light) Pointers exceeding Class 1 or Class 2   | PROHIBITED | These devices are classed as a “Controlled Weapon” under the Weapons Act 1999. Criminal liability and maximum penalty of \$24,000 fine and 2 year’s imprisonment.  | Legal laser pointers (<1mW) may be brought to site.  |
| Miscellaneous |   | Access or use of grid mesh (for installation purposes) that is not temporarily fixed with a minimum of 4 temporary clips, at maximum spacing of 120mm | PROHIBITED | Risk of serious injury from falling.   | Access or use of Grid Mesh (for installation purposes) must be temporarily fixed with a minimum of 4 temporary clips, at a maximum spacing of 1200mm or permanently fixed.<br><br>The 2 methods for permanent fixing are and should be considered for use in this order:<br>1. Huck bolt & saddle;<br>2. Weld – 1” stitch<br>3. Permanent proprietary fixing   |
|               |  | Worm drive hose clamps  | RESTRICTED | There is a history in industry of near misses and fatalities due to failure of worm drive type clamps on pressurised hoses, as there is no way of knowing how close to being stripped the thread may be. | Worm Drive Hose Clamps must not be used on pressurised air or water hoses. Underground Equipment (Loaders, L/Vs etc.) use these clamps as OEM fittings.<br><br>Double ear clamp for ½” hoses. <br><br>Saddle type grooved clamps for hoses greater than ½”.<br><br><br>Bandit tape or punch lock systems of repair are acceptable when carried out correctly.<br> |
|               |  | Star Picket and Rebar caps  | RESTRICTED | Do not fully protect workers from impalements.   | Reinforced safety caps (or equivalent) for bar and star picket lower than 1.5m from ground.<br>   |

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|    | <p>High Pressure Water Jetting System- defined as having an output capability greater than 800 litres per minute.</p> | <p><b>RESTRICTED</b></p> | <p>Following a number of serious injuries within the industry. Water jet may pierce the skin. Contaminated material may be injected into the body. Flying debris may hit and cause eye injuries.</p> | <p>A minimum 1.5 metre lance must be implemented on all high pressure water hoses (gunners) Training MSMWJ301 in the use of Class A pressure washers as a minimum as per AS 4233.1</p> <p>Ensure regulated pressure does not exceed 5000KPI.</p>   |
|    | <p>Multi-meters used to test for "dead"/ de-energised</p>   | <p><b>PROHIBITED</b></p> | <p>Risk of electric shock</p>  | <p>Use of an AC/DC Voltage Absence Tester with 1000v IP2x rated test leads or similar.</p>   |
|   | <p>Cat support stand with lower main frame &amp; moveable centre post.</p>  | <p><b>RESTRICTED</b></p> | <p>Possibility of uncontrolled movement when the pin is removed from the centre shaft resulting in severe finger / hand injury.</p>  | <p>Ratchet type support stand or fixed height support stands (rated and approved).</p> <p>Authorised maintenance workshop personnel are exempt from the application process for use of this restricted tool.</p>   |
|  | <p>Drill press without dead man pedal</p>   | <p><b>PROHIBITED</b></p> | <p>No safe stopping options after entanglement or incident</p>   | <p>Drill presses must have a 'dead man' foot pedal connected</p>   |
|  | <p>Crocodile clip jumper leads</p>  | <p><b>RESTRICTED</b></p> | <p>Battery explosions due to connection of the clips incorrectly (i.e. reverse polarity).</p>  | <p>CAT style jump start receptacles for 24VDC equipment and Anderson style jump start receptacles for 12VDC equipment</p>  |
|  | <p>Recovering Vehicles using Slings, Chains or Other Pulling Systems</p>  | <p><b>RESTRICTED</b></p> | <p>Potential for line of fire injury if components fail</p>  | <p>The use of chains, snatch straps or other pulling systems for vehicle recovery is not permitted except by professional vehicle recovery providers or persons approved by Project Manager following a risk assessment. Only black snake kevlar low recoil tow straps are to be used.</p> |

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|  |  | <p>Non OEM extension bars for ratchets and torque wrenches</p> | <p><b>PROHIBITED</b></p> | <p>Risk of injury due to slippage</p>                        | <p>OEM (i.e. designed to be extension for a wrench) torque wrench extensions must be used, ensuring these are adequately secured prior to work start.</p>  |
|  |  | <p>Manual torque multipliers</p>                               | <p><b>RESTRICTED</b></p> | <p>Industry fatality and other manual handling injuries.</p> | <p>Hydraulic, electric or pneumatic torque multipliers shall be used (i.e. Hytorc).<br/>Manual torque multipliers solely for authorised workshop use must be stored / locked away when not in use, authorised access only.</p> |
|  |  | <p>Two post hoist</p>  | <p><b>PROHIBITED</b></p> | <p>Vehicle may overbalance during maintenance.</p>           | <p>Four post hoist.</p>  |

# BR-NA-NON-HHS-REG-00001\_01 Borumba - Exploratory Works - Prohibited and Restricted Items (BR-REG-0001) - unsigned

Final Audit Report

2025-03-26

|                 |   |
|-----------------|---|
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## "BR-NA-NON-HHS-REG-00001\_01 Borumba - Exploratory Works - Prohibited and Restricted Items (BR-REG-0001) - unsigned" History

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