Health Safety & Environment

Critical Control Verification – Line of Fire Hazards



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Name of person(s)	
conducting verification:	
Date of verification:	
Site, Job Location &	
Contractor Company:	
Job description/work type:	

Audit Finding Key

- C: Compliant meets all requirements
- D: Deficient evidence gap identified, or improvement required but does not compromise control objectives
- S: Significantly deficient the design or operation or verification of the critical control is not appropriate and impacts achievement of the control objective

Туре	Criteria Cri	Verification Activity	Evidence sighted	Verification Finding (C, D, S)	Proposal Improvements
Crush Hazard	s – People, Plant, Process Critical Controls				
Critical Control	1 – Critical risk controls are in place for machinery with moving plants risks				
Design Check CC1-D1	 Machinery is adequately guarded Engineering controls into place (Guards, Covers, interlocks) Barriers and guarding put up around moving and swinging machinery Reversing alarms, visual alarms on moving plant Location of emergency stop devices on machinery is known, obvious and signed 				
Operation Check CC1-O1	 People do not work near equipment with parts that can move/rotate suddenly and/or unexpectedly, Workers ensure they do not place selves in the Line of Fire Hands and fingers kept clear of pinch/crush/entrapment areas and areas signed, Workers never reach into a moving machine, no loose clothing and long hair tied back around moving machinery Possible pinch points and crushing hazards identified before a task Equipment locked out before working on it, Plant and equipment is isolated, de-energised, restrained or dissipated to a safe level prior to the commencement of work Isolation device effectively locks, tags, and provides a physical control mechanism to secure the isolation Signs and barriers help to keep people out of the most dangerous areas Operators of mobile plant or vehicles know location of other people, Workers stay in the mobile plant operator/driver's full view, and approach the equipment only after permission from the operator/driver Preparation for isolations include: Isolation covers the equipment and the nature of the work being performed Checking the isolation type, isolation location and any label present on the isolator Notifying all relevant personnel that an isolation is required and is about to commence Obtaining permission before isolating Confirming the plant operating status Shut plant down by the normal shut down method" Roll Potential – All wheeled equipment should have parking brakes and wheel chocks implemented, especially for vehicles parked on an incline Check for cylinders, poles and other tools that might roll or spin, and secure these items Information, instruction, training, and supervision must be provided, recorded, and retained to all AGL employees and contractors involved in or carrying out energy isola				
Critical Control	2 – Critical risk controls are in place for ground disturbance and excavation risks				
Operation Check CC2-O1	 Excavations are properly BATTERED/SHORED/BENCHED as necessary Excavations are appropriately barricaded to prevent unauthorised entry Items surrounding the excavation have no potential to fall in 				
Hazards – Ped	pple, Plant, Process Critical Controls				
Critical Control	3 – Moving vehicle and mobile plant critical risk critical controls are in place				
Design Check CC3-D1	 Precautions taken in areas where there are moving vehicles including traffic controls, Traffic management plans help to avoid the line of fire hazards <i>Striking</i> Rollover and Falling Object Protection (ROPS AND FOPS) on mobile plant Engineering controls into place (Guards, Covers, interlocks) Barriers and guarding put up around moving and swinging machinery, Physical barriers to keep people out of dangerous areas, Flags, cones, and other barricades to mark boundaries for exclusion zones and lifting areas are used 				
Operation Check CC3-O1	 Workers aware of mobile plant blind spots, workers alert for conditions that may change where the Line of Fire zone is Parking brakes and/or wheel chocks used for vehicles/equipment parked on an incline Operator has a clear view of obstructions in the immediate area or signaler/spotter present, to avoid entering the line of fire of vehicles and heavy machinery, workers stay in the operator/driver's full view and must receive permission from the operator/driver before approaching the equipment Before starting a job, a suitable risk assessment completed that identifies and controls striking hazards When lifting with a crane, everyone is out of the drop/exclusion zone Activities involving driving undertaken by personnel with a current licence for the specific vehicle, all personnel working in or around plant and equipment must be trained and competent Plant and equipment have pre-start checks conducted prior to operation Procedures detail: Start-up, shutdown, normal operation Abnormal/emergency operation Control system operation, fault diagnosis and maintenance Key Risks Emergency requirements 				

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AGL-HSE-CKL-004.1.2.2



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Туре	Criteria Cri	Verification Activity	Evidence sighted	Verification Finding (C, D, S)	Proposal Improvements
	Materials loaded and secured for transportation by personnel with relevant competency in National Load Restraint requirements				
Critical Control	4 – Critical risk controls are in place for objects with roll potential				
Operation Check CC4-O1	 Workers avoid walking on objects that could roll Objects that could roll (cylinders, piping, tools, equipment) are managed safely with bracing/controls to prevent objects from rolling unexpectedly All wheeled equipment has parking brakes and wheel chocks implemented, especially on an incline 				
Critical Control	5 – Critical risk controls are in place for hand and power tools risks				
Design Check	Adequate guards/barriers in place to eliminate potential Line of Fire situations, Grinder handles and guards are not removed				
CC5-D1	Adequate guards/barriers in place to climinate potential Eine of the situations, crimed hardies and guards are not removed				
Operation Check CC5-O1	 Workers wear the correct PPE for the tool being used incl gloves Workers aware of potential for tool kick back, jam, catch or release unexpectedly Tool inspected prior to use Workers aware of potential for tool to cause flying/falling debris? (Grinding, welding, chiseling, etc.)? Workers aware of need to secure workpiece firmly in drill presses and other plant to prevent spinning or propulsion Workers aware of safe practices when using non powered hand tools (plan, keep hands away from line of fire in event of tool slippage or human error) 				
Stored/Release	ed Energy – People, Plant, Process Critical Controls				
Critical Control	6 – Critical risk controls are in place for lifting operations				
Operation Check CC6-O1	 Other workers prevented from entering a lifting/ hoisting zone Workers aware of load swing when load being lifted or lowered, Exclusion zones established for any lift Rigging equipment inspected prior to use, Slings/Chains visually inspected prior each use to check for damage, wear, and legibility of tag, Slings/Chains Tagged to identify the date of the last inspection Tag lines installed and in use Hooks fitted with a safety latch to prevent the load from accidentally detaching "Pre-start checklists, logbooks, registration, maintenance records and appropriate certification completed prior to crane operation The location and voltage of any nearby overhead power lines identified within the JSEA and/or lifting plan "No Go Zones" and spotters must be established in accordance with legislation During lifting operations, the operator and/or dogger ensure: load is fully secure working Load Limit not exceeded equipment is operated within manufacturer's specifications and lifting rating plant controls not left while the motor is running and/or there is a load attached to the crane loads are not directly above the operator's compartment, personnel, or occupied buildings load kept in sight and maintained a travel path clear of people and obstacles" Personnel required to carry out rigging, spotting and/or dogging activities have the relevant high-risk licenses which are recorded and maintained 				
Critical Control	7 – Critical risk controls are in place for contact with electricity				
Design Check CC7-D1	 All PPE complies with Australian Standards and following PPE is considered: Face Protection— arc rated full face shield if potential for an arc flash Eye Protection—metal spectacle frames must not be worn Gloves insulated to the highest potential voltage expected Leather work gloves ok for de-energised electrical work" 				
Operation Check CC7-O1	 Workers test for dead prior to working on isolated equipment, where energy has been isolated, workers confirm zero energy before commencing work Test for dead (test before you touch) procedure is always applied Workers adhere to working distances and boundaries, in case of arc flash when energised Workers stay clear when breakers are being closed remotely "An exclusion zone must be applied when working in the vicinity of: A bare overhead power line An insulated overhead power line connected to a building An open switchboard with exposed components An exposed overhead conduction Any exposed electrical part which may present risk to personnel" Low Voltage Gloves are used when exposed conductive parts have not been confirmed as earthed and when working in and around live apparatus Gloves used when operating metal clad switchgear and earthing High Voltage apparatus Electrical Energy risk documented, assessed, and controlled in JSEA prior to work All electrical work undertaken by competent and (where applicable) licensed personnel 				
Critical Control	8 – Critical risk controls are in place for spring loaded devices	1	1		
Design Check CC8-D1	 Objects that are spring-loaded or contain coils can that exert tremendous energy are safely stored, signed, and operated Spring-loaded devices are not used over their capacity 				
Operation Check CC8-O1	 Workers aware a spring could give way to release tremendous energy Equipment containing springs is in good working condition? 				
Critical Control	9 – Critical risk controls are in place for dropped objects during work at height	1	-	1	

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Туре	Criteria	Verification Activity	Evidence sighted	Verification Finding (C, D, S)	Proposal Improvements
Design Check CC9-D1	 Toe boards on elevated areas to keep nails, drills, hammers, and other objects from falling When designing drop zones consider work at ground level, height, lateral movement, and deflection of and role of capture nets or safety observers 				
Operation Check CC9-O1	 Dropped Object risks must be identified in safe work procedures/SWMS/JSEA with controls implemented prior to commencing works Drop/exclusion zone established under any work at height Tools and equipment secured by those working above, Tool bags and handlines to provide tools and equipment to workers above Pre-planning is to considers risks between work parties and usage of the zone below the works area and likely requirements for access Appropriate/required PPE, signage and equipment is used to manage drop object risks Isolation of equipment above where practicable that could result in falling objects Chin straps fitted to hard hats when at height Housekeeping is incorporated into work procedures to prevent materials, tools, and waste from becoming a drop hazard Personnel have completed the appropriate training and are competent and authorised to implement the required controls and execute the work Scaffolding is to be erected, maintained, and inspected by trained and competent people 				
Critical Control	10 – Critical risk controls are in place for protection from pressurised objects (including explosive charges)	<u>'</u>		'	
Design Check CC10-D1	 Where practicable, people do not work close to pressurised objects (e.g., piping systems, compressed gases)? Workers aware that contents could be toxic or hazardous and warning signage is adequate 				
Operation Check CC10-O1	 Suitable isolations in place and verified Awareness that contents of a pressurised system can be released due to a planned or unplanned activity Where stored energy is not visible, high level of awareness is maintained Minimise the amount of time you need to spend near operating plant There is awareness that a pressurised substance (hydraulic, gas, liquid) can be released when a valve is opened, or a fitting loosened? Workers look for damaged equipment used to contain energy sources – pipes, hoses, couplings, and report Caps on pressurized cylinders and lines are tightly fitted and tanks are secured 				
Critical Control	11 – Critical risk controls are in place for objects under tension				
Operation Check CC11-O1	 Workers are aware of stored energy potential from chains under tension, slings, load lines, tie-downs, straps Workers keep clear of the potential path of travel when removing/adjusting straps or banding under tension Snatch straps for vehicle recovery are never used 				
Critical Control	12 – Critical risk controls are in place for objects with fall potential	'	'	'	
Operation Check CC12-O1	 Top-heavy items that could fall are stored safely in the workplace Items being transported by forklift or truck are laterally secure There is awareness that adverse weather including strong, gusty winds may contribute to the danger of falling objects or debris and is considered when planning work Top-heavy equipment or loads that may be susceptible to toppling, and items on forklift, dolly, or flatbed truck are secured safely or stored appropriately All suspended items with swing potential are Identified and secured especially ones with hooks, pulls, straps and buckles 				

O Action	Responsible Person	Due Date			
Was positive feedback given? If so, provide detail below					

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